

PROJECT MANUAL

JANUARY 16, 2024

COOL SPRING ELEMENTARY SCHOOL SIDEWALK IMPROVEMENT PROJECT
DEPARTMENT OF PUBLIC WORKS
HANOVER COUNTY, VIRGINIA

INVITATION FOR BID NO. 24-05-3173TP

VIRTUAL PRE-BID CONFERENCE: 10:00 A.M., JANUARY 30, 2024
(24-Hour Advanced Preregistration Required)

BIDS DUE PRIOR TO 2:00 PM, MARCH 15, 2024

OWNER / ENGINEER:

COUNTY OF HANOVER
DEPARTMENT OF PUBLIC WORKS
P. O. BOX 470
HANOVER, VA 23069-0470
PH: (804) 365-6181



The County's Project Manager for this Work shall assume all rights and responsibilities attributed to the Engineer in this document and those referenced herein.

HANOVER COUNTY FINANCE AND MANAGEMENT SERVICES
PURCHASING DIVISION
804-365-6015

This public body does not discriminate against faith-based organizations.

SECTION 00010

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THE LATEST REVISION OR VERSION OF THE FOLLOWING DOCUMENTS ARE INCORPORATED HEREIN AND INCLUDED BY REFERENCE ONLY AND MAY BE REVIEWED AND OR OBTAINED FROM THEIR APPROPRIATE ORGANIZATION:

- VDOT ROAD AND BRIDGE SPECIFICATIONS (2020)
http://www.virginiadot.org/business/resources/const/VDOT_2020_RB_Specs.pdf
- VDOT ROAD AND BRIDGE STANDARDS (2016, REVISED 2020)
http://www.virginiadot.org/business/locdes/2016_road_and_bridge_standards.asp
- VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (1992 THIRD EDITION)
http://www.dcr.virginia.gov/stormwater_management/e_and_s-ftp.shtml
- VIRGINIA WORK AREA PROTECTION MANUAL (AUGUST 2011) <http://www.virginiadot.org/business/trafficing-WZS.asp>
http://www.virginiadot.org/business/resources/traffic_engineering/workzone/2011_WAPM_Rev_2.pdf
- MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (2009 EDITION) http://mutcd.fhwa.dot.gov/kno_2009.htm
- VIRGINIA SUPPLEMENT TO THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (2011 EDITION)
http://www.virginiadot.org/business/virginia_mutcd_supplement.asp
- VDOT LOCALLY ADMINISTERED PROJECTS MANUAL (MARCH 2016 UPDATE)
- OTHER PROJECT FORMS:

THE LATEST REVISION OR VERSION OF THE FOLLOWING DOCUMENTS ARE INCORPORATED HEREIN AND INCLUDED BY REFERENCE ONLY AND MAY BE REVIEWED AND OR OBTAINED FROM THEIR APPROPRIATE ORGANIZATION:

- * STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT (EJCDC NO. 1910-8, 1996 EDITION)
- * CONTRACTOR'S QUALIFICATION STATEMENT (AIA DOCUMENT A305, 1986 EDITION)
- * PERFORMANCE BOND AND PAYMENT BOND (AIA DOCUMENT A312-1984 or latest version)
- * CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS (AIA DOCUMENT G706A - 1994 EDITION)
- * CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS (AIA DOCUMENT G706-1994)
- * CONSENT OF SURETY COMPANY TO FINAL PAYMENT (AIA DOCUMENT G707-1994)

TECHNICAL SPECIFICATIONS

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**ALL VDOT FORMS ARE AVAILABLE IN WRITEABLE PDF'S AT THE FOLLOWING LINK:
<http://vdotforms.vdot.virginia.gov/> USING THE FORM NUMBER PROVIDED**

PERMITS

CONTRACTOR shall ensure that all special and general conditions of the following permits are complied with during all phases of construction. The materials, labor and equipment necessary to comply with all permit conditions shall be incidental to construction and shall be paid for in lump sum or unit prices as applicable.

- VDOT LAND USE PERMIT

END OF SECTION

SECTION 00020
ADVERTISEMENT
INVITATION FOR BID NO. 24-05-3171TP
COOL SPRING ELEMENTARY SCHOOL SIDEWALK IMPROVEMENT PROJECT
DEPARTMENT OF PUBLIC WORKS
HANOVER COUNTY, VIRGINIA

Sealed bids, in accordance with the Bid Documents, will be received by the Finance and Management Services Department (Purchasing Division) prior to **2:00 P.M., MARCH 15, 2024**, and publicly opened and read aloud. Bids received after the above time shall not be considered. The time a bid is received shall be determined by the time stamped by the clock in the Purchasing office. Bidders are responsible for ensuring that the County personnel stamp their bids by the deadline indicated. In the event this time clock is not functioning, the time shall be determined by the time displayed on the landline telephone near the time clock. The time on the telephone will be written on the bid by hand, by County staff. Should the County be officially closed at the time the bid is due or prebid conference is scheduled, the bid due date or prebid conference date shall automatically be changed to the same time the next day the County is officially open at that time.

DELIVERY OF BID RESPONSES. Bid responses must be submitted prior to the date and time stated above to:

BY MAIL:

County of Hanover
Finance and Management Services Department
Purchasing Division
P.O. Box 470
Hanover, Virginia 23069-0470

OR

BY EXPRESS COURIER OR HAND DELIVERY:

County of Hanover
Finance and Management Services Department
Purchasing Division
7507 Library Drive
Hanover, Virginia 23069-0470

The project is generally described as: Provide all labor, materials, tools, equipment, services, transportation, and incidentals necessary for the construction of improvements to extend sidewalks from existing Cool Spring Elementary School to Honey Meadows and Taylor Farms subdivisions. This includes grading and installation of approximately 450' of sidewalk and compliant ramp connections, median and pedestrian refuge on Honey Meadows as well as two high visibility cross walks.

All work shall be constructed in accordance with the Project Manual; the Virginia Department of Transportation Road and Bridge Specifications, dated 2020; the Road and Bridge Standards, dated 2016; the Virginia Work Area Protection Manual, 2011 edition; the Manual on Uniform Traffic Control Devices, 2009 edition; VDOT Special Provision Copied Notes, Special Provisions, and Supplemental Specifications; the Virginia Supplement to the Manual on Uniform Traffic Control Devices, 2011 edition, and the VDOT Locally Administered Project Manual. In the case of any conflict between these documents, the more stringent of the requirements shall apply.

OPTIONAL PRE-BID CONFERENCE: A virtual pre-bid conference will be held for this project at **10:00 A.M., JANUARY 30, 2024**. The project location is Cool Springs Elementary School, 9964 Honey Meadows Rd, Mechanicsville, VA 23116. To acquire information for attending the virtual meeting, contact Trena A. Ponton, CPPB, Purchasing Officer Senior at taponton@hanovercounty.gov at least 24 hours in advance of the meeting.

The pre-bid meeting is to allow potential Bidders an opportunity to present questions and obtain clarification related to any facet of this project. While attendance will not be a prerequisite to submitting a bid, Bidders who intend to submit a bid are encouraged to attend. All questions about the meaning or intent of the Bid Documents or Contract Documents, even those presented during both meetings shall be submitted in writing to Trena A. Ponton, CPPB, Purchasing Officer Senior, taponton@hanovercounty.gov. To receive consideration, all questions should be received by the Purchasing Officer prior to **12:00 P.M., FEBRUARY 2, 2024**. Any changes made to the written requirements of the Bid Documents or Contract Documents shall be made by written Addendum only.

BID PACKET AVAILABILITY: At no charge to the Bidder, electronic copies of the Bid documents are available to download on eVA (Virginia's eProcurement Marketplace): <http://www.eva.virginia.gov>. Search for the Bid documents, Bidders are to either scroll down to locate or enter the solicitation title, number, etc. in the search engine. Depending on document(s) size and program, special software may be required to download and/or view the solicitation.

GENERAL INFORMATION: The Bid Documents shall be used in preparing bid responses. Upon proper request and identification, Bids may be withdrawn at any time prior to the bid due date and time set for receipt of Bids. However, consideration for withdrawal of Bids after the bid due date and time set for receipt of Bids shall comply with the *Code of Virginia* and as identified herein.

Any bid in response to this solicitation shall be valid for 90 calendar days. At the end of the 90 days the bid may be withdrawn at the written request of the Bidder. If the bid is not withdrawn at the time previously stated, it shall remain in effect until an award is made or the solicitation is canceled.

All Bidders are required to be registered under Title 54.1, Chapter 11 of the *Code of Virginia*.

Method of award of contract shall be identified in the Bid Form.

A Bid Security of 5% shall be required of Bids \$100,000 and greater. A Performance and Payment Bond, each equaling 100% of the contract amount shall be required of a CONTRACT that is \$100,000 and greater.

This Bid invitation, and award to the Successful Bidder, shall be conducted in accordance with the *Code of Virginia*, and Bidders shall be subject to the provisions thereof.

For all further requirements regarding Bid submittal, qualifications, procedures, and contract award, refer to the Instructions to Bidders that are included in the Bid Documents.

All Bidders are required to demonstrate compliance with the requirements found within this solicitation.

In the event there is a conflict between the provisions stated herein, and others referenced, the more stringent provision shall take precedence.

All Bidders are required to demonstrate compliance with the all the requirements founded within this solicitation, with special consideration of those addressed in **Section 00090- VDOT SPECIAL PROVISION COPIED NOTES, SPECIAL PROVISIONS & SUPPLEMENTAL SPECIFICATIONS, DIVISION I – GENERAL PROVISIONS** and **Section 00100- STATE PROVISIONS FOR LOCALLY ADMINISTERED PROJECTS- VDOT SPECIAL PROVISION COPIED NOTES (SPCN'S), SPECIAL PROVISIONS (SP'S) & SUPPLEMENTAL SPECIFICATIONS (SS'S) – DIVISION 1- GENERAL PROVISIONS.**

COUNTY OF HANOVER, VIRGINIA (COUNTY/OWNER)

ISSUED BY:

Trena A. Ponton, CPPB, Purchasing Officer Senior

Finance and Management Services Department

Purchasing Division

Chenault-Weems Building (2nd floor)

P.O. Box 470 / 7507 Library Drive

Hanover, VA 23069-0470

Telephone: (804) 365-6283

Facsimile: (804) 365-6100

Email: taponton@hanovercounty.gov

(I telework elsewhere Tuesdays and Thursdays, so the best method to reach me is by email)

END OF SECTION

SECTION 00030

The County's Project Manager for this Work shall assume all rights and responsibilities attributed to the Engineer in this document and those referenced herein.

These INSTRUCTIONS TO BIDDERS are defined in EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and whereas modified within this solicitation.

CONTRACTOR: The term "CONTRACTOR" means the Successful Bidder to whom the contract is awarded to.

COUNTY/OWNER: The Purchasing Division of the Finance and Management Services Department provides purchasing support for Hanover County Government, Hanover County School Board, Pamunkey Regional Jail Authority and Pamunkey Regional Library, hereinafter referred to as County. Any contract issued as a result of this solicitation shall be available for the use of any or all of these entities unless otherwise stated in the solicitation.

DESCRIPTION OF WORK: Provide all labor, materials, tools, equipment, services, transportation, and incidentals necessary for the construction of improvements to extend sidewalks from existing Cool Spring Elementary School to Honey Meadows and Taylor Farms subdivisions. This includes grading and installation of approximately 450' of sidewalk and compliant ramp connections, median and pedestrian refuge on Honey Meadows as well as two high visibility cross walks.

All work shall be constructed in accordance with the Project Manual; the Virginia Department of Transportation Road and Bridge Specifications, dated 2020; the Road and Bridge Standards, dated 2016; the Virginia Work Area Protection Manual, 2011 edition; the Manual on Uniform Traffic Control Devices, 2009 edition; VDOT Special Provision Copied Notes, Special Provisions, and Supplemental Specifications; the Virginia Supplement to the Manual on Uniform Traffic Control Devices, 2011 edition, and the VDOT Locally Administered Project Manual. In the case of any conflict between these documents, the more stringent of the requirements shall apply.

SUCCESSFUL BIDDER: The term "Successful Bidder" means the lowest, qualified, responsive and responsible Bidder to whom the County (on the basis of the County's evaluation as hereinafter provided) makes an award.

The following are provided in alphabetic order.

1. **BID SECURITY:** A Bid Security in the amount of 5% percent shall be required of Bids \$100,000 and greater. The Bid Security may be in the form of a Bid Bond from a Surety legally authorized to do business in Virginia, or a cashier's check, or certified check payable to HANOVER COUNTY, VIRGINIA. The Bid Bond shall accompany the Bid. The Bidder shall require the attorney-in-fact that executed the Bid Bond on behalf of the surety company to affix thereto a certified and current copy of the power of attorney. The Bidder shall pay the cost of providing the Bid security.
 - A. The Bid security is a guarantee that if the contract is awarded by the OWNER to the Bidder, the Bidder shall enter into the contract with the OWNER for the Work mentioned in the Bid or forfeit the Bid security to the OWNER, not as a penalty, but as liquidated damages.
 - B. Unless it shall become the property of, or payable to, the OWNER, the Bid security will be returned to the Bidder, upon request, as hereinafter provided. Bid Bonds will be returned upon request by the Bidder to all except the low Bidder within five (5) business days after the OWNER and the Bidder have executed the contract. In the event the contract has not been fully executed within 90 calendar days after the opening of Bids, the Bid security of any Bidder who has not been notified of the acceptance of its Bid will be returned promptly upon request.
2. **COMPLETION OF CONTRACT DOCUMENTS/AWARD:** The OWNER reserves the right to accept or reject any or all Bids or parts of Bids, to waive informalities, and to request rebids. A Bid may be modified by the Bidder any time prior to the time and date set for the receipt of Bids. The Bidder shall give the Purchasing Division notice of its intentions at the time the request to modify the Bid is given. Modified bids may be resubmitted up to the date and time set for the receipt of Bids. Telephone or facsimile modifications of Bids shall not be accepted.
 - A. It's the intent of the OWNER to recommend the award of the contract for this Work to the lowest responsive and responsible Bidder provided the Bid has been submitted in accordance with the requirements of the Bid Documents and does not exceed the funds available. The OWNER may consider, among other things, the Bidders past performance, conduct on other contracts, and other information provided by the Bidder on AIA Document A305, Contractor's Qualification Statement.
 - B. The OWNER may conduct such investigations as he deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications and financial ability of the Bidders, proposed Subcontractors and other persons and organizations to do the Work in accordance with the Bid Documents to the OWNER's satisfaction within the prescribed time.

- C. The Bidder to whom the contract is awarded shall, within 15 days after prescribed documents are presented for signature, execute and deliver to the OWNER the Contract Documents and any other forms or bonds required by the Bid. Otherwise, the County may award the CONTRACT to the next lowest responsive and responsible Bidder and keep the Bidders Bid security, if any.
3. CONTRACTOR'S QUALIFICATION STATEMENT: Bidders being considered for award of a contract may be required to file a Contractor's Qualification Statement (AIA Document A305) and/or provide other such additional information as the County may request to assist it in determining the CONTRACTOR's qualifications to satisfy its obligations under the Request. Bidders requested to file such a statement or provide such additional information shall be given 48 hours to get the completed statement, or provide the requested information, to the County. The County shall determine whether such information permits the Bidder to be considered as a responsible bidder in accordance with Section 2.2-4301 of the *Code of Virginia*. Factors which may be considered in arriving at this determination may include the financial stability and solvency of the Bidder; experience in completing work of a nature and scope similar to the work being bid; and performance and/or workmanship on previous contracts.
4. CONTRACT TIME: The number of days within which, or the date by which, the Work is to be completed (the Contract Time) is set forth in the BID FORM and will be included in the Agreement.
5. DISCREPANCIES WITHIN BID/CONTRACT DOCUMENTS:
- A. Prior to submission of bids, the Bidder (or any person bidding to Bidder and-or subsequently in contract with the Bidder, relating to the subject project) knows, or should have known, that an ambiguity, discrepancy, error, or omission or conflicting statement exists in the Bid or Contract Documents, said Bidder (or sub-bidder) has an obligation to seek clarification thereof from the OWNER/ENGINEER. The OWNER/ENGINEER welcomes such a clarification request and, if deemed necessary, the OWNER/ENGINEER will issue a written Addendum at 10 days prior to bid date clarifying the matter in question.
- B. If the CONTRACTOR (or any person in contract with CONTRACTOR relating to the subject project) knew, or should have known, that an error, inconsistency, omission, ambiguity, discrepancy, conflict or variance exists in the BID/CONTRACT DOCUMENTS, such as associated codes, specifications and standards set forth therein, it is the CONTRACTOR's obligation to seek clarification thereof from the OWNER/ENGINEER prior to the time the Work is performed. The CONTRACTOR shall not be liable for damages relating thereto, if he has met this obligation. The OWNER/ENGINEER welcomes such a clarification request and, if deemed necessary by the OWNER/ENGINEER, the OWNER/ENGINEER will issue a written change to the contract clarifying the matter in question.
- C. Should the Bidder/CONTRACTOR fail to seek such a clarification thereof immediately upon discovery, the Bidder/CONTRACTOR thereby waives, and agrees to indemnify and hold the OWNER/ENGINEER harmless from, any claim, suit or cause of action arising out of or related to such error, inconsistency, ambiguity, discrepancy, conflict or variance which Bidder/CONTRACTOR knew or should have known existed prior to the Bidder's submission of Bid, and the CONTRACTOR's performing any construction activity under the CONTRACT. The CONTRACTOR shall assume responsibility for such performance and shall bare all the cost of correction.
6. ESCROW ACCOUNT FOR RETAINED FUNDS: Refer to Section 00080 for an example of the Escrow Agreement.
- A. At the time the Bid is submitted, provided the Bid price exceeds \$200,000 (including additive alternates, if any), and subject to the provisions of Section 2.2-4334 of the Virginia Public Procurement Act, the Bidder shall have the option to request use of an escrow account procedure for utilization of funds retained by the OWNER, and may request use of this option by so indicating in the space provided on the BID FORM. In the event the OWNER's award to the CONTRACTOR exceeds \$200,000, and the CONTRACTOR has indicated on the BID FORM its intention to use the escrow procedure, the CONTRACTOR may use the escrow account procedure. The "Escrow Agreement" form included in this Bid proposal shall be executed by the CONTRACTOR and submitted to the Purchasing Division Director within 15 calendar days of notification by the County that its Bid has been accepted. If the "Escrow Agreement" is not submitted as herein provided, the CONTRACTOR shall forfeit such rights to the use of the escrow account procedure.
- B. In order to have retained funds paid to an escrow agent, the CONTRACTOR, the escrow agent and the surety shall execute an Escrow Agreement form and submit same to the OWNER for approval. The CONTRACTOR's escrow agent shall be a trust company, bank or savings and loan institution with its principal office located in the Commonwealth of Virginia. The Escrow Agreement form shall contain the complete address of the escrow agent and surety, and an executed escrow agreement will be authority for the County Administrator, or his designee, to make payment of retained funds to the escrow agent. After approving the Escrow Agreement, the OWNER will pay to the escrow agent the funds retained as provided herein except that funds retained for lack of progress or other deficiencies on the part of the CONTRACTOR will not be paid to the escrow agent.

- C. The escrow agent may, in accordance with stipulations contained in the escrow agreement, invest the funds paid into the escrow account and pay earnings on such investments to the CONTRACTOR or release the funds to the CONTRACTOR provided such funds are fully secured by approved securities.
 - D. Retained funds invested and securities held as collateral for retainage may be released only as and when directed by the County Administrator, or his designee. When the final estimate is released for voucher, the OWNER will direct the escrow agent to settle the escrow account by paying the CONTRACTOR or the OWNER monies due them as determined by the County Administrator, or his designee. The OWNER reserves the right to recall retained funds and to release same to the surety upon receipt of written requests from the CONTRACTOR or in the event of default.
7. **ETHICS IN PUBLIC CONTRACTING:** The provisions contained in the *Code of Virginia*, Sections 2.2-4367 through 2.2-4377, of the Virginia Public Procurement Act, shall be applicable to all contracts solicited or entered into by this County. A copy of these provisions may be obtained from the Purchasing Division Director upon request.

The provisions of this article supplement, but do not supersede, other provisions of law including, but not limited to, the State and Local Government Conflict of Interests Act (Title 2.2, Chapter 31 of the *Code of Virginia*), the Virginia Governmental Frauds Act (Title 18.2, Chapter 12, Article 1.1 of the *Code of Virginia*) and prohibitions against bribery and related offenses (Title 18.2, Chapter 10, Articles 2 and 3 of the *Code of Virginia*). The provisions apply notwithstanding the fact that the conduct described may not constitute a violation of the Virginia Conflict of Interests Act.

8. **EXAMINATION OF SITE AND BID DOCUMENTS:** Before submitting a Bid, each Bidder shall (a) thoroughly examine the Bid and Contract Documents, (b) visit the site of the proposed work to become familiar with the local conditions that may in any manner affect cost, progress or performance of the Work, (c) become familiar with federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress or performance of the Work, and (d) study and carefully correlate the Bidders observations with the Bid and Contract Documents.

Bidders are requested and expected to visit the site of the project such as: labor and transportation, handling and storage of materials, the availability of materials, and site access. The failure or omission of any Bidder to examine the documents or to visit the site shall in no way relieve any Bidder from any obligation with respect to its Bid or to the contract. The submission of a Bid shall be taken as prima facie evidence of compliance with this section.

- A. The Bidder should consult the Instructions to Bidders, Hanover County General Terms and Conditions, and EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and whereas modified and supplemented within this solicitation, for the identification of those reports of investigations and tests of subsurface and latent physical conditions at the site or reports that otherwise may affect cost, progress, or performance of the Work which have been utilized by the OWNER/ENGINEER in preparation of the Drawings and Specifications. These reports, if any, are included in this Project Manual. These reports are not intended or constitute any explicit or implicit representation as to the nature of the subsurface and latent physical conditions which may be encountered at the site or to constitute explicit or implicit representations as to any other matter contained in any report. Such reports are not guaranteed as to accuracy or completeness and are not part of the Contract Documents. Before submitting a Bid, each Bidder will, at its own expense, make such investigations and tests as the Bidder may deem necessary to determine its Bid for performance of the Work in accordance with the Contract Documents. On request 24 hours in advance, the OWNER will provide each Bidder access to the site to conduct explorations and tests each Bidder deems necessary for submission of a Bid.

The Bidder shall obtain all necessary permits to complete explorations or tests, obtain permission from property owners to enter properties, fill all holes, clean up, and restore the site to its former condition upon completion of such explorations or test. Arrangements for site visits shall be made by calling the appropriate County department at the number listed on the cover page of this Project Manual.

- B. The lands upon which the Work is to be performed, right-of-way for access thereto, and other lands available for use by the successful CONTRACTOR in performing the Work are identified in the Instructions to Bidders, Hanover County General Terms and Conditions, and EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and whereas modified and supplemented within this solicitation, General Construction Standards, or Drawings.
- C. The submission of a Bid constitutes an incontrovertible representation by the Bidder that it has complied with every requirement of this Section and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the Work.
- D. If the CONTRACTOR (or any person in contract with CONTRACTOR relating to the subject project) knew, or should have known, that an error, inconsistency, omission, ambiguity, discrepancy, conflict or variance exists in the Bid

Documents, or between the Contract Documents and any of the codes, specifications and standards set forth therein, the CONTRACTOR has the obligation to seek a clarification thereof from the OWNER/ENGINEER prior to the time the Work is performed which is affected by such error, inconsistency, omission, ambiguity, discrepancy, conflict or variance. The CONTRACTOR shall not be liable for damages relating thereto, if he has met this obligation. The OWNER will welcome such a clarification request and, if deemed necessary by the ENGINEER, the ENGINEER or the OWNER will issue a written change to the contract clarifying the matter in question.

- E. If the CONTRACTOR performs any construction activity which he knows or should know involves an error, inconsistency, or omission in the Bid Documents without such notice to the OWNER/ENGINEER, the CONTRACTOR shall assume responsibility for such performance and shall bear the cost of correction.
- F. The CONTRACTOR will be held responsible for locating all underground structures such as water, oil and gas mains, water and gas services, storm and sanitary sewers and telephone and electric conduits which may be encountered during the construction operation. He shall dig test holes to determine the position of the underground structures. The CONTRACTOR shall pay the cost of digging test holes and likewise he shall pay the cost of the services of the representatives of the owners of such utilities for locating the said utilities. The cost of determining the location of any and all utilities is to be included in the Bid price.
- G. Dimensioned and written information takes precedence over scale on all drawings. The CONTRACTOR shall verify all grades, lines, levels, and dimensions indicated on the drawings and shall report all inconsistencies in writing to the OWNER/ENGINEER and shall receive clarification of such inconsistencies from the OWNER/ENGINEER before commencing Work.

9. **FOREIGN & DOMESTIC BUSINESSES AUTHORIZED TO TRANSACT BUSINESS IN THE COMMONWEALTH:** In accordance with *Code of Virginia* § 2.2-4311.2 subsection B, a Bidder organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 is required to include in its bid the identification number issued to it by the State Corporation Commission (SCC). Any Bidder that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bid a statement describing why the Bidder is not required to be so authorized. Indicate the above information on the SCC Form provided.

Contractor agrees that the process by which compliance with Titles 13.1 and 50 is checked during the solicitation stage (including without limitation the SCC Form provided) is streamlined and not definitive, and the OWNER's use and acceptance of such form, or its acceptance of CONTRACTOR's statement describing why the Bidder was not legally required to be authorized to transact business in the Commonwealth, shall not be conclusive of the issue and shall not be relied upon by the CONTRACTOR as demonstrating compliance.

10. **INTERPRETATIONS AND ADDENDA:** All questions about the meaning or intent of the Bid Documents or Contract Documents shall be submitted to ENGINEER in writing. In order to receive consideration, questions should be received by ENGINEER as explained in Section 00020, page 1. Any interpretations of questions so raised, which in the opinion of the ENGINEER require interpretations, will be issued by Addenda mailed or delivered to all parties recorded by ENGINEER as having received the Bid Documents not later than ten (10) days prior to the date fixed for the receipt of Bids. An Addendum extending the date for the receipt of Bids or an Addendum withdrawing the Invitation to Bid may be issued any time prior to the date set for the receipt of Bids. ENGINEER and OWNER will not be responsible for oral interpretations or clarifications that anyone presumes to make on their behalf.

- A. The OWNER may issue such additional Addenda as may be necessary to clarify, correct or change the Bid Documents or the Contract Documents. Such Addenda, if any, will be issued in the manner and within the time stated in the preceding paragraph of this Section.
- B. Each Bidder shall be responsible for determining that all Addenda issued for the Invitation to Bid have been received before submitting its Bid for the Work.
- C. Each Bidder shall ascertain prior to submitting its Bid that it has received all Addenda issued and shall acknowledge receipt of each Addendum on the BID FORM.
- D. Bidders and Sub-bidders shall promptly notify the ENGINEER of any ambiguity, inconsistency or error which they may discover upon examination of the Bid and Contract Documents or of the site and local conditions.
- E. If the Bidder (or any person bidding to Bidder and/or subsequently in contract with the Bidder, relating to the subject project) knows, or should have known, that an ambiguity, discrepancy, error, omission or conflicting statement exists in the Bid or Contract Documents, said Bidder (or sub-bidder) has an obligation to seek a clarification thereof from

the ENGINEER prior to Bid. The OWNER will welcome such a clarification request, and, if deemed necessary, the ENGINEER or OWNER will issue a written Addendum at least 10 days prior to the bid date clarifying the matter in question.

11. LAWS AND REGULATIONS: Laws and Regulations are set forth through the *Code of Virginia*, and whereas modified and supplemented within this solicitation. Additional provisions, if any, concerning Laws and Regulations are set forth in this solicitation.
 - A. The Bidder shall familiarize himself with and comply with all federal, state, and local laws, ordinances, rules, and regulations that in any manner may affect the cost, progress, or performance of the Work.
 - B. The CONTRACTOR certifies that they do not, and shall not during the performance of the contract for goods and services in the Commonwealth, knowingly employ an unauthorized alien as defined in the Federal Immigration Reform and Control Act of 1986.
12. LICENSES AND PERMITS: The CONTRACTOR shall secure and pay for all permits, governmental fees and licenses necessary for the proper execution and completion of the Work that are legally required prior to and during construction. Included with the permits, the CONTRACTOR shall secure, but not be responsible for payment of fees associated with any Land Disturbance Permit or Virginia Stormwater Management Program (VSMP) Permit fees, as required by Hanover County ordinance, these fees will be paid for by the OWNER.
13. LIQUIDATED DAMAGES: Liquidated damages shall be assessed (not as penalty) in accordance with Virginia Department of Transportation Road and Bridge Specification, Section 108.6 Failure to Complete on Time.
14. PREPARATION AND SUBMISSION OF BIDS:
 - A. PREPARATION OF BIDS: The Bidder has carefully reviewed and understands the Bidding Documents/Contract Documents, to the extent that such documentation relates to the Work for which the Bid is submitted, and for other portions of the Project, if any, being bid concurrently or presently under construction, and has verified that all of the Bidding Documents received are complete. The Bidder shall notify the OWNER and ENGINEER immediately if received Bidding Documents are not complete.
 1. The Bidder has familiarized itself with all applicable federal, state and local laws, ordinance, rules and regulations that in any manner may affect cost, process or performance of the Work; the Bidder has obtained the necessary licenses for bidding, if applicable, and is licensed or certified to perform the Work.
 2. The OWNER is exempt from Federal Excise and State Sales and Use Tax on all tangible personal property purchased or leased by it for its use or consumption. The Bidder shall pay all County, City, State, and Federal taxes required by laws enacted at the time Bids are received and resulting from the Work or traceable thereto, under whatever name levied. Said taxes shall not be added to the Contract price and the OWNER shall be held harmless for same by the CONTRACTOR. Exemption certification will be supplied upon request.
 3. The Bidder has inspected the site and has become thoroughly familiar with local conditions relating to the construction of this Project and the employment of labor thereon and has correlated the Bidder's personal observations with the requirements of the proposed Contract Documents. The Bidder shall have familiarized itself of the Drawings, Project Manual, Specifications, and other Contract Documents (including all addenda). Failure to do so shall not relieve the Successful Bidder of its obligation to furnish all material of labor necessary to carry out the provisions of the Contract for the Bid amount.
 - B. SUBMISSION OF BIDS: Sealed Bids, in accordance with the Bid Documents, will be received prior to the date and at the time indicated in this solicitation, unless changed by Addendum.
 1. Instructions and Bidder responsibilities for methods of Bid submission, and submission of original Bid Bonds provided in the Advertisement of this solicitation.
 2. **Bids shall be completed on the BID FORM provided in the Bid Documents, or a copy thereof. The OWNER shall not accept any oral Bids or Bids received by telephone, facsimile, or emailed. Failure to submit a Bid, or copy thereof, on the official County form provided for that purpose shall be a cause for possible rejection of the Bid. Modification of or additions to any portion of the Bid Documents may be cause for rejection of the bid.** However, the County reserves the right to decide, on a case-by-case basis, in its sole discretion, whether to reject such a bid as nonresponsive. No modification of or addition to the provisions of the contract shall be effective unless in writing and signed by the parties.
 4. Each Bid must give the full legal name and business address of the Bidder. If the Bidder is a corporation, the Bid must be submitted in the name of the corporation, not simply the corporation's trade name.

5. The BID FORM shall have original signatures, in black or blue ink, signed by a person authorized to bind the Bidder in contractual matters in order to be considered. The name and title of the person signing the Bid shall also be typed or printed as indicated on the BID FORM.
6. The BID FORM, the Bid security, if any, and any other documents required, shall be enclosed in a sealed envelope with the Contractor's registration license number and legal business name, the Invitation for Bid number, and the due date and time identified on the outside of the letter in the left hand corner. ANY NOTATION ON THE EXTERIOR OF THE ENVELOPE PURPORTING TO ALTER, AMEND, MODIFY OR REVISE THE BID CONTAINED WITHIN THE ENVELOPE SHALL BE OF NO EFFECT AND SHALL BE DISREGARDED.
7. Discrepancies between amounts shown in words and amounts shown in figures will be resolved in favor of the amounts shown in words. Discrepancies in the multiplication of units of Work and the unit prices will be resolved in favor of the correct multiplication of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.
8. All erasures, insertions, additions, and other changes made by the Bidder to the BID FORM shall be signed or initialed by the Bidder. Bids containing any conditions, omissions, erasures, alterations, or items not called for in the Bid, may be rejected by the OWNER as being incomplete and nonresponsive.
9. Use of Information and Documents: The County and its officials, employees and agents will copy and use the response of the Bidder and documents included with the response, for various purposes related to analysis, evaluation, and decision to award a contract. Following award, the County may be required to allow inspection and copying of documents and may also use the Bidders documents in connection with any resulting contracts with that Bidder. The Bidder is responsible for obtaining any necessary authorizations for all such use of the documents and information, and for assuring that such copying and use is in conformance with laws related to trademarks and copyrights. Any documents or information for which the Bidder has not obtained such authorization, or for which such copying and use is not authorized, shall not be submitted. The undersigned Bidder agrees to indemnify, defend and hold the County, its officials, employees and agents harmless from any claims of any nature, including claims arising from trademark or copyright laws, related to use of information and documents submitted with the Bidders response.
15. **PROPRIETARY INFORMATION:** Trade secrets or proprietary information submitted by a Bidder in connection with this procurement transaction shall not be subject to public disclosure under the Virginia Freedom of Information Act; however, the Bidder must invoke these protections prior to or upon submission of the data or the materials and must identify the data or other materials to be protected and state the reason why protection is necessary. [Virginia Code Section 2.2-4342F]. **Bidders shall submit, and clearly identify in a separate section of the bid, any information considered by the Bidder to be trade secrets or proprietary information and shall state the reason why protection is necessary. Bidders may not declare the entire bid proprietary, nor may they declare pricing to be proprietary.** References may be made within the body of the bid to proprietary information; however, all information contained within the body of the bid not in the separate section labeled proprietary shall be public information.
16. **STATE CORPORATION COMMISSION IDENTIFICATION NUMBER:** In accordance with *Code of Virginia* § 2.2-4311.2 subsection B, a Bidder organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 is required to include in its bid the identification number issued to it by the State Corporation Commission (SCC). Any Bidder that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law shall include in its bid a statement describing why the Bidder is not required to be so authorized. Indicate the above information on the SCC Form provided. Contractor agrees that the process by which compliance with Titles 13.1 and 50 is checked during the solicitation stage (including without limitation the SCC Form provided) is streamlined and not definitive, and the County's use and acceptance of such form, or its acceptance of Contractor's statement describing why the Bidder was not legally required to be authorized to transact business in the Commonwealth, shall not be conclusive of the issue and shall not be relied upon by the Contractor as demonstrating compliance.
17. **SUBCONTRACTING:** No CONTRACTOR shall be required to employ any Subcontractor, Supplier, other person or organization against whom he has reasonable objection.
 - A. Each Bidder shall submit to the OWNER, with its Bid, the List of Subcontractors found in this Project Manual, completed with the names of all such Subcontractors, Suppliers, other persons, and organizations proposed for those portions of the Work for which such identification is required. Suppliers and equipment manufacturers who are named in the BID FORM need not be named in the List of Subcontractors. The OWNER will, during the term of this Agreement, have the right of reasonable rejection of staff or subcontractors assigned to the project by the

CONTRACTOR. If the OWNER reasonably rejects staff or subcontractors, the CONTRACTOR must provide replacement staff or subcontractors satisfactory to the OWNER in a timely manner and at no additional cost to the OWNER. The day-to-day supervision and control of the CONTRACTOR'S employees shall be solely the responsibility of the CONTRACTOR.

- B. If the apparent Successful Bidder declines to make such a substitution, the OWNER may award the contract to the next lowest Bidder that proposes to use acceptable Subcontractors, Suppliers, and other persons, and organizations. The declining to make requested substitutions will not constitute grounds for sacrificing the Bid security of any Bidder. Any Subcontractor, Supplier, other person, or organization listed and to whom the OWNER or ENGINEER does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to the OWNER and ENGINEER.
- C. By submitting the List of Subcontractors as provided for herein, the Bidder is indicating that the Bidder is confident that each Subcontractor listed:
1. Has sufficient financial capability, physical plant, and personnel to perform its duties under the contract.
 2. Has successfully provided similar work on at least three recent occasions.
 3. Has stated or attached a list of the names of manufacturers whose products it will supply.
18. **SUBSTITUTE MATERIAL AND EQUIPMENT:** The Contract, if awarded, will be on the basis of material and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or “or equal” item of material or equipment may be furnished or used by the CONTRACTOR if acceptable to the ENGINEER, the ENGINEER shall not review substitute or “or equal” items until after the “effective date of the Agreement”. Requirements for proposing substitute material and or equipment are set forth in EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and whereas modified and supplemented within this solicitation
19. **WITHDRAWAL OF BIDS:** Upon proper request and identification, Bids may be withdrawn at any time prior to the date and time set for the receipt of Bids. Once bids are received, withdrawal of bids shall be considered based upon the following:
- A. The Bidder shall not be allowed to withdraw its Bid within (90) calendar days after the Bid opening date and time. At the end of the (90) calendar days the bid may be withdrawn at the written request of the Bidder. If the bid is not withdrawn at that time it remains in effect until an award is made or the solicitation is canceled.
- B. Bids may be withdrawn in accordance with the *Code of Virginia* §2.2-4330B(1), if the reason for withdrawal is due solely to a mistake in the bid, provided the bid was submitted in good faith and was an unintentional mathematical error or an unintentional omission of quantity of work, labor, or materials made directly in the compilation of a bid, and the mistake can be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the bid sought to be withdrawn.
- C. If a bid contains both clerical and judgment mistakes, a Bidder may withdraw his bid from consideration if the bid would have been substantially lower than the other bids due solely to the clerical mistake, that was an unintentional mathematical error or an unintentional omission of a quantity of work, labor or material made directly in the compilation of a bid that shall be clearly shown by objective evidence drawn from inspection of original work papers, documents and materials used in the preparation of the bid sought to be withdrawn.
20. **SPECIAL INSTRUCTIONS TO BIDDERS:**
- A. **CONTRACT AUDIT:** The Contractor shall permit the County to audit, examine, and copy all documents, computerized records, electronic mail, or other records of the Contractor during the life of the Contract and for a period of not less than five years after the date of final payment, or the date the Contractor is declared in default of Contract, or the date of termination of the Contract. The documents and records shall include, but not be limited to:
1. Those that were used to prepare and compute the bid, prepare all schedules used on the project, record the progress of work on the project, accounting records, purchasing records, personnel payments or records necessary to determine employee credentials, vendor payments and written policies and procedures used to record, compute and analyze all costs incurred on the project, including those used in the preparation or presentation of claims to the County.
 2. Records pertaining to the project as the County may deem necessary in order to permit adequate evaluation and verification of Contractor’s compliance with contract requirements, compliance with the County’s business policies, and compliance with provisions for pricing work orders or claims submitted by the Contractor or the Contractor’s subcontractors, insurance agents, surety bond agents and material suppliers shall be made available to the auditor(s) at the County’s request. The Contractor shall make his personnel available for interviews when requested by the County.

3. Upon request, the Contractor shall provide the County with data files on data disks, or other suitable alternative computer data exchange format. Data furnished by the Contractor that cannot be verified will be subject to a complete audit by the County.

The Contractor shall ensure that the requirements of this provision are made applicable to his subcontractors, insurance agents, surety bond agents and material suppliers. The Contractor shall cooperate and shall cause all related parties to furnish or make available in an expeditious manner all such information, materials, and data. The Contractor shall be forthcoming in disclosing all sources and locations of media.

The Contractor shall provide immediate access to records for the audit and provide immediate acceptable facilities for the audit. Failure on the part of the Contractor to afford the County immediate access or proper facilities for the audit will be considered failure to cooperate and will result in disqualification as a bidder in accordance with Section 102.08.

Upon completion of the contract audit, any adjustments or payments due by the Contractor as a result of the audit shall be made within 60 days from presentation of the County's findings to the Contractor. Failure on the part of the Contractor to make payment may result in disqualification as a bidder in accordance with Section 102.08.

If the Contractor disagrees with the findings of the County's audit, the Contractor may appeal the decision in accordance with provisions of Section 105.19 or the *Code of Virginia* as amended and as applicable, except that the provision for the Contractor to submit a claim within 60 days after final payment shall not apply. If the Contractor elects to appeal the decision of the audit he shall within 60 days of the date of the notice of the County's findings submit a written request to appeal the decision to the Chief Engineer. Failure on the part of the Contractor to file a claim disputing the County's audit within 60 days will be interpreted as a waiver of any claim for dispute of the County's findings.

B. PREQUALIFICATION OF BIDDERS:

1. Prior to submittal of bid, the successful Bidder shall be prequalified in accordance with the Rules Governing Prequalification Privileges with the Virginia Department of Transportation (VDOT). All prospective Bidders, joint ventures and subcontractors, should include in their certification with their bid. Bidders seeking new prequalification status in compliance with VDOT requirements and processing should submit a copy of their prequalification packet as submitted to VDOT.

The rules and regulations for prequalification are described within the Virginia Department of Transportation's Rules Governing Prequalification Privileges: (<http://www.virginiadot.org/business/const/prequal.asp>). This requirement may be waived by a Contract provision. Prequalification will not be required for items noted in the proposal as "Specialty Items."

The names of persons authorized to sign bids shall be on file with the Department. A name will be considered to be on file if it appears as that of an officer, a partner, or an owner on the current Contractor's Prequalification Application. Requests by the bidder to revise the list of persons authorized to sign bids shall be submitted in writing and approved prior to the date bids are opened. A bid signed by someone whose name is not on file may be rejected.

A bidder who makes a false certification on the Bid will be subject to forfeiture of the bid bond or disqualification from bidding on future work for a 90-day period, or both.

When an individual is prequalified to bid jointly only with a specific company, the joint venture will be considered a unified entity for qualification purposes.

Bidders intending to submit bids consistently shall prequalify at least once each two years using the Prequalification Renewal Application. However, the maximum capacity rating or classification, or both, may be changed by the Virginia Department of Transportation during that period if additional favorable reports are submitted or upon unsatisfactory performance as determined in accordance with the requirements of Section 108.03 or from the Contractor's performance evaluations or upon non-performance as determined in accordance with the provisions of Section 108.07. The Virginia Department of Transportation may require a Contractor to furnish a current financial and experience statement at any time.

2. If prequalification is approved, prospective bidders will be placed on the Virginia Department of Transportation's List of Prequalified Vendors. Bidders are subject to varying levels of prequalification as

stated within the Rules Governing Prequalification Privileges. Bidders will be subject to removal from this list based on disqualification in accordance with the Specifications and Prequalification rules and regulations. Unless otherwise stated, consideration for reinstatement to the Virginia Department of Transportation's List of Prequalified Vendors will be made by the Virginia Department of Transportation.

END OF SECTION

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SECTION 00040
HANOVER COUNTY GENERAL TERMS AND CONDITIONS

In the event there is a conflict between the provisions stated herein, and others referenced, the more stringent provisions shall take precedence.

1. **eVA BUSINESS-TO-GOVERNMENT VENDOR REGISTRATION:** The eVA Internet electronic procurement solution, web site portal www.eva.virginia.gov streamlines and automates government purchasing activities. All vendors desiring to provide goods and/or services to the County shall participate in the eVA Internet e-procurement solution by completing the free eVA Vendor Registration. All Bidders or Offerors must register in eVA, failure to register may result in the bid/proposal being rejected. The County advertises all competitive solicitations on eVA but does not issue purchase orders through eVA unless required to by the terms and conditions of a state issued contract.
2. **ACCEPTANCE OF GOODS/SERVICES:** Goods/services delivered shall remain the property of the CONTRACTOR until a physical inspection or actual usage of the goods/services is made and thereafter accepted to the satisfaction of the County. The goods/services must comply with the specifications and terms and conditions of the Request and be of the highest quality. In the event the goods/services supplied to the County are found to be defective or not to conform to specifications, the County reserves the right to cancel the contract upon written notice to the CONTRACTOR and return products to CONTRACTOR at the CONTRACTOR'S expense.
3. **ANNOUNCEMENT OF AWARD:** Upon the award or the announcement of the decision to award a contract as a result of this solicitation, the County will publicly post such notice in eVA (<https://eva.virginia.gov>) for a minimum of 10 days.
4. **ANTI-DISCRIMINATION:** By submitting their bids, Bidders certify to the OWNER that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and § 2.2-4311 of the *Virginia Public Procurement Act, (Code of Virginia)*. If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided. However, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body (*Code of Virginia, § 2.2-4343.1E*).

In every contract over \$10,000 the provisions in A and B below apply:

- A. During the performance of this contract, the CONTRACTOR agrees as follows:
 1. The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the CONTRACTOR. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
 2. The CONTRACTOR, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, will state that such CONTRACTOR is an equal opportunity employer.
 3. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
 - B. The CONTRACTOR will include the provisions of (A) above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.
5. **APPLICABLE LAWS AND COURTS:** This solicitation is governed by the laws of the Commonwealth of Virginia. Any dispute or controversy arising out of or relating to this solicitation or otherwise shall be brought in the Hanover County Circuit Court or in the United States District Court for the Eastern District of Virginia, Richmond Division; provided, however, that prior to the instigation of any such action (other than an action for equitable relief) a meeting shall be held at a mutually agreed upon location, attended by individuals with decision-making authority to attempt in good faith to negotiate a resolution of the dispute.
 6. **ASSIGNMENT OF CONTRACT:** A contract shall not be assignable by the CONTRACTOR in whole or in part without the written consent of the OWNER.

7. AVAILABILITY OF FUNDS: It is understood and agreed between the parties herein that the OWNER shall be bound hereunder only to the extent of lawfully appropriated funds.
8. BID PRICE CURRENCY: Unless stated otherwise in this solicitation, Bidders shall state bid prices in US dollars.
9. BIDDER, OFFEROR AND CONTRACTOR COMPLIANCE: All Bidders, Offerors and CONTRACTORS shall comply with the *Virginia Public Procurement Act, (Code of Virginia § 2.2-4300, et seq.)*, and all applicable OWNER policies, regulations and procedures adopted pursuant thereto.
10. CONTRACT CHANGES: Any changes to the contract must be approved through issuance of a written contract addendum or change order. The County will not assume responsibility for the cost of any changes made without issuance of a written contract addendum or change order.
11. CONTRACTOR'S PERFORMANCE:
 - A. The CONTRACTOR agrees and covenants that its agents and employees shall comply with all County, State and Federal laws, rules and regulations applicable to the business to be conducted under the Contract.
 - B. The CONTRACTOR shall ensure that its employees shall observe and exercise all necessary caution and discretion so as to avoid injury to person or damage to property of any and all kinds.
 - C. The CONTRACTOR shall cooperate with County officials in performing the Contract work so that interference with normal operations will be held to a minimum. Work/deliveries must be during the hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, except County observed holidays. Working hours may be altered upon OWNER approval.
 - D. The CONTRACTOR shall be an independent CONTRACTOR and nothing contained in the contract shall constitute or designate the CONTRACTOR of any of its agents or employees as employees of the OWNER.
12. CONTRACTUAL CLAIMS: Requirements of contractual claims are set forth in EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and whereas modified and supplemented within this solicitation. Contractual claims shall be submitted in writing no later than 60 days after final payment; however, written notice of the CONTRACTOR's intention to file such claim shall have been given at the time of the occurrence or beginning of the work upon which the claim is based. Any notice or claim shall be delivered to: Director, Finance and Management Services Department, 7496 County Complex Road, Hanover, VA 23069-0470 and shall include a description of the factual basis for the claim and a statement of the amounts claimed or other relief requested. The County Administrator will render a decision on the claim and will notify the CONTRACTOR within 30 days of receipt of the claim. The CONTRACTOR may appeal the decision of the County Administrator to the Board of Supervisors by providing written notice to the County Administrator, within 15 days of the date of the decision. The Board of Supervisors shall render a decision on the claim within 60 days of the date of receipt of the appeal notice and such decision shall be final unless the CONTRACTOR appeals the decision in accordance with the Virginia Public Procurement Act, (*Code of Virginia*). Invoices for all services or goods provided by the CONTRACTOR shall be delivered to the OWNER no later than 30 days following the conclusion of the work or delivery of the goods.
13. DEBARMENT STATUS: By submitting their bids, Bidders certify that they are not currently debarred by the OWNER from submitting bids or proposals on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.
14. DEFAULT: In case of failure to deliver goods or services in accordance with the contract terms and conditions, the OWNER, after due written notice as required by the NOTIFICATION clause, may procure them from other sources and hold the CONTRACTOR responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the OWNER may have.
15. DRUG-FREE WORKPLACE: During the performance of this contract, the CONTRACTOR agrees to (i) provide a drug-free workplace for the CONTRACTOR's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the CONTRACTOR's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR that the CONTRACTOR maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor. For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a CONTRACTOR, the employees of whom are

prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the contract.

16. **ETHICS IN PUBLIC CONTRACTING**: By submitting their bids, Bidders certify that their bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other Bidder, supplier, manufacturer or subcontractor in connection with their bid, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.
17. **FORCE MAJEURE**: If either party shall be wholly or partially prevented from the performance of any contractual obligation or duty by reason of or through strikes, stoppage of labor, riot, fire, flood, acts of war, insurrection, accident, order of any court, act of God, or specific cause reasonably beyond the party's control and not attributable to its neglect or nonfeasance, in such event, the time for the performance of such obligation or duty shall be suspended until such disability to perform is removed. Determination of Force Majeure shall rest solely with the County.
18. **IMMIGRATION REFORM AND CONTROL ACT OF 1986**: The Contractor certifies that they do not, and shall not during the performance of the contract, knowingly employ an unauthorized alien as defined in the Federal Immigration Reform and Control Act of 1986.
19. **INDEMNIFICATION**: Contractor agrees to indemnify the County, its officers, agents, and employees for any loss, liability, cost (including attorney's fees), or reasonable settlement cost incurred as a result of any claims, damages and actions of any kind or nature, whether at law or in equity, arising from or caused by the use of any materials, goods, or equipment of any kind or nature furnished by the Contractor/any services of any kind or nature furnished by the Contractor, provided that such liability is not attributable to the sole negligence of the County or to failure of the County to use the materials, goods, or equipment in the manner already and permanently described by the Contractor on the materials, goods or equipment delivered. The County will not agree to indemnify the Contractor.
20. **INDEPENDENT CONTRACTOR**: The Contractor is an independent Contractor and nothing contained in the contract shall constitute or designate the Contractor or any of its agents or employees as employees of the County.
21. **NOTIFICATION**: Any notice required by the contract shall be effective if given by registered mail, return receipt requested, to the CONTRACTOR in the name and at the address given in their bid; provided that change of address shall be effective if given in accordance with this paragraph. Unless otherwise specified, any notice to the County shall be given to: County of Hanover, Finance and Management Services Department, Purchasing Division Director, P.O. Box 470, Hanover, VA 23069-0470. The CONTRACTOR agrees to notify the OWNER immediately of any change of legal status or of address.
22. **PAYMENT**: Payment procedures/methods are set forth in EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and whereas modified and supplemented within this solicitation. The OWNER encourages CONTRACTOR to accept electronic and credit card payments. Finance charges and or fees imposed by the CONTRACTOR on any invoice shall not be paid by the OWNER.
23. **PRECEDENCE OF TERMS**: The following Terms and Conditions; ANTI-DISCRIMINATION, APPLICABLE LAWS AND COURTS, ETHICS IN PUBLIC CONTRACTING, IMMIGRATION REFORM AND CONTROL ACT OF 1986, DEBARMENT STATUS, MANDATORY USE OF COUNTY FORM AND TERMS AND CONDITIONS, PAYMENT shall apply in all instances.
24. **ROYALTY AND LICENSE FEES AND COPYRIGHT, TRADEMARK AND PATENT PROTECTION**:
 - A. By submitting their bid, Bidders certify that there will be no violation of copyrights or patent rights in manufacturing, producing, or selling the commodities or services to be ordered as a result of this solicitation.
 - B. Unless specified otherwise in the contract, the CONTRACTOR shall pay all royalty and license fees relating to the items covered by the contract.
 - C. In the event any third party shall claim that the manufacture, use and sales of these goods offered hereby constitutes an infringement of any copyright, trademark, or patent, the CONTRACTOR shall indemnify and hold harmless the OWNER from any cost, expense, damage or loss incurred in any manner by the OWNER on account of such alleged infringement.
25. **SEVERABILITY**: Each paragraph and provision of the resultant contract will be severable from the entire agreement and if any provision is declared invalid, the remaining provisions shall remain in effect.

26. TAXES: The County is exempt from Federal Excise and State Sales and Use Tax on all tangible personal property purchased or leased by it for its use or consumption. The Contractor shall pay all County, City, State, and Federal taxes required by law enacted at the time Bids are received and resulting from the work or traceable thereto, under whatever name levied. Said taxes shall not be added to the contract price between the County and the Contractor, as the taxes shall be an obligation of the Contractor and not of the County, and the County shall be held harmless for same by the Contractor. Exemption certification will be supplied upon request.
27. TERMINATION FOR CONVENIENCE: Unless otherwise stated, any resultant contract may be terminated, in whole or in part, whenever the OWNER determines that such a termination is in its best interests. Any such termination shall become effective on the date stated in a written notice of termination to the CONTRACTOR sent at least five days prior to the stated termination date. The notice of termination shall state the extent to which performance shall be terminated. The CONTRACTOR shall be paid for all goods delivered or services successfully completed prior to the termination date.
28. TESTING AND INSPECTION: The County reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications and requirements under the CONTRACT.

END OF SECTION

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SECTION 00050
BID FORM

Bid For: INVITATION FOR BID NO. 24-05-3173TP
COOL SPRING ELEMENTARY SCHOOL SIDEWALK IMPROVEMENT PROJECT
DEPARTMENT OF PUBLIC WORKS
HANOVER COUNTY, VIRGINIA

Submit: Instructions and Bidder responsibilities for Bid submission are found in the Advertisement of this solicitation.

| | | |
|--|----|---|
| <u>BY MAIL:</u> | OR | <u>BY EXPRESS COURIER OR HAND DELIVERY:</u> |
| County of Hanover | | County of Hanover |
| Finance and Management Services Department | | Finance and Management Services Department Chenault- Chenault-Weems Building (2nd floor) |
| Weems Building (2nd floor) | | Purchasing Division |
| Purchasing Division | | 7507 Library Drive |
| P.O. Box 470 | | Hanover, Virginia 23069-0470 |
| Hanover, Virginia 23069-0470 | | |

Bidders:

1. The undersigned Bidder declares that he has informed himself fully of all conditions pertaining to the work and to the location where the work is to be performed; that he has examined the Bid Documents and Contract Documents, including the Form of Contract, Terms and Conditions of the Contract, the Drawings, the Specifications, all Addenda, and all conditions relative to the work to be performed.
2. The Bidder proposes and agrees, if this Bid is accepted within the number of days provided for in the PROJECT MANUAL, to enter into an Agreement with the OWNER in the form of contract specified, for the Contract Price, and within the Contract Time indicated in the Bid Documents to furnish all necessary material, equipment, machinery, apparatus, transportation and labor as required to complete the project indicated on this BID FORM.
3. The Bidder certifies that he has not combined, conspired or agreed to intentionally rig, alter or otherwise manipulate, or to cause to be rigged, altered or otherwise manipulated this Bid for the purpose of allocating purchases or sales to or among persons, raising or otherwise fixing the prices of the goods or services, or excluding other persons from dealing with Hanover County.
4. The County requires that a minimum of 30 days after receipt of an approved Application for Payment (invoice) be allowed for payment.
 - A. Payment to Prime Contractor:
 1. Invoices for items ordered, delivered and accepted shall be submitted by the Contractor directly to the payment address shown on the purchase order/contract. All invoices shall show the contract number and/or purchase order number; social security number (for individual Contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).
 2. Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.
 3. In those cases where payment is made by mail, the date of postmark shall be deemed to be the date payment is made (*Code of Virginia*, § 2.2-4353).
 4. Unreasonable Charges. Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, Contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the County shall promptly notify the Contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A Contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification. The provisions of this section do not relieve the County of its prompt payment obligations with respect to those charges which are not in dispute (*Code of Virginia*, § 2.2-4363).

- B. To Subcontractors:
1. A Contractor awarded a contract under this solicitation is hereby obligated:
 - a. To pay the subcontractor(s) within seven (7) days of the Contractor's receipt of payment from the County for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or
 - b. To notify the County and the subcontractor(s), in writing, of the Contractor's intention to withhold payment and the reason.
 2. The Contractor is obligated to pay the subcontractor(s) interest at the rate of one percent (1%) per month (unless otherwise provided under the terms of the contract) on all amounts owed by the Contractor that remain unpaid seven (7) days following receipt of payment from the County, except for amounts withheld as stated in (b) above. The date of mailing of any payment by U. S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier Contractor performing under the primary contract. A Contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the County.
5. The Bidder certifies that it will comply with all provisions of the *Virginia Public Procurement Act, (Code of Virginia)* and with the laws and regulations of Hanover County.
6. By submitting a Bid, the Bidder represents that the Bidder understands the Insurance Requirements of these specifications and will comply in full if awarded the contract.
7. In submitting this Bid, Bidder represents, as more fully set forth elsewhere in the Bid and Contract Documents:
- A. Bidder has examined the site and locality where the Work is to be performed, the legal requirements (federal, state, and local laws, ordinances, rules and regulations) and the conditions affecting cost, progress of performance of the Work and has made such independent investigations as Bidder deems necessary.
 - B. Bidder acknowledges that OWNER and ENGINEER do not assume responsibility for the accuracy of dimensions or completeness of information and data shown or indicated in the Bid Documents with respect to existing facilities.
 - C. Bidder has given ENGINEER written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bid and Contract Documents and the written resolution thereof by ENGINEER is acceptable to Bidder, and the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work for which this Bid is submitted.
 - D. By bidding in response to this solicitation, the Bidder represents that in the preparation and submission of this Bid, said Bidder did not, either directly or indirectly, enter into any combination or arrangement with any person, firm, or corporation or enter into any agreement, participate in any, collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. Section 1) or Sections 59.1-9.1 through 59.1-9.17 or Sections 59.1-68.6 through 59.1-68.8 of the *Code of Virginia*.
 - E. Bidder hereby certifies that, if awarded the Contract for construction of the Project, it will take all possible actions to minimize costs to OWNER that are related to any disruptions in any part of the Work resulting from unforeseeable conditions which may be encountered and Work changes or additions which may be made.
 - F. The Bidder agrees to bear full cost of maintaining the Work until final acceptance of the Work is approved as provided by the Contract.
8. Bidder agrees to the requirements for substantial completion, final completion, and liquidated damages as follows:
- A. Contract Time
Upon Award of Contract, Contractor will be issued partial Notice to Proceed for design and purchase of equipment. Due to the time necessary for design and fabrication, a secondary Notice to Proceed will be issued for construction. The actual construction shall be completed and accepted by the OWNER within **60 calendar days** of the CONTRACTOR selected construction start date. The Contractor's selected start date for construction shall be at least 2 weeks after the last of school, which is currently scheduled to be May 31, 2024.

B. Liquidated Damages

OWNER and CONTRACTOR agree for each calendar day that work remains incomplete after the contract limit specified for the completion of the work, the OWNER will assess liquidated damages (but not as a penalty) against the CONTRACTOR. Liquidated damages will be deducted from any monies due the CONTRACTOR for each calendar day of additional time consumed until final completion and acceptance of the work, subject to the VDOT Road and Bridge Specifications, Section 108.06 plus any approved time extensions. The CONTRACTOR waives any defense as to the validity of any liquidated damages stated in the Contract, the Contract Documents, or other responsibilities and assessed by the OWNER against the CONTRACTOR on the grounds that such liquidated damages are void as penalties or are not reasonably related to actual damages.

9. The following documents shall be made part of this Bid. Some forms are required with submittal of the Bid Package; others are due within their specified timeframes. **Failure to complete the forms, in the timeframes specified, may result in a Bid being deemed INCOMPLETED and non-responsive and removed from consideration.**

| | |
|----|---|
| A. | Required Bid Security in the form of either a cashier's check, certified check or Bid Bond in the amount of 5% of the Bid amount, required with Bid Package |
| B. | List of Subcontractors, required with Bid Package |
| C. | Itemized schedule of values for all work/materials associated with the Project. Should include quantities and unit price for each item. |
| D. | VDOT Form C-104 Bidder Statement, required with Bid Package |
| E. | VDOT Form C-105 Bidder Certification, required with Bid Package |
| F. | DBE Policy Statement- <u>APPENDIX G</u> |
| G. | VDOT Form C-111 Minimum DBE Requirements. Goal for this project is <u>2%</u> . This form is required prior to 10:00 a.m., next business day after bid opening |
| H. | VDOT Form C-112 Certification of Binding Agreement. This form is required within 3 business days after bid opening |
| I. | <u>SECTION 518—TRAINEES ON CONSTRUCTION PROJECTS- APPENDIX H</u> |
| J. | VDOT Form C-48 Subcontractor/Supplier Solicitation and Utilization Form. This form is required within 10 business days after bid opening |
| K. | VDOT Form C-49 DBE Good Faith Efforts Documentation. This form is required within 2 business days after bid opening |

All VDOT forms can be found here: <http://vdotforms.vdot.virginia.gov/> by entering the form #, as shown above, in the second drop down box. Writeable PDF documents can be found on the website.

10. Receipt of Addenda listed below is acknowledged and the bid incorporates all requirements of these Addenda:
 No. _____ Date _____ No. _____ Date _____ No. _____ Date _____

11. CONTRACTOR REGISTRATION: Per Federal Code: 23 CFR § 635.110, Licensing and qualification of contractors, paragraph (c) "No Contractor shall be required by law, regulation, or practice to obtain a license before submission of a bid or before the bid may be considered for award of a contract. This, however, is not intended to preclude requirements for the licensing of a Contractor upon or subsequent to the award of the contract if such requirements are consistent with competitive bidding. Prequalification of Contractors may be required as a condition for submission of a bid or award of contract only if the period between the date of issuing a call for bids and the date of opening of bids affords sufficient time to enable a bidder to obtain the required prequalification rating."

If a contract for construction, removal, repair or improvement of a building or other real property is for one hundred and twenty thousand dollars (\$120,000) or more, or if the total value of all such contracts undertaken by Bidder within any 12-month period is seven hundred and fifty thousand dollars (\$750,000) or more, the Bidder is required under Title 54.1-1100, *Code of Virginia* (1950), as amended, to be licensed by the State Board of Contractors as a "CLASS A CONTRACTOR." If such a contract is for seventy-five hundred dollars (\$7,500) or more but less than one hundred and twenty thousand dollars (\$120,000), or if the total value of all such contracts undertaken by Bidder within any 12-month period is between one hundred and fifty thousand dollars (\$150,000) and seven hundred and fifty thousand dollars (\$750,000) or more, the Bidder is required to be licensed as a "CLASS B CONTRACTOR." If such a contract is for one-thousand dollars (\$1,000) or more but less than seventy-five hundred dollars (\$7,500), or if the Contractor does less than \$150,000 in business in a 12-month period, the Bidder is required to be licensed as a "CLASS C CONTRACTOR." The board shall require a master tradesmen license as a condition of licensure for electrical, plumbing and heating, ventilation and air conditioning Contractors.

Bidders, if currently certified, are to identify their Contractor's license number below, and for Bidders submitting hardcopies, the license number is to be added to the outside left hand corner of the envelope containing the Bid.

Licensed Class A Virginia Contractor No. _____ Specialty _____
 Licensed Class B Virginia Contractor No. _____ Specialty _____
 Licensed Class C Virginia Contractor No. _____ Specialty _____

If not certified at the time the bid is submitted, appropriate certification will be required upon award of contract.

12. My Bid to provide all labor, materials and equipment necessary to complete the Work described in this Bid is provided in the Bid Schedule.

All work shall be constructed in accordance with the Project Manual; the Virginia Department of Transportation Road and Bridge Specifications, dated 2020; the Road and Bridge Standards, dated February 1, 2001, revised February 2016; the Virginia Work Area Protection Manual, 2011 edition; the Manual on Uniform Traffic Control Devices, 2009 edition; and the Virginia Supplement to the Manual on Uniform Traffic Control Devices, 2011 edition. In the case of any conflict between these documents, the more stringent of the requirements shall apply.

Bids shall include **ALL WORK** necessary to complete the project to the full extent of the contract documents, including plans, drawings, specifications, permits, and related documents. The bid shall include all overhead, profit, labor, materials, equipment and incidental work, and shall be the sum total compensation payable for such items of work in place (including additive bid items, if so stated).

Bids shall be **LUMP SUM**. Prices shall include all overhead, profit, labor, materials, equipment and incidental work and shall be the sum total compensation payable or creditable for such items of work in place.

BID SCHEDULE:

| BID ITEM # | SPEC | VDOT ITEM CODE | DESCRIPTION | UNIT | QUANTITY | UNIT PRICE (\$) | EXTENDED PRICE (\$) |
|------------|------|----------------|-------------------------------------|------|----------|-----------------|---------------------|
| 1 | 517 | 00100 | MOBILIZATION | LS | 1 | | |
| 2 | 517 | 00101 | CONSTRUCTION SURVEYING | LS | 1 | | |
| 3 | 512 | 24265 | NS MAINTENANCE OF TRAFFIC | LS | 1 | | |
| 4 | ATTD | N/A | QUALITY CONTROL INSPECTION SERVICES | LS | 1 | | |
| 5 | ATTD | 25565 | PROGRESS SCHEDULE BASELINE | LS | 1 | | |
| 6 | ATTD | 25567 | PROGRESS SCHEDULE UPDATES | EA | 2 | | |
| 7 | 301 | 00110 | CLEARING AND GRUBBING | LS | 1 | | |
| 8 | 303 | 00120 | REGULAR EXCAVATION | CY | 45 | | |
| 9 | 305 | 00140 | BORROW EXCAVATION | CY | 20 | | |
| 10 | 315 | 11070 | NS SAW-CUT ASPH CONC | LF | 105 | | |
| 11 | 508 | 24420 | DEMO. OF PAVEMENT RIGID | SY | 40 | | |
| 12 | 510 | 24501 | NS REMOVE EXIST. CURB | LF | 50 | | |
| 13 | ATTD | 14120 | REMOVE COMB. CURB AND GUTTER | LF | 80 | | |

| | | | | | | | |
|----|-----|-------|--|------|------|--|--|
| 14 | 308 | 10128 | AGGR. BASE MATL. TY. I NO. 21B | TON | 40 | | |
| 15 | 502 | 21020 | MEDIAN STRIP MS-1 | SY | 45 | | |
| 16 | 502 | 12020 | STD. CURB CG-2 | LF | 185 | | |
| 17 | 502 | 12022 | RADIAL CURB CG-2 | LF | 35 | | |
| 18 | 502 | 12600 | STD. COMB. CURB & GUTTER CG-6 | LF | 25 | | |
| 19 | 502 | 12610 | RAD. COMB. CURB & GUTTER CG-6 | LF | 55 | | |
| 20 | 504 | 13108 | CG-12 DETECTABLE WARNING SURFACE | SY | 12 | | |
| 21 | 504 | 13220 | HYDR. CEMENT CONC. SIDEWALK 4" | SY | 265 | | |
| 22 | 700 | 50320 | REMOVE EXISTING 1 POST SIGN PANEL | EA | 1 | | |
| 23 | 700 | 51931 | NS REMOVE EXISTING SIGN PANEL | EA | 1 | | |
| 24 | 701 | 50108 | SIGN PANEL | SF | 71 | | |
| 25 | 700 | 50436 | SIGN POST STP-1, 2 1/2", 12 GAUGE | LF | 80 | | |
| 26 | 700 | 50485 | CONC. SIGN FDN. STP-1 TY.A | EA | 8 | | |
| 27 | 704 | 54032 | TYPE B CLASS I PVMT LINE MRKG 4" | LF | 80 | | |
| 28 | 704 | 54037 | TYPE B CLASS I PVMT LINE MRKG 8" | LF | 240 | | |
| 29 | 704 | 54042 | TYPE B CLASS I PVMT LINE MRKG 24" | LF | 65 | | |
| 30 | 602 | 27012 | TOPSOIL CLASS A 2" | ACRE | 0.15 | | |
| 31 | 603 | 27101 | TEMPORARY SEED | LB | 15 | | |
| 32 | 603 | 27102 | REGULAR SEED | LB | 22 | | |
| 33 | 603 | 27103 | OVERSEEDING | LB | 18 | | |
| 34 | 603 | 27104 | LEGUME SEED | LB | 2 | | |
| 35 | 603 | 27105 | LEGUME OVERSEEDING | LB | 2 | | |
| 36 | 603 | 27110 | HYDRAULIC EROSION CONTROL PRODUCT TYPE 1 | SY | 528 | | |
| 37 | 603 | 27112 | HYDRAULIC EROSION CONTROL PRODUCT TYPE 3 | SY | 1034 | | |
| 38 | 603 | 27230 | FERTILIZER NITROGEN - N | LB | 14 | | |

| | | | | | | | | |
|--|-----|-------|---------------------------------|----------------|------|--|----|--|
| 39 | 603 | 27231 | FERTILIZER PHOSPHOROUS - P | LB | 19 | | | |
| 40 | 603 | 27232 | FERTILIZER POTASSIUM - K | LB | 9 | | | |
| 41 | 603 | 27250 | LIME | TON | 0.65 | | | |
| 42 | 303 | 27430 | SILTATION CONTROL EXCAVATION | CY | 85 | | | |
| 43 | 303 | 27461 | INLET PROTECTION , TYPE B | EA | 2 | | | |
| 44 | 303 | 27505 | TEMP. SILT FENCE TYPE A | LF | 425 | | | |
| SUBTOTAL BID ITEMS (SUM OF ITEMS 1 THRU 44): | | | | | | | \$ | |
| TOTAL BASE BID LUMP SUM AMOUNT (sum of all Bid Items 1-44) INVITATION FOR BID NO. 24-05-3173TP COOL SPRING ELEMENTARY SCHOOL SIDEWALK IMPROVEMENT PROJECT | | | | | | | | |
| \$ _____ | | | | In Words _____ | | | | |

AWARD OF BID: If the BID FORM contains Additive Bid Items, award will be based on the TOTAL BASE BID LUMP SUM AMOUNT entered on the BID FORM, plus all Additive Bid Items.

SPACE LEFT BLANK INTENTIONALLY)

BIDDER DATA SHEET

Note: The following information is required as part of your response to this solicitation. Failure to complete and provide this sheet may result in finding your bid nonresponsive.

1. Qualification: The vendor must have the capability and capacity in all respects to satisfy fully all of the contractual requirements.

2. Bidder's Primary Contact:

Name: _____ Phone: _____

Email: _____ Fax: _____

3. Years in Business: Indicate the length of time you have been in business providing this type of good or service:

_____Years _____Months

4. Bidder Information: eVA Vendor ID No.: _____

5. Indicate below a listing of at least three (3) recent accounts, either commercial or governmental, that your company is servicing, has serviced, or has provided similar goods. Include the length of service and the name, address and telephone number of the point of contact.

Company: _____ Contact: _____

Phone: () _____ Fax: () _____

Project: _____

Dates of Service: _____ \$ Value: _____

Company: _____ Contact: _____

Phone: () _____ Fax: () _____

Project: _____

Dates of Service: _____ \$ Value: _____

Company: _____ Contact: _____

Phone: () _____ Fax: () _____

Project: _____

Dates of Service: _____ \$ Value: _____

STATE CORPORATION COMMISSION REGISTRATION

The Bidder:

is a corporation or other business entity with the following SCC identification number: _____

-OR-

is not a corporation, limited liability company, limited partnership, registered limited liability partnership, or business trust

-OR-

is an out-of-state business entity that does not regularly and continuously maintain as part of its ordinary and customary business any employees, agents, offices, facilities, or inventories in Virginia (not counting any employees or agents in Virginia who merely solicit orders that require acceptance outside Virginia before they become contracts, and not counting any incidental presence of the Bidder in Virginia that is needed in order to assemble, maintain, and repair goods in accordance with the contracts by which such goods were sold and shipped into Virginia from bidder's out-of-state location)

-OR-

is an out-of-state business entity that is including with this bid an opinion of legal counsel which accurately and completely discloses the undersigned Bidder's current contacts with Virginia and describes why those contacts do not constitute the transaction of business in Virginia within the meaning of § 13.1-757 or other similar provisions in Titles 13.1 or 50 of the *Code of Virginia*.

****NOTE**** >> Check the following box if you have not completed any of the foregoing options but currently have pending before the SCC an application for authority to transact business in the Commonwealth of Virginia and wish to be considered for a waiver to allow you to submit the SCC identification number after the due date for bids (the County reserves the right to determine in its sole discretion whether to allow such waiver):

My signature certifies that this firm or individual has no business or personal relationships with any other companies or persons that could be considered as a conflict of interest or potential conflict of interest to the County of Hanover, and that there are no principals, officers, agents, employees, or representatives of this firm that have any business or personal relationships with any other companies or person that could be considered as a conflict of interest or a potential conflict of interest to the County of Hanover, pertaining to any and all work or services to be performed as a result of this request and any resulting contract with the County of Hanover.

Name and Address of Firm:

Date:

By:

Name:

Title:

Signature in Ink

Please Print

eVA Vendor ID _____

Telephone No. _____

E-mail Address: _____

FAX No. _____

END SECTION

SECTION 00060
LIST OF SUBCONTRACTORS

In compliance with the Instructions to Bidders and the EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and whereas modified within this solicitation, the undersigned submits the following names of Subcontractors to be used in performing the Work for Invitation for Bid with which this form is submitted.

The Bidder certifies that all Subcontractors listed are eligible to perform the Work, and that all Subcontractors performing more than five percent of the Work are listed.

Subcontractor's Work

Subcontractors Name

| | |
|-------|-------|
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |
| _____ | _____ |

This form is required, and should be submitted with the Bid in accordance with the Instructions to Bidders.

END OF SECTION

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SECTION 00070
SAMPLE CONTRACT AGREEMENT

CONTRACT NO. 24-05-3173TP
COOL SPRING ELEMENTARY SCHOOL SIDEWALK IMPROVEMENT PROJECT
DEPARTMENT OF PUBLIC WORKS
HANOVER COUNTY, VIRGINIA

THIS AGREEMENT is entered into this ____ day of _____, 2024 by and between HANOVER COUNTY, a political subdivision of the Commonwealth of Virginia, ("OWNER") and _____ ("CONTRACTOR").

The OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

Article 1. WORK

The CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents based on the acceptance by OWNER of CONTRACTOR's bid.

The project is generally described as: Provide all labor, materials, tools, equipment, services, transportation, and incidentals necessary for the construction of improvements to extend sidewalks from existing Cool Spring Elementary School to Honey Meadows and Taylor Farms subdivisions. This includes grading and installation of approximately 450' of sidewalk and compliant ramp connections, median and pedestrian refuge on Honey Meadows as well as two high visibility cross walks.

All work shall be constructed in accordance with the Project Manual; the Virginia Department of Transportation Road and Bridge Specifications, dated 2020; the Road and Bridge Standards, dated 2016; the Virginia Work Area Protection Manual, 2011 edition; the Manual on Uniform Traffic Control Devices, 2009 edition; VDOT Special Provision Copied Notes, Special Provisions, and Supplemental Specifications; the Virginia Supplement to the Manual on Uniform Traffic Control Devices, 2011 edition, and the VDOT Locally Administered Project Manual. In the case of any conflict between these documents, the more stringent of the requirements shall apply.

Article 2. ENGINEER

The project has been designed by Timmons Group, 1001 Boulders Parkway, Suite 300 | Richmond, VA 23225, and is referred to in the Contract Documents as ENGINEER, unless the OWNER designates an alternate ENGINEER.

Article 3. CONTRACT TIME AND LIQUIDATED DAMAGES

3.1 Contract Time

Upon Award of Contract, Contractor will be issued partial Notice to Proceed for design and purchase of equipment. Due to the time necessary for design and fabrication, a secondary Notice to Proceed will be issued for construction. The actual construction shall be completed and accepted by the OWNER within **60 calendar days** of the CONTRACTOR selected construction start date. The Contractor's selected start date for construction shall be at least 2 weeks after the last of school, which is currently scheduled to be May 31, 2024.

3.2 Liquidated Damages

OWNER and CONTRACTOR agree for each calendar day that work remains incomplete after the contract limit specified for the completion of the work, the OWNER will assess liquidated damages (but not as a penalty) against the CONTRACTOR. Liquidated damages will be deducted from any monies due the CONTRACTOR for each calendar day of additional time consumed until final completion and acceptance of the work, subject to the VDOT Road and Bridge Specifications, Section 108.06 plus any approved time extensions. The CONTRACTOR waives any defense as to the validity of any liquidated damages stated in the Contract, the Contract Documents, or other responsibilities and assessed by the OWNER against the CONTRACTOR on the grounds that such liquidated damages are void as penalties or are not reasonably related to actual damages.

Article 4. CONTRACT PRICE

4.1 The OWNER shall pay the CONTRACTOR for performance of the Work, in current funds as follows:

\$ _____

Article 5. PAYMENT PROCEDURES

The CONTRACTOR shall submit Applications for Payment in accordance with the requirements identified in Instructions to Bidders, Hanover County General Terms and Conditions, and EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and whereas modified within this solicitation, and will be processed by the ENGINEER.

5.1 Progress Payments. The OWNER will make progress payments on account of the Contract Price on the basis of the CONTRACTOR's Applications for Payment within 30 days of approval by OWNER of the Application for Payment during construction as provided below. All progress payments shall be on the basis of the progress of the Work measured by the schedule of values.

Prior to Final Completion, progress payments will be in an amount equal to the value of Work performed plus the value of equipment and materials not incorporated in the Work but delivered and suitably stored, less the aggregate of previous payments.

5.2 Final Payment. Upon final completion and acceptance of the Work, the OWNER shall pay the remainder of the Contract Price as identified in the Bid Documents.

Article 6. CONTRACTOR'S REPRESENTATIONS

The CONTRACTOR makes the following representations:

6.1 The CONTRACTOR has familiarized himself with the nature and extent of the Contract Documents, Work, locality, and with all local conditions and shall comply with all federal, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress, or performance of the Work.

6.2 The CONTRACTOR has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site that may affect cost, progress or performance of the Work which were relied upon by ENGINEER in the preparation of the Contract Documents and which have been identified in the Instructions to Bidders, Hanover County General Terms and Conditions, and EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and VDOT Road and Bridge Specifications, 2020 edition, whereas modified within this solicitation.

6.3 The CONTRACTOR has made or caused to be made examinations, investigations and tests and studies of such reports and related data in addition to those referred to in the Bid Documents as he deems necessary for the performance of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examinations, investigations, tests, reports or similar data are or will be required by the CONTRACTOR for such purposes.

6.4 The CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.

6.5 The CONTRACTOR has given the ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to the CONTRACTOR.

6.6 The business addresses of the CONTRACTOR given herein are designated as the place to which all notices, letters, and other communication to the CONTRACTOR will be mailed or delivered. The address of the OWNER appearing herein is hereby designated as the place to which all notices, letters, and other communication to the OWNER shall be mailed or delivered. Either party may change its address at any time by an instrument in writing delivered to the ENGINEER and to the other party.

Article 7. CONTRACT DOCUMENTS

The Contract Documents which comprise the entire agreement between the OWNER and the CONTRACTOR are enumerated as follows:

7.1 This Agreement, all pages associated with the Agreement, including applicable Exhibits.

7.2 Insurance Certificate, attached as Exhibit C.

7.3 Performance and Payment Bonds, attached as Exhibit B.

7.4 Escrow Agreement, attached as Exhibit D (if applicable).

7.5 Notice of Award.

7.6 Notice to Proceed.

7.7 The complete text of the Project Manual for: Invitation for Bid No. 24-05-3173TP, Cool Spring Elementary School Sidewalk Improvement Project, Hanover County Public Works Department, Hanover County, Virginia.

7.8 Addenda numbers _____ through _____ to the Project Manual.

7.9 Contract Drawings titled: "HANOVER COUNTY COOL SPRING ES SRTS"

7.10 CONTRACTOR'S BID, attached as Exhibit A.

7.11 Any and all documentation submitted by the CONTRACTOR as required or contemplated by the provisions contained in the Project Manual referred to in paragraph 7.7 above.

7.12 Any modifications including Change Orders, duly delivered after execution of the Agreement.

7.13 In the event of conflict among the provisions of these documents, this Contract shall take precedence.

There are no Contract Documents other than those listed above. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in accordance with the Bid Documents, Instructions to Bidders, Hanover County General Terms and Conditions, and EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and whereas modified within this solicitation.

Article 8. MISCELLANEOUS

- 8.1 Terms used in this Agreement which are defined shall have the meanings indicated in the Instructions to Bidders, Hanover County General Terms and Conditions, and EJCDC No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition), and whereas modified within this solicitation.
- 8.2 No assignment by a party hereto of any rights under or interest in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 8.3 The OWNER and the CONTRACTOR each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.
- 8.4 The CONTRACTOR shall make payment to vendors, subcontractors, and suppliers promptly according to the *Code of Virginia*. Before final payment, any and all claims or liens incurred in and about this Work shall be paid in full and a final release from each vendor, subcontractor and supplier shall be provided to the OWNER.
- 8.5 The CONTRACTOR shall secure and pay for all permits, governmental fees and licenses necessary for the proper execution and completion of the Work that are legally required prior to and during construction. Contractor will not be responsible for payment of fees associated with the Land Disturbance Permit, these fees will be paid for by Hanover County.
 - A. Land Disturbance Permit- Contractor will be required to complete the Land Disturbance Permit application and submit for approval. Contractor will schedule a Pre-Construction meeting with Project Manager and Environmental Compliance staff prior to commencement of land disturbing activities.

(This space intentionally left blank)

IN WITNESS WHEREOF, the parties hereto have signed this Agreement. One counterpart each has been delivered to the OWNER, ENGINEER, and CONTRACTOR. All portions of the Contract Documents have been signed or identified by the OWNER and the CONTRACTOR on their behalf.

CONTRACTOR: _____

DATE: _____

BY: _____

Name

Title

Name

OWNER: HANOVER COUNTY

DATE: _____

BY: _____

Steven Rusch
Purchasing Division Director

Address for giving notices: CONTRACTOR

Address for giving notices: OWNER

HANOVER PUBLIC WORKS

P.O. BOX 470

HANOVER, VA 23069

Email: _____

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EXHIBIT D
SAMPLE ESCROW AGREEMENT
(if applicable)

THIS AGREEMENT, made this ____ day of _____, 2024, among HANOVER COUNTY, a political subdivision of the Commonwealth of Virginia, ("County" or "OWNER") and _____ ("CONTRACTOR");

(Name of Bank)

(Street Address of Bank)

a trust company, bank, or savings and load institution with its principal office located in Virginia ("Bank"); and _____ ("Surety"),

Name of Surety
_____, provides:

(Street Address of Surety)

I.

The County and the CONTRACTOR have entered into a contract with respect to Project Name _____
_____ Project No. _____ ("Contract").

This Agreement is pursuant to, but in no way amends or modifies, the contract. Payments made hereunder or the release of funds from escrow shall not be deemed approval or acceptance of performance of the CONTRACTOR.

II.

In order to assure full and satisfactory performance by the CONTRACTOR of its obligations under the contract, the County Treasurer is required thereby to retain certain amounts otherwise due the CONTRACTOR. The CONTRACTOR has, with the approval of the County, elected to have these retained amounts held in escrow by the Bank. This agreement sets forth the terms of the escrow. The Bank shall not be deemed a party to, bound by, or required to inquire into the terms of the contract or any other instrument or agreement between the County and the CONTRACTOR.

III.

The County shall from time to time pursuant to its contract pay to the Bank amounts retained by it under the contract. Except as to amounts actually withdrawn from escrow by the County, the CONTRACTOR shall look solely to the Bank for the payment of funds retained under the contract and paid by the County to the Bank.

The risk of loss by the diminution of the principal of any funds invested under the terms of the Contract shall be solely upon the CONTRACTOR.

Funds and securities held by the Bank pursuant to this Escrow Agreement shall not be subject to levy, garnishment, attachment, lien, or other process whatsoever. CONTRACTOR agrees not to assign, pledge, discount, sell or otherwise transfer or dispose of its interest in the escrow account or any part thereof, except to the Surety.

IV.

Upon receipt of checks or warrants drawn by the County Treasurer and made payable to it as escrow agent, the Bank shall promptly notify the CONTRACTOR, negotiate the same and deposit or invest and reinvest the proceeds in approved securities in accordance with the written instructions of the CONTRACTOR. In no event shall the Bank invest the escrowed funds in any security not approved.

V.

The following securities, and none other, are approved securities for all purposes of this Agreement:

- (1) United States Treasury Bonds, United States Treasury Notes, United States Treasury Certificates of Indebtedness or United States Treasury Bills.
- (2) Bonds, notes and other evidence of indebtedness unconditionally guaranteed as to the payment of principal and interest by the United States,
- (3) Bonds or notes of the County of Hanover,
- (4) Bonds of any political subdivision of Virginia if such bonds carried, at the time of purchase by the Bank or deposit by the CONTRACTOR, a Standard and Poor's or Moody's Investors Service rating of at least "A," and

- (5) Certificates of deposit issued by commercial Banks located within Virginia, including, but not limited to, those insured by the Bank and its affiliates,
- (6) Any bonds, notes or other evidences of indebtedness listed in Sections (1) through (3) may be purchased pursuant to a repurchase agreement with a bank, within or without the County of Virginia having a combined capital, surplus and undivided profit of not less than \$25,000,000, provided the obligation of the Bank to repurchase is within the time limitations established for investments as set forth herein. The repurchase agreement shall be considered a purchase of such securities even if title, and/or possession of such securities is not transferred to the Escrow Agent, so long as the repurchase obligation of the Bank is collateralized by the securities themselves, and the securities have on the date of the repurchase agreement a fair market value equal to at least 100% of the amount of the repurchase obligation of the Bank, and the securities are held by a third party, and segregated from other securities owned by the Bank.

No security is approved hereunder which matures more than five years after the date of its purchase by the Bank or deposit by the CONTRACTOR.

VI.

The CONTRACTOR may from time to time withdraw the whole or any portion of the escrowed funds by depositing with the Bank approved securities in an amount equal to, or in excess of, the amount so withdrawn. Any securities so deposited or withdrawn shall be valued at such time of deposit or withdrawal at the lower of par or market value, the latter as determined by the Bank. Any securities so deposited shall thereupon become a part of the escrowed fund.

Upon receipt of a direction signed by the Hanover County Administrator, the Bank shall pay the principal of the fund, or any specified amount thereof, to the Treasurer of Hanover County for deposit to the appropriate fund and account within the County's approved accounting structure. Such payment shall be made in cash as soon as is practicable after receipt of the direction.

Upon receipt of a direction signed by the Hanover County Administrator, the Bank shall pay and deliver the principal of the fund, or any specified amount thereof, to the CONTRACTOR, in cash or in kind, as may be specified by the CONTRACTOR. Such payment and delivery shall be made as soon as is practicable after receipt of the direction.

VII.

For its services hereunder, the Bank shall be entitled to a reasonable fee in accordance with its published schedule of fees or as may be agreed upon by the Bank and the CONTRACTOR. Such fee and any other costs of administration of this Agreement shall be paid from the income earned upon the escrowed fund and, if such income is not sufficient to pay the same, by the CONTRACTOR.

VIII.

The net income earned and received upon the principal of the escrowed fund shall be paid over to the CONTRACTOR in quarterly or more frequent installments. Until so paid or applied to pay the Bank's fee or any other costs of administration, such income shall be deemed a part of the principal of the fund.

IX.

The Surety undertakes no obligation hereby but joins in this Agreement for the sole purpose of acknowledging that its obligations as surety for the CONTRACTOR's performance of the contract are not affected hereby.

WITNESS the following signatures, all as of the day and year first above written.

HANOVER COUNTY, VIRGINIA

CONTRACTOR

Purchasing Division Director (Print)

Officer, Partner or Owner (Print)

Signature

Signature

Bank: _____

Surety: _____

Bank Officer: _____

Surety Company: _____

Bank Address: _____

Surety Address: _____

END OF SECTION

SECTION 00080
SUPPLEMENTARY CONDITIONS

Changes have been made in the following Articles

ARTICLE

1. DEFINITIONS AND TERMINOLOGY
 - 1.01 Defined Terms

2. PRELIMINARY MATTERS
 - 2.02 Copies of Documents
 - 2.03 Commencement of Contract Times; Notice to Proceed
 - 2.05 Before Starting Construction
 - 2.06 Preconstruction Conference

3. CONTRACT DOCUMENTS; INTENT, AMENDING, REUSE
 - 3.02 Reference Standards
 - 3.04 Amending and Supplementing Contract Documents
 - 3.05 Reuse of Documents

4. AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS
 - 4.02 Subsurface and Physical conditions
 - 4.03 Differing Subsurface or Physical Conditions
 - 4.04 Underground Facilities
 - 4.06 Hazardous Environmental Condition at Site

5. BONDS AND INSURANCE
 - 5.01 Performance, Payment, and Other Bonds
 - 5.02 Licensed Sureties and Insurers
 - 5.03 Certificates of Insurance
 - 5.04 CONTRACTOR's Liability Insurance
 - 5.05 OWNER's Liability Insurance
 - 5.06 Property Insurance
 - 5.07 Waiver of Rights
 - 5.09 Acceptance of Bonds and Insurance; Option to Replace
 - 5.10 Partial Utilization; Acknowledgment of Property Insurer

6. CONTRACTOR'S RESPONSIBILITIES
 - 6.02 Labor; Working Hours
 - 6.05 Substitutes and "Or-Equals"
 - 6.07 Patent Fees and Royalties
 - 6.10 Taxes
 - 6.15 Hazard Communication Programs
 - 6.16 Emergencies
 - 6.17 Shop Drawings and Samples
 - 6.18 Continuing the Work
 - 6.20 Indemnification
 - 6.21 Access to Records

8. OWNER'S RESPONSIBILITIES
 - 8.06 Insurance
 - 8.11 Evidence of Financial Arrangements

9. ENGINEER'S STATUS DURING CONSTRUCTION
 - 9.01 OWNER's Representative
 - 9.07 Shop Drawings, Change Orders and Payments
 - 9.09 Decisions of Requirements of Contract Documents and Acceptability of Work

- 10. CHANGES IN THE WORK; CLAIMS
 - 10.01 Authorized Changes in the Work
 - 10.04 Notification to Surety
 - 10.05 Claims and Disputes
- 11. COST OF THE WORK; CASH ALLOWANCES; UNIT PRICE WORK
 - 11.01 Cost of the Work
 - 11.03 Cash Allowances
- 12. CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES
 - 12.02 Change of Contract Times
- 13. TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK
 - 13.01 Notice of Defects
 - 13.02 Access to Work
 - 13.05 OWNER May Stop the Work
 - 13.07 Correction Period
- 14. PAYMENTS TO CONTRACTOR AND COMPLETION
 - 14.01 Schedule of Values
 - 14.02 Progress Payments
 - 14.04 Substantial Completion
 - 14.05 Partial Utilization
 - 14.07 Final Payment
 - 14.08 Final Completion Delayed
- 15. SUSPENSION OF WORK AND TERMINATION
 - 15.01 OWNER May Suspend Work
 - 15.04 CONTRACTOR May Stop Work or Terminate
- 16. DISPUTE RESOLUTION
 - 16.01 Methods and Procedures
- 17. MISCELLANEOUS
 - 17.06 Historical or Archaeological Deposits
 - 17.07 Antitrust
 - 17.08 Lien
 - 17.09 Forms
 - 17.10 Employment Discrimination/Drug Free Workplace
 - 17.11 Payments to Subcontractors

(This space intentionally left blank)

SCOPE: These Supplementary Conditions amend or supplement the EJDCD No. 1910-8 Standard General Conditions of the Construction Contract (1996 Edition) and other provisions of the Contract Documents as indicated herein. All provisions which are not so amended or supplemented remain in full force and effect.

IDENTIFICATION OF MODIFICATIONS MADE IN SUPPLEMENTARY CONDITIONS: Changes are numbered to correspond with the related article, paragraph, subparagraph, etc. of the General Conditions.

Change:

1.01. A.12 Delete in its entirety and replace with the following:
Contract Documents --The definition of the Contract Documents shall be set forth in the AGREEMENT. Shop drawing submittals reviewed pursuant to Division 1, General Requirements, and the reports and drawings referred to Paragraphs 4.02 are not Contract Documents.

Change:

1.01. A.17 Delete in its entirety and replace with the following:
Drawings --The drawings which show the scope, extent, and character of the Work to be furnished and performed by CONTRACTOR and which have been prepared or approved by ENGINEER and are referred to in the Contract Documents. Shop drawings are not Drawings as so defined. The term "Drawings" shall be used interchangeably with "figures" and both shall have identical meaning.

Change:

1.01. A.19 Delete in its entirety and replace with the following:
ENGINEER -- The individual or entity named as such in the Agreement, or other individual or firm designated by OWNER, and its duly authorized agents, such agents acting within the scope of the particular duties entrusted to them in each case.

Change:

1.01. A.30 Delete in its entirety and replace with the following:
OWNER --The public body or authority, corporation, association, firm, or person with whom CONTRACTOR has entered into the Agreement and for whom the Work is to be provided. OWNER is Hanover County, Virginia. The following definition of the term "County" applies to all matters under the resultant contract: "The County Board of Supervisors of Hanover County, Virginia and any affiliated or subsidiary Board, Authority, Committee, or Independent Agency (including those newly constituted), provided that such affiliated or subsidiary Board, Authority, Committee, or Independent Agency is either a Body Politic created by the County Board of Supervisors of Hanover County, Virginia or one in which controlling interest is vested in Hanover County; and Hanover County Constitutional Officers."

Add:

1.01. A.51 *Bidder* --The person, firm, or corporation who submits a Bid for Work directly to OWNER, as distinct from the sub-bidder who submits a bid directly to a Bidder.

Add:

1.01. A.52 *Critical Path* --The sequence of activities in the CPM schedule for which an adjustment in the duration of any activity results in a corresponding adjustment in the overall schedule duration. The Critical Path shall extend from the Notice to Proceed date to the specified completion date, and should include Project Float, if any.

Add:

1.01.A.53 *Excusable Delay* --Any delay beyond the control and without the fault or negligence of CONTRACTOR caused by events or circumstances such as, but not limited to, acts of God or of public enemy, acts of government other than OWNER, fires, floods, epidemics, quarantine restrictions, freight embargoes, hurricanes, tornadoes, unusually severe weather or, new sinkholes. Above average rainfall or snowfall may be considered an excusable delay.

Add:

1.01.A.54 *Inexcusable Delay* --Any delay caused either (i) by events or circumstances within the control of CONTRACTOR, such as inadequate manpower, slow submittals, etc., which might have been avoided by the exercise of care, prudence, foresight, or diligence on the part of CONTRACTOR, or (ii) labor disputes.

Add:

1.01. A.55 *Non-prejudicial Delays* --Any delay impacting a portion of the Work within the available float time and not necessarily preventing completion of the Work within the Contract Time (i.e., not exceeding the available Project Float).

Add:
1.01. A.56 *Prejudicial Delays* --Any Excusable Delay impacting the Work and exceeding the total float time available in the progress schedule, including Project Float, and preventing completion of the Work within the Contract Time unless the Work is accelerated.

Add:
1.01. A.57 *Project Float* --The period of time, if any, between CONTRACTOR's scheduled overall project Substantial Completion Date and the contractually stipulated Substantial Completion Date.

Change:
2.02 Delete in its entirety and replace with the following:
CONTRACTOR to whom a contract is awarded will be furnished, free of charge, 6 copies of the Specifications and 6 sets of the Drawings. Additional copies of Specifications and Drawings may be obtained from ENGINEER, upon request, at the cost of reproduction.

Change:
2.03 Delete in its entirety and replace with the following:
The Contract Times will commence to run on the day indicated in the Notice to Proceed.

Change:
2.05. B Delete in its entirety and replace with the following:
Preliminary Schedules: Requirements for the initial construction schedule, schedule of values, schedule of payments, and shop drawings schedule are set forth in the Technical Specification section.

Change:
2.05. C Delete in its entirety and replace with the following:
Evidence of Insurance: Within 15 days after the Notice of Award from OWNER, CONTRACTOR shall *deliver* to OWNER, certificates of insurance which CONTRACTOR is required to purchase and maintain in accordance with the requirements in Article 5 of the General Conditions as supplemented herein. Certificates of Insurance must be submitted to OWNER before any Work at the Project Site is started.

Change:
2.06. A Delete in its entirety and replace with the following:
Prior to commencement of Work at the site, a preconstruction conference attended by CONTRACTOR, ENGINEER, and others will be held as set forth in Division 1, General Requirements.

Change:
3.02. A.2 Delete in its entirety and replace with the following:
No provisions of any such standard, specification, manual, code, or instruction shall be effective to change the duties or responsibilities of OWNER, CONTRACTOR, or ENGINEER, or any of their Subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall it be effective to assign to OWNER, ENGINEER, or any other of ENGINEER's consultants, agents, or employees any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

Add:
3.04. C ENGINEER does not have the authority to authorize any change to the Work which results in a change in the Contract Price or the Contract Time. If CONTRACTOR believes that any variation or deviation authorized under Paragraph 3.04 entitles CONTRACTOR to an adjustment in Contract Price or Contract Time, it is CONTRACTOR's obligation to provide written notice to ENGINEER in accordance with Articles 11 and 12 prior to proceeding with the work covered by the variation or deviation.

Change:
3.05. A. (ii) After word "OWNER", delete the words:
"and ENGINEER and specific written verification or adaptation by ENGINEER".

Add:
4.02. A.3 In preparation of the Contract Documents, the following reports of explorations and tests of subsurface conditions at the site of the Work were relied upon:
a. Geotechnical reports were not performed for this project.

- b. Before submitting a Bid, each Bidder will, at Bidders own expense, make or obtain any additional examinations, investigations, explorations, tests and studies and obtain any additional information and data which pertain to the physical conditions, surface or subsurface, at or contiguous to the site or otherwise which may affect cost, progress, performance or furnishing of the Work and which Bidder deems necessary to determine its bid for performing and furnishing the Work in accordance with the time, price and other terms and conditions of the Contract Documents.
- c. The Bidder shall assume all risk as to the nature and behavior of the soil or subsurface conditions which underlie the work or is adjacent thereto, or difficulties that may be due to any unfavorable conditions that may be encountered in the work, whether apparent on surface inspection or disclosed after construction begins.
- d. Unless specified otherwise, any required excavation is on an unclassified basis. The cost of all excavation required under this Contract will be merged into the bid prices. No distinction will be made insofar as payment is concerned between earth and rock.
- e. No plea of ignorance of conditions that exist prior to submission of bids, or may hereafter exist on the site of the work subsequent to the Notice to Proceed, or difficulties that may be encountered in the execution of the work, as a result of failure to make necessary investigations and examinations, will be accepted as an excuse for any failure or omission on the part of the successful Bidder to fulfill in every detail all the requirements of the Contract Documents and to complete the work for the consideration set forth therein, or as a basis for any claim whatsoever.
- f. It is further agreed and understood that the Contractor will not use any of the information made available to him or obtained in any examination made by him in any manner as a basis or ground or claim or demand of any nature, against the Owner or the Engineer arising from or by reason of any variance which may exist between the information offered and the actual materials or structures encountered during the construction work, except as otherwise provided in the Contract Documents.
- g. Insofar as possible, the Successful Bidder, in carrying out his work, must employ such methods or means as will not cause interruption or interference with the work of the Owner or any separate contractor.

Change:

4.02. B

Delete in its entirety and replace with the following:

Limited Reliance by CONTRACTOR on Technical Data Authorized: CONTRACTOR may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such technical data, CONTRACTOR may not rely upon or make claim against OWNER, ENGINEER, or any of ENGINEER's Consultants with respect to:

Change:

4.03. C.3

Delete the last sentence of the last paragraph of Paragraph 4.03.C.3 and replace with the following:

However, OWNER, ENGINEER, and ENGINEER's Consultants, shall not be liable to CONTRACTOR for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, or other dispute resolution costs) sustained by CONTRACTOR on or in connection with any other project or anticipated project.

Add:

4.03. C.4

No claim of CONTRACTOR under this paragraph shall be allowed unless (1) CONTRACTOR has given the written notice required in paragraph 4.03, and (2) CONTRACTOR submits to ENGINEER detailed claim setting forth CONTRACTOR's right to recover any additional costs and lost time, including the information required by Article 12 of the General Conditions as amended by the Supplementary Conditions.

Change:

4.04. B.2

Add the following sentences to the end of paragraph 4.04.B.2:

However, OWNER, ENGINEER, and ENGINEER's Consultants, shall not be liable to CONTRACTOR for any claims, costs, losses, or damages incurred or sustained by CONTRACTOR on or in connection with any other project or anticipated project. CONTRACTOR shall be responsible for discovery of existing underground installations, in advance of excavating or trenching, by contacting all local utilities and by prospecting.

Delete:

4.06. G

Delete in its entirety.

Change:

5.01 Delete in its entirety and replace with the following:

5.01. *Performance, Payment, and Other Bonds*

- A. If the contract award exceeds \$100,000, the successful bidder must deliver to the County, simultaneously with the delivery of the executed contract, a Performance Bond and Labor and Material Payment Bond, AIA Document No. A312 as modified in the following section. Bonds shall comply with the *Code of Virginia*, and each shall be in an amount equal to one hundred percent (100%) of the accepted bid as guaranty for the faithful performance of the contract and the payment of all persons who have and fulfill contracts which are directly with the successful Bidder. The Sureties of all bonds shall be a security company or companies licensed to do business in the Commonwealth of Virginia. Documents evidencing current authority of attorney-in-fact of surety must be attached to the bonds. These Bonds shall remain in effect at least one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. CONTRACTOR shall also furnish such other Bonds, as are required by the Supplementary Conditions.
- B. If using the AIA Document A312, the following modification is required, and the principal and surety should both sign the modified page to evidence agreement with the modification.
 1. Check or 'X' the box next to "See Page 6" on the informational page of the A312 Payment Bond (page 4 of the Performance and Payment Bond set).
 2. Insert the following language under "Modifications To This Bond Are As Follows" (page 6 of the Performance and Payment Bond set)"
 - Paragraph 6 is replaced with the following:

"When the Claimant has satisfied the conditions of Section 4 and provided the Surety with a sworn statement and documentation in full support of its claim, then the Surety shall promptly and at Surety's expense take the following actions:

 - 6.1 Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the sworn statement and documentation in full support of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.
 - 6.2 Pay or arrange for payment of any undisputed amounts."
- C. If required for this project, the Contractor shall post an erosion control bond with the County and the price for the bond shall be included in the bid prices.
- D. If Surety on any Bond furnished by CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in the Commonwealth of Virginia or it ceases to meet the requirements of the preceding paragraph, CONTRACTOR shall within 10 days thereafter substitute another Bond and Surety, both of which must be acceptable to OWNER.

Change:

5.02 Delete in its entirety and replace with the following:

5.02. *Licensed Sureties and Insurers; Certificates of Insurance*

Review this section carefully with your surety and insurance agent prior to Bid submission. An insurance checklist and Builder's Risk form are included with this section as Exhibit A and Exhibit B.

- A. All bonds and insurance required by the Contract Documents shall be obtained from surety or insurance companies that are acceptable to the parties hereto and are legally allowed to do business in the Commonwealth of Virginia. All Performance Bonds shall be countersigned by an authorized agent of the Surety licensed to transact business in the Commonwealth of Virginia.
- B. CONTRACTOR shall deliver to OWNER and ENGINEER, prior to the start of any Work at the project site, properly completed certificates of Insurance, on the forms included in the Contract Documents, as evidence that the required insurance is in full force and effect.

Change:

5.03 Delete in its entirety and replace with the following:

5.03 *Insurance Requirements*

The following sections contain the general requirements of Hanover County, Virginia, ("County" or "OWNER"), related to insurance coverage for those contracting with the County. The CONTRACTOR (and its subcontractors,

if required herein) shall provide at least the insurance coverage and amounts specified in the "Insurance Checklist" found at the end of these requirements, plus any additional coverages and greater amounts as may be required by law or required elsewhere in this solicitation.

A. General Insurance Requirements

1. The CONTRACTOR shall not commence Work until the CONTRACTOR has obtained, at the CONTRACTOR's own expense, all of the insurance required hereunder and such insurance has been approved by the County; nor shall the CONTRACTOR allow any Subcontractor to commence Work on any subcontract until all insurance required of the Subcontractor has been obtained and approved by the CONTRACTOR. Approval of insurance required of the CONTRACTOR will be granted only after submission to the County of original certificates of insurance signed by authorized representatives of the insurers or, at the County's request, certified copies of the required insurance policies.
2. Insurance as required hereunder shall be in force throughout the term of the Contract and for five years after Final Payment for the Work by the Owner with respect to products and completed operations liability. Original certificates of insurance signed and submitted by authorized representatives of the insurers or, at the Owner's request, certified copies of insurance policies, evidencing that the required insurance is in effect, shall be maintained with the Owner throughout the term of the Contract and for five years after Final Payment for the Work by the Owner with respect to products and completed operations liability.
3. The CONTRACTOR shall require all Subcontractors to maintain during the term of the Contract commercial general liability insurance, business auto liability insurance, workers compensation and employers liability insurance, and umbrella excess or excess liability insurance to the same extent required of the CONTRACTOR unless any such requirement is expressly waived or amended by the County in writing. Immediately upon request, the CONTRACTOR shall have Subcontractors' original certificates of insurance signed and submitted to the County by authorized representatives of the insurers.
4. All insurance policies required hereunder should be endorsed to provide that the policy is not subject to cancellation or non-renewal until 30 days prior written notice has been given to the County Purchasing Division.
5. No acceptance and/or approval of any insurance by the County shall be construed as relieving or excusing the CONTRACTOR or the CONTRACTOR's Surety from any liability or obligation imposed upon either or both of them by the provisions of the Contract.
6. If the CONTRACTOR does not meet the insurance requirements in this solicitation, the CONTRACTOR shall forward a written request to the County for a waiver of the insurance requirement(s) not met (accompanied by a statement from the CONTRACTOR'S insurance agent, broker, or insurer, stating the specific requirements not met), or approval in writing of alternate insurance coverage, self-insurance, or group self-insurance arrangements. If the County denies the request, the CONTRACTOR must comply with the insurance requirements in the solicitation, or the County may award a contract to the next lowest responsive and responsible bidder whose insurance is acceptable to the County.
7. All required insurance coverage shall be underwritten by insurers legally allowed to do business in the Commonwealth of Virginia and acceptable to the County. The insurers shall have a Best's financial strength rating of "A-" or better, and a Best's financial size category of Class VII or better, in the latest evaluation of A.M. Best Company, or as otherwise approved by the County.
8. Any deductibles or retentions in excess of \$5,000 shall be disclosed on the original Certificate of Insurance or by attachment thereto, and are subject to County's approval. Any deductible or retention amounts elected by the CONTRACTOR or imposed by the CONTRACTOR's insurer(s) shall be the sole responsibility of the CONTRACTOR.
9. If the County is damaged by the failure or neglect of the CONTRACTOR to purchase and maintain insurance as described and required herein, without so notifying the County, then the CONTRACTOR shall bear all reasonable costs properly attributable thereto.

10. The following definition of the term "County" applies to all policies issued under the resultant contract: "The County Board of Supervisors of Hanover County, Virginia, the Hanover County School Board, if applicable under the resultant contract, and any affiliated or subsidiary Board, Authority, Committee, or Independent Agency (including those newly constituted), provided that such affiliated or subsidiary Board, Authority, Committee, or Independent Agency is either a Body Politic created by the County Board of Supervisors of Hanover County, Virginia, Hanover County School Board, or one in which controlling interest is vested in Hanover County; and Hanover County Constitutional Officers."
 11. Should the CONTRACTOR fail to provide acceptable evidence of current insurance within seven days of written notice at any time during the Contract Term, the County shall have the absolute right to terminate the Contract without any further obligation to the CONTRACTOR, and the CONTRACTOR shall be liable to the County for the entire additional cost of procuring performance and the cost of performing the uncompleted portion of the Contract at the time of termination.
 12. The CONTRACTOR shall be responsible for the work performed under the Contract Documents and every part thereof, and for all materials, tools, equipment, appliances, and property of any and all description used in connection with the Work. The CONTRACTOR assumes all risks for direct and indirect damage or injury to the property or persons used or employed on or in connection with the Work contracted for, except to the extent that any such loss is covered by property insurance outlined in paragraph C (if applicable to the project), and of all damage or injury to any person or property wherever located, resulting from any action, omission, commission or operation under the Contract, or in connection in any way whatsoever with the contracted Work, until final acceptance of the Work by the County.
 13. Contractual and other liability insurance provided under the Contract shall not contain a supervision, inspection or engineering services exclusion that would preclude the County from supervising and/or inspecting the project as to the end result. The CONTRACTOR shall assume all on-the-job responsibilities as to the control of persons directly employed by it and of the subcontractors and any persons employed by the subcontractor.
- B. CONTRACTOR's Liability Insurance
1. The CONTRACTOR shall purchase and maintain the following insurance coverages and limits.
 - a. Commercial general liability insurance or its equivalent for bodily injury, property damage including loss of use and personal and advertising injury.
 - b. Business auto liability insurance or its equivalent.*
If the CONTRACTOR is subject to Sections 29 and 30 of the Motor Carrier Act of 1980 and the rules and regulations of the Federal Highway Administration and Interstate Commerce Commission in connection with the Work to be performed under the Contract, the CONTRACTOR will obtain the MCS 90 endorsement to its automobile liability coverage.
 - c. Workers compensation insurance or its equivalent with statutory benefits as required by any state or Federal law, including standard "other states" coverage; employer's liability insurance or its equivalent.
 - d. Umbrella excess liability or excess liability insurance or its equivalent including coverage for Commercial general liability; Business auto liability; and Employers liability.
 - e. The County (using the definition of County in 5.03 A.10 above) and its elected appointed officials, officers, consultants, agents, and employees shall be named as additional insured on the CONTRACTOR's commercial general liability insurance and umbrella excess or excess liability insurance policies for premises, ongoing operations and products and completed operations on a primary and non-contributory basis.
 2. If any liability insurance purchased by the CONTRACTOR has been issued on a "claims made" basis, the CONTRACTOR shall comply with the following additional conditions:
 - a. The CONTRACTOR shall agree to have original certificates of insurance signed and provided by authorized representatives of the insurers provided to the County for a period of five years after Final

Payment for the Work by the County. Such certificates shall evidence a retroactive date no later than the beginning of the Work under the Contract; or

- b. The CONTRACTOR shall purchase an extended (minimum five years) reporting period endorsement for each such "claims made" policy in force as of the date of Final Payment for the Work by the County and original certificates of insurance signed and provided by authorized representatives of the insurers shall be provided to evidence the purchase of this extended reporting period endorsement. Such certificate shall evidence a retroactive date no later than the beginning of the Work under the Contract.

C. Builders Risk Insurance. When applicable to a project, Exhibit B shall be completed and submitted to the Purchasing Division along with executed contract documents and insurance certificate(s).

1. The OWNER shall purchase and maintain builders risk insurance on a replacement cost basis with a limit at least equal to the initial Contract Sum. This insurance shall be maintained until final acceptance of the Project by the OWNER or until no person or entity other than the OWNER has an insurable interest in the covered property, whichever is earlier. This Builders risk insurance shall include the interests of the OWNER, CONTRACTOR, Subcontractors and Sub-subcontractors in the Project.
2. Insurance shall be on an "all-risk" or equivalent policy form including the perils of fire, extended coverage, theft, vandalism, malicious mischief, collapse and windstorm. Coverage is to apply for debris removal including demolition occasioned by a covered loss. This insurance shall cover reasonable compensation for ARCHITECT's, ENGINEER's, and CONTRACTOR's services and expenses required as a result of such covered loss. Coverage for other perils such as flood and earthquake or for loss caused by the enforcement of any applicable ordinance or law shall not be required unless otherwise provided in the Contract.
3. This Builders risk insurance shall cover all of the following types of property:
 - a. All structures to be constructed, under construction, and/or already constructed;
 - b. All materials, equipment, machinery and supplies which are to be incorporated into the Project;
 - c. Temporary structures of any nature whatsoever; and
 - d. Underground property, including but not limited to, foundations, pump stations, pumps, pipes, drains, tanks and connections.
4. The CONTRACTOR shall be responsible for payment of any deductibles applicable under this builders risk insurance, boiler and machinery insurance or other property insurance applicable to the Project. Hanover County's Builders Risk policy has deductibles of \$5,000, except \$25,000 Flood, \$25,000 Earthquake, and other exceptions as specified in the policy forms. Flood includes hazard zones B, C, X only for \$25,000,000. Comprehensive Risk Form.
5. Unless otherwise provided in the Contract Documents, this Builders risk insurance shall cover materials to be incorporated into the Project which are off the site, and also such materials in transit.
6. This builders risk insurance shall insure against loss or damage caused by the boiler and machinery perils with limits and scope of coverage that are deemed by the OWNER to be satisfactory. This insurance shall also include the interests of the OWNER, CONTRACTOR, Subcontractors and Sub-subcontractors in the Project.
7. The OWNER and CONTRACTOR waive all rights against each other and against the Architect, Engineer, OWNER's other CONTRACTORS, if any, and the subcontractors, sub-subcontractors, elected and appointed officials, officers, agents, employees and consultants of any of them, for property damage to or loss of use of the Work to the extent that such property damage or loss of use is covered by this builders risk insurance, boiler and machinery insurance or other property insurance applicable to the Work. The policies shall provide such waivers of subrogation by endorsement or otherwise.
8. Any loss covered under this builders risk insurance, boiler and machinery insurance or other property insurance applicable to the Work shall be payable to the OWNER as fiduciary for the insureds, as their interests may appear, subject to any mortgagee clause. The CONTRACTOR shall pay Subcontractors their just shares of insurance proceeds received by the CONTRACTOR, and by appropriate agreements,

written where legally required for validity, shall require Subcontractors to make payments to their Sub-subcontractors in similar manner.

9. OWNER, as fiduciary, shall have the power to adjust and settle a loss with insurers.
10. Partial occupancy or use in accordance with the provisions of the Contract that pertain to partial occupancy or use shall not commence until the builders risk insurer has granted permission by endorsement or otherwise for the OWNER to partially occupy or use any completed or partially completed portion of the Work at any stage of construction. The OWNER and CONTRACTOR shall take reasonable steps to obtain such permission.
11. The insurance required by this Paragraph 3 is not intended to cover machinery, tools or equipment owned or rented by the CONTRACTOR, or its Subcontractors, which are utilized in the performance of the Work but not incorporated into the permanent improvements. The CONTRACTOR and its Subcontractors shall, at their own expense, purchase and maintain property insurance coverage for owned, leased or rented machinery, tools or equipment. The CONTRACTOR, and its Subcontractors, hereby waive all rights against the OWNER and its elected and appointed officials, officers, agents, employees and consultants for property damage to or loss of use of such machinery, tools or equipment to the extent that such property damage or loss of use is covered by the CONTRACTOR's or Subcontractor's property or equipment floater insurance or other similar property insurance maintained by the CONTRACTOR or its Subcontractors. The policies shall provide such waivers of subrogation by endorsement or otherwise.

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EXHIBIT A – INSURANCE CHECKLIST

Items marked with an "X" are required.

| <u>Coverage Required</u> | <u>Limits (Figures Denote Minimums)</u> |
|--|---|
| <input checked="" type="checkbox"/> 1. Workers' Compensation* & | Statutory limits of the Commonwealth of Virginia |
| <input checked="" type="checkbox"/> 2. Employers' Liability* *If required by statute | \$500,000 accident, \$500,000 disease \$500,000 policy limit disease |
| <input type="checkbox"/> 3. USL&H Endorsement | Statutory |
| <input checked="" type="checkbox"/> 4. General Liability | <u>\$1,000,000</u> Combined single limit for BI & PD each occurrence |
| <input checked="" type="checkbox"/> 5. General aggregate limit | <u>\$2,000,000</u> |
| <input checked="" type="checkbox"/> Applies per project | |
| <input checked="" type="checkbox"/> Applies per location | |
| <input checked="" type="checkbox"/> 6. Products and Completed Operations | <u>\$2,000,000</u> aggregate |
| <input checked="" type="checkbox"/> 7. Personal and Advertising Injury Liability | <u>\$1,000,000</u> each offense and aggregate |
| <input checked="" type="checkbox"/> 8. Remove any XCU restrictions | |
| <input checked="" type="checkbox"/> 9. Business Auto Liability | <u>\$1,000,000</u> BI & PD, each accident |
| <input checked="" type="checkbox"/> 10. Owned, Hired & Non-owned | |
| <input checked="" type="checkbox"/> 11. Motor Carrier Act End. (only if required by law) | |
| <input checked="" type="checkbox"/> 12. Umbrella Liability | <u>\$1,000,000</u> per occurrence |
| <input checked="" type="checkbox"/> 13. The Certificate holder shall be Hanover County, Virginia, Attn: Purchasing Division, P. O. Box 470, Hanover, Virginia 23069-0470, unless stated otherwise in the solicitation. | |
| <input type="checkbox"/> 14. Other insurance indicated below. | |

EXHIBIT B - BUILDER'S RISK INSURANCE

Upon award of contract and when applicable, complete and submit this form to Purchasing

Invitation for Bid Number: _____

Building Description/Project title: _____

CONTRACTOR Name: _____

CONTRACTOR Address: City: _____

State: _____

Zip Code: _____

Physical Address of Building: _____

Construction Type – choose one:

_____ Frame: Wooden construction including brick veneer over wood frame?

_____ Joisted Masonry: Solid brick or concrete walls with heavy timbered construction of the roof?

_____ Fire Resistive: Metal/concrete construction with minimal contents (water tanks, block pump stations)?

_____ Non Combustible: Solid brick/concrete walls with metal/concrete roof construction?

Does facility have pressure vessels (items requiring state inspection; for example, boilers)? Yes ___ No ___
If yes, how many? _____

Total Contract Amount: \$ _____

Building Value: \$ _____ (exclude items like land, paving, underground piping, etc.)

Contents Value: \$ _____

Property In Open Value: \$ _____ (fencing, light poles, generators, other major equipment not attached to building)

Est. Completion Date: _____

Delete:

5.04 Delete in its entirety.

Delete:

5.05 Delete in its entirety.

Delete:

5.06 Delete in its entirety.

Delete:

5.07 Delete in its entirety.

Delete:

5.08 Delete in its entirety.

Delete:

5.09 Delete in its entirety.

Delete:

5.10 Delete in its entirety.

Add:

6.02.C Regular working hours shall not exceed 40 hours per week, 8 hours per day (between 7:00 a.m. and 6:00 p.m.), Monday through Friday. No work shall be done between 6:00 p.m. and 7:00 a.m. without prior permission of OWNER. Requests to work during other than regular working hours or on legal holidays must be submitted to ENGINEER at least 48 hours in advance of the period proposed for such work and shall set forth the proposed schedule for such work to give ENGINEER ample time to arrange for appropriate personnel to be at the site of the work. Legal holidays observed by OWNER include New Year's Day, Lee-Jackson Day, Martin Luther King, Jr. Day, Memorial Day, Independence Day, Labor Day, Veterans Day, Thanksgiving, the day after Thanksgiving, Christmas Eve and Christmas Day (total of 11 days). However, emergency work may be done without prior permission.

Add:

6.02. D CONTRACTOR shall pay for all additional charges by ENGINEER to OWNER, and other extra personnel cost to OWNER, on account of the overtime work which may be authorized under the provisions of Paragraph 6.02, except where the Contract Documents or OWNER restricts CONTRACTOR in writing from performing specific portions of the Work during regular work hours or requests CONTRACTOR to perform specific portions of the work during other than regular work hours. No extra payment shall be made by OWNER on account of such overtime work. Charges by ENGINEER shall be calculated in accordance with the terms of ENGINEER's Agreements with OWNER.

Delete:

6.02. E Delete in its entirety and replace with the following:

Add:

6.02. E The CONTRACTOR shall contract services of an independent materials testing agency acceptable to the OWNER/ENGINEER to perform quality control inspection services on construction activities and materials incorporated into this project. The type of tests, the frequency of tests and the method of testing shall be in accordance with the requirements of the current edition of the VDOT Inspection Manual and LAP Manual. The testing agency shall provide resumes for their staff members that will be involved in the project and provide evidence that their technicians are certified by the Virginia Department of Transportation (VDOT) to perform the required testing. Evidence of VDOT certification will be required for all technicians for all tests performed and will need to be provided to OWNER/ENGINEER prior to commencing testing activities. The CONTRACTOR shall be responsible for scheduling and coordinating the testing, monitoring, and inspection services with the applicable construction activities. The CONTRACTOR and testing firm shall consult with OWNER's Construction Management Services staff on a daily basis to ensure compliance with VDOT requirements. The CONTRACTOR shall be responsible for ensuring that all construction activities are planned, scheduled, and conducted in a manner that will facilitate the construction testing and ensure that the testing and monitoring are being performed in a timely manner and as required by VDOT regulations. The CONTRACTOR shall ensure that the testing firm has the capabilities to furnish an appropriate number of technicians to satisfy the contractor's and/or subcontractor's construction operations and progress. Should it become necessary to delay or postpone a construction activity because of the unavailability of certified technicians, no

consideration for an extension of contract time will be allowed. The testing firm shall be responsible for furnishing all testing equipment, transportation, and documentation. A representative of the testing firm shall attend all monthly progress meetings on the project to report the status of tests from the previous month and their plan activities for the following month to correspond with CONTRACTOR's activities. The testing firm shall keep the CONTRACTOR and OWNER/ENGINEER apprised of the status of all tests at all times and shall provide the OWNER/ENGINEER with all tests results, reports, and supporting documentation on the same day, unless otherwise approved. Source of Materials are required. The frequency of tests, as shown in the VDOT Inspection Manual and LAP Manual, are considered minimum and are based on obtaining acceptable results on a consistent basis. Should tests reveal unacceptable or inconsistent results, the testing firm shall IMMEDIATELY notify the CONTRACTOR and OWNER'S Construction Management staff. The CONTRACTOR shall take immediate action to correct the problem to ensure compliance with the contract requirements. If the tests yield unacceptable and/or inconsistent results, additional tests will be required. The testing and retesting of materials and construction operations shall have the full cooperation of the CONTRACTOR and/or their subcontractors. Method of Measurement and Basis of Payment-Quality Control Inspection Services shall be paid on a lump sum basis, which price shall be full compensation for the services of the independent testing firm, for scheduling, coordinating, and performing material testing, monitoring, and inspections, as outlined herein and as required by the current edition of VDOT's Inspection Manual, LAP Manual, and the Road and Bridge Specifications and for all labor, equipment, and materials necessary to perform the work. Payment will be made in equal monthly installments based on the original contract time. No additional compensation will be made for this item because of additional tests being required due to unacceptable or inconsistent results, time delays, or any time extensions that may be granted for other matters.

Add:

6.02. F

CONTRACTOR is responsible for retesting where results of required inspections, tests or similar services prove unsatisfactory and do not indicate compliance with Contract Document requirements, regardless of whether the original test was the CONTRACTOR's responsibility.

Change:

6.05. A

Change the last sentence in paragraph 6.05.A to read:

Whenever in the Bid Documents or Contract Documents any item of equipment or material is specified by proprietary name, trade name, and/or name of one or more manufacturers, with the addition of such expressions as "no substitutes," it is to be understood that those items are so specified for reasons of standardization in maintenance and operation, or for reasons of obtaining desirable features best suited to the requirements of the Owner and no other brand shall be considered. Whenever in the Bid Documents or Contract Documents any item of equipment or material is specified by proprietary name, trade name, and/or name of one or more manufacturers, without the addition of such expressions as "no substitutes," it is understood that equal-quality equipment or products of either a manufacturer named or of a manufacturer not named, which meet the requirements of the Specifications, is intended, subject to the approval of the ENGINEER and the Owner as to the equality thereof, and it is distinctly understood: (1) that the ENGINEER and the Owner shall use their best judgment in determining whether or not any item of equipment or material proposed is equal in quality to that specified; (2) that the decision of the Owner on all such questions of equality shall be final; and (3) that, in the event of any adverse decision by the Owner, no claim of any sort shall be made or allowed against the ENGINEER or the Owner. When two or more acceptable brands are specified for a particular item, for purposes of consistency, the Contractor shall select and provide only one of the acceptable brands. Should the Owner reject any substitute submitted, the Contractor shall furnish the equipment or materials that are specified in the bid documents. When two or more acceptable brands are specified for a particular item, for purposes of consistency, the Contractor shall select and provide only one of the acceptable brands.

Change:

6.05. A.1.a

Delete in its entirety and replace with the following:

- a. in the exercise of reasonable judgment ENGINEER determines that: (i) it is equivalent to or better than the product named in form, function, performance, reliability, quality, features, materials of construction, operation and maintenance costs, static and dynamic loads, general dimensional configuration, size, weight, and appearance; (ii) it will reliably perform at least equally well in function imposed by the design concept of the completed Project as a functioning whole, and;

Change:

6.05. E

Delete in its entirety and replace with the following:

ENGINEER's Cost Reimbursement: ENGINEER will record time required in evaluating substitutes proposed or submitted by CONTRACTOR pursuant to Paragraphs 6.05.A.2 and 6.05.B and in making changes in the Contract Documents (or in the provisions of any other direct contract with OWNER for work on the Project) occasioned thereby.

Regardless of ENGINEER's decision regarding a substitute item so proposed or submitted by CONTRACTOR, CONTRACTOR shall reimburse OWNER for the charges of ENGINEER, and ENGINEER's Consultants for evaluating each such proposed substitute item.

Change:

6.05. F

Add the following sentence to the end of paragraph 6.05.F:

If any proposed substitution will affect correlated function, adjacent construction, or the work of other contractors, the necessary changes and modifications to the affected work shall be considered an essential part of the proposed substitution, to be accomplished by CONTRACTOR without additional expense to OWNER, if and when approved.

Add:

6.07.B

CONTRACTOR shall furnish OWNER at the time of initial submittal, satisfactory evidence that Suppliers of proprietary materials, equipment, devices, or processes to be furnished or used in the performance of the Work do indemnify, keep, and save harmless CONTRACTOR from all liabilities, judgments, costs, damages, and expenses which may arise from the use of such proprietary materials, equipment, devices, or processes, furnished to CONTRACTOR for incorporation in or use in performance of the Work and its operation by OWNER after acceptance of the Work. Such satisfactory evidence shall consist of patent licenses or patent releases covering proprietary materials, equipment, devices, or processes.

Add:

6.10. B

Said taxes shall not be in addition to the contract price between the OWNER and the CONTRACTOR, as the taxes shall be an obligation of the CONTRACTOR and not of the OWNER, and the OWNER shall be held harmless for same by the CONTRACTOR.

Add:

6.10. C

Pollution control facilities qualify for exemption from sales and use tax in accordance with Section 58.1-609.3 of the *Code of Virginia*. If this Project qualifies as pollution control facilities, the Work will be certified to the Virginia Department of Taxation as an approved pollution control facility by the Department of Environmental Quality. CONTRACTOR shall request from the Virginia Department of Taxation the applicable sales and use tax exemption certificate.

Add:

6.15. B

CONTRACTOR agrees that it will comply with the applicable Virginia Occupational Safety and Health Standards and regulations while performing services contracted by OWNER.

Add:

6.15. C

OWNER is subject to Hazard Communication Standard 29 CFR 1910.1200 (Standard). CONTRACTOR agrees that it will provide or cause to be provided Material Safety Data Sheets required under the Standard be provided for all hazardous materials supplied to OWNER and shall be delivered no later than actual delivery of any hazardous materials to OWNER. Container labeling meeting the requirements of the Standard shall be appropriately affixed to the shipping or internal containers. OWNER reserves the right to refuse shipments of hazardous materials not appropriately labeled or when Material Safety Data Sheets have not been received prior to or concurrent with receipt of the shipment, or whenever the material is delivered in a manner inconsistent with any applicable Law and Regulation. CONTRACTOR further certifies that all material supplied under the Contract meets all OSHA requirements, both federal and those of the Commonwealth of Virginia; and further certifies that, if the material delivered is subsequently found to be deficient in any of the applicable state or federal OSHA requirements, all costs necessary to bring the material into compliance with the requirements shall be borne by CONTRACTOR.

Add:

6.15. D

Additional Hanover County safety programs, if applicable, are covered in the project requirements section of Division 1 - General Requirements.

Change:

6.16. A

Delete the last sentence of Paragraph 6.16.A and replace with the following:

If ENGINEER determines that a change in the Contract Documents is required because of the action taken by CONTRACTOR in response to such emergency and the emergency occurred through no fault of CONTRACTOR, a Work Change Directive or Change Order will be issued to document the consequences of such action.

Change:

6.17 Delete in its entirety and replace with the following:
Requirements regarding Shop Drawings, samples, and submittal procedures are covered in Division 1, General Requirements.

Change:

6.18. A Insert the following sentence after the first sentence of Paragraph 6.18.A:
CONTRACTOR's refusal to carry on the Work during disputes and disagreements with OWNER, the pendency of claims, or the pendency of change order requests shall be a substantial violation of the Contract Documents.

Change:

6.20.A.2 Delete in its entirety and substitute: "To the fullest extent permitted by law, the Contractor, for itself, heirs, representatives, successors and assigns agrees to save, defend, keep harmless and indemnify the County, and all of its officials, agents and employees (collectively, the "County") from and against any and all claims, loss, damage, injury, costs (including court costs and attorney's fees), charges, liability or exposure, however caused, resulting from, arising out of or in any way connected with the Contractor's performance (or nonperformance) of the agreement terms or its obligations under this agreement."

Add:

6.21 *Access to Records:*
A. CONTRACTOR and all Subcontractors shall maintain books, records, documents, and other evidence directly pertinent to performance of the Work under the Contract Documents in accordance with generally accepted and consistently applied accounting principles and practices. OWNER or ENGINEER shall have access, at all times during normal business hours, to such books, records, documents, and evidence for the purposes of inspection, audit, and copying. CONTRACTOR shall provide suitable facilities for such access and inspection. Such books, records, and evidence shall be maintained and made available until final payment and settlement of any disputes, claims, and litigation. CONTRACTOR shall provide to OWNER, when requested, copies of all purchase orders issued or subagreements executed, complete with all amendments, for Work under the Contract Documents. CONTRACTOR shall include this provision in all subcontracts.

Delete:

8.06 Delete in its entirety.

Delete:

8.11 Delete in its entirety.

Change:

9.01. A Delete in its entirety and replace with the following:
ENGINEER will be OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of ENGINEER as OWNER's representative during construction are set forth in the Contract Documents and shall not be extended without written consent of OWNER and ENGINEER. The assignment of any authority, duties, or responsibilities to ENGINEER under the Contract Documents, or under any agreement between OWNER and ENGINEER, or any undertaking, exercise, or performance thereof by ENGINEER, is intended to be for the sole and exclusive benefit of OWNER and not for the benefit of CONTRACTOR, Subcontractor, Supplier, or any other person or organization, or for any surety or employee or agent of any of them.

Delete:

9.07 Delete in its entirety.

Change:

9.09. A Delete in its entirety and replace with the following:
ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. Claims, disputes and other matters relating to the acceptability of the Work, the quantities and classifications of Unit Price Work, the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, and claims seeking changes in the Contract Price or Contract Times will be referred initially to the ENGINEER in writing, in accordance with the provisions of paragraph 10.05, with a request for a decision. When the Owner differs in opinion from the Engineer's determination, the Owner specifically reserves the

right to have the Contractor submit the disputed claim to the Hanover County Board of Supervisors in accordance with the Contractual Claims procedure contained in Section 16.01.C in this Project Manual.

Change:

9.09. B

Delete in its entirety and replace with the following:

When functioning as interpreter and judge under this paragraph 9.09, ENGINEER will not show partiality to OWNER or CONTRACTOR and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by ENGINEER pursuant to this paragraph 9.09 with respect to any such claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.07) will be a condition precedent to any exercise by CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such claim, dispute, or other matter.

Change:

10.01. B

Delete in its entirety and replace with the following:

At any time ENGINEER may request CONTRACTOR to submit a proposal, (through a Request for Proposal), for a proposed change in the Work. Within 20 work days after receipt of a Request for Proposal, CONTRACTOR shall submit, to ENGINEER, a written detailed proposal for the change. The detailed proposal shall include an itemized estimate of all costs that will result directly or indirectly from the proposed change and include an assessment of the impact of the proposed change on the overall project schedule. Unless otherwise directed, itemized estimates shall be in accordance with the rules governing the Cost of the Work as outlined in Article 11 of the General Conditions. Proposals shall be in sufficient detail to reasonably permit an analysis by ENGINEER of all material, labor, equipment, subcontracts, overhead costs, and fees, and shall cover all Work involved in the change, whether such Work was deleted, added, changed, or impacted. Each cost category shall be supported with substantiating documentation which may include, but is not limited to, quantity takeoffs, quotations, invoices, cost records, certified payrolls and identification of estimating guidelines, and resources. The subcontract portions of each proposal shall be similarly supported. Itemized schedule adjustments shall be in sufficient detail to permit an analysis of impact. If OWNER elects to proceed with the change covered by the Request for Proposal, such change will be authorized by execution of proper documentation in accordance with Paragraph 10.01. Notwithstanding the Request for Proposal, CONTRACTOR shall carry on the Work and maintain the progress schedule. ENGINEER and OWNER shall have 20 workdays after receipt of the detailed proposal to respond in writing. Delays in the submittal of the written and detailed proposal will be considered nonprejudicial as defined in the Supplementary Conditions.

Add:

10.01. C

The adjustment in Contract Price and/or Contract Time stated in a Change Order shall comprise the total price and/or time adjustment due or owed CONTRACTOR for the Work or changes defined in the Change Order. By executing the Change Order, CONTRACTOR acknowledges and agrees that the stipulated price and/or time adjustments cover all costs and delays for all work contained in the Change Order, including cost and delays associated with the interruption of schedules, extended overheads, delay, and cumulative impacts or ripple effect on all other work under the Contract. Signing of the Change Order constitutes full and mutual accord and satisfaction for the adjustment in the Contract Price and/or Time as a result of increases or decreases in costs and time of performance caused directly and indirectly by the change. Execution of the Change Order constitutes an agreement between OWNER and CONTRACTOR that the Change Order represents an equitable adjustment to the Contract Price and/or Time and that CONTRACTOR waives all rights to claim further adjustments related to the Change Order.

Add:

10.01.D

CONTRACTOR is obligated, in the performance of changes in the Work, to mitigate all cost and time related to any changes and shall identify in writing, when requested by OWNER, the actions taken in that regard.

Change:

10.04. A

Add the following new sentence to the end of Paragraph 10.04.A:
CONTRACTOR shall furnish OWNER proof of such adjustment.

Change:

10.05. A

Delete in its entirety and replace with the following:

Written notice of intention to file a claim, stating the general nature of each claim, dispute, request or other matter, which shall be considered a request for determination by the ENGINEER, shall be delivered by the CONTRACTOR to the ENGINEER (at the address stated in this Project Manual) at the time of the occurrence of the event or beginning of the Work upon which the claim is based and the ENGINEER shall immediately consult with the Owner and obtain any necessary information from the Owner regarding the matter. The ENGINEER may require submittal by the CONTRACTOR of additional information deemed necessary by the ENGINEER to respond to the notice. A claim

for an adjustment in Contract Price shall be prepared in accordance with the provisions of paragraph 12.01.B. A claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of paragraph 12.02.B. Each notice of intention to file a claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which claimant believes it is entitled as a result of the event.

Change:

10.05. B

Delete in its entirety and replace with the following:

ENGINEER shall render a decision in writing within 30 days after receipt of the last submittal of the CONTRACTOR or the notice of intention to file a claim. ENGINEER's written decision on such claim, dispute, or other matter will be final and binding upon CONTRACTOR unless an appeal is made from ENGINEER's decision. CONTRACTOR's appeal shall be made within 10 days after the rendering of the decision by ENGINEER and shall be in accordance with Article 16.01.C.

Change:

10.05. C

Delete in its entirety and replace with the following:

If ENGINEER does not render a formal decision in writing within the time stated in paragraph 10.05B, a decision denying the claim in its entirety shall be deemed to have been issued 31 days after receipt of the last submittal of the CONTRACTOR.

Change:

10.05. D

Delete in its entirety and replace with the following:

No claim by the CONTRACTOR for an adjustment in Contract Price or Contract Times (or Milestones), or for resolution of any other matters will be valid if not submitted in accordance with this paragraph 10.05.

Add:

11.01. B.6

Extended office overhead (except office and temporary facilities at the site as referenced in Paragraph 11.01.A.5.b) or lost profit associated with delays of any type. Such costs are considered to be administrative costs covered by CONTRACTOR's fee.

Add:

11.01.B.7

Any and all costs which arise from any suspension, delay, or interruption to a Work activity or the Work as a whole, to the extent that performance would have been so suspended, delayed, or interrupted for reasons beyond the control and without the fault or negligence of OWNER. Examples of such situations include, but are not limited to, instances where compensable delays occur concurrently with either excusable or inexcusable delays and instances where such combinations of delays, even when not concurrent, individually give rise to similar impacts on the completion of the Work.

Change:

11.01. D

Add the following sentence to the end of Paragraph 11.01.D:

OWNER may audit CONTRACTOR's records related to such costs during normal business hours.

Change:

11.03. A

In the first sentence of Paragraph 11.03.A, delete the word "Agreement" and replace with the words "BID FORM".

Change:

11.03. C.1

Delete the word "Agreement" and replace with the words "BID FORM".

Add:

12.02. C

CONTRACTOR will only be entitled to an extension of the Contract Time for Prejudicial delays.

Add:

12.02. D

Prejudicial Delays in the completion of the entire Work or specified part thereof shall not give rise to default under the Contract by either party. Any such delays shall not entitle CONTRACTOR to any additional compensation. The sole remedy of CONTRACTOR shall be an extension of Contract Time pursuant to this Article 12.

Add:

12.02. E

No extensions of Contract Time (or Milestones) or increases in Contract Price shall be granted for Nonprejudicial Delays of any type or for Inexcusable Delays, unless otherwise agreed to by OWNER in its sole discretion.

Add:
12.02. F Except as otherwise provided herein, CONTRACTOR shall not be entitled to recover damages due to delays of any type.

Add:
12.02. G In presenting justification for any claim of Prejudicial Delay, CONTRACTOR shall not rely on scheduling interrelationships which reflect CONTRACTOR's chosen sequencing of the Work which are more constraining than the sequencing constraints stipulated in the Contract Documents and which are not based on necessary interrelationships between the components of the physical Work being constructed (e.g., resource constraints involving equipment, manpower, and materials). CONTRACTOR shall demonstrate a reasonable effort to reschedule any Work which is delayed by changes or unforeseeable conditions so as to minimize any additional cost to OWNER.

Change:
13.01. A Delete in its entirety and replace with the following:
A. CONTRACTOR warrants and guarantees to OWNER and ENGINEER that all Work will be in accordance with the Contract Documents, will not be defective, and that all materials and equipment used for the Work are appropriate for the Project for a minimum period of at least one year, or the manufacturer's standard warranty, whichever is longer. The warranty shall include all parts, labor, transportation and any other costs (except general supply items) necessary to keep the product in good OPERATING condition. Prompt notice of all defects shall be given to CONTRACTOR upon discovery. All defective Work, whether or not in place, may be rejected, corrected, or accepted as provided for in this Article 13.

Add:
13.02. B Authorized representatives of the Department of Environmental Quality and the Virginia Department of Health shall have access to the Work wherever it is in preparation or progress. CONTRACTOR shall provide proper facilities for such access and inspection.

Change:
13.05. A Delete in its entirety and replace with the following:
If the Work is defective, or if CONTRACTOR's operations endanger or cause unapproved disruptions to the general public or facility, or CONTRACTOR fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, OWNER may order CONTRACTOR to stop the Work or any portion thereof, until the cause for such order is eliminated, and CONTRACTOR shall have no basis for making a claim thereof; however, this right of OWNER to stop the work shall not give rise to any duty on the part of OWNER to exercise this right for the benefit of CONTRACTOR or any other party.

Change:
13.07. A. In the first sentence, delete the words "date of Substantial Completion", and substitute: "approval by the County of the final Application for Payment".

Change:
14.01. A Delete in its entirety and replace with the following:
Requirements for the schedule of values are set forth in the Technical Specification Sections.

Add:
14.02. A.4 All moneys not paid when due hereunder shall bear simple interest at the rate of 6 percent per annum.

Add:
14.02. A.5 Payments for stored materials and equipment shall be based only upon the actual costs of the materials and equipment to CONTRACTOR and shall not include any overhead or profit to CONTRACTOR. Partial payments will not be made for undelivered materials or equipment.

Add:
14.02. A.6 CONTRACTOR shall submit with Application for Payment, data and receipts of payment and shipment on all materials and equipment stored on the Site. OWNER will consider payment for off-Site stored materials and equipment if the following conditions are adhered to:
a. Materials and equipment are stored within a 25-mile radius of the Site.

- b. Reasonable access provisions are made to allow periodic inspection of materials and equipment by OWNER or his authorized representative.
- c. Methods of storage and protection are acceptable to OWNER.
- d. Security measures for storage area is submitted for OWNER's approval.
- e. Receipts for actual cost of materials and equipment, including shipping charges to CONTRACTOR, are submitted with payment application.

Add:

14.02.A.7 Each Application for Payment shall be accompanied by and shall be considered incomplete and unacceptable without the corresponding "Monthly Progress Status Report" prepared per the requirements of Division 1 - General Requirements. Each Application for Payment shall also be accompanied by CONTRACTOR's schedules, values of material on hand included in application, and other data specified in Division 1 or reasonably required by ENGINEER.

Change:

14.02. B.2 Delete the words "as an experienced and qualified design professional" from the first sentence.

Add:

14.02. D.1.e If the Contractor shall fail to adhere to the approved progress schedule or to the schedule as revised, he must promptly adopt such other or additional means and methods of construction as shall make up for the time lost and shall assure completion in accordance with the latest approved schedule. If the Contractor's progress is more than 10% behind the latest approved schedule, partial payments may be withheld until such time as the Work is at least within 90% of the latest approved schedule.

Add:

14.04. C "Substantial Completion" means that the facilities are completed to the point that facility can properly operate, to the satisfaction of OWNER and ENGINEER. All process equipment shall be installed and operational. All work such as architectural, painting, final cleaning, rough site grading, sidewalks, etc. shall be complete. Manufacturer's field services and performance testing shall have been provided in accordance with the contract requirements. The intent of "Substantial Completion" is for all contract work to be complete except minor punch list work.

Add:

14.04. D Portions of the Work not essential to operation of the facility, which can be completed without interruption of facility operation, may be completed after the Work is accepted as substantially complete and may include the following items:
Permanent fencing
Finish grading
Seeding
Removal of temporary access road and CONTRACTOR's mobilization areas
Items to be completed or corrected before final payment listed on the attachment to the certificate of Substantial Completion.

Change:

14.05. A.2 Delete in its entirety and replace with the following:
No occupancy or separate operation of part of the Work will be accomplished prior to CONTRACTOR's compliance with the requirements of the Supplementary Conditions pertaining to property insurance.

Change:

14.07. A.2 Delete in its entirety and replace with the following:
The final Application for Payment shall be accompanied (except as previously delivered) by: (i) all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by the Supplementary Conditions; (ii) AIA document G707, "Consent of Surety Company to Final Payment;" (iii) complete and legally effective releases or waivers of all Lien rights arising out of or Liens filed in connection with the Work, specifically AIA document G706A, "Contractor's Affidavit or Release of Liens" and AIA document G706, "Contractor's Affidavit of Payments of Debts & Claims."

Add:

14.07. A.4 Notwithstanding any other provision of these Contract Documents to the contrary, OWNER and ENGINEER are under no duty or obligation whatsoever to any Subcontractor, laborer, or other party to ensure that payments due and owed by CONTRACTOR to any of them are or will be made. Such parties shall rely only on CONTRACTOR's surety bonds for remedy of nonpayment by CONTRACTOR.

Change:

14.08. A In the second sentence, delete the words "paragraph 5.01" and replace with the words "the Supplementary Conditions".

Add:

15.01.B Notwithstanding Paragraph 15.01.A, if OWNER stops work under Paragraph 13.05, or excludes CONTRACTOR from the Site under Paragraph 13.09.B, or suspends the Work or any portion thereof because of CONTRACTOR's failure to prosecute the Work, CONTRACTOR will not be entitled to an extension of Contract Time.

Change:

15.02. B In the first sentence, delete the words "seven days".

Change:

15.03. A.2 Delete the second word and the last word ("expenses"), and substitute the word "costs" in each place.

Change:

15.03. A.3 Delete in its entirety.

Change:

15.03. A.4 Delete in its entirety.

Add:

15.04. B The words "suspended" and "suspension" in Paragraph 15.04.A shall not refer to the legal doctrine known as "constructive suspension" but shall only refer to a stoppage of the Work by express order of OWNER without cause.

Change:

Article 16 Delete in its entirety and replace with the following:

ARTICLE 16 - DISPUTE RESOLUTION.

16.01. Methods and Procedures

- A. Arbitration will not be used as a means for settling claims, disputes, and other matters. However, the parties may attempt to resolve any claims, disputes, or other matters by good faith negotiation. Contractual claims by the CONTRACTOR shall be governed by Paragraph 16.01.C. Any litigation brought shall be as provided in Paragraph 16.01.E.
- B. In all cases where the ENGINEER is given authority for approval of payments or for resolution of claims or disputes, that authority shall be understood to be subject to final action by OWNER. Any procedures or notification requirements of the general conditions relating to claims shall be met, in addition to those required by Paragraph 16.01.C.
- C. Contractual claims, whether for money or other relief, shall be submitted in writing no later than 60 days after final payment; however, written notice of the CONTRACTOR's intention to file such claim shall have been given at the time of the occurrence or beginning of the Work upon which the claim is based. Any notice or claim shall have been delivered to the ENGINEER and shall include a description of the factual basis for the claim and a statement of the amounts claimed or other relief requested. Submission by the CONTRACTOR of a notice of intention, and determination by the ENGINEER, shall be a prerequisite to submission of a claim pursuant to this paragraph. Any claim shall be delivered to the County Administrator, Hanover County Government Building, 7516 County Complex Road Building, Hanover, VA 23069 and shall include a copy of the ENGINEER's determination, a description of the factual basis for the claim and a statement of the amounts claimed or other relief requested. The County Administrator shall render a decision on the claim and shall notify the CONTRACTOR within 30 days of receipt of the claim. The CONTRACTOR may appeal the decision of the County Administrator to the Board of Supervisors by providing written notice to the County Administrator within 15 days of the date of the decision. The Board of Supervisors shall render a decision on the claim within 60 days of its date of receipt of the appeal notice and such decision shall be final unless the CONTRACTOR appeals the decision in accordance with the *Code of Virginia*.
- D. Invoices for all services or goods provided by the CONTRACTOR shall be delivered to the OWNER no later than 60 days following the conclusion of the Work or delivery of goods.
- E. The Contract Documents shall be construed, governed, and interpreted under the law of the Commonwealth of Virginia. Should any dispute arise out of or pertaining to the performance of the Contract, such disputes

shall be litigated and decided solely either in the General District Court or in the Circuit Court of the County of Hanover, Virginia, subject to applicable appeals. This forum selection clause is mandatory and binding on all parties.

Add:
17.06 *Historical or Archaeological Deposits*

A. If, during the course of construction, evidence of deposits of historical or archaeological interest is found, CONTRACTOR shall cease operations affecting the find and shall notify OWNER, who shall notify the State Historic Preservation Officer. No further disturbance of the deposits shall ensue until CONTRACTOR has been notified by OWNER that he may proceed. OWNER will issue a Notice To Proceed only after the state official has surveyed the find and reported a determination to OWNER. Compensation to CONTRACTOR, if any, for lost time or changes in construction to avoid the find, shall be determined in accordance with changed conditions or Change Order provisions of the Contract Documents. (Reference: 80 Stat 915, 16 USC 470, and Executive Order No. 11593 of May 31, 1971.)

Add:
17.07 *Antitrust*

A. By entering into a contract, CONTRACTOR conveys, sells, assigns, and transfers to OWNER all rights, title, and interest in and to all causes of action CONTRACTOR may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by OWNER under the said contract.

Add:
17.08 *Lien*

A. It is expressly agreed that after any payment has been made by OWNER to CONTRACTOR for work done, or labor or material supplied as required and described in the Contract, OWNER will have a lien upon all material delivered to the site by or for CONTRACTOR or any Subcontractor.

Add:
17.09 *Forms*

A. The forms of all submittals, notices, and other documents permitted or required to be used or transmitted under the Contract Documents shall be determined by OWNER. It is the Bidder's/Contractor's responsibility to become familiarized of all documentation related to the Contract Documents. The forms that are not included in the Project Manual may be available for review in the Hanover County Purchasing Division, 7496 County Complex Road, Hanover, VA.

END OF SECTION

SECTION 00090



DIVISION I – GENERAL PROVISIONS

SPECIAL PROVISION COPIED NOTES (SPCNs), SPECIAL PROVISION (SPs) and SUPPLEMENTAL SPECIFICATIONS (SSs)

These sheets may also be found at the following locations: Global Web Access: <http://www.virginiadot.org/business/const/spec-default.asp>

ALL REFERENCES MADE TO SECTIONS REFER TO THE 2020 VDOT ROAD AND BRIDGE SPECIFICATIONS

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GENERAL PROJECT REQUIREMENTS, SUPPLEMENTAL SPECIFICATIONS (SSs), SPECIAL PROVISIONS (SPs) AND SPECIAL PROVISION COPIED NOTES (SPCNs)

This project shall be constructed according to: the plans; the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2020; the *Virginia Department of Transportation Road and Bridge Standards*, dated 2016, with revisions issued online as of the advertisement date for this project incorporated; the 2011 edition of the *Virginia Work Area Protection Manual with Revision Number 2* incorporated, dated September 1, 2019; the 2009 edition of the *MUTCD with Revision Numbers 1 and 2* incorporated, dated May 2012; and the 2011 edition of the *Virginia Supplement to the MUTCD with Revision Number 1* dated September 30, 2013; and the Supplemental Specifications, Special Provisions and Special Provision Copied Notes in this contract. The status in the Contract of each of these documents will be according to Section 105.12 of the Specifications.

Special Provision Copied Notes in this contract are designated with “(SPCN)” after the date.

The information at the top and left of each Special Provision Copied Note in this contract is file reference information for Department use only. The information in the upper left corner above the title of each Supplemental Specification and Special Provision in this contract is file reference information for Department use only.

4-20-20 (SPCN)

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**VDOT SUPPLEMENTAL SPECIFICATIONS (SSs), SPECIAL PROVISIONS (SPs)
AND SPECIAL PROVISION COPIED NOTES (SPCNs)**

Where Virginia Department of Transportation (VDOT) Supplemental Specifications, Special Provisions and Special Provision Copied Notes are used in this contract, the references therein to “the Specifications” shall refer to the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2020 and the Supplement thereto, dated 2022. References to the “Road and Bridge Standards” shall refer to the *Virginia Department of Transportation Road and Bridge Standards*, dated 2016 with revisions issued online as of the advertisement date for this project incorporated. References to the “Virginia Work Area Protection Manual” shall refer to the 2011 edition of the *Virginia Work Area Protection Manual with Revision Number 2.1* incorporated, dated November 1, 2020. References to the “MUTCD” shall refer to the 2009 edition of the *MUTCD with Revision Numbers 1 and 2* incorporated, dated May 2012; and the 2011 edition of the *Virginia Supplement to the MUTCD with Revision Number 1* dated September 30, 2013.

Where the terms “Department”, “Engineer”, “Contract Engineer”, “Construction Engineer”, Materials “Engineer”, and “Operations Engineer” appear in VDOT Supplemental Specifications, Special Provisions and Special Provision Copied Notes used in this contract and the VDOT publications that each references, the authority identified shall be according to the definitions in Section 101.02 of the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2020. Authority identified otherwise for this particular project will be stated elsewhere in this contract.

VDOT Supplemental Specifications, Special Provisions and Special Provision Copied Notes used in this contract and the VDOT publications that each reference are intended to be complementary to the each other. In case of a discrepancy, the order of priority stated in Section 105.12 of the *Virginia Department of Transportation Road and Bridge Specifications*, dated 2020 shall apply.

VDOT Special Provision Copied Notes in this contract are designated with “(SPCN)” after the date of each document. VDOT Supplemental Specifications and Special Provision Copied Notes in this contract are designated as such above the title of each document.

The information at the top and left of each VDOT Special Provision Copied Note in this contract is file reference information for VDOT use only. The information in the upper left corner above the title of each VDOT Supplemental Specification and VDOT Special Provision in this contract is file reference information for VDOT use only.

7-1-22 (SPCN)

SP0F0-000100-00

PREDETERMINED MINIMUM WAGE RATES

"General Decision Number: VA20230125 01/06/2023

Superseded General Decision Number: VA20220125

State: Virginia

Construction Type: Highway

County: Hanover County in Virginia.

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

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

Table with 2 columns: Contract conditions and applicable Executive Order details. Row 1: Contract entered into or after Jan 30, 2022... Executive Order 14026 applies... Row 2: Contract awarded on or between Jan 1, 2015 and Jan 29, 2022... Executive Order 13658 applies...

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

Additional information on contractor requirements and worker protections under the Executive Orders is available at http://www.dol.gov/whd/govcontracts.

Modification Number: 0, Publication Date: 01/06/2023

* ELEC0080-011 12/01/2021

Table with 3 columns: Job Classification, Rates, Fringes. Rows include ELECTRICIAN, CARPENTER, and CEMENT MASON/CONCRETE FINISHER with their respective rates and fringe percentages.

| | | |
|--|-------------|------|
| IRONWORKER, REINFORCING..... | \$ 20.80 | 0.00 |
| IRONWORKER, STRUCTURAL..... | \$ 27.38 | 0.00 |
| LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor..... | \$ 19.21 | 2.82 |
| LABORER: Common or General..... | \$ 15.34** | 0.00 |
| LABORER: Grade Checker..... | \$ 14.88 ** | 0.00 |
| LABORER: Pipelayer..... | \$ 17.76 | 0.00 |
| LABORER: Power Tool Operator..... | \$ 15.69** | 0.00 |
| OPERATOR: Backhoe/Excavator/Trackhoe..... | \$ 18.63 | 0.00 |
| OPERATOR: Bobcat/Skid Steer/Skid Loader..... | \$ 19.16 | 4.45 |
| OPERATOR: Broom/Sweeper..... | \$ 17.40 | 2.01 |
| OPERATOR: Crane..... | \$ 24.42 | 4.69 |
| OPERATOR: Drill..... | \$ 24.66 | 0.00 |
| OPERATOR: Gradall..... | \$ 19.26 | 0.00 |
| OPERATOR: Grader/Blade..... | \$ 23.21 | 0.00 |
| OPERATOR: Hydroseeder..... | \$ 16.64 | 0.00 |
| OPERATOR: Loader..... | \$ 17.17 | 0.00 |
| OPERATOR: Mechanic..... | \$ 21.43 | 0.00 |
| OPERATOR: Milling Machine..... | \$ 23.12 | 3.60 |
| OPERATOR: Paver (Asphalt, Aggregate, and Concrete) | \$ 20.32 | 0.00 |
| OPERATOR: Piledriver..... | \$ 21.83 | 4.08 |
| OPERATOR: Roller (Finishing)..... | \$ 19.05 | 1.29 |
| OPERATOR: Roller..... | \$ 21.69 | 0.00 |
| OPERATOR: Screed..... | \$ 22.13 | 4.89 |
| OPERATOR: Asphalt Spreader and Distributor..... | \$ 19.09 | 1.81 |
| OPERATOR: Bulldozer, Including Utility..... | \$ 18.22 | 2.69 |
| TRAFFIC CONTROL: Flagger..... | \$ 12.89** | 0.00 |
| TRUCK DRIVER : HEAVY 7 CY & UNDER..... | \$ 15.53** | 0.00 |
| TRUCK DRIVER: Fuel and Lubricant Service..... | \$ 18.25 | 0.00 |
| TRUCK DRIVER: HEAVY OVER 7 CY..... | \$ 16.98 | 0.00 |
| TRUCK DRIVER: Single & Multi Axle..... | \$ 19.52 | 0.00 |

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

=====
** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$16.20) or 13658 (\$12.15). Please see the Note at the top of the wage determination for more information.

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

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

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

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

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

Survey Rate Identifiers

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

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

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

WAGE DETERMINATION APPEALS PROCESS

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

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

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour 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

(SPACE LEFT BLANK INTENTIONALLY)

U.S. DEPARTMENT OF LABOR
OFFICE OF THE SECRETARY
WASHINGTON
DECISION OF THE SECRETARY

This case is before the Department of Labor pursuant to a request for a wage predetermination as required by law applicable to the work described.

A study has been made of wage conditions in the locality and based on information available to the Department of Labor the wage rates and fringe payments listed are hereby determined by the Secretary of Labor as prevailing for the described classes for labor in accordance with applicable law.

This wage determination decision and any modifications thereof during the period prior to the stated expiration date shall be made a part of every contract for performance of the described work as provided by applicable law and regulations of the Secretary of Labor, and the wage rates and fringe payments contained in this decision, including modifications, shall be the minimums to be paid under any such contract and subcontractors on the work.

The Contracting Officer shall require that any class of laborers and mechanics which is not listed in the wage determination and which is to be employed under the Contract, shall be classified or reclassified conformably to the wage determination, and a report of the action taken shall be sent by the Federal agency to the Secretary of Labor. In the event the interested parties cannot agree on the proper classification or reclassification of a particular class of laborers and mechanics to be used, the question accompanied by the recommendation of the Contracting Officer shall be referred to the Secretary for determination.

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 apprentice-journeyman ratios and wage in the project area, which will be the basis for establishing such ratios and rates for the project under the applicable contract provisions.

Fringe payments include medical and hospital care, compensation for injuries or illness resulting from occupational activity, unemployment benefits, life insurance, disability and sickness insurance, accident insurance (all designated as health and welfare), pensions, vacation and holiday pay, apprenticeship or other similar programs and other bona fide fringe benefits.

By direction of the Secretary of Labor



E. Irving Manger, Associate Administrator
Division of Wage Determinations
Wage and Labor Standards Administration

**REQUIRED CONTRACT PROVISIONS FEDERAL-AID
CONSTRUCTION CONTRACTS**

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

ATTACHMENTS

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

I. GENERAL

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

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

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

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

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

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

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised

release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

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

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

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504

of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

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

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

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

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

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

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

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

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

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of

employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

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

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

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

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

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

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

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

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

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

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

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

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

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

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

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

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

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

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

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

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

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

10. Assurances Required:

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

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

- a. The records kept by the contractor shall document the following:
 - (1) The number and work hours of minority and non- minority group members and women employed in each work classification on the project;
 - (2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and
 - (3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.
- b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non- minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on [Form FHWA-1391](#). The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

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

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and

other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

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

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act ([29 CFR part 3](#))), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act ([40 U.S.C. 3141\(2\)\(B\)](#)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in [29 CFR part 1](#), a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

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

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

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

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* 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 may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, 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.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized

representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and 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.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph 2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31U.S.C. 3901–3907](#).

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements (1) Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section 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 [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements (1) Frequency and method of submission.* The contractor or subcontractor must submit weekly,

for each week in which any DBA- or Related Acts- covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a “Statement of Compliance,” signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH-347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the “Statement of Compliance” required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards

provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices (1) Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeymen on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeymen under this part must be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

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

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

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

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

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

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

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

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

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

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

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, 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 that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31U.S.C. 3901–3907](#).

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower- tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

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

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

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

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

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

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

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish

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

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

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

VII. SAFETY: ACCIDENT PREVENTION

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

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

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

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

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

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

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

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or

the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

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

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

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

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

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

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

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

1. Instructions for Certification – First Tier Participants:

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

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

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

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

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

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

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

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

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

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

* * * * *

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

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

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

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

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local)

with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

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

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

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

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

* * * * *

3. Instructions for Certification - Lower Tier Participants:

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

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

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

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

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

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

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

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

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

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

* * * * *

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

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

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

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

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

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

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

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

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

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

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

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

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

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

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

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

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.
2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
 - a. To the extent that qualified persons regularly residing in the area are not available.
 - b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
 - c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective

bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

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

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

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

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

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

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
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 Opportunity Construction Contract Specifications" set forth herein.
2. The goals for female and minority participation, expressed in percentage terms of the Contractor's aggregate work force in each trade on all construction works in the covered area, are as follows:

Females- 6.9%

Minorities - See Attachment "A"

The goals are applicable to all the Contractor's construction work performed in the covered area, whether or not it is Federal or federally assisted. 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 41 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 established herein. 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 Executives 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 10 workings days the award of any construction subcontract in excess of \$10,000 at any tier for construction works under this contract. The notification shall list the name, address and telephone number of the subcontractor, employer identification number, estimated dollar amount of the subcontract, estimated starting and completion dates of the subcontract and the geographical area in which the Contract is to be performed.

**STANDARD FEDERAL EQUAL EMPLOYMENT OPPORTUNITY
CONSTRUCTION CONTRACT SPECIFICATIONS (EXECUTIVE ORDER 11246)**

1. As, used in this provision:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941;
 - d. "Minority" includes:
 - (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
 - (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
 - (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and

- (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation.
3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors and Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction Contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
5. Neither the provisions of any collective bargaining agreement, nor the failure by a union with whom the Contractor has a collective bargaining agreement, to refer either minorities or women shall excuse the Contractor's obligations under these specifications, Executive Order 11246, or the regulations promulgated pursuant thereto.
6. In order for the nonworking training hours of apprentices and trainees to be counted in meeting the goals, such apprentices and trainees must be employed by the Contractor during the training period, and the Contractor must have made a commitment to employ the apprentices and trainees at the completion of their training, subject to the availability of employment opportunities. Trainees must be trained pursuant to training programs approved by the U. S. Department of Labor.
7. The Contractor shall take specific affirmative actions to ensure equal employment opportunity. The evaluation of the Contractor's compliance with these specifications shall be based upon its effort to achieve maximum results from its actions. The Contractor shall document these efforts fully, and shall implement affirmative action steps at least as extensive as the following:
 - a. Ensure and maintain a working environment free of harassment, intimidation, and coercion at all sites, and in all facilities at which the Contractor's employees are assigned to work. The Contractor, where possible, shall assign two or more women to each construction project. The Contractor shall specifically ensure that all foreman, superintendents and other on-site supervisory personnel are aware of and carry out the Contractor's obligation to maintain such a working environment, with specific attention to minority or female individuals working at such sites in such facilities.
 - b. Establish and maintain a current list of minority and female recruitment sources, provide written notification to minority and female recruitment sources and to community organizations when the Contractor or its unions have employment opportunities available, and maintain a record of the organizations' responses.
 - c. Maintain a current file of the names, addresses and telephone numbers of each minority and female off the street applicant and minority or female referral from a union, a recruitment source or community organization and of what action was taken with respect to each such individual. If such individual was sent to the union hiring hall for referral and was not referred back to the Contractor by the union, or if referred, not employed by the Contractor, this shall be documented in the file with the reason therefore, along with whatever additional actions the Contractor may have taken.
 - d. Provide immediate written notification to the Director when the union or unions which the Contractor has a collective bargaining agreement has not referred to the Contractor a minority person or women sent by the Contractor, or when the Contractor has other information that the union referral process has impeded the Contractor's efforts to meet its obligations.
 - e. Develop on-the-job training opportunities and/or participate in training programs for the area which expressly include minorities and women, including upgrading programs and apprenticeship and trainee programs relevant to the Contractor's employment needs,

especially those programs funded or approved by the Department of Labor. The Contractor shall provide notice of these programs to the sources compiled under 7b above.

- f. Disseminate the Contractor's EEO policy by providing notice of the policy to unions and training programs and requesting their cooperation in assisting the Contractor in meeting its EEO obligations; by including it in any policy manual and collective bargaining agreement; by publicizing it in the company newspaper or annual report; by specific review of the policy with all management personnel and with all minority and female employees at least once a year; and by posting the company EEO policy on bulletin boards accessible to all employees at each location where construction work is performed.
 - g. Review, at least annually, the company's EEO policy and affirmative action obligations under these specifications with all employees having any responsibility for hiring, assignment, layoff, termination, or other employment decisions including specific review of these items with onsite supervisory personnel such as Superintendents and General Foremen prior to the initiation of construction work at any job site. A written record shall be made and maintained identifying the time and place of these meetings, persons attending, subject matter discussed and disposition of the subject matter.
 - h. Disseminate the Contractor's EEO policy externally by including in any news media advertisement that the Contractor is "An Equal Opportunity Employer" for minority and female, and providing written notification to and discussing the Contractor's EEO policy with other Contractors and Subcontractors with whom the Contractor does or anticipates doing business.
 - i. Directs its recruitment efforts, both oral and written, to minority, female and community organizations, to schools with minority and female students and to minority and recruitment and training organizations serving the Contractor's recruitment area and employment needs. Not later than one month prior to the date for the acceptance of applications for apprenticeship or other training by recruitment source, the Contractor shall send written notification to organizations such as the above, describing the openings, screening procedures and tests to be used in the selection process.
 - j. Encourage present minority and female employees to recruit other minority persons and women and, where reasonable, provide after school, summer and vacation employment to minority and female youth both on the site and in other areas of Contractor's workforce.
 - k. Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
 - l. Conduct, at least annually, an inventory and evaluation of all minority and female personnel for promotional opportunities and encourage these employees to seek or to prepare for such opportunities through appropriate training or other means.
 - m. Ensure that seniority practices, job classifications, work assignments and other personnel practices, do not have a discriminatory effect by continually monitoring all personnel and employment related activities to ensure that the EEO policy and the Contractor's obligations under these specifications are being carried out.
 - n. Ensure that all facilities and company activities are nonsegregated, except that separate or single-user toilet and necessary changing facilities shall be provided to assure privacy between the sexes.
 - o. Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
 - p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
9. Goals for women have been established. However, the Contractor IS required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner, that is even

thought the Contractor has achieved its goals for women, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.

10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, sexual orientation, gender identity, or national origin.
11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246, as amended.
13. The Contractor, in fulfilling its obligations under these specifications shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from Its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director will proceed in accordance with 41 CFR 60-4.8.
14. The Contractor shall designate and make known to the Department a responsible official as the EEO Officer to monitor all employment related activity, to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors will not be required to maintain separate records.
15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

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ATTACHMENT A

| <u>Economic Area</u> | <u>Goal (Percent)</u> |
|---|-----------------------|
| Virginia: | |
| 021 Roanoke-Lynchburg, VA | |
| SMSA Counties: | |
| 4640 Lynchburg, VA | 19.3 |
| VA Amherst; VA Appomattox; VA Campbell; VA Lynchburg | |
| 6800 Roanoke, VA | 10.2 |
| VA Botetourt; VA Craig; VA Roanoke; VA Roanoke City; VA Salem | |
| Non-SMSA Counties | 12.0 |
| VA Alleghany; VA Augusta; VA Bath; VA Bedford; VA Bland; VA Carroll; | |
| VA Floyd; VA Franklin; VA Giles; VA Grayson; VA Henry; VA Highland; | |
| VA Montgomery; VA Nelson; VA Patrick; VA Pittsylvania; VA Pulaski; | |
| VA Rockbridge; VA Rockingham; VA Wythe; VA Bedford City; VA Buena Vista; | |
| VA Clifton Forge; VA Covington; VA Danville; VA Galax; VA Harrisonburg; | |
| VA Lexington; VA Martinsville; VA Radford; VA Staunton; VA Waynesboro; WV | |
| Pendleton. | |
| 022 Richmond, VA | |
| SMSA Counties: | |
| 6140 Petersburg - Colonial Heights - Hopewell, VA | 30.6 |
| VA Dinwiddie; VA Prince George; VA Colonial Heights; VA Hopewell; | |
| VA Petersburg. | |
| 6760 Richmond, VA | 24.9 |
| VA Charles City; VA Chesterfield; VA Goochland, VA Hanover; VA | |
| Henrico; VA New Kent; VA Powhatan; VA Richmond. | |
| Non-SMSA Counties | 27.9 |
| VA Albemarle; VA Amelia; VA Brunswick; VA Buckingham, VA Caroline; | |
| VA Charlotte; VA Cumberland; VA Essex; VA Fluvanna; VA Greene; VA | |
| Greensville; VA Halifax; VA King and Queen; VA King William; VA | |
| Lancaster; VA Louisa; VA Lunenburg; VA Madison; VA Mecklenburg; VA | |
| Northumberland; VA Nottoway; VA Orange; VA Prince Edward; VA Richmond | |
| VA Sussex; VA Charlottesville; VA Emporia; VA South Boston | |
| 023 Norfolk - Virginia Beach - Newport News VA: | |
| SMSA Counties: | |
| 5680 Newport News- Hampton, VA | 27.1 |
| VA Gloucester; VA James City; VA York; VA Hampton; VA Newport | |
| News; VA Williamsburg. | |
| 5720 Norfolk - Virginia Beach - Portsmouth, VA - NC | 26.6 |
| NC Currituck; VA Chesapeake; VA Norfolk; VA Portsmouth; VA | |
| Suffolk; VA Virginia Beach. | |
| Non-SMSA Counties | 29.7 |
| NC Bertie; NC Camden; NC Chowan; NC Gates; NC Hertford; | |
| NC Pasquotank; NC Perquimans; VA Isle of Wight; VA Matthews; | |
| VA Middlesex; VA Southampton; VA Surry; VA Franklin. | |
| Washington, DC: | |
| 020 Washington, DC. | |
| SMSA Counties: | |
| 8840 Washington, DC - MD - VA | 28.0 |
| DC District of Columbia; MD Charles; MD Montgomery MD Prince | |
| Georges; VA Arlington; VA Fairfax; VA Loudoun; VA Prince William | |
| VA Alexandria; VA Fairfax City; VA Falls Church. | |
| Non- SMSA Counties | 25.2 |
| MD Calvert; MD Frederick; MD St. Marys; MD Washington; VA Clarke; | |
| VA Culpeper; VA Fauquier; VA Frederick; VA King George; VA Page; VA | |
| Rappahannock; VA Shenandoah; VA Spotsylvania; VA Stafford; VA | |
| Warren; VA Westmoreland; VA Fredericksburg; VA Winchester WV Berkeley; | |
| WV Grant; WV Hampshire; WV Hardy; WV Jefferson; WV Morgan. | |

Tennessee:

052 Johnson City - Kingsport - Bristol, TN - VA

SMSA Counties:

3630 Johnson City - Kingsport -Bristol, TN-VA 2.6
TN Carter; TN Hawkins; TN Sullivan; TN Washington; VA Scott; VA
Washington; VA Bristol.

Non-SMSA Counties 3.2

TN Greene; TN Johnson; VA Buchanan; VA Dickenson; VA Lee;
VA Russell; VA Smyth; VA Tazewell; VA Wise; VA Norton; WV McDowell;
WV Mercer.

Maryland:

019 Baltimore MD

Non-SMSA Counties 23.6

MD Caroline; MD Dorchester; MD Kent; MD Queen Annes; MD Somerset;
MD Talbot; MD Wicomico; MD Worcester; VA Accomack; VA Northampton.

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
CHANGED CONDITIONS FOR LOCAL ASSISTANCE PROJECTS**

I. GENERAL

This special provision specifies the process to be followed when conditions specified in the Contract differ from what is encountered during the prosecution of work except as provided elsewhere in the Contract.

II. DIFFERING SITE CONDITIONS

1. During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the Contract or if unknown physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract, are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the site is disturbed and before the affected work is performed.
2. Upon written notification, the Engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the Contract, an adjustment, excluding anticipated profits, will be made and the Contract modified in writing accordingly. The Engineer will notify the Contractor of the determination whether or not an adjustment of the Contract is warranted.
3. No contract adjustment which results in a benefit to the Contractor will be allowed unless the Contractor has provided the required written notice.
4. No contract adjustment will be allowed under this clause for any effects caused on unchanged work. (This provision may be omitted by the [Department](#) at its option.)

III. SUSPENSION OF WORK ORDERED BY THE ENGINEER

1. If the performance of all or any portion of the work is suspended or delayed by the Engineer in writing for an unreasonable period of time (not originally anticipated, customary, or inherent to the construction industry) and the Contractor believes that additional compensation and/or contract time is due as a result of such suspension or delay, the Contractor shall submit to the Engineer in writing a request for adjustment within 7 calendar days of receipt of the notice to resume work. The request shall set forth the reasons and support for such adjustment.
2. Upon receipt, the Engineer will evaluate the Contractor's request. If the Engineer agrees that the cost and/or time required for the performance of the Contract has increased as a result of such suspension and the suspension was caused by conditions beyond the control of and not the fault of the Contractor, its suppliers, or subcontractors at any approved tier, and not caused by weather, the Engineer will make an adjustment (excluding profit) and modify the Contract in writing accordingly. The Contractor will be notified of the Engineer's determination whether or not an adjustment of the Contract is warranted.
3. No contract adjustment will be allowed unless the Contractor has submitted the request for adjustment within the time prescribed.
4. No contract adjustment will be allowed under this clause to the extent that performance would have been suspended or delayed by any other cause, or for which an adjustment is provided or excluded under any other term or condition of this contract.

IV. SIGNIFICANT CHANGES IN THE CHARACTER OF WORK

1. The Engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the Contract nor release the surety, and the Contractor agrees to perform the work as altered.
2. If the alterations or changes in quantities significantly change the character of the work under the Contract, whether such alterations or changes are in themselves significant changes to the character of the work or by affecting other work cause such other work to become significantly different in character, an adjustment, excluding anticipated profit, will be made to the Contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed

upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable.

3. If the alterations or changes in quantities do not significantly change the character of the work to be performed under the Contract, the altered work will be paid for as provided elsewhere in the Contract.
4. The term “significant change” shall be construed to apply only to the following circumstances:
 - A. When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction; or
 - B. When a major item of work, as defined elsewhere in the Contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
DUAL DATE CONTRACT PROJECTS**

SECTION 102.05(a) GENERAL of the Specifications is amended to include the following:

The bidder's attention is directed to the consecutive calendar day and the “no later than” fixed completion dates set forth in the Proposal.

SECTION 103.06—CONTRACT DOCUMENTS of the Specifications is amended to include the following:

The lowest successful bidder may schedule and perform work identified in this proposal at any time within the time limits set forth on Form C-7DD in the proposal. Prior to contract execution, the lowest successful Bidder shall indicate on the Form C-7DD provided by the Department for execution of the Contract, his selected start date for the Work, and, using the number of consecutive calendar days stated in the Proposal, the Department will determine the fixed date for completion and acceptance of the Work. In no case shall the Bidder’s determined fixed completion date be beyond the Department’s “no later than” fixed completion date set forth in the Proposal.

Once selected, the Contractor’s selected start date and determined fixed completion date for the project will be binding.

SECTION 105—CONTROL OF WORK of the Specifications is amended as follows:

Section 105.01—Notice to Proceed is replaced with the following:

For the purposes of this Contract the date the Contractor selects to start the Work will be the Notice to Proceed date. If the Contractor fails to select a start date that is before a date equal to the “no later than” fixed completion date minus the calendar days stated in the Proposal, the Contractor’s Notice to Proceed date will automatically become the date resulting from subtracting the consecutive calendar days from the “no later than” fixed completion date stated in the Proposal. In no case shall work begin before the Department executes the Contract.

Section 105.05(b) Equipment is amended to add the following:

The Contractor shall provide the Engineer a list of all equipment available for use on the Contract. The make, model, size, capacity, and year of manufacture shall be listed for each piece of equipment. The list shall be provided at the pre-construction conference or no later than one week prior to the first estimate and shall be updated as changes occur but at least once a month.

SECTION 108—PROSECUTION AND PROGRESS OF WORK of the Specifications is amended as follows:

Section 108.01—Prosecution of Work is amended to replace the first paragraph with the following:

The Contractor shall begin work on his selected start date or no later than 15 consecutive calendar days after his selected start date. Once started, work on this Contract shall be continuously prosecuted and completed no later than the Contractor’s determined fixed completion date.

Section 108.04—Determination and Extension of Contract Time Limit is replaced with the following:

No request for an extension of time will be considered that is based on any claim that the time limit as originally established by the Department was inadequate nor will the Department’s granting or denying the Contractor’s request for an extension of time relieve the Contractor of his responsibility to perform the Work according to the scope and requirements of the Contract unless specifically addressed as an authorized change to the Contract.

If the satisfactory fulfillment of the Contract with extensions and increases authorized according to Sections 104.02 and 104.03 of the Specifications requires the performance of work in greater quantities than those specified in the Contract, the Contractor shall inform the Department in writing if the additional quantities require additional time to perform the work and, if so, the reason supporting such a determination and the additional amount of time requested to perform the work due to the greater quantities. The Engineer will determine if additional contract time is warranted by the greater quantities as specified in the Contractor’s request. Where the Engineer determines such additional time is warranted, the amount of additional time as well as the additional quantities involved shall be specifically identified in the authorized change order to the Contract.

The Engineer may give consideration for extension of time when a delay occurs due to unforeseen causes beyond the control of and without the fault or negligence of the Contractor. However, consideration will not be given to extensions of time attributable to normal weather conditions or conditions resulting from normal weather.

During prosecution of the work, the Contractor shall identify the causes for any delays attributable to conditions he deems to be beyond his control and shall identify the particular construction operations affected, their criticality to project milestones or overall contract completion, and the significant dates that encompass the periods of delay. The Contractor shall furnish all such information necessary for the Department to make an adequate evaluation of any claim received from the Contractor for an extension of the contract time limit within three days of experiencing such a delay.

Section 108.07—Default of Contract is amended to replace (a) in the first paragraph with the following:

- (a) fails to begin the work under the Contract within 15 consecutive calendar days after the Contractor’s selected start date for this Contract.

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 101 – DEFINITIONS OF ABBREVIATIONS, ACRONYMS, AND TERMS**

SECTION 101 – DEFINITIONS OF ABBREVIATIONS, ACRONYMS, AND TERMS of the Specifications is amended as follows:

Section 101.01 – Abbreviations and Acronyms is amended to include the following:

- ATSSA** American Traffic Safety Service Association
- ITS** Intelligent Transportation Systems
- MASH** Manual for Assessing Safety Hardware
- NFPA** National Fire Protection Association
- NTPEP** National Transportation Product Evaluation Program
- VAC** Virginia Administrative Code, when referencing a legal code

Section 101.01 – Abbreviations and Acronyms is amended to replace the following abbreviations:

- VAC** Volts Alternating Current when used to define an amount of electrical potential.

Section 101.02 – Terms is amended by inserting the below terms and definitions:

Internet. The electronic communications network that connects computer networks and organizational computer facilities around the world.

Match-Cure. A process where concrete test specimens are cured at the same temperature as the product by monitoring the concrete temperature in both the product and the test specimens and applying heat to the test specimens to match the temperature of the concrete.

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BASE AND ADDITIVE BIDS – The Bidders’ attention is directed to the separate Sections in the Schedule of Bid Items: – **SECTION 0001 REGULAR BID ITEMS** and **SECTION 0002 ADDITIVE A ITEMS**. The description of each of the sections follows:

- Section 0001 Regular Items comprise the Base Bid.
- Section 0002 Additive Items comprise the Additive Bids.

The Bidder shall submit prices on the Base Bid and on the Additive Bid items.

Failure on the part of the Bidder to submit prices on the bid items for any of the designated Sections will be cause for the Department to declare the Bidder’s bid non-responsive, the Bidder not responsible, or both; and therefore, reject the bid.

The award of the contract will be made to the lowest responsive and responsible Bidder of the Base Bid and Additive Bid, if the bid amount does not exceed the available funding for the work. If the Base Bid and Additive Bids total more than available funding, the Contractor with the lowest Base Bid will be awarded the Contract if the Base Bid is within the funding parameters deemed acceptable by the Department.

Award of the Base Bid and Additive Bids to the Contractor for construction is dependent on the decision of the Department. If the Department decides to award the Additive Bid, the successful bidder will be notified during the normal award process.

If the Additive Bid is awarded, the Completion Date in the executed Contract will be the Date of Completion with Additive Bid as shown on the C-7.

3-18-20 (SPCN)

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(g) **Compliance with the Cargo Preference Act**

As required by [46 CFR 381.7 \(a\)-\(b\)](#) “Use of United States-flag vessels, when materials or equipment are acquired for a specific highway project, the Contractor agrees:

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

This requirement will not be applicable when materials or equipment used on the Project are obtained from the existing inventories of suppliers and contractors; they are only applicable when the materials or equipment are acquired for the specific project, and have been transported by ocean vessel.

12-14-15; Reissued 7-12-16 (SPCN) [\[formerly cn102-050100-00\]](#)

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
NON-DISCRIMINATION IN EMPLOYMENT AND CONTRACTING PRACTICES**

I. Description

This Special Provision implements Executive Order 61, ensuring equal opportunity and access for all Virginians in state contracting and public services.

II. Non-Discrimination

The Contractor shall maintain a non-discrimination policy, which prohibits discrimination by the Contractor on the basis of race, sex, color, national origin, religion, sexual orientation, gender identity, age, political affiliation, disability, or veteran status. This policy shall be followed in all employment practices, subcontracting practices, and delivery of goods or services. The Contractor shall also include this requirement in all subcontracts valued over \$10,000.

III. Measurement and Payment

Conformance with this Special Provision will not be measured for individual payment, and will be considered incidental to the Work.

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
USE OF DOMESTIC MATERIAL**

SECTION 102.05 PREPARATION OF BID of the Specifications is amended to include the following:

In accordance with the provisions of Section 635.410(b) of Title 23 CFR, hereinafter referred to as "Buy America", except as otherwise specified, all iron and steel (including miscellaneous items such as fasteners, nuts, bolts and washers) to be permanently incorporated for use on federal aid projects shall be produced in the United States of America. This applies to any iron or steel item brought onto the project, regardless of the percentage of iron or steel that exists in the pay item or in the final form they take; however, electrical components (i.e., combination products such as signal controllers and similar products which are only sold as a unit) are not subject to Buy America provisions if the product as purchased by the Contractor is less than 50% steel and iron. "Produced in the United States of America" means all manufacturing processes occur in one of the 50 United States, the District of Columbia, Puerto Rico or in the territories and possessions of the United States. "Manufacturing processes" are defined as any process which alters or modifies the chemical content, physical size or shape, or final finish of iron or steel material (such as rolling, extruding, bending, machining, fabrication, grinding, drilling, finishing, or coating). For the purposes of satisfying this requirement "coating" is defined as the application of epoxy, galvanizing, painting or any other such process that protects or enhances the value of the material to which the coating is applied. Non-iron and non-steel materials used in the coating process do not need to be produced in the United States as long as the application of the coating occurred in the United States. The manufacturing process is considered complete when the resultant product is ready for use as an item in the project (e.g. fencing, posts, girders, pipe, manhole covers, etc.) or is incorporated as a component of a more complex product by means of further manufacturing. Final assembly of a product may occur outside of the United States of America provided no further manufacturing processes take place.

For the purposes of this provision, all steel or iron material meeting the criteria as produced in the United States of America will be considered as "Domestic Material." All iron and steel items not meeting the criteria as produced in the United States of America will be considered "Non-Domestic Material."

A minimal amount of "Non-Domestic" steel or iron material may be incorporated in the permanent work on a federal-aid contract provided that the cost of such materials or products does not exceed one-tenth of one percent of the Contract amount or \$2500, whichever is greater. The cost of the "Non-Domestic Material" is defined as its monetary value delivered to the job site and supported by invoices or bill of sale to the Contractor. This delivered-to-site cost must include transportation, assembly, installation and testing.

Buy America provisions do not apply to iron or steel products used temporarily in the construction of a project such as temporary sheet piling, temporary bridges, steel scaffolding, falsework or such temporary material or product or material that remains in place for the Contractor's convenience.

Raw materials such as iron ore, pig iron, processed, pelletized and reduced iron ore, waste products (including scrap, that is, steel or iron no longer useful in its present form from old automobiles, machinery, pipe, railroad rail, or the like and steel trimmings from mills or product manufacturing) and other raw materials used in the production of steel and/or iron products may, however, be imported. Extracting, handling, or crushing the raw materials which are inherent to the transporting the materials for later use in the manufacturing process are exempt from Buy America.

Any items containing foreign source steel or iron billet shall be considered "Non-Domestic Materials." Additionally, iron or steel ingots or billets produced in the United States, but shipped outside the United States of America for any manufacturing process and returned for permanent use in a project shall be considered "Non-Domestic Materials."

Waivers:

The process for receiving a waiver for Buy America provisions is identified in 23 CFR 635.410(c). The Contractor shall not anticipate that any Buy America provisions will be waived.

Certification of Compliance:

The Contractor is required to submit a Certificate of Compliance prior to incorporating any items containing iron or steel items into the project. This shall be accomplished by the Contractor submitting the Form C-76 Certificate of Compliance to the Department when the items are delivered to the project site. The Certification of Compliance will certify whether the items are considered

“Domestic Material” or “Non-Domestic Material” as referenced in this Special Provision. The certificate must be signed and dated by the Prime Contractor’s Superintendent and include a Buy America Submittal Number. The Buy America Submittal Number is simply the Contractor’s project specific sequential numbering system that will allow the Contractor and Department to track the total number of certificates provided and the individual items containing iron or steel associated with each certificate.

Supporting Documentation:

Supporting documentation to demonstrate compliance with Buy America provisions (such as mill test reports manufacturer/supplier certifications, etc.) shall be organized by Buy America Submittal Number and maintained by the Contractor from the date of delivery until three years after project acceptance. The Contractor may maintain this documentation electronically or in paper format.

The Department or FHWA may review the Contractor’s supporting documentation to verify compliance with the Buy America provisions at any time. Supporting documentation shall be provided within five business days of the request. The burden of proof to meet the Buy America provisions rests with the Contractor. If the supporting documentation does not undeniably demonstrate to FHWA or the Department that the “Domestic Materials” identified in the Certificates of Compliance were produced in the United States of America, then the Department may deduct payment from moneys due the Contractor for the value of the iron and steel that did not meet the Buy America provisions.

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
CONSTRUCTION RECORD DOCUMENTATION OF PERMANENT STORMWATER MANAGEMENT FACILITIES**

February 1, 2018

I. Description

This specification covers the requirement for the Contractor to provide Construction Record Documents of permanent stormwater management facilities (SWMF).

II. Definitions

1. **Construction Record Documents (CRDs).** Documents that record and detail the construction and final state of a SWMF, including, but not limited to, construction record surveys, shop drawings, and all certifications required in the Contract for the specific type of SWMF.
2. **Licensed Professional.** A Professional Engineer, Land Surveyor, or Certified Landscape Architect licensed to practice in the Commonwealth of Virginia.

III. Requirements

The Contractor shall provide CRDs and other required information identified in Section IV for all permanent SWMF shown in the Plans. CRDs shall comply with Section 105.10(c) of the Specifications. All survey work and drawings shall comply with the VDOT Survey Manual and CADD Manual.

CRDs shall document the items summarized in Section IV for each type or category of SWMF on the Project. The CRDs shall be signed and sealed by a Licensed Professional.

A digitally signed and sealed copy of the CRDs and other required information for permanent SWMF on the Project shall be provided to the Engineer prior to Final Acceptance.

Deviations from the Plans that result in a decrease in the water quality or quantity volumes, or any change to the shape, size, location or elevations of the facility or its associated structures shall be shown on the CRDs for the Engineer's review. The Contractor shall be responsible for making any corrections to the SWMF required by the Engineer and updating the CRDs prior to Final Acceptance.

IV. CRDs for Permanent Stormwater Management Facilities

CRDs shall be provided for the following types of permanent SWMF's shown in the Plans:

1. **Constructed Wetlands, Wet Ponds, Extended Detention, and Dry Detention Basins.** These facilities require a construction record survey which shall include:
 - A. Finished elevations, including pretreatment areas, basin floor elevations, bench elevations, pool elevations, and embankment contours and elevations.
 - B. Horizontal location of basin footprint, spillway, outfall structure and outlet protection.
 - C. Spillway dimensions and elevations.
 - (1) Riser shape and elevations (crest and bottom).
 - (2) Orifice shape, dimensions, and elevations.
 - (3) Weir shape, dimensions, and elevations.
 - (4) Barrel shape, dimensions, and elevations (inlet and outlet).
 - (5) Emergency spillway shape, dimensions, and elevations.
 - D. Baffle location, shape and dimensions.
2. **Infiltration, Bioretention, and Filtering Practices.** These facilities require a construction record survey which shall include:
 - A. Finished elevations including pretreatment areas, filter bed surface, berm and earthen spillway.
 - B. Horizontal location of observation wells, cleanouts, spillways and outfall.

- C. Types of outlet and overflow structures, shape and elevations (crest and bottom).
 - D. Pipe barrel shape, dimensions, and elevations (inlet and outlet).
 - E. Underdrain pipe shape, size and invert elevations.
 - F. Underground storage structure type, shape, dimensions, and elevations.
3. **Manufactured Treatment Devices (MTDs) and Permeable Pavement.** Manufacturer’s shop drawings shall be provided for all manufactured components of MTDs and Permeable Pavement. A statement for planting in conformance with the Plans shall be included. MTDs require a construction record survey which shall include:
- A. Horizontal location of the facility and outfall.
 - B. Horizontal location of observation wells and cleanouts.
 - C. Rim and invert elevations of associated structures or access location.

V. Measurement and Payment

Construction Record Documents for permanent SWMF will be paid for at the Contract lump sum price. This price shall include performing the work described herein on all SWMF’s shown on the Plans.

Payment will not be made until the Contractor provides the Engineer with CRDs, signed and sealed by a Licensed Professional, and they are accepted by the Engineer.

Payment will be made under:

| Pay Item | Pay Unit |
|-------------------------------|-----------------|
| Construction Record Documents | Lump sum |

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
SECTION 105.06—SUBCONTRACTING
(FEDERAL FUNDED PROJECTS)**

February 9, 2017

SECTION 105.06—Subcontracting of the Specifications is amended to include the following:

- (d) According to Commonwealth of Virginia Executive Order 20, the Contractor is encouraged to seek out and consider Small, Women-owned, and Minority-owned (SWaM) businesses certified by the Department of Small Business and Supplier Diversity (DSBSD) as potential subcontractors and vendors. Further, the Contractor shall furnish and require each subcontractor (first-tier) to furnish information relative to subcontractor and vendor involvement on the project.

For purposes of this provision, the term “vendor” is defined as any consultant, manufacturer, supplier or hauler performing work or furnishing material, supplies or services for the contract. The Contractor and, or subcontractor (first-tier) must insert this provision in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). The applicable requirements of this provision are incorporated by reference for work done by vendors under any purchase order, rental agreement or agreement for other services for the contract. The Contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or vendor.

The submission of a bid will be considered conclusive evidence that the Contractor agrees to assume these contractual obligations and to bind subcontractors contractually to the same at the Contractor’s expense.

When an approved Form C-31 “Subletting Request” is required according to IIM-CD-2013-06.01, the Contractor shall indicate on the Subletting Request if a subcontractor is a certified DBE or SWaM business.

The Contractor shall report all DBE, SWaM, and Non SWaM vendor payments quarterly to the District Civil Rights Office. The Contractor shall provide the information in a format consistent with Form C-63, Vendor Payment Compliance Report, subject to the approval of the Engineer.

DBE Participation and reporting shall be in accordance with the Special Provision for Section 107.15 (Use of Disadvantaged Business Enterprises).

If the Contractor fails to provide the required information, the Department may delay final payment according to Specification Section 109.10 of the Specifications.

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VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 105 – CONTROL OF WORK

SECTION 105 – CONTROL OF WORK of the Specifications is amended as follows:

Section 105.10(b) – Plans is replaced with the following:

Plans will be furnished to the Contractor electronically without charge.

Plan revisions issued while the project is under construction will be furnished to the Contractor electronically.

The Contractor shall keep one complete set of plans, standard drawings, Contract assemblies, and Specifications available on the project at all times. For maintenance projects, certain sign projects, and other projects having no field office or on which the Contractor has no office, the Contractor shall keep one complete set of plans, Contract assemblies, and Specifications with him while prosecuting the Work. In the event items of Work are required as per the Standard Drawings, the Contractor shall also keep the appropriate Standard Drawings on the project during the performance of that work.

Plans consisting of general drawings and showing such details as are necessary to give a comprehensive understanding of the work specified will be furnished by the Department. Except as otherwise shown on the plans, dimensions shown on the Plans are measured in the respective horizontal or vertical planes. Dimensions that are affected by gradients or vertical curvatures shall be adjusted as necessary by the Contractor to accommodate actual field conditions and shall be specifically denoted as “field adjusted” on the Working Drawings. Failure on the part of the Contractor to so denote field adjustments on the Working Drawings shall not relieve the Contractor of the responsibility to accommodate and incorporate such existing conditions into the finished work.

Section 105.14(a)3 Flagging Traffic is replaced with the following:

Flagging Traffic: Flaggers shall be able to communicate to the traveling public in English while performing the job duty as a flagger at the flagger station.

Certification for flaggers will be awarded upon a candidate’s satisfactory completion of an examination. Proof of certification shall be carried by flaggers while performing flagging duties. Flaggers found not to be in possession of their certification card shall be removed from the flagging site and operations requiring flagging will be suspended by the Engineer until a certified flagger is on-site to perform flagging duties in accordance with the requirements herein. Flaggers performing duties improperly will have their certifications revoked.

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SPECIAL PROVISION COPIED NOTE

AS BUILT SKETCHES

Section 105.10(c) Working Drawings is amended by replacing the sixth paragraph with the following:

Prior to acceptance of each location by the Engineer, the Contractor shall submit as-built sketches showing locations and offset distances for underground installations as installed by the Contractor. Locations and offset distances for underground installations shall be within \pm six (6) inches of their actual location.

3-1-2017 (SPCN)

DRUG-FREE WORKPLACE– The Contractor shall:

- Provide a Drug-Free Workplace for the Contractor’s employees.
- Post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the Contractor’s workplace and specifying the actions that will be taken against employees for violations of such prohibition.
- State in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a Drug-Free Workplace.
- Include the provisions of the foregoing clauses in every Subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each Subcontractor or vendor.

For the purposes of this provision, “Drug-Free Workplace” means a site for the performance of work done in connection with the Contract. The Contractor’s employees, and those of his Subcontractors, shall be prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession, or use of any controlled substance or marijuana during the performance of the Work.

7-3-19 (SPCN)

CONTRACTOR SEXUAL HARASSMENT POLICY – If the contractor employs more than five employees, the contractor shall (i) provide annual training on the contractor's sexual harassment policy to all supervisors and employees providing services in the Commonwealth, except such supervisors or employees that are required to complete sexual harassment training provided by the Department of Human Resource Management, and (ii) post the contractor's sexual harassment policy in (a) a conspicuous public place in each building located in the Commonwealth that the contractor owns or leases for business purposes and (b) the contractor's employee handbook.

The contractor shall include the above paragraph in every subcontract or purchase order over \$10,000, so that this requirement shall be binding upon each subcontractor or vendor.

6-5-20 (SPCN)

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* Include any off-site support facility areas located within VDOT right of way or easement.
(Note: This form must be returned with performance and payment bonds)

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
ELECTRONIC SUBMISSION OF PAYROLLS AND
DBE SUBCONTRACTOR PAYMENT FOR FEDERALLY FUNDED PROJECTS**

I. GENERAL REQUIREMENTS

The Contractor and all Subcontractors shall submit all certified payrolls and subcontractor payments, including those made to Disadvantaged Business Enterprises (DBEs), using the AASHTOWare Project Civil Rights and Labor (CRL) system in accordance with this specification. The term “subcontractor” shall include all vendors subject to FHWA-1273.

The electronic payroll submission and subcontractor payments through the CRL system replaces the paper submission of the C-57 and C-63 forms otherwise required by Sections 107.14(m) and 107.15 of the Specifications.

II. SYSTEM REQUIREMENTS

The CRL system is web based. The Contractor shall ensure compatibility with the CRL system as necessary to successfully execute the Work. The CRL system works with Internet Explorer 11 or Google Chrome and requires the ability to read, create, and edit spreadsheets in the .xlsx file format.

The Contractor and Subcontractors will be granted access after submitting forms ITD-35 and ITD-36 for each individual user who requires an account. Only those firms with a required contract in the system should submit the Request Access form. The software is configured so that each firm will only be able see their specific contract information. There will only be one single sign-on process for multiple application access within the Department.

VDOT will provide access and link and a log-in identification (ID) for the CRL system to designated employees of the Contractor and approved subcontractors entered into the system for the contract. The log-in ID and password are unique to the designated employee and must not be shared with other employees. There are no fees associated with accessing the system or to receive a login ID.

The low bidders on Contract awards will be contacted by the State Civil Rights Manager after letting to begin the process for accessing the CRL system for them and their subcontractors. The State Civil Rights Manager will provide all training for entry of certified payrolls and DBE subcontractor payments in CRL.

The CRL website is located at:

https://www.virginiadot.org/business/aashtoware_project_civil_rights_and_labor%E2%84%A2_crl_management_system.asp.

III. PROCEDURES

1. CERTIFIED PAYROLL & SUBCONTRACTOR DATA SUBMISSION FOR FEDERALLY FUNDED PROJECTS

The Contractor and all subcontractors shall use the CRL system to provide VDOT electronic certified payrolls. The Contractor shall ensure that all subcontractors submit their certified payrolls into the system electronically.

Electronic submittal of certified payrolls can be submitted using the following methods:

- Manually add, copy, or modify data into CRL;
- Import payroll data with the CRL payroll spreadsheet XML converter tool available at <https://xml.cloverleaf.net/spreadsheet/>;
- Convert payroll system program data to Payroll XML and import it into the CRL system. Information on how to convert to payroll program data to an XML file can be located at <https://xml.cloverleaf.net/resourcekit/>;
- The Contractor may send, on behalf of a subcontractor, payroll payment information based on a signed, certified paper payroll through the Electronica Proxy Payroll Process. Import payroll data with the CRL payroll spreadsheet XML converter tool available at <https://xml.cloverleaf.net/spreadsheet/>.

The District Civil Rights Manager or Engineer may require at any time, in writing, certified paper copies of the payrolls conforming to FHWA 1273 from any or all contractors working on the project.

2. DBE PAYMENT SUBMISSION REQUIREMENTS FOR FEDERALLY FUNDED PROJECTS

The Contractor shall post payment to DBE firms listed on their C-111 towards meeting their contract DBE goal per Federal DBE regulations. The Contractor shall submit, and shall require each Subcontractor to provide, payment amounts relative to all DBE involvement on the project during the life of the Contract in which participation occurs, and verification is available. The Contractor shall post payments to DBEs in CRL within 7 days after receipt of payment from the Department. Subcontractors shall post payments to DBEs in CRL within 7 days after receipt of payment from the Contractor.

The District Civil Rights Manager may require at any time, in writing, proof of payments from any or all subcontractors working on the project related to contractor DBE payments. The Contractor shall enter all payments made to all subcontractors into the Payment area of CRL for each estimate.

DBE Payments shall be entered only for those business entities that are being utilized in conjunction with performing a Commercial Useful Function (CUF).

More information about the CRL system can be located at <https://www.aashtowareproject.org/index.php>.

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
DBE REQUIREMENTS**

SECTION 107 – LEGAL RESPONSIBILITIES of the Specifications is revised as follows:

Section 107.15 – Use of Small, Women-Owned, and Minority-Owned Business is renamed **Use of Disadvantaged Business Enterprises (DBEs)** and replaced with the following:

(a) Disadvantaged Business Enterprise (DBE) Program Requirements

Any Contractor, subcontractor, supplier, DBE firm, and contract surety involved in the performance of work on a federal-aid contract shall comply with the terms and conditions of the United States Department of Transportation (USDOT) DBE Program as the terms appear in Part 26 of the Code of Federal Regulations (49 CFR as amended), the USDOT DBE Program regulations; and the Virginia Department of Transportation's (VDOT or the Department) Road and Bridge Specifications and DBE Program rules and regulations.

For the purposes of this provision, Contractor is defined as the Prime Contractor of the Contract; and sub-contractor is defined as any DBE supplier, manufacturer, or subcontractor performing work or furnishing material, supplies or services to the Contract. The Contractor shall physically include this same contract provision in every supply or work/service subcontract that it makes or executes with a subcontractor having work for which it intends to claim credit.

In accordance with 49 CFR Part 26 and VDOT's DBE Program requirements, the Contractor, for itself and for its subcontractors and suppliers, whether certified DBE firms or not, shall commit to complying fully with the auditing, record keeping, confidentiality, cooperation, and anti-intimidation or retaliation provisions contained in those federal and state DBE Program regulations. By bidding on this contract, and by accepting and executing this contract, the Contractor agrees to assume these contractual obligations and to bind the Contractor's subcontractors contractually to the same at the Contractor's expense.

The Contractor or subcontractor shall not discriminate on the basis of race, color, sex, sexual orientation, gender identity, or national origin in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award, administration, and performance of this contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which will result in the termination of this contract or other such remedy, as VDOT deems appropriate.

All administrative remedies noted in this provision are automatic unless the Contractor exercises the right of appeal within the required timeframe(s) specified herein. Appeal requirements, processes, and procedures shall be in accordance with guidelines stated herein and current at the time of the proceedings. Where applicable, the Department will notify the Contractor of any changes to the appeal requirements, processes, and procedures after receiving notification of the Contractor's desire to appeal.

All time frames referenced in this provision are expressed in business days unless otherwise indicated. Should the expiration of any deadline fall on a weekend or holiday, such deadline will automatically be extended to the next normal business day.

(b) DBE Certification

The only DBE firms eligible to perform work on a federal-aid contract for DBE contract goal credit are firms certified as Disadvantaged Business Enterprises by the Virginia Department of Small Business and Supplier Diversity (DSBSD) or the Metropolitan Washington Airports Authority (MWAA) in accordance with federal and VDOT guidelines. DBE firms must be certified in the specific work listed for DBE contract goal credit. A directory listing of certified DBE firms can be obtained from the Virginia Department of [Small Business and Supplier Diversity website: www.sbsd.virginia.gov](http://www.sbsd.virginia.gov).

(c) Bank Services

The Contractor and each subcontractor are encouraged to use the services of banks owned and controlled by socially and economically disadvantaged individuals. Such banking services and the fees charged for services typically will not be eligible for DBE Program contract goal credit. Such information is available from the VDOT's Internet Civil Rights Division website: http://www.virginiadot.org/business/resources/Civil_Rights/VDOT_DB_E_Program_Plan.pdf

(d) DBE Program-Related Certifications Made by Bidders\Contractors

By submitting a bid and by entering into any contract on the basis of that bid, the bidder/Contractor certifies to each of the following DBE Program-related conditions and assurances:

1. That the management and bidding officers of its firm agree to comply with the bidding and project construction and administration obligations of the USDOT DBE Program requirements and regulations of 49 CFR Part 26 as amended, and VDOT's Road and Bridge Specifications and DBE Program requirements and regulations.
2. Under penalty of perjury and other applicable penal law that it has complied with the DBE Program requirements in submitting the bid, and shall comply fully with these requirements in the bidding, award, and execution of the Contract.
3. To ensure that DBE firms have been given full and fair opportunity to participate in the performance of the Contract. The bidder certifies that all reasonable steps were, and will be, taken to ensure that DBE firms had, and will have, an opportunity to compete for and perform work on the Contract. The bidder further certifies that the bidder shall not discriminate on the basis of race, color, age, sex, sexual orientation, gender identity, or national origin in the performance of the Contract or in the award of any subcontract. Any agreement between a bidder and a DBE whereby the DBE promises not to provide quotations for performance of work to other bidders is prohibited.
4. As a bidder, good faith efforts were made to obtain DBE participation in the proposed contract at or above the goal for DBE participation established by VDOT. It has submitted as a part of its bid true, accurate, complete, and detailed documentation of the good faith efforts it performed to meet the Contract goal for DBE participation. The bidder, by signing and submitting its bid, certifies the DBE participation information submitted within the stated time thereafter is true, correct, and complete, and that the information provided includes the names of all DBE firms that will participate in the Contract, the specific line item(s) that each listed DBE firm will perform, and the creditable dollar amounts of the participation of each listed DBE. The specific line item must reference the VDOT line number and item number contained in the proposal.
5. The bidder further certifies, by signing its bid, it has committed to use each DBE firm listed for the specific work item shown to meet the Contract goal for DBE participation. Award of the Contract will be conditioned upon meeting these and other listed requirements of 49 CFR Part 26.53 and the contract documents. By signing the bid, the bidder certifies on work that it proposes to subcontract; it has made good faith efforts to seek out and consider DBEs as potential subcontractors. The bidder shall contact DBEs to solicit their interest, capability, and prices in sufficient time to allow them to respond effectively, and shall retain on file proper documentation to substantiate its good faith efforts. Award of the Contract will be conditioned upon meeting these and other listed requirements of 49 CFR Part 26.53 and the contract documents.
6. Once awarded the Contract, the Contractor shall make good faith efforts to utilize DBE firms to perform work designated to be performed by DBEs at or above the amount or percentage of the dollar value specified in the bidding documents. Further, the Contractor understands it shall not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract in whole or in part with another DBE, any non-DBE firm, or with the Contractor's own forces or those of an affiliate of the Contractor without the prior written consent of VDOT as set out within the requirements of this provision.
7. Once awarded the contract, the Contractor shall designate and make known to the Department a liaison officer who is assigned the responsibility of administering and promoting an active and inclusive DBE program as required by 49 CFR Part 26 for DBEs. The designation and identity of this officer need be submitted only once by the Contractor during any twelve (12) month period at the preconstruction conference for the first contract the Contractor has been awarded during that reporting period. The Department will post such information for informational and administrative purposes at VDOT's Internet Civil Rights Division website.
8. Once awarded the Contract, the Contractor shall comply fully with all regulatory and contractual requirements of the USDOT DBE Program, and that each DBE firm participating in the Contract shall fully perform the designated work items with the DBE's own forces and equipment under the DBE's direct supervision, control, and management. Where a contract exists and where the Contractor, DBE firm, or any other firm retained by the Contractor has failed to comply with federal or VDOT DBE Program regulations and/or their requirements on that contract, VDOT has the authority and discretion to determine the extent to which the DBE contract regulations and/or requirements have not been met, and will assess against the Contractor any remedies available at law or provided in the Contract in the event of such a contract breach.
9. In the event a bond surety assumes the completion of work, if for any reason VDOT has terminated the prime Contractor, the surety shall be obligated to meet the same DBE contract terms and requirements as were required of the original prime Contractor in accordance with the requirements of this specification.

(e) **Disqualification of Bidder**

Bidders may be disqualified from bidding for failure to comply with the requirements of this Special Provision, the Contract specifications, and VDOT Road and Bridge Specifications.

(f) **Bidding Procedures**

The following bidding procedures shall apply to the Contract for DBE Program compliance purposes:

1. **Contract Goal, Good Faith Efforts Specified:** All bidders evidencing the attainment of DBE goal commitment equal to or greater than the required DBE goal established for the project must submit completed Form C-111, Minimum DBE Requirements, and Form C-48, Subcontractor/Supplier Solicitation and Utilization, as a part of the bid documents.

Form C-111 may be submitted electronically or may be faxed to the Department, but in no case shall the bidder's Form C-111 be received later than 10:00 a.m. the next business day after the time stated in the bid proposal for the receipt of bids. Form C-48 must be received within ten (10) business days after the bid opening.

If, at the time of submitting its bid, the bidder knowingly cannot meet or exceed the required DBE contract goal, it shall submit Form C-111 exhibiting the DBE participation it commits to attain as a part of its bid documents. The bidder shall then submit Form C-49, DBE Good Faith Efforts Documentation, within two (2) business days after the bid opening.

The lowest responsive and responsible bidder must submit its properly executed Form C-112, Certification of Binding Agreement, within three (3) business days after the bids are received. DBEs bidding as prime contractors are not required to submit Form C-112 unless they are utilizing other DBEs as subcontractors.

If, after review of the apparent lowest bid, VDOT determines the DBE requirements have not been met, the apparent lowest successful bidder must submit Form C-49, DBE Good Faith Efforts Documentation, which must be received by the Contract Engineer within two (2) business days after official notification of such failure to meet the aforementioned DBE requirements.

Forms C-48, C-49, C-111, and C-112 can be obtained from the VDOT website at:

<http://vdotforms.vdot.virginia.gov/>

Instructions for submitting Form C-111 can be obtained from the VDOT website at:

http://www.virginiadot.org/business/resources/const/Exp_DBE_Commitments.pdf

2. **Bid Rejection:** The failure of a bidder to submit the required documentation within the timeframes specified in the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision may be cause for rejection of that bidder's bid.

If the lowest bidder is rejected for failure to submit the required documentation in the specified time frames, the Department may award the work to the next lowest bidder, or re-advertise the proposed work at a later date or proceed otherwise as determined by the Commonwealth.

3. **Good Faith Efforts Described:** In order to award a contract to a bidder that has failed to meet DBE contract goal requirements, VDOT will determine if the bidder's efforts were adequate good faith efforts, and if given all relevant circumstances, those efforts were made actively and aggressively to meet the DBE requirements. Efforts to obtain DBE participation are not good faith efforts if they could not reasonably be expected to produce a level of DBE participation sufficient to meet the DBE Program and contract goal requirements.

Good faith efforts may be determined through use of the following list of the types of actions the bidder may make to obtain DBE participation. This is not intended to be a mandatory checklist, nor is it intended to be exclusive or exhaustive. Other factors or types of efforts of similar intent may be relevant in appropriate cases:

- a. Soliciting through reasonable and available means, such as but not limited to, attendance at pre-bid meetings, advertising, and written notices to DBEs who have the capability to perform the work of the Contract. Examples include: advertising in at least one daily/weekly/monthly newspaper of general circulation, as applicable; phone contact with a completely documented telephone log, including the date and time called, contact person, or voice mail status; and internet contacts with supporting documentation, including dates advertised. The bidder shall solicit this interest no less than five (5) business days before the bids are due so that the solicited DBEs have enough time to reasonably respond to the solicitation. The bidder shall determine with certainty if the DBEs are interested by taking

reasonable steps to follow up initial solicitations as evidenced by documenting such efforts as requested on Form C-49, DBE Good Faith Efforts Documentation.

- b. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to completely perform all portions of this work in its entirety or use its own forces;
- c. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the Contract in a timely manner, which will assist the DBEs in responding to a solicitation;
- d. Negotiating for participation in good faith with interested DBEs;
 - (1) Evidence of such negotiation shall include the names, addresses, and telephone numbers of DBEs that were considered; dates DBEs were contacted; a description of the information provided regarding the plans, specifications, and requirements of the Contract for the work selected for subcontracting; and, if insufficient DBE participation seems likely, evidence as to why additional agreements could not be reached for DBEs to perform the work;
 - (2) A bidder using good business judgment should consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and should take a firm's price, qualifications, and capabilities, as well as contract goals, into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not sufficient reason for a bidder's failure to meet the Contract goal for DBE participation, as long as such costs are reasonable and comparable to costs customarily appropriate to the type of work under consideration. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make diligent good faith efforts. Bidders are not, however, required to accept higher quotes from DBEs if the price difference can be shown by the bidder to be excessive, unreasonable, or greater than would normally be expected by industry standards;
- e. A bidder cannot reject a DBE as being unqualified without sound reasons based on a thorough investigation of the DBE's capabilities. The DBE's standing within its industry, membership in specific groups, organizations, associations, and political or social affiliations, and union vs. non-union employee status are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal for DBE participation;
- f. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by VDOT or by the bidder/Contractor;
- g. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services subject to the restrictions contained in these provisions;
- h. Effectively using the services of appropriate personnel from VDOT and from DMBE; available minority/women community or minority organizations; contractors' groups; local, state, and Federal minority/ women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and utilization of qualified DBEs.

(g) Documentation and Administrative Reconsideration of Good Faith Efforts

During Bidding: As described in the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision, the bidder must provide Form C-49, DBE Good Faith Efforts Documentation, of its efforts made to meet the DBE contract goal as proposed by VDOT within the time frame specified in this provision. The means of transmittal and the risk for timely receipt of this information shall be the responsibility of the bidder. The bidder shall attach additional pages to the certification, if necessary, in order to fully detail specific good faith efforts made to obtain the DBE firms participation in the proposed contract work.

However, regardless of the DBE contract goal participation level proposed by the bidder or the extent of good faith efforts shown, all bidders shall timely and separately file their completed and executed forms C-111, C-112, C-48, and C-49, as aforementioned, or face potential bid rejection.

If a bidder does not submit its completed and executed forms C-111, or C-112, when required by this Special Provision, the bidder's bid will be considered non-responsive and may be rejected.

Where the Department upon initial review of the bid results determines the apparent low bidder has failed or appears to have failed to meet the requirements of the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision and has failed to adequately document that it made a good faith effort to achieve sufficient DBE participation as specified in the bid proposal, that firm upon notification of the Department's initial determination will be offered the opportunity for administrative reconsideration before VDOT rejects that bid as non-responsive. The bidder shall address such request for reconsideration in writing to the Contract Engineer within five (5) business days of receipt of notification by the Department and shall be given the opportunity to discuss the issue and present its evidence in person to the Administrative Reconsideration Panel. The Administrative Reconsideration Panel will be made up of VDOT Division Administrators or their designees, none of who took part in the initial determination that the bidder failed to make the goal or make adequate good faith efforts to do so. After reconsideration, VDOT shall notify the bidder in writing of its decision and explain the basis for finding that the bidder did or did not meet the goal or make adequate good faith efforts to do so.

If, after reconsideration, the Department determines the bidder has failed to meet the requirements of the Contract goal and has failed to make adequate good faith efforts to achieve the level of DBE participation as specified in the bid proposal, the bidder's bid will be rejected.

If sufficient documented evidence is presented to demonstrate that the apparent low bidder made reasonable good faith efforts, the Department will award the Contract and reduce the DBE requirement to the actual commitment identified by the lowest successful bidder at the time of its bid. The Contractor is still encouraged to seek additional DBE participation during the life of the Contract.

However, such action will not relieve the Contractor of its responsibility for complying with the reduced DBE requirement during the life of the Contract or any administrative sanctions as may be appropriate.

During the Contract: If a DBE, through no fault of the Contractor, is unable or unwilling to fulfill his agreement with the Contractor, the Contractor shall immediately notify the Department and provide all relevant facts. If a Contractor relieves a DBE subcontractor of the responsibility to perform work under their subcontract, the Contractor is encouraged to take the appropriate steps to obtain a DBE to perform an equal dollar value of the remaining subcontracted work. In such instances, the Contractor is expected to seek DBE participation towards meeting the goal during the performance of the Contract.

If the Contractor fails to conform to the schedule of DBE participation as shown on the progress schedule, or at any point at which it is clearly evident that the remaining dollar value of allowable credit for performing work is insufficient to obtain the scheduled participation, and the Contractor has not taken the preceding actions, the Contractor and any aforementioned affiliates may be subject to disallowance of DBE credit until such time as conformance with the schedule of DBE participation is achieved.

Project Completion: If the Contractor fails upon completion of the project to meet the required participation, the Contractor and any prime contractual affiliates, as in the case of a joint venture, may be enjoined from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects for a period of 90 days.

Prior to enjoinder from bidding or denial to participate as a subcontractor for failure to comply with participation requirements, as provided hereinbefore, the Contractor may submit documentation to the State Construction Engineer to substantiate that failure was due solely to quantitative underrun(s), elimination of items subcontracted to DBEs, or to circumstances beyond their control, and that all feasible means have been used to obtain the required participation. The State Construction Engineer upon verification of such documentation shall make a determination whether or not the Contractor has met the requirements of the Contract.

If it is determined that the aforementioned documentation is insufficient or the failure to meet required participation is due to other reasons, the Contractor may request an appearance before the Administrative Reconsideration Panel to establish that all feasible means were used to meet such participation requirements. The decision of the Administrative Reconsideration Panel shall be administratively final. If the decision is made to enjoin the Contractor from bidding on other VDOT work as described herein, the enjoinder period will begin upon the Contractor's failure to request a hearing within the designated time frame or upon the Administrative Reconsideration Panel's decision to enjoin, as applicable.

(h) **DBE Participation for Contract Goal Credit**

1. Cost-plus subcontracts will not be considered to be in accordance with normal industry practice and will not normally be allowed for credit.
2. The applicable percentage of the total dollar value of the Contract or Subcontract awarded to the DBE will be counted toward meeting the Contract goal for DBE participation in accordance with the **DBE Program-Related Certifications**

Made by Bidders/Contractors section of this Special Provision for the value of the work, goods, or services that are actually performed or provided by the DBE firm itself or subcontracted by the DBE to other DBE firms.

3. When a DBE performs work as a participant in a joint venture with a non-DBE firm, the Contractor may count toward the DBE goal only that portion of the total dollar value of the Contract equal to the distinctly defined portion of the Contract work that the DBE has performed with the DBE's own forces or in accordance with the provisions of this Section. The Department shall be contacted in advance regarding any joint venture involving both a DBE firm and a non-DBE firm to coordinate Department review and approval of the joint venture's organizational structure and proposed operation where the Contractor seeks to claim the DBE's credit toward the DBE contract goal.
4. When a DBE subcontracts part of the work of the Contract to another firm, the value of that subcontracted work may be counted toward the DBE contract goal only if the DBE's subcontractor at a lower tier is a certified DBE. Work that a DBE subcontracts to either a non-DBE firm or to a non-certified DBE firm will not count toward the DBE contract goal. The cost of supplies and equipment a DBE subcontractor purchases or leases from the prime Contractor or the prime's affiliated firms will not count toward the Contract goal for DBE participation.
5. The Contractor may count expenditures to a DBE subcontractor toward the DBE contract goal only if the DBE performs a Commercially Useful Function (CUF) on that contract.
6. A Contractor may not count the participation of a DBE subcontractor toward the Contractor's final compliance with the DBE contract goal obligations until the amount being counted has actually been paid to the DBE. A Contractor may count sixty (60) percent of its expenditures actually paid for materials and supplies obtained from a DBE certified as a regular dealer, and one hundred (100) percent of such expenditures actually paid for materials and supplies obtained from a certified DBE manufacturer.
 - a. For the purposes of this Special Provision, a regular dealer is defined as a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment required and used under the Contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business. To be a regular dealer, the DBE firm shall be an established business that regularly engages, as its principal business and under its own name, in the purchase and sale or lease of the products or equipment in question. Packagers, brokers, manufacturers' representatives, or other persons who arrange or expedite transactions will not be considered regular dealers.
 - b. A DBE firm may be a regular dealer in such bulk items as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business where it keeps such items in stock if the DBE both owns and operates distribution equipment for the products it sells and provides for the Contract work. Any supplementation of a regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an *ad hoc* or contract-by-contract basis to be eligible for credit to meet the DBE contract goal.
 - c. If a DBE regular dealer is used for DBE contract goal credit, no additional credit will be given for hauling or delivery to the project site goods or materials sold by that DBE regular dealer. Those delivery costs shall be deemed included in the price charged for the goods or materials by the DBE regular dealer, who shall be responsible for their distribution.
 - d. For the purposes of this Special Provision, a manufacturer will be defined as a firm that operates or maintains a factory or establishment that produces on the premises the materials, supplies, articles, or equipment required under the Contract and of the general character described by the project specifications. A manufacturer shall include firms that produce finished goods or products from raw or unfinished material, or purchase and substantially alter goods and materials to make them suitable for construction use before reselling them.
 - e. A Contractor may count toward the DBE contract goal the following expenditures to DBE firms that are not regular dealers or manufacturers for DBE program purposes:
 - (1) The entire amount of fees or commissions charged by a DBE firm for providing a bona fide service, such as professional, technical, consultant or managerial services, or for providing bonds or insurance specifically required for the performance of the federal-aid contract, if the fee is reasonable and not excessive or greater than would normally be expected by industry standards for the same or similar services.
 - (2) The entire amount of that portion of the construction contract that is performed by the DBE's own forces and equipment under the DBE's supervision. This includes the cost of supplies and materials ordered and paid for by

the DBE for contract work, including supplies purchased or equipment leased by the DBE, except supplies and equipment a DBE subcontractor purchases or leases from the prime Contractor or its affiliates.

- f. A Contractor may count toward the DBE contract goal one hundred (100) percent of the fees paid to a DBE trucker or hauler for the delivery of material and supplies required on the project job site, but not for the cost of those materials or supplies themselves, provided that the trucking or hauling fee is determined by VDOT to be reasonable, as compared with fees customarily charged by non-DBE firms for similar services. A Contractor shall not count costs for the removal or relocation of excess material from or on the job site when the DBE trucking company is not the manufacturer of or a regular dealer in those materials and supplies. The DBE trucking firm shall also perform a Commercially Useful Function (CUF) on the project and not operate merely as a pass through for the purposes of gaining credit toward the DBE contract goal. Prior to submitting a bid, the Contractor shall determine, or contact the VDOT Civil Rights Division or its district Offices for assistance in determining, whether a DBE trucking firm will meet the criteria for performing a CUF on the project. See section on **Miscellaneous DBE Program Requirements; Factors used to Determine if a DBE Trucking Firm is Performing a CUF**.
- g. The Contractor will receive DBE contract goal credit for the fees or commissions charged by and paid to a DBE broker who arranges or expedites sales, leases, or other project work or service arrangements provided that those fees are determined by VDOT to be reasonable and not excessive as compared with fees customarily charged by non-DBE firms for similar services. For the purposes of this Special Provision, a broker is defined as a person or firm that regularly engages in arranging for delivery of material, supplies, and equipment, or regularly arranges for the providing of project services as a course of routine business but does not own or operate the delivery equipment necessary to transport materials, supplies, or equipment to or from a job site.

(i) **Performing a Commercially Useful Function (CUF)**

No credit toward the DBE contract goal will be allowed for contract payments or expenditures to a DBE firm if that DBE firm does not perform a CUF on that contract. A DBE performs a CUF when the DBE is solely responsible for execution of a distinct element of the Contract work and the DBE actually performs, manages, and supervises the work involved with the firm's own forces or in accordance with the provisions of the **DBE Participation for Contract Goal Credit** section of this Special Provision. To perform a CUF the DBE alone shall be responsible and bear the risk for the material and supplies used on the Contract, selecting a supplier or dealer from those available, negotiating price, determining quality and quantity, ordering the material and supplies, installing those materials with the DBE's own forces and equipment, and paying for those materials and supplies. The amount the DBE firm is to be paid under the Contract shall be commensurate with the work the DBE actually performs and the DBE credit claimed for the DBE's performance.

Monitoring CUF Performance: It shall be the Contractor's responsibility to ensure that all DBE firms selected for subcontract work on the Contract, for which he seeks to claim credit toward the Contract goal, perform a CUF. Further, the Contractor is responsible for and shall ensure that each DBE firm fully performs the DBE's designated tasks with the DBE's own forces and equipment under the DBE's own direct supervision and management or in accordance with the provisions of the **DBE Participation for Contract Goal Credit** section of this Special Provision. For the purposes of this provision the DBE's equipment will mean either equipment directly owned by the DBE as evidenced by title, bill of sale or other such documentation, or leased by the DBE, and over which the DBE has control as evidenced by the leasing agreement from a firm not owned in whole or part by the prime Contractor or an affiliate of the Contractor under this contract.

VDOT will monitor the Contractor's DBE involvement during the performance of the Contract. However, VDOT is under no obligation to warn the Contractor that a DBE's participation will not count toward the goal.

DBEs Must Perform a Useful and Necessary Role in Contract Completion: A DBE does not perform a commercially useful function if the DBE's role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

DBEs Must Perform The Contract Work With Their Own Workforces: If a DBE does not perform and exercise responsibility for at least thirty (30) percent of the total cost of the DBE's contract with the DBE's own work force, or the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involve, VDOT will presume that the DBE is not performing a CUF and such participation will not be counted toward the Contract goal.

VDOT Makes Final Determination On Whether a CUF Is Performed: VDOT has the final authority to determine whether a DBE firm has performed a CUF on a federal-aid contract. To determine whether a DBE is performing or has performed a CUF, VDOT will evaluate the amount of work subcontracted by that DBE firm or performed by other firms and the extent of the involvement of other firms' forces and equipment. Any DBE work performed by the Contractor or by employees or

equipment of the Contractor shall be subject to disallowance under the DBE Program, unless the independent validity and need for such an arrangement and work is demonstrated.

(j) **Verification of DBE Participation and Imposed Damages**

Within fourteen days after contract execution, the Contractor shall submit to the Responsible Engineer, with a copy to the District Civil Rights Office (DCRO), a fully executed subcontract agreement for each DBE used to claim credit in accordance with the requirements stated on Form C-112. The subcontract agreement shall be executed by both parties stating the work to be performed, the details or specifics concerning such work, and the price which will be paid to the DBE subcontractor. Because of the commercial damage that the Contractor and its DBE subcontractor could suffer if their subcontract pricing, terms, and conditions were known to competitors, the Department staff will treat subcontract agreements as proprietary Contractor trade secrets with regard to Freedom of Information Act requests. In lieu of subcontract agreements, purchase orders may be submitted for haulers, suppliers, and manufacturers. These too, will be treated confidentially and protected. Such purchase orders must contain, as a minimum, the following information: authorized signatures of both parties; description of the scope of work to include contract item numbers, quantities, and prices; and required federal contract provisions.

The Contractor shall also furnish, and shall require each subcontractor to furnish, information relative to all DBE involvement on the project for each quarter during the life of the Contract in which participation occurs and verification is available. The information shall be indicated on Form C-63, DBE and SWAM Payment Compliance Report. The department reserves the right to request proof of payment via copies of cancelled checks with appropriate identifying notations. Failure to provide Form C-63 to the District Civil Rights Office (DCRO) within five (5) business days after the reporting period may result in delay of approval of the Contractor's monthly progress estimate for payment. The names and certification numbers of DBE firms provided by the Contractor on the various forms indicated in this Special Provision shall be exactly as shown on the DMBE's or MWAA's latest list of certified DBEs. Signatures on all forms indicated herein shall be those of authorized representatives of the Contractor as shown on the Prequalification Application, Form C-32 or the Prequalification/Certification Renewal Application, Form C-32A, or authorized by letter from the Contractor. If DBE firms are used which have not been previously documented with the Contractor's bid and for which the Contractor now desires to claim credit toward the project goal, the Contractor shall be responsible for submitting necessary documentation in accordance with the procedures stipulated in this Special Provision to cover such work prior to the DBE beginning work.

Form C-63 can be obtained from the VDOT website at: <http://vdotforms.vdot.virginia.gov/>

The Contractor shall submit to the Responsible Engineer its progress schedule with a copy to the DCRO, as required by Section 108.03 of the Specifications or other such specific contract scheduling specification that may include contractual milestones, i.e., monthly or VDOT requested updates. The Contractor shall include a narrative of applicable DBE activities relative to work activities of the Contractor's progress schedule, including the approximate start times and durations of all DBE participation to be claimed for credit that shall result in full achievement of the DBE goal required in the Contract.

On contracts awarded on the basis of good faith efforts, narratives or other agreeable format of schedule information requirements and subsequent progress determination shall be based on the commitment information shown on the latest Form C-111 as compared with the appropriate Form C-63.

Prior to beginning any major component or quarter of the work, as applicable, in which DBE work is to be performed, the Contractor shall furnish a revised Form C-111 showing the name(s) and certification number(s) of any current DBEs not previously submitted who will perform the work during that major component or quarter for which the Contractor seeks to claim credit toward the Contract DBE goal. The Contractor shall obtain the prior approval of the Department for any assistance it may provide to the DBE beyond its existing resources in executing its commitment to the work in accordance with the requirements listed in the **Good Faith Efforts Described** section of this Special Provision. If the Contractor is aware of any assistance beyond a DBE's existing resources that the Contractor, or another subcontractor, may be contemplating or may deem necessary and that have not been previously approved, the Contractor shall submit a new or revised narrative statement for VDOT's approval prior to assistance being rendered.

If the Contractor fails to comply with correctly completing and submitting any of the required documentation requested by this provision within the specified time frames, the Department will withhold payment of the monthly progress estimate until such time as the required submissions are received VDOT. Where such failures to provide required submittals or documentation are repeated the Department will move to enjoin the Contractor and any prime contractual affiliates, as in the case of a joint venture, from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects until such submissions are received.

(k) Documentation Required for Semi-final Payment

On those projects nearing completion, the Contractor must submit Form C-63 marked "Semi-Final" within twenty (20) days after the submission of the last regular monthly progress estimate to the DCRO. The form must include each DBE used on the Contract work and the work performed by each DBE. The form shall include the actual dollar amount paid to each DBE for the accepted creditable work on the Contract. The form shall be certified under penalty of perjury, or other applicable law, to be accurate and complete. VDOT will use this certification and other information available to determine applicable DBE credit allowed to date by VDOT and the extent to which the DBEs were fully paid for that work. The Contractor shall acknowledge by the act of filing the form that the information is supplied to obtain payment regarding a federal participation contract. A letter of certification, signed by both the prime Contractor and appropriate DBEs, will accompany the form, indicating the amount, including any retainage, if present, that remains to be paid to the DBE(s).

(l) Documentation Required for Final Payment

On those projects that are complete, the Contractor shall submit a final Form C-63 marked "Final" to the DCRO, within thirty (30) days of the final estimate. The form must include each DBE used on the Contract and the work performed by each DBE. The form shall include the actual dollar amount paid to each DBE for the creditable work on the Contract. VDOT will use this form and other information available to determine if the Contractor and DBEs have satisfied the DBE contract goal percentage specified in the Contract and the extent to which credit was allowed. The Contractor shall acknowledge by the act of signing and filing the form that the information is supplied to obtain payment regarding a federal participation contract.

(m) Prompt Payment Requirements

The Contractor shall make prompt and full payment to the subcontractor(s) of any retainage held by the prime Contractor after the subcontractor's work is satisfactorily completed.

For purposes of this Special Provision, a subcontractor's work is satisfactorily completed when all the tasks called for in the subcontract have been accomplished, documented, and accepted as required by the contract documents by VDOT. When VDOT has made partial acceptance of a portion of the prime contract, the Department will consider the work of any subcontractor covered by that partial acceptance to be satisfactorily completed. Payment will be made in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Specifications.

Upon VDOT's payment of the subcontractor's portion of the work as shown on the monthly progress estimate and the receipt of payment by the Contractor for such work, the Contractor shall make compensation in full to the subcontractor for that portion of the work satisfactorily completed and accepted by the Department. For the purposes of this Special Provision, payment of the subcontractor's portion of the work shall mean the Contractor has issued payment in full, less agreed upon retainage, if any, to the subcontractor for that portion of the subcontractor's work that VDOT paid to the Contractor on the monthly progress estimate.

The Contractor shall make payment of the subcontractor's portion of the work within seven (7) days of the receipt of payment from VDOT in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Specifications.

If the Contractor fails to make payment for the subcontractor's portion of the work within the time frame specified herein, the subcontractor shall contact the Responsible Engineer and the Contractor's bonding company in writing. The bonding company and VDOT will investigate the cause for non-payment and, barring mitigating circumstances that would make the subcontractor ineligible for payment, ensure payment in accordance with the requirements of Section 107.01, Section 109.08, and Section 109.09 of the Specifications.

By bidding on this contract, and by accepting and executing this contract, the Contractor agrees to assume these contractual obligations, and to bind the Contractor's subcontractors contractually to those prompt payment requirements.

Nothing contained herein shall preclude the Contractor from withholding payment to the subcontractor in accordance with the terms of the subcontract in order to protect the Contractor from loss or cost of damage due to a breach of agreement by the subcontractor.

(n) Miscellaneous DBE Program Requirements

1. **Loss of DBE Eligibility:** When a DBE firm has been removed from eligibility as a certified DBE firm, the following actions will be taken:

- a. When a Bidder/Contractor has made a commitment to use a DBE firm that is not currently certified, thereby making the Contractor ineligible to receive DBE participation credit for work performed, and a subcontract has not been executed, the ineligible DBE firm does not count toward either the Contract goal or overall goal. The Contractor shall meet the Contract goal with a DBE firm that is eligible to receive DBE credit for work performed, or must demonstrate to the Contract Engineer that it has made good faith efforts to do so.
 - b. When a Bidder/Contractor has executed a subcontract with a certified DBE firm prior to official notification of the DBE firm's loss of eligibility, the Contractor may continue to use the firm on the Contract and shall continue to receive DBE credit toward its DBE goal for the subcontractor's work.
 - c. When VDOT has executed a prime contract with a DBE firm that is certified at the time of contract execution but that is later ruled ineligible, the portion of the ineligible firm's performance on the Contract before VDOT has issued the notice of its ineligibility shall count toward the Contract goal.
2. **Termination of DBE:** If a certified DBE subcontractor is terminated, or fails, refuses, or is unable to complete the work on the Contract for any reason, the Contractor must promptly request approval to substitute or replace that firm in accordance with this section of this Special Provision.

The Contractor, as aforementioned in **DBE Program-Related Certifications Made by Bidders/Contractors**, shall notify VDOT in writing before terminating and/or replacing the DBE that was committed as a condition of contract award or that is otherwise being used or represented to fulfill DBE contract obligations during the Contract performance period. Written consent from the Department for terminating the performance of any DBE shall be granted only when the Contractor can demonstrate that the DBE is unable, unwilling, or ineligible to perform its obligations for which the Contractor sought credit toward the Contract DBE goal. Such written consent by the Department to terminate any DBE shall concurrently constitute written consent to substitute or replace the terminated DBE with another DBE. Consent to terminate a DBE shall not be based on the Contractor's ability to negotiate a more advantageous contract with another subcontractor whether that subcontractor is, or is not, a certified DBE.

- a. All Contractor requests to terminate, substitute, or replace a certified DBE shall be in writing, and shall include the following information:
 - (1) The date the Contractor determined the DBE to be unwilling, unable, or ineligible to perform.
 - (2) The projected date that the Contractor shall require a substitution or replacement DBE to commence work if consent is granted to the request.
 - (3) A brief statement of facts describing and citing specific actions or inaction by the DBE giving rise to the Contractor's assertion that the DBE is unwilling, unable, or ineligible to perform;
 - (4) A brief statement of the affected DBE's capacity and ability to perform the work as determined by the Contractor;
 - (5) A brief statement of facts regarding actions taken by the Contractor which are believed to constitute good faith efforts toward enabling the DBE to perform;
 - (6) The current percentage of work completed on each bid item by the DBE;
 - (7) The total dollar amount currently paid per bid item for work performed by the DBE;
 - (8) The total dollar amount per bid item remaining to be paid to the DBE for work completed, but for which the DBE has not received payment, and with which the Contractor has no dispute;
 - (9) The total dollar amount per bid item remaining to be paid to the DBE for work completed, but for which the DBE has not received payment, and over which the Contractor and/or the DBE have a dispute.
- b. Contractor's Written Notice to DBE of Pending Request to Terminate and Substitute with another DBE.
 The Contractor shall send a copy of the "request to terminate and substitute" letter to the affected committed DBE firm, in conjunction with submitting the request to the DCRO. The affected DBE firm may submit a response letter to the Department within two (2) business days of receiving the notice to terminate from the Contractor. The affected DBE firm shall explain its position concerning performance on the committed work. The Department will consider both the Contractor's request and the DBE's response and explanation before approving the Contractor's termination and substitution request, or determining if any action should be taken against the Contractor.

If, after making its best efforts to deliver a copy of the “request to terminate and substitute” letter, the Contractor is unsuccessful in notifying the affected DBE firm, the Department will verify that the affected, committed DBE firm is unable or unwilling to continue the Contract. The Department will immediately approve the Contractor’s request for a substitution.

c. Proposed Substitution of Another Certified DBE

Upon termination of a DBE, the Contractor shall use reasonable good faith efforts to replace the terminated DBE. The termination of such DBE shall not relieve the Contractor of its obligations pursuant to this section, and the unpaid portion of the terminated DBE’s contract will not be counted toward the Contract goal.

When a DBE substitution is necessary, the Contractor shall submit an amended Form C-111 with the name of another DBE firm, the proposed work to be performed by that firm, and the dollar amount of the work to replace the unfulfilled portion of the work of the originally committed DBE firm. The Contractor shall furnish all pertinent information including the Contract I.D. number, project number, bid item, item description, bid unit and bid quantity, unit price, and total price. In addition, the Contractor shall submit documentation for the requested substitute DBE as described in this section of this Special Provision.

Should the Contractor be unable to commit the remaining required dollar value to the substitute DBE, the Contractor shall provide written evidence of good faith efforts made to obtain the substitute value requirement. The Department will review the quality, thoroughness, and intensity of those efforts. Efforts that are viewed by VDOT as merely superficial or pro-forma will not be considered good faith efforts to meet the Contract goal for DBE participation. The Contractor must document the steps taken that demonstrated its good faith efforts to obtain participation as set forth in the **Good Faith Efforts Described** section of this Special Provision.

3. **Factors Used to determine if a DBE Trucking Firm is performing a CUF:**

The following factors will be used to determine whether a DBE trucking company is performing a CUF:

- a. To perform a CUF the DBE trucking firm shall be completely responsible for the management and supervision of the entire trucking operation for which the DBE is responsible by subcontract on a particular contract. There shall not be a contrived arrangement, including, but not limited to, any arrangement that would not customarily and legally exist under regular construction project subcontracting practices for the purpose of meeting the DBE contract goal;
- b. The DBE must own and operate at least one fully licensed, insured, and operational truck used in the performance of the Contract work. This does not include a supervisor’s pickup truck or a similar vehicle that is not suitable for and customarily used in hauling the necessary materials or supplies;
- c. The DBE receives full contract goal credit for the total reasonable amount the DBE is paid for the transportation services provided on the Contract using trucks the DBE owns, insures, and operates using drivers that the DBE employs and manages;
- d. The DBE may lease trucks from another certified DBE firm, including from an owner-operator who is certified as a DBE. The DBE firm that leases trucks from another DBE will receive credit for the total fair market value actually paid for transportation services the lessee DBE firm provides on the Contract;
- e. The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of the transportation services provided by non-DBE lessees, *not to exceed the value of transportation services provided by DBE-owned trucks on the Contract*. For additional participation by non-DBE lessees, the DBE will only receive credit for the fee or commission it receives as a result of the lease arrangement.

EXAMPLE

DBE Firm X uses two (2) of its own trucks on a contract. The firm leases two (2) trucks from DBE Firm Y and six (6) trucks from non-DBE Firm Z.

Firm X

**Value of Trans.
Serv.**

| | | (For Illustrative Purposes Only) |
|----------------------|----------------------|----------------------------------|
| Truck 1 | Owned by DBE | \$100 per day |
| Truck 2 | Owned by DBE | \$100 per day |
| <u>Firm Y</u> | | |
| Truck 1 | Leased from DBE | \$110 per day |
| Truck 2 | Leased from DBE | \$110 per day |
| <u>Firm Z</u> | | |
| Truck 1 | Leased from Non DBE | \$125 per day |
| Truck 2 | Leased from Non DBE | \$125 per day |
| Truck 3 | Leased from Non DBE | \$125 per day |
| Truck 4 | Leased from Non DBE | \$125 per day |
| Truck 5 | Leased from Non DBE* | \$125 per day |
| Truck 6 | Leased from Non DBE* | \$125 per day |

DBE credit would be awarded for the total transportation services provided by DBE Firm X and DBE Firm Y, and may also be awarded for the total value of transportation services by four (4) of the six (6) trucks provided by non-DBE Firm Z (not to exceed the value of transportation services provided by DBE-owned trucks).

Credit = 8 Trucks
Total Value of Transportation Services = \$820

In all, full DBE credit would be allowed for the participation of eight (8) trucks (twice the number of DBE trucks owned and leased) and the dollar value attributable to the Value of Transportation Services provided by the 8 trucks.

* With respect to the other two trucks provided by non-DBE Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks that DBE Firm X receives as a result of the lease with non-DBE Firm Z.

f. For purposes of this section, the lease must indicate that the DBE firm leasing the truck has exclusive use of and control over the truck. This will not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, provided the lease gives the DBE absolute priority for and control over the use of the leased truck. Leased trucks must display the name and identification number of the DBE firm that has leased the truck at all times during the life of the lease.

4. **Data Collection:** In accordance with 49CFR Section 26.11, all firms bidding on prime contracts and bidding or quoting subcontracts on federal-aid projects shall provide the following information to the Contract Engineer annually.
- Firm name
 - Firm address
 - Firm's status as a DBE or non-DBE
 - The age of the firm and
 - The annual gross receipts of the firm

The means of transmittal and the risk for timely receipt of this information shall be the responsibility of the bidder. However, the above information can be submitted by means of the Annual Gross Receipts Survey as required in the Prequalification/Certification application.

All bidders, including DBE prime Contractor bidders, shall complete and submit to the Contract Engineer the Subcontractor/Supplier Solicitation and Utilization Form C-48 for each bid submitted; to be received within ten (10)

business days after the bid opening. Failure of bidders to submit this form in the time frame specified may be cause for disqualification of the bidder and rejection of their bid in accordance with the requirements of this Special Provision, the Contract specifications, and VDOT Road and Bridge specifications.

(o) Suspect Evidence of Criminal Behavior

Failure of a bidder, Contractor, or subcontractor to comply with the Virginia Department of Transportation Road and Bridge Specifications and these Special Provisions wherein there appears to be evidence of criminal conduct shall be referred to the Attorney General for the Commonwealth of Virginia and/or the FHWA Inspector General for criminal investigation and, if warranted, prosecution.

Suspected DBE Fraud

In appropriate cases, VDOT will bring to the attention of the U. S. Department of Transportation (USDOT) any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take the steps, e.g., referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General, action under suspension and debarment or Program Fraud and Civil Penalties rules provided in 49CFR Part 31.

(p) Summary of Remedies for Non-Compliance with DBE Program Requirements

Failure of any bidder\Contractor to comply with the requirements of this Special Provision for Section 107.15 of the Virginia Road and Bridge Specifications, which is deemed to be a condition of bidding, or where a contract exists, is deemed to constitute a breach of contract shall be remedied in accordance with the following:

1. Disadvantaged Business Enterprise (DBE) Program Requirements

The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award, administration, and performance of this contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which will result in the termination of this contract or other such remedy, as VDOT deems appropriate.

All administrative remedies noted in this provision are automatic unless the Contractor exercises the right of appeal within the required timeframe(s) specified herein.

2. DBE Program-Related Certifications Made by Bidders\Contractors

Once awarded the contract, the Contractor shall comply fully with all regulatory and contractual requirements of the USDOT DBE Program, and that each certified DBE firm participating in the Contract shall fully perform the designated work items with the DBE's own forces and equipment under the DBE's direct supervision, control, and management. Where a contract exists and where the Contractor, DBE firm, or any other firm retained by the Contractor has failed to comply with federal or VDOT DBE Program regulations and/or their requirements on that contract, VDOT has the authority and discretion to determine the extent to which the DBE contract requirements have not been met, and will assess against the Contractor any remedies available at law or provided in the Contract in the event of such a contract breach.

3. Disqualification of Bidder

Bidders may be disqualified from bidding for failure to comply with the requirements of this Special Provision, the Contract specifications, and VDOT Road and Bridge Specifications.

4. Bidding Procedures

The failure of a bidder to submit the required documentation within the timeframes specified in the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision may be cause for rejection of that bidder's bid. If the lowest bidder is rejected for failure to submit required documentation in the specified time frames, the Department may either award the work to the next lowest bidder, or re-advertise and construct the work under contract or otherwise as determined by the Commonwealth.

In order to award a contract to a bidder that has failed to meet DBE contract goal requirements, VDOT will determine if the bidder's efforts were adequate good faith efforts, and if given all relevant circumstances, those efforts were to the extent a bidder actively and aggressively seeking to meet the requirements would make. Regardless of the DBE contract

goal participation level proposed by the bidder or the extent of good faith efforts shown, all bidders shall timely and separately file their completed and executed Forms C-111, C-112, C-48, and Form C-49, as aforementioned, or face potential bid rejection. If a bidder does not submit its completed and executed C-111, or C-112, when required by this Special Provision, the bidder's bid will be considered non-responsive and may be rejected. If, after reconsideration, the Department determines the bidder has failed to meet the requirements of the Contract goal and has failed to make adequate good faith efforts to achieve the level of DBE participation as specified in the bid proposal, the bidder's bid will be rejected. If sufficient documented evidence is presented to demonstrate that the apparent low bidder made reasonable good faith efforts, the Department will award the Contract and reduce the DBE requirement to the actual commitment identified by the lowest successful bidder at the time of its bid. The Contractor is encouraged to seek additional participation during the life of the Contract.

If the Contractor fails to conform to the schedule of DBE participation as shown on the progress schedule, or at any point at which it is clearly evident that the remaining dollar value of allowable credit for performing work is insufficient to obtain the scheduled participation, the Contractor and any aforementioned affiliates may be enjoined from bidding for 60 days or until such time as conformance with the schedule of DBE participation is achieved. In such instances, the Contractor is expected to seek DBE participation towards meeting the goal during the prosecution of the Contract.

If the Contractor fails upon completion of the project to meet the required participation, the Contractor and any prime contractual affiliates, as in the case of a joint venture, may be enjoined from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects for a period of 90 days.

Prior to enjoinder from bidding or denial to participate as a subcontractor for failure to comply with participation requirements, as provided hereinbefore, the Contractor may submit documentation to the State Construction Engineer to substantiate that failure was due solely to quantitative underrun(s) or elimination of items subcontracted to DBEs, and that all feasible means have been used to obtain the required participation. The State Construction Engineer upon verification of such documentation shall make a determination whether or not the Contractor has met the requirements of the Contract.

If it is determined that the aforementioned documentation is insufficient or the failure to meet required participation is due to other reasons, the Contractor may request an appearance before the Administrative Reconsideration Panel to establish that all feasible means were used to meet such participation requirements. The decision of the Administrative Reconsideration Panel shall be administratively final. The enjoinder period will begin upon the Contractor's failure to request a hearing within the designated time frame or upon the Administrative Reconsideration Panel's decision to enjoin, as applicable.

5. Verification of DBE Participation and Imposed Damages

If the Contractor fails to comply with correctly completing and submitting any of the required documentation requested by this provision within the specified time frames, the Department will withhold payment of the monthly progress estimate until such time as the required submissions are received by VDOT. Where such failures to provide required submittals or documentation are repeated the Department will move to enjoin the Contractor and any prime contractual affiliates, as in the case of a joint venture, from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects until such submissions are received.

(q) Suspect Evidence of Criminal Behavior

In addition to the remedies described heretofore in this provision VDOT also exercises its rights with respect to the following remedies:

- Failure of a bidder, Contractor, or subcontractor to comply with the Virginia Department of Transportation Road and Bridge Specifications and these Special Provisions wherein there appears to be evidence of criminal conduct shall be referred to the Attorney General for the Commonwealth of Virginia and/or the FHWA Inspector General for criminal investigation and, if warranted prosecution.
- In appropriate cases, VDOT will bring to the attention of the U. S. Department of Transportation (USDOT) any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take the steps, e.g., referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General, action under suspension and debarment or Program Fraud and Civil Penalties rules provided in 49CFR Part 31.

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
BUILD AMERICA, BUY AMERICA ACT REQUIREMENTS FOR CONSTRUCTION MATERIALS**

SECTION 107.03 FEDERAL AID PROVISIONS of the Specifications is amended to include the following:

In accordance with the provisions of the Build America, Buy America Act (BABA), Public Law, No. 117-58, §§ 70901-70953, and any implementing regulations or policies (hereinafter referred to together as “BABA Requirements”): except as otherwise specified, all construction materials that are to be permanently incorporated for use on federal aid projects (hereinafter be referred to as “BABA Construction Materials”) shall be manufactured in the United States of America. Note that the provisions herein do not apply to iron and steel, which are addressed in another provision of the Contract.

BABA Construction Materials. Manufactured in the United States of America means that at least the final manufacturing process and the immediately preceding manufacturing stage for the construction materials, and any other stages in the manufacturing process that are specified in the BABA Requirements or FHWA guidance, all occurred in the United States.

BABA Construction Materials, as defined and designated in the BABA Requirements, include any article, material, or supply that is or consists primarily of:

- Non-ferrous metals;
- Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- Glass (including fiber optic glass);
- Lumber; or
- Drywall.

Any items that consist of at least one of the listed BABA Construction Materials combined together through a manufacturing process with another listed BABA Construction Material or with a non-listed item are considered to be “Manufactured Products” under BABA, not BABA Construction Materials. Therefore, the BABA requirements for “Manufactured Products” and FHWA guidance would apply.

The BABA Construction Materials requirements do not apply to: cement and cementitious materials; aggregates such as stone, sand, or gravel; aggregate binding agents (including asphalt cement) or additives; or any material composed of or derived from these items.

Waivers:

The process for receiving a waiver of BABA requirements for construction materials is provided at BABA § 70914(b) through (d), and any federal regulations adopted in accordance with this law. Other than any FHWA or other Federal agency waivers of general applicability that may be in effect, the Contractor shall not anticipate that any BABA provisions will be waived.

Certification of Compliance:

The Contractor is required to submit a Certificate of Compliance prior to incorporating any items into the project containing any of the above-listed BABA Construction Materials. This shall be accomplished by the Contractor submitting the appropriate Form C-76 Certificate of Compliance to the Department when the items are delivered to the project site. The Certificate of Compliance will certify that the final manufacturing process and the immediately preceding manufacturing stage for the construction materials occurred in the United States. The certificate must be signed and dated by the Prime Contractor’s Superintendent and include a BABA Requirements Submittal Number, which is simply the Contractor’s project specific sequential numbering system that will allow the Contractor and Department to track the total number of certificates provided and the individual construction materials associated with each certificate.

Supporting Documentation:

Supporting documentation to demonstrate compliance with BABA provisions (such as manufacturer/supplier certifications, etc.) shall be organized by BABA Requirements Submittal Number, and shall be maintained by the Contractor and available for examination from the date of delivery until three years after project acceptance. The Contractor may maintain this documentation electronically or in paper format.

The Department or FHWA may review the Contractor's supporting documentation to verify compliance with the BABA Requirements for construction materials at any time upon request. Supporting documentation shall be provided within five business days of the request. The burden of proof to meet the BABA Requirements for construction materials rests with the Contractor. If the supporting documentation does not undeniably demonstrate to FHWA or the Department that the BABA Construction Materials identified in the Certificate of Compliance were produced in the United States, then such construction materials will be considered unacceptable and must be replaced at no cost to the Department, and if not replaced the Department, in addition to other rights and remedies, may have them replaced and deduct the cost of removal and replacement from any moneys due or that become due the Contractor in accordance with Section 106.10 of the Specifications.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
PREVAILING WAGE RATES**

SECTION 107 – LEGAL RESPONSIBILITIES of the Specifications is amended as follows:

Section 107.13 – Labor and Wages is amended as follows:

Section 107.13(a) Predetermined Minimum Wages is replaced with the following:

- (a) **Prevailing Wage Rates:** The provisions of federal and state laws requiring the payment of a prevailing minimum wage rate are incorporated in and expressly made a part of this Contract. The Contractor and the Contractor's subcontractors shall promptly comply with all such applicable provisions, as well as the following.
1. If the Contractor needs a job classification not listed in the wage determination to submit a bid or comply with this provision, the Contractor shall submit to the Department a completed Additional Classification and Wage Rate Request using Form C-51. If other or additional classifications are used, omission of classifications shall not be cause for additional compensation to the Contractor. The Contractor shall be responsible for determining local practices with regard to the application of the various labor classifications.
 2. Upon the award of the Contract, the Contractor shall certify, under oath, to the Commissioner of the Virginia Department of Labor and Industry (VDOLI) the pay scale for each craft or trade employed on the project to be used by the Contractor and any of the Contractor's subcontractors for work to be performed under the Contract. This certification shall, for each craft or trade employed on the project, specify the total hourly amount to be paid to employees, including wages and applicable fringe benefits, provide an itemization of the amount paid in wages and each applicable benefit, and list the names and addresses of any third party fund, plan or program to which benefit payments will be made on behalf of employees. The certification form available at: www.doli.virginia.gov/wp-content/uploads/2021/04/DOLI-Pay-Scale-Certification-for-Public-Works-Projects.pdf. The form may be emailed to prevailingwage@doli.virginia.gov, faxed to 804-371-6524, or mailed to Virginia Department of Labor and Industry, 600 East Main St., Suite 207, Richmond, VA, 23219, Attn: Prevailing Wage.
 3. The Contractor and the Contractor's subcontractors performing work on this Contract shall post the general prevailing wage rate for each craft and classification involved in prominent and easily accessible places accessible to all employees at the site of the work or at any such places as are used by the Contractor or subcontractors to pay workers their wages. Within 10 days of such posting, the Contractor or subcontractors shall certify to the Commissioner of VDOLI their compliance with this requirement. The certification form available at: www.doli.virginia.gov/wp-content/uploads/2021/04/PW_Posting_Compliance_Form.pdf. The form may be emailed to prevailingwage@doli.virginia.gov, faxed to 804-371-6524, or mailed to Virginia Department of Labor and Industry, 600 East Main St., Suite 207, Richmond, VA, 23219, Attn: Prevailing Wage.
 4. The Contractor and the Contractor's subcontractors shall keep, maintain and preserve (i) records relating to the wages paid to and hours worked by each individual performing the work of any mechanic, laborer, or worker and (ii) a schedule of the occupation or work classification at which each individual performing the work of any mechanic, laborer, or worker on the public works project is employed during each work day and week. The employer shall preserve these records for a minimum of six years and make such records available to the Department of Labor and Industry within 10 days of a request and shall certify that records reflect the actual hours worked and the amount paid to its workers for whatever time period they request.
 5. The Contractor shall insert this Special Provision into any subcontracts let to subcontractors for performance of services in connection with the Contract.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 107 – LEGAL RESPONSIBILITIES**

SECTION 107 – LEGAL RESPONSIBILITIES of the Specifications is amended as follows:

Section 107.14 – Equal Employment Opportunity is replaced with the following:

The Contractor shall comply with the applicable provisions of presidential executive orders and the rules, regulations, and orders of the President’s Committee on Equal Employment Opportunity.

The Contractor shall maintain the following records and reports as required by the Contract EEO provisions:

- Record of all applicants for employment
- New hires by race, work classification, hourly rate, and date employed
- Minority and non-minority employees employed in each work classification
- Changes in work classifications
- Employees enrolled in approved training programs and the status of each
- Minority subcontractor or subcontractors with meaningful minority group representation
- Copies of Form C-57 submitted by subcontractors

If the Contract has a stipulation or requirement for trainees, the Contractor shall submit semi-annual training reports in accordance with the instructions shown on the forms furnished by the Department. If the Contractor fails to submit such reports in accordance with the instructions, his monthly progress estimate for payment may be delayed.

The Contractor shall cooperate with the Department in carrying out EEO obligations and in the Department’s review of activities under the Contract. The Contractor shall comply with the specific EEO requirements specified herein and shall include these requirements in every subcontract of \$10,000 or more with such modification of language as may be necessary to make them binding on the subcontractor.

(a) **Required contract provisions:**

1. **Required by §2.2-4201 of the Code of Virginia:** During the performance of this Contract, the Contractor agrees as follows:
 - a. The Contractor shall not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin, except where religion, sex, or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of the Contractor. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause, including the names of all contracting agencies with which the Contractor has contracts of over \$10,000.
 - b. The Contractor shall, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that such contractor is an equal opportunity employer. However, notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this chapter.
 - c. If the Contractor employs more than five employees, the Contractor shall (i) provide annual training on the Contractor's sexual harassment policy to all supervisors and employees providing services in the Commonwealth, except such supervisors or employees that are required to complete sexual harassment training provided by the Department of Human Resource Management, and (ii) post the Contractor's sexual harassment policy in (a) a conspicuous public place in each building located in the Commonwealth that the Contractor owns or leases for business purposes and (b) the Contractor's employee handbook.

The Contractor shall include the provisions of subdivisions a, b, and c in every subcontract or purchase order of over \$10,000, so that such provisions shall be binding upon each subcontractor or vendor.

Nothing contained in this chapter shall be deemed to empower any agency to require any contractor to grant preferential treatment to, or discriminate against, any individual or any group because of race, color, religion, sex, or national origin on account of an imbalance that may exist with respect to the total number or percentage of persons of any race, color, religion, sex, or national origin employed by such contractor in comparison with the total number or percentage of persons of such race, color, religion, sex, or national origin in any community or in the Commonwealth.

2. **Required by Executive Order 61-2017:** The Contractor shall not discriminate, in employment practices, subcontracting practices, and delivery of goods or services, on the basis of race, sex, color, national origin, religion, sexual orientation, gender identity, age, political affiliation, disability, or veteran status. The Contractor shall include this paragraph in every subcontract or purchase order over \$10,000, so that the same provisions will be binding upon each subcontractor or vendor providing labor or materials to the Project.

(b) **EEO Officer:** The Contractor shall designate and make known to the Department an EEO Officer who can effectively administer and promote an active Contractor EEO program and who shall be assigned adequate authority and responsibility to do so.

(c) **Dissemination of Policy:**

1. Members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees or recommend such action or are substantially involved in such action shall be made fully aware of and shall implement the Contractor's EEO policy and contractual responsibilities to provide equal employment opportunity in each grade and classification of employment. The following actions shall be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees shall be conducted before the start of work and at least once every 6 months thereafter, at which time the Contractor's EEO policy and its implementation shall be reviewed and explained. The meetings shall be conducted by the EEO Officer or another knowledgeable company official.

b. New supervisory or personnel office employees shall be given a thorough indoctrination by the EEO Officer or another knowledgeable company official covering all major aspects of the Contractor's EEO obligations within 30 days following their reporting for duty with the Contractor.

c. The EEO Officer or appropriate company official shall instruct employees engaged in the direct recruitment of employees for the project relative to the methods followed by the Contractor in locating and hiring minority group employees.

2. In order to make the Contractor's EEO policy known to all employees, prospective employees, and potential sources of employees such as, but not limited to, schools, employment agencies, labor unions where appropriate, and college placement officers, the Contractor shall take the following actions:

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

The Contractor shall furnish, erect, and maintain at least two bulletin boards having dimensions of at least 48 inches in width and 36 inches in height at locations readily accessible to all personnel concerned with the project. The boards shall be erected immediately upon initiation of the Contract work and shall be maintained until the completion of such work, at which time they shall be removed from the project. Each bulletin board shall be equipped with a removable glass or plastic cover that, when in place, will protect posters from weather or damage. The Contractor shall promptly post official notices on the bulletin boards. The costs for such work shall be included in the price bid for other Contract items.

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

(d) **Recruitment:**

1. Advertisements for employment shall conform to Section 107.14(a)1.

2. Unless precluded by a valid bargaining agreement, the Contractor shall conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants, including, but not limited to, state employment agencies, schools, colleges, and minority group organizations. The Contractor shall identify sources of potential minority group employees and shall establish procedures with such sources whereby minority group applicants may be referred to him for employment consideration.

3. The Contractor shall encourage his employees to refer minority group applicants for employment by posting appropriate notices or bulletins in areas accessible to all employees. In addition, information and procedures with regard to referring minority group applicants shall be discussed with employees.

- (e) **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel action of any type shall be taken without regard to race, color, religion, sex, or national origin.
1. The Contractor shall conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of personnel.
 2. The Contractor shall periodically evaluate the spread of wages paid within each classification to determine whether there is evidence of discriminatory wage practices.
 3. The Contractor shall periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor shall promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, corrective action shall include all affected persons.
 4. The Contractor shall investigate all complaints of alleged discrimination made to him in connection with obligations under the Contract, attempt to resolve such complaints, and take appropriate corrective action. If the investigation indicates that the discrimination may affect persons other than the complainant, corrective action shall include those persons. Upon completion of each investigation, the Contractor shall inform every complainant of all avenues of appeal.
- (f) **Training:**
1. The Contractor shall assist in locating, qualifying, and increasing the skills of minority group and women employees and applicants for employment.
 2. Consistent with 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.
 3. The Contractor shall advise employees and applicants for employment of available training programs and the entrance requirements for each.
 4. The Contractor shall periodically review the training and promotion potential of minority group employees and shall encourage eligible employees to apply for such training and promotion.
 5. If the Contract provides a pay item for trainees, training shall be in accordance with Section 518.
- (g) **Unions:** If the Contractor relies in whole or in part on unions as a source of employees, best efforts shall be made to obtain the cooperation of such unions to increase opportunities for minority groups and women in the unions and to effect referrals by such unions of minority and women employees. Actions by the Contractor, either directly or through his Contractor's Association acting as agent, shall include the following procedures:
1. In cooperation with the unions, best efforts shall be used to develop joint training programs aimed toward qualifying more minority group members and women for membership in the unions and to increase the skills of minority group employees and women so that they may qualify for higher-paying employment.
 2. Best efforts shall be used to incorporate an EEO clause into union agreements to the end that unions shall be contractually bound to refer applicants without regard to race, color, religion, sex, or national origin.
 3. Information shall be obtained concerning referral practices and policies of the labor union except that to the extent the information is within the exclusive possession of the union. If the labor union refuses to furnish the information to the Contractor, the Contractor shall so certify to the Department and shall set forth what efforts he made to obtain the information.
 4. If a union is unable to provide the Contractor with a reasonable flow of minority and women referrals within the time limit set forth in the union agreement, the Contractor shall, through his recruitment procedures, fill the employment vacancies without regard to race, color, religion, sex, or national origin, making full efforts to obtain qualified or qualifiable minority group persons and women. If union referral practice prevents the Contractor from complying with the EEO requirements, the Contractor shall immediately notify the Department.
- (h) **Subcontracting:** The Contractor shall use best efforts to use minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of SWaM and

DBE construction firms from the Department. If SWaM and DBE goals are established in the proposal, the Contractor shall comply with Section 107.15.

The Contractor shall use best efforts to ensure subcontractor compliance with his EEO obligations.

(i) **Records and Reports:** The Contractor shall keep such records as are necessary to determine compliance with his EEO obligations. The records shall be designed to indicate the following:

1. the number of minority and nonminority group members and females employed in each work classification on the project.
2. the progress and efforts being made in cooperation with unions to increase employment opportunities for minorities and females if unions are used as a source of the work force.
3. the progress and efforts being made in locating, hiring, training, qualifying, and upgrading minority and female employees.
4. the progress and efforts being made in securing the services of minority group subcontractors or subcontractors with meaningful minority group and female representation among their employees.

Records shall be retained for a period of 3 years following the Completion Date of the Contract work and shall be available at reasonable times and places for inspection by authorized representatives of the Department.

Each month for the first three months after construction begins and every month of July thereafter for the duration of the project, Form C-57 shall be completed to indicate the number of minority, nonminority, and female employees currently engaged in each work classification shown on the form. The completed Form C-57 shall be submitted within 3 weeks after the reporting period. Failure to do so may result in delay of approval of the Contractor's monthly progress estimate for payment.

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
PROGRESS SCHEDULES FOR CATEGORY I PROJECTS**

Section 103.06(e) Progress Schedule of the Specifications is deleted and replaced by this provision.

Section 108.03 Progress Schedule of the Specifications is deleted and replaced by this provision.

I. General Requirements

The Contractor shall develop and maintain a Progress Schedule for the entire duration of the Project, which shall be used by all involved parties to plan and execute all work required to complete the Project. The Progress Schedule will be used by the Department to monitor the project, assess progress, and evaluate the effects of time-related issues on the project. Unless specifically stated otherwise, 'days' shall be understood as calendar days.

At the Pre-Construction Conference, in accordance with Section 105.02 or as mutually agreed upon by the Engineer and the Contractor, the Contractor shall attend a Scheduling Conference with the Engineer to discuss the Contractor's overall plan to accomplish the Work. The Contractor shall also discuss its detail work plan for the initial sixty (60) days; as well as project specific requirements and other key issues that are expected to impact the Progress Schedule or are necessary for the preparation, maintenance, and submittal of the Progress Schedule.

II. Progress Schedule Submissions

Unless otherwise directed in writing by the Engineer, the Contractor shall prepare, maintain, and submit a Progress Schedule in accordance with the following requirements:

1. Baseline Progress Schedule

Within fifteen (15) days of the Contract execution date or within seven (7) days prior to beginning work, whichever occurs first, the Contractor shall submit to the Engineer for review and acceptance, a Baseline Progress Schedule representing the Contractor's original complete detailed plan to accomplish the entire scope of the Project according to the Contract. Upon acceptance by the Engineer, the Baseline Progress Schedule shall become the Schedule of Record (SOR). The Baseline Progress Schedule submission shall consist of:

A. **Baseline Schedule** – A logic driven Baseline Schedule depicting all detailed activities required to complete the entire scope of the Project, including as applicable, work to be performed by subcontractors, the Department, and other involved parties. The Baseline Schedule shall be prepared and submitted according to the following:

(1) **Software:** The Baseline Schedule shall be prepared using any scheduling software of the Contractor's choosing that is capable of meeting the detail requirements as specified herein. However, an electronic backup copy of the Baseline Schedule shall be submitted in any of the following acceptable file formats Primavera P6 (XER), Microsoft Project (MPP, XML), or Microsoft Excel (XLS) based on the software.

(2) **Project ID and Name:** The Project ID and Name for each submission shall be unique and defined as follows:

(a) For Project Schedules prepared in the Primavera P6 software, the Project ID shall be defined using the Contract ID as a prefix followed by a short ID indicating the specific version of the schedule (i.e., PS01, BS, BSR1, etc.). For example, Baseline Schedule (C000XXXXXXXX_BS, C000XXXXXXXX_BSR1, etc.). And the Project Name shall reflect the Project Description as shown in the Contract, appended to indicate the specific version of the schedule (i.e., Route 10 Over I-95 Bridge Replacement Baseline Schedule).

(b) For Project Schedules prepared in the Microsoft Project software, the Project Name (Title) shall be defined using the Contract ID as a prefix followed by a short ID indicating the specific version of the schedule (i.e., PS01, BS, BSR1, etc.). For example, Baseline Schedule (C000XXXXXXXX_BS, C000XXXXXXXX_BSR1, etc.).

(3) **Work Breakdown Structure (WBS):** The Baseline Schedule shall be organized using a logical Project Work Breakdown Structure (WBS). The Work shall be broken down to an appropriate level of WBS nodes and sub-nodes

to allow for a hierarchical grouping and summarization of related activities required to complete each phase, feature, deliverable, or work package, as appropriate. Each WBS element shall be defined using a short alpha-numeric WBS Code and a WBS Name describing the WBS element. At a minimum, the WBS shall include as applicable:

- (a) **Level 1:** “Milestones” node for all Contract and other key milestones; “Preliminary” node for all pre-construction activities; and “Construction” node for all construction activities.
 - (b) **Level 2:** Under the “Preliminary” node, Level 2 “Submittals”, “VDOT Review”, “Materials” sub-nodes for all initial activities such as submittals, VDOT reviews, long lead materials, etc. Under the “Construction” node, Level 2 “General/Start-up”, “Phase” or “Feature of Work”, and “Close-out” sub-nodes, as applicable.
 - (c) **Level 3:** Under the “Phase” or “Feature of Work” node, Level 3 sub-nodes for “Sub-features” or “Location” for all associated construction activities, as applicable.
- (4) **Level of Details:** The Work shall be broken down into discrete activities to an appropriate level of detail to allow for identification of work by the responsible party; as well as the type, amount, and specific location of work the activity represents.
- (5) **Activity Definition:** Activities shall be discrete and shall be defined as follows:
- (a) Each activity shall be defined using a unique Activity ID which shall remain unchanged throughout the duration of the Project. If an activity is deleted in a subsequent submission, the corresponding Activity ID shall not be used for any other activity. If the Project Schedule is prepared and submitted using Microsoft Project, then a “Unique Activity ID” Custom Field shall be defined using the “Text1” data field with formula set to equal “Unique ID”.
 - (b) Each activity shall be defined using an Activity Name to indicate the type of work, phase (or stage), and specific location in which the work occurs, as applicable (e.g., Drive Steel Piles - Phase 1 - Abut A). For work to be performed by the Department or other contractors, and third parties, the Activity Name shall include “VDOT” or the name of the corresponding responsible party.
 - (c) Activity durations shall be defined in whole days based on the assigned calendar. For activities such as “Concrete Cure Time”, that are not restricted by a standard working calendar, activity durations shall be expressed in terms of calendar days. Activity durations shall be limited to twenty (20) work days, unless otherwise accepted by the Engineer. Longer durations may be allowed as approved by the Engineer for certain administrative, level of effort, or procurement activities that are typically performed over longer periods of time.
- (6) **Calendars:** Each activity shall be assigned a project-level calendar to establish the planned work days per week and any non-work days for holidays, weather days, or other restrictions, as applicable. Regardless of the actual or planned work hours/day, all calendars shall be based on a standard 8 work hours/day, with the same daily start and finish times. If the Project Schedule is prepared and submitted using Microsoft Project, then a “Calendar” Custom Field shall be defined using the “Text2” field with formula set to equal “Task Calendar”. Once the Baseline Schedule is accepted, any changes to calendars shall be identified and explained in the accompanying Schedule Narrative.
- (7) **Network Logic:** Logic relationships shall be assigned to each activity to establish the sequence in which the Contractor plans to accomplish the Work and as follows:
- (a) Activity relationship types shall be limited to finish-to-start (FS), start-to-start (SS), and finish-to-finish (FF).
 - (b) All activities, except the first activity shall be assigned at least one predecessor relationship and all activities, except the last activity shall be assigned at least one successor relationship.
 - (c) If an activity is assigned as a predecessor with a start-to-start (SS) relationship, then the activity must also be assigned as a predecessor to another related activity with a finish-to-start (FS) or finish-to-finish (FF) relationship, as applicable.
 - (d) The Contractor shall avoid the use of redundant logic relationships when possible.
 - (e) The use of lag shall be prohibited unless approved by the Engineer. The Contractor shall remove any lag and replace with an activity upon the request of the Engineer. When lags are used, the Contractor shall provide an explanation for use of the lags in the Schedule Narrative.

- (8) **Constraints:** Use of Constraints shall be limited to milestones specified in the Contract, unless approved by the Engineer. Constraints shall be applied as follows:
- (a) For Contracts that include a specified milestone that restricts the start date of an activity, the activity shall be constrained with a “Start No Later Than” or “Start No Earlier Than” constraint, as applicable, with the date specified in the Contract.
 - (b) For Contracts that include a specified milestone that establishes a completion date deadline such as Interim Completion or Substantial Completion, the Contract milestone activity shall be constrained with a “Finish On or Before” (Finish No Later Than) constraint, with the date specified in the Contract.
 - (c) Constraints such as “Start On” (Must Start On) or “Finish On” (Must Finish On) that delays the start or finish date of an activity to the specified date as allowed by network logic, or “Mandatory Start” or “Mandatory Finish” that violate network logic are prohibited.
- (9) **Progress As-built Information:** The Baseline Schedule shall reflect the current status of the Project and all known information at the time of submission. The Baseline Schedule shall include any progress as-built information showing actual dates for all completed and on-going activities, as of the Data Date, as applicable. The Baseline Schedule shall be calculated using a Data Date as follows:
- a) If the Baseline Schedule includes progress as-built information, then the Data Date shall be within three (3) days of the date of submission.
 - b) If the Baseline Schedule does not include progress as-built information, then the Data Date shall be the Contract execution date or the planned start date of the first activity, whichever is earlier.
- B. **Baseline Schedule Narrative** – A Baseline Schedule Narrative describing the Contractor’s overall plan to accomplish the Work. The Baseline Schedule Narrative shall be the basis for the Baseline Schedule and shall provide the following supporting information, as applicable:
- 1. **Milestones:** Current status of the Project milestones including, as applicable Contract milestones and other key events such as major traffic switches.
 - 2. **Work By Others:** Work to be performed by the Department and other involved parties (e.g., utilities), including activities requiring coordination; and a description of when the work must be performed to avoid impacts to the Work.
 - 3. **Overall Sequence of Work:** Explanation of the proposed overall sequence of Work, including where the Work will begin and how the Work and crews will flow through the Project.
 - 4. **Project Critical Path:** Description of the project critical path indicating the series of operations that are expected to drive the completion date of the project. A listing of the Project Schedule critical path activities will not be accepted as a substitute.
 - 5. **Scheduling Assumptions:** Scheduling assumptions including, the general procedures and anticipated daily production rates for major operations that are expected to drive the schedule.
 - 6. **Lags:** Identification of all logic relationships with Lag and explanation for the use of each Lag.
 - 7. **Constraints:** Identification of all schedule Constraints used in the Baseline Schedule and an explanation for the use of each Constraint.
 - 8. **Calendars:** Description of the project calendar(s) used in the Baseline Schedule, identifying the Calendar and the proposed number of work days per week, number of shifts per day, and number of hours per day. Also, the anticipated number of non-working days per month shall be identified for each calendar with considerations, as applicable, for holidays, normal adverse weather conditions; as well as seasonal or other known or specified restrictions (i.e. traffic, local events, environmental, permits, utility, etc.).
 - 9. **Resource Plan:** The Contractor’s resource plan indicating the number and type of crews, crew make-up, and major equipment needed to accomplish the Work as planned. The resource plan shall also explain how the Contractor plans on meeting the resource requirements as reflected on the Baseline Schedule.

10. **DBE Participation:** Log of the applicable DBE participation activities in the schedule and the DBE firms performing the work for which the Contractor intends to claim credit for attaining the DBE goal required in the Contract. The list shall indicate the start/finish dates and durations of the DBE participation activities.

11. **Issues and Concerns:** Any known or foreseeable issues or concerns that are currently affecting or anticipated to affect the schedule. Also, describe how the issues will affect the schedule and any actions taken or needed to avoid or mitigate the impact.

C. **Baseline Progress Earnings Schedule** – A Baseline Progress Earnings Schedule showing the anticipated monthly earnings for the entire Project. A Baseline Progress Earnings Schedule is not required for projects with overall contract duration of ninety (90) days or less. The Baseline Progress Earnings Schedule submission shall be prepared using the VDOT Form C-13C as follows:

1. The Breakdown of Contract Items form shall be completed to show the bid items and costs associated with each Major Work Category.
2. The C-13C (Baseline) form shall be completed to show all required information and the monthly anticipated earnings for each Major Work Category.
3. The C-13C (Update) form shall be completed to show the current Projected Completion Date, Current Estimate Date, and actual monthly earnings, and anticipated earnings for each Major Work Category as of the Current Estimate Date.
4. The Controls Chart Data form shall be completed to show the Actual Monthly Earnings for each estimate date, as of the Current Estimate Date.

2. **Update Progress Schedule**

After the Baseline Progress Schedule is accepted, on a monthly basis thereafter, and within seven (7) days after the estimate date, the Contractor shall submit an Update Progress Schedule submission to the Engineer for review and acceptance. The Update Progress Schedule submission shall represent the current status of the Project and the Contractor's current plan to complete the remaining Work. The Update Progress Schedule submission shall consist of:

A. **Update Schedule** – An Update Schedule, which shall be based on a copy of the most recent accepted Project Schedule and shall be prepared according to the following:

- (1) The Project ID for each submission shall be updated to indicate the specific Update Schedule version (i.e., C000XXXXXXXX_U01, C000XXXXXXXX_U01R1, C000XXXXXXXX_U02). And the Project Name shall be updated to indicate the specific version of the schedule.
- (2) All activities completed prior to the Data Date shall be updated to show actual start and actual finish dates. And all on-going activities shall be updated to show actual start dates and remaining duration to indicate the amount of time required to complete the remaining work as of the Data Date. Actual dates on or after the Data Date are prohibited.
- (3) Activity percent complete for on-going activities shall be based on cost of work completed as of the Data Date relative to the total cost of work planned.
- (4) All schedule related changes requested or approved by the Engineer shall be incorporated into the Update Schedule, including as applicable, added or deleted work, changes to Contract Milestones, changes in sequence of work, changes in duration, changes to Contract Amount, and other time-related changes.
- (5) The Update Schedule shall be calculated using a Data Date of either the 4th, 11th, or 20th of the month, based on the Contractor's estimate date as defined in Section 109.08(a) – Partial Payments, of the Specifications.

B. **Update Schedule Narrative** – An Update Schedule Narrative describing the current status of the project, deviations from scheduled performance, and changes in Contractor's work plan, and the current work plan for accomplishing the remaining work as of the Data Date. The Schedule Update Narrative shall include a description of:

1. **Milestones:** The current status of scheduled Milestone dates, including a description of any deviations from the last accepted Project Schedule and the Contract. The Contractor shall provide an explanation for any Milestone that is scheduled to occur later than the date specified in the Contract and any actions taken or proposed to correct the delay.

2. Progress % Complete: The current status of the Project in terms of earnings relative to the SOR, based on the Progress Earnings Schedule. If progress is falling behind, provide an explanation for the progress deficiency and any actions taken or proposed to correct the deficiency.
 3. Work Performed Last Period: The work performed during the last update period and any deviations from the work scheduled. A listing of the Project Schedule activities will not be accepted as a substitute.
 4. Changes in Work Plan: Any major changes in the Contractor's work plan in terms of sequence of construction, shifts, means and methods, manpower, or equipment.
 5. Changes to Schedule: Any non-progress changes made to the Project Schedule since the previous submission including, changes requested or approved by Engineer. Also, any justification why changes requested by the Engineer should not be accomplished. A Claim Digger report or Schedule Comparison report will not be accepted as a substitute.
 6. Project Critical Path: The critical path work and any deviations from the previous submission. A listing of the Project Schedule critical path activities will not be accepted as a substitute.
 7. Days Lost Last Period: Number of days lost during the last update period, including affected activities; as well as any impacts on the critical path or project milestones. Also, describe any actions taken or proposed to mitigate any resulting delays.
 8. DBE Participation: Log of the applicable DBE participation activities in the schedule and the DBE firms performing the work for which the Contractor intends to claim credit for attaining the DBE goal required in the Contract. The list shall indicate the start/finish dates and durations of the DBE participation activities.
 9. Pending Contract Issues: The status of pending issues such as access, permits, conflicts with other related or adjacent work, Change Orders, time extension requests, etc.
 10. Issues and Concerns: Any issues encountered during the last update period that are currently affecting the Project Schedule or other Project concerns that are anticipated to affect the schedule, including an explanation of any corrective actions taken or required to mitigate or avoid the effects.
 11. Work Planned Next Period: Work planned for the next update period, including any actions needed or expected performance by the Department or other involved parties (e.g., utilities) to avoid impacts to the Work.
- C. **Update Progress Earnings Schedule** – An Update Progress Earnings Schedule showing the actual progress earnings to date and the projected earnings for the remaining periods, as of the Data Date. An Update Progress Earnings Schedule is not required for projects with overall contract duration of ninety (90) days or less. The Update Progress Earnings Schedule shall be prepared as follows:
- (1) The C-13C (Baseline) form shall be updated to show the current Projected Completion Date based on the current Update Schedule.
 - (2) The C-13C (Update) form shall be completed to show the current Projected Completion Date, Current Estimate Date, and actual monthly earnings, and anticipated earnings for each Major Work Category as of the Current Estimate Date.
 - (3) The Controls Chart Data form shall be completed to show the Actual Monthly Earnings for each estimate date to date, as of the Current Estimate Date.

3. Revised Baseline Progress Schedule

The Contractor shall submit a Revised Baseline Progress Schedule as determined by the Engineer. The Engineer may determine that a Revised Baseline Progress Schedule is required when:

- A. The Engineer determines that the Work is being performed significantly different from the SOR; or the Engineer approves changes to the Contract that significantly impacts the Project Schedule or causes a major shift in the anticipated progress earnings. In which case, the Engineer will issue a written notice to the Contractor to submit a

Revised Baseline Progress Schedule. The Contractor shall respond in writing within seven (7) days, either agreeing to comply with the Engineer's request or providing justification why the request should not be accomplished.

- B. The Contractor proposes to perform the Work significantly different from the SOR. In which case, the Contractor shall notify the Engineer in writing at least 14 days prior to performing the Work. The Contractor's notice shall describe the proposed changes and potential impact on the Project Schedule. The Engineer will respond in writing within seven (7) days of the Contractor's notice, either agreeing with the Contractor's proposed revisions or providing reasons why the requested revisions should not be accomplished.

If the Engineer requests a Revised Baseline Progress Schedule or accepts the Contractor's proposed revisions, the Contractor shall submit a Revised Baseline Progress Schedule in lieu of the subsequent required Update Progress Schedule submission or as requested by the Engineer.

If the Engineer does not accept the Contractor's proposed revisions, the Contractor shall not incorporate the proposed revisions into the Project Schedule. In which case, the Contractor shall proceed under the previously accepted Progress Schedule and the current SOR shall remain.

The Revised Baseline Progress Schedule shall be prepared and submitted in the form of a Baseline Progress Schedule, according to Section II.1 above; however, it shall reflect the current status of the Project as of the submittal date, any approved changes in the Work, and the proposed plan for completing the remaining Work. The Revised Baseline Progress Schedule submission shall consist of:

- A. **Revised Baseline Schedule** – A Revised Baseline Schedule, which shall be based on the most recent accepted Project Schedule. The Revised Baseline Schedule shall be prepared according to Section II.1.A above and as follows:
- (1) The Project ID for each submission shall be unique and shall be updated to indicate the specific Update Schedule version being submitted as a Revised Baseline (RB) (i.e., C000XXXXXXXX_U06RB, C000XXXXXXXX_U20RB, etc.).
 - (2) All activities completed prior to the Data Date shall be updated to show actual start and actual finish dates. And all on-going activities as of the Data Date shall be updated to show actual start dates and remaining duration to indicate the amount of time required to complete the remaining work. Actual dates beyond the Data Date are prohibited.
 - (3) Activity percent complete for on-going activities shall be based on cost of work completed as of the Data Date relative to the total cost of work planned.
 - (4) All schedule related changes requested or approved by the Engineer shall be incorporated into the Revised Baseline Schedule, including as applicable, added or deleted work, changes in sequence of work, changes in duration, approved SIA; and changes to the Contract Amount, Contract Milestones, Completion Date, and other time-related requirements.
 - (5) Activity logic shall be modified as necessary to correct out-of-sequence progress for on-going and remaining activities to reflect the Contractor's current plan for completing the remaining Work.
 - (6) The Revised Baseline Schedule shall be calculated using a Data Date of either the 4th, 11th, or 20th of the month, based on the Contractor's estimate date as defined in Section 109.08(a) – Partial Payments, of the Specifications, or as approved by the Engineer.
- B. **Revised Baseline Schedule Narrative** – A Revised Baseline Schedule Narrative, which shall be the basis for the Revised Project Schedule. The Revised Baseline Schedule Narrative shall be prepared according to Section II.1.B above; however, it shall reflect the current status of the project as of the submittal date, approved changes in the Work, and the proposed plan for completing the remaining Work.
- C. **Revised Baseline Progress Earnings Schedule** – A Revised Baseline Progress Earnings Schedule showing the actual earnings to date and anticipated earnings for the remaining Work. The Revised Baseline Progress Earnings Schedule shall be prepared and submitted according to Section II.1.C above, and as follows:
- (1) The C-13C (Baseline) form shall be adjusted accordingly to show the current Contract Dates and Amount.

- (2) The C-13C (Baseline) form shall be completed to show the actual monthly earnings and anticipated earnings for each Major Work Category as of the Current Estimate Date.
 - (3) The C-13C (Update) form shall be completed to show the current Completion Date and actual monthly earnings and anticipated earnings for each Major Work Category as of the Current Estimate Date.
 - (4) The Controls Chart Data form shall be completed to show the Actual Monthly Earnings for each estimate date to date, as of the Current Estimate Date.
4. **Early Completion Incentive Duration** – For Contracts that include an incentivized provision for completing a portion of the Work before a specified milestone date or all of the Work before the Completion Date, the Contractor may insert an “Early Completion Date” milestone activity to indicate its intent to complete the Work early. In which case, the Contractor may insert an “Early Completion Incentive Duration” activity between the proposed “Early Completion Date” milestone activity and the Contract completion milestone activity. The incentive duration shall be specified in calendar days, which shall not exceed the maximum allowable incentive days at any time. The incentive duration shall be adjusted accordingly each Update Schedule to reflect any slippage or contraction of the Project Schedule.
5. **Use of Total Float** – Total float shall be considered a project property that is shared amongst all activities on the network. Total float shall be calculated relative to the Completion Date or a related Contract milestone, as applicable. The Contractor may submit a Progress Schedule showing completion of a portion of the Work before a specified milestone date or all of the Work before the Completion Date. If this occurs, any total float available in the Project Schedule, at any time, shall belong to the Project. It shall be understood that total float is not for the exclusive use or benefit of either the Department or the Contractor and that either party has the right to full use of any available total float. Until such time that all available total float is depleted, total float shall be used responsibly on a first come first serve basis for the benefit of the Project. Changes to the Project Schedule at any time for the purpose of manipulating float is prohibited, with the exception of adjustments to incentive duration activities for Contracts with incentive provisions for early completion, as defined herein. Negative total float will not be allowed in the Preliminary Schedule, Baseline Schedule, or Revised Baseline Schedule.
6. **Progress Schedule Submittal Format and Reports**

Unless otherwise approved in writing by the Engineer, the Contractor shall submit for each Baseline Schedule, Update Schedule, or Revised Baseline Schedule submission, the following submittal items and reports, in the formats specified below:

- A. **File Naming Convention** – Each electronic submittal file shall have a unique file name using a file naming convention that identifies the file by the Contract ID and version of Progress Schedule (i.e., BS, BSR1, U01, U04RB), type of submission (i.e., Baseline Schedule Narrative, Form C-13C), and Data Date of the submission. For example: C000XXXXXXXX_BS_Baseline Schedule_04-01-21.
- B. **Transmittal Email** – An electronic mail to the Engineer, identifying which Progress Schedule is being submitted for review and what submittal items are included.
- C. **Project Schedule** – For each submission of the Project Schedule, the Contractor shall submit:
 - (1) An electronic backup copy of the working schedule in the “.mpp”, “.xer”, or “.xls” file format, as appropriate.
 - (2) A time-scaled bar-chart plot of the “Complete Detailed Schedule” in “.pdf” file format, showing for each activity, Activity ID (Unique ID), Activity Name, Original Duration, Start, Finish, Activity % Complete, Remaining Duration, and Total Float.
- D. **Schedule Narrative** – For each submission of the Project Schedule, the Contractor shall submit a file copy of the “Project Schedule Narrative” in “.pdf” format.
- E. **Progress Earnings Schedule** – For each submission of the Project Schedule, the Contractor shall submit a Progress Earnings Schedule report as follows:
 - (1) A copy of the “Progress Earnings Schedule (Form C-13C)” in “.xlsm” file format.
 - (2) Copies of the “Monthly Progress Earnings Schedule” and “S-Curve” in “.pdf” file format.

III. Review and Acceptance

The Engineer will review each Progress Schedule submission for acceptance and will respond within fourteen (14) days of receipt of the Contractor's complete submittal. The Engineer will determine acceptance or rejection based on conformance with this specification and other requirements of the Contract and will respond as follows:

1. **Accepted, No Exceptions** – When the submission is complete and in full compliance with this specification and other requirements of the Contract, the Engineer will respond to the Contractor with a notice indicating the submission is “Accepted, No Exceptions”.
2. **Accepted As Noted** – When the submission is complete and generally in compliance with this specification and other requirements of the Contract, but contains minor flaws or exceptions, the Engineer will respond to the Contractor with a notice indicating the submission is “Accepted As Noted”. In which case, the Contractor shall make the necessary corrections in the next required Progress Schedule submission to address the Engineer's comments or provide justifications in the narrative why the corrections should not be made.
3. **Rejected, As Noted** – When the submission is incomplete or not in compliance with this specification or other requirements of the Contract, the Engineer will respond to the Contractor with a notice indicating the submission is “Rejected, As Noted”. The Progress Schedule submission will be immediately rejected and returned by the Engineer for the following reasons:
 - A. Failure to include all required reports and submittal items.
 - B. Failure to calculate the Project Schedule using the correct Data Date.
 - C. Use of prohibited constraints.
 - D. Activities without predecessors or successors with exception of the first and last activities.
 - E. The Project Schedule shows actual dates equal to or greater than the Data Date.
 - F. Failure to respond to the Engineer's review comments from the previous submission.

If the submission is rejected and returned by the Engineer, the Contractor shall make the necessary corrections to address the Engineer's comments and resubmit the Progress Schedule within seven (7) days of receipt of the Engineer's response.

When the Engineer determines that a meeting with the Contractor is necessary to discuss proposed changes to the schedule or to resolve issues concerning acceptance of the Progress Schedule submission, the Contractor shall meet with the Engineer as requested.

If the Contractor or Engineer discovers an error after the Engineer has accepted a Progress Schedule, the Contractor shall correct the error in the next required submission.

The Engineer's acceptance of a Progress Schedule submission does not attest to the validity of the Project Schedule, sequencing, logic, duration, or assumptions on which the schedule is based. Acceptance by the Engineer does not transfer any of the Contractor's responsibilities to the Department. Failure of the Contractor to include in the Project Schedule any element of work required by the Contract for timely completion will not excuse the Contractor from completing the Work within the Contract specified Milestone(s) or the Contract time limit, as applicable.

Upon acceptance by the Engineer, the Baseline Progress Schedule or a subsequent Revised Baseline Progress Schedule will be established as the Project “Schedule of Record (SOR)”. The SOR is the latest agreed upon and only Project Baseline with which all parties will plan and execute all work required to complete the Project; and against which progress of the Project and the Contractor's performance will be assessed.

IV. Failure to Comply with Progress Schedule Submission Requirements

The Engineer may delay approval of the monthly progress estimate for failure to submit an acceptable Progress Schedule on time and as required. Payments withheld for violation of the schedule requirements will be included in the next progress estimate following the Contractor's submission of an acceptable Progress Schedule. Any delays resulting from payment withholding due to the Contractor's failure to provide an acceptable Progress Schedule will not be considered just cause for extension of the Contract time limit or for additional compensation.

V. Delays and Schedule Impact Analysis (SIA)

The Contractor shall promptly notify the Engineer when it discovers or encounters any changes to the Work or conditions that are expected to impact the Project Schedule. In the event of an excusable delay that extends the completion date of the Project or a

Contract milestone, as applicable, beyond the Contract specified date, for which the Contractor is seeking an extension of time, the Contractor shall promptly submit a request for an adjustment to the Contract in accordance with Section 108.04 of the Specifications. Unless directed otherwise in writing by the Engineer, the Contractor shall submit along with its request for an adjustment to the Contract, a Schedule Impact Analysis (SIA) in accordance with the following:

1. Prospective SIA for Anticipated Impacts Due to Directed or Authorized Changes

The Engineer may issue a written request to the Contractor for proposed additions, deletions, or other changes to the Work in accordance with Section 104 of the Specifications. If this occurs and the Contractor is seeking an extension of time, the Contractor shall submit a Prospective SIA within seven (7) days after receipt of the Engineer’s request and prior to proceeding with the changed work, unless directed otherwise in writing by the Engineer. The Prospective SIA submission shall consist of the following:

A. **Prospective SIA Schedule** – The Prospective SIA Schedule shall reflect all known information at the time of analysis and shall be prepared and submitted as follows.

- (1) A Pre-impact SIA Schedule shall be prepared by updating a copy of the latest accepted Project Schedule in place prior to the proposed change with progress only through the date of the proposed change.
- (2) An Impacted SIA Schedule shall be prepared by inserting a fragnet (fragmentary network) of the detail activities representing the added or changed Work into a copy of the Pre-impact SIA Schedule. The added activities shall be linked to other related and affected activities accordingly.
- (3) The Prospective SIA Schedule submission shall include a bar-chart schedule layout showing the added activities, related and affected activities, critical path activities, and any affected Contract milestones. It shall also show a graphical comparison between the Impacted SIA Schedule and Pre-impact SIA Schedule and variances in activity duration, start dates, and finish dates.
- (4) The Prospective SIA Schedule submission shall include “.pdf” copies and electronic backup copies of the Pre-impact and Impacted SIA Schedules in the same file format as Update Schedule.

B. **Prospective SIA Narrative** – The Prospective SIA Narrative shall describe:

- (1) The proposed changes to the Work and timeline of events associated with the changes.
- (2) Any changes made to the Project Schedule and current status of the Project prior to the proposed change as reflected on the Pre-impact SIA Schedule.
- (3) The changes made to the Pre-impact SIA Schedule including, added or deleted activities, affected activities and how the activities are expected to be affected.
- (4) Any shifts to the Critical Path and overall impact to related Contract milestones or the Project Completion Date as reflected on the Impacted SIA Schedule.
- (5) Any actions taken or proposed to mitigate or avoid the potential impact.

2. Retrospective SIA for Impacts Due to Unforeseen Changes and Delays

In the event of an excusable delay resulting from unforeseen changes to the Work or conditions, for which the Contractor is seeking a time extension, the Contractor shall submit along with its request for time extension, a Retrospective SIA within fourteen (14) days after the end date of the delay event, unless directed otherwise in writing by the Engineer. The Retrospective SIA submission shall consist of the following:

A. **Retrospective SIA Schedules** – The Retrospective SIA Schedules shall include all accepted monthly Update Schedules immediately before, during, and after the delay event and shall consider all known information as of the time of analysis. If there are update periods with missing Update Schedules or Update Schedules returned with a notice of “Rejected, As Noted”, the Contractor shall prepare acceptable Update Schedules with progress only for the missing periods using the previous accepted Update Schedule accordingly. If there are Update Schedules returned with a notice of “Accepted, As

Noted”, the Contractor shall modify the Update Schedules accordingly to address the Engineer’s comments. The Retrospective SIA shall be prepared and submitted as follows:

- (1) Each accepted monthly Update Schedule submitted during the period of occurrence of the delay event shall be compared against the accepted Update Schedule for the previous update period, to identify any variances between actual and planned performance for the work performed during each update period.
- (2) Each SIA Schedule shall show the activities performed during last update period, including any activities added to the SIA Schedule to identify delay events; as well as the Project Critical Path activities. The SIA Schedule layout shall show:
 - (a) For each activity, Original Duration, Start, Finish, Criticality, and Total Float. It shall also show the previous Update Schedule Start, Finish; and the Start, Finish, and Duration variances relative to the previous Update Schedule.
 - (b) A bar-chart plot showing a graphical comparison between the SIA Schedule and previous Update Schedule.
- (3) If there are Update Schedules with schedule changes that negatively impacts the schedule, the analysis shall be split to determine the impact due to the changes and impact due to progress separately by updating a copy of the previous Update Schedule with progress alone.
- (4) Any related impact resulting from projected delays due to calendar restrictions such winter weather or TOYR shall be deferred until after the delays have actually occurred.
- (5) The Retrospective SIA Schedule submission shall include “.pdf” copies and electronic backup copies of the SIA Schedules in the same file format as the Update Schedule.

B. Retrospective SIA Narrative – The Retrospective SIA Narrative shall describe:

- (1) The changes to the Work or conditions or delay events, including explanation of who is responsible and why the delay is excusable.
- (2) Timeline of events associated with the delay, including all actions and waiting times.
- (3) For each update period, identify the SIA Schedule and previous Update Schedule and:
 - (a) Any changes made to the SIA Schedule, including activities added to identify delay events, deleted activities, affected activities and how the activities were affected.
 - (b) The controlling critical path activity and any causal link to the delay event.
 - (c) Any shifts to the Critical Path, Milestone, or the Project Completion Date.
- (4) Any actions taken or proposed to mitigate the impact.
- (5) A summary of any incremental time gains or losses in the Milestones, or the Project Completion Date for each update period.

The Engineer will review the Contractor’s request and SIA and will respond within 14 days of submittal. The Contractor must adhere to the notice of a change, request for time extension, and SIA submission requirements; as well Section 105.19 of the Specifications to preserve their rights to file a claim. The Contractor’s notice of a change, a subsequent meeting with the Engineer, or submittal of a request for modification of the Contract as defined herein, shall not constitute a notice of intent to file a claim as required by Section 105.19. *No part of this provision is intended to alter, replace, or supersede Section 105.19 of the Specifications.*

VI. Monitoring the Work and Assessing Progress

The Engineer will monitor and assess progress of the Work regularly relative to the SOR to identify deviations from the Contractor’s scheduled performance and to determine if progress is satisfactory according to the following:

1. Progress and Coordination Meetings

Once the Work is underway and until the Project is completed, the Contractor shall keep the Engineer up-to-date on the short-term work plan on a regular basis, including any changes in the work plan or issues that may impact the schedule, as follows:

- A. **Weekly Look-Ahead Schedule** – Unless directed otherwise by the Engineer, the Contractor shall furnish in Bar Chart format, a detailed Two-Week Look-Ahead (TWLA) Schedule to the Engineer every week on a day as mutually agreed upon. The TWLA Schedule shall depict in a greater level of detail, the daily operations, showing actual dates for work performed since the last TWLA Schedule submission and planned dates for work to be performed in the upcoming two (2) weeks. The daily operations included in the TWLA Schedule shall specifically reference the applicable Activity IDs in the Project Schedule. The TWLA Schedule may be prepared using a computer software or by hand.
- B. **Monthly Progress Meetings** – Unless directed otherwise by the Engineer, the Contractor shall attend a monthly progress meeting with the Engineer on a day as agreed upon. At the progress meeting the Contractor shall furnish a 30-day Look-ahead Schedule Report and shall be prepared to discuss the current status of the Project, work performed during the last period, on-going work, and work planned for the following thirty (30) days; as well as any issues that are currently impacting the schedule or anticipated to impact the schedule. The 30-day Look-ahead Schedule shall be based on the Contractor’s current Update Schedule, showing actual dates for work performed during the last update period and planned dates for work to be performed in the upcoming thirty (30) days.

2. **Progress Evaluation and Unsatisfactory Performance**

- A. **Progress Deficiency and Schedule Slippage** – The Engineer will assess the current status of the Work each month, based on the monthly Update Progress Schedule submission, and relative to the SOR. The Contractor’s actual progress may be considered unsatisfactory, as determined by the Engineer, if any of the following conditions occur:
 - (1) The Actual Progress Percent Complete for Work completed to date, based on the current estimate, falls behind the Baseline Cumulative Progress Percent Complete by more than ten (10) percent, relative to the SOR.
 - (2) A Contract milestone or the Project Completion Date is currently projected to occur more than fourteen (14) days after the date specified in the Contract, as applicable.
- B. **Notice of Unsatisfactory Performance** – When the Engineer determines that actual progress of the Work is unsatisfactory, the Engineer will issue a written notice of unsatisfactory performance to the Contractor. The Engineer will also advise the Contractor that five (5) percent retainage of the monthly progress estimate is being withheld and will continue to be withheld as described in Section 109.08(c), for each month the Contractor’s actual progress is remains unsatisfactory. Within fourteen (14) days from the date of receipt of the Engineer’s notice, the Contractor shall respond by submitting a written statement describing any actions taken or proposed by the Contractor to correct the progress deficiency. If the Contractor’s response includes a proposed recovery plan, the current Project Schedule shall be modified accordingly to reflect the Contractor’s proposed recovery plan. The Contractor may submit to the Engineer a written explanation along with supporting documentation to establish that such delinquency is attributable to conditions beyond its control. If the Engineer accepts the Contractor’s recovery plan, the modified Project Schedule showing the recovery plan will be considered the current Update Schedule and will not replace the SOR.

If the Contractor fails to respond within the time required, or the response is unacceptable, its prequalification status may be changed as provided in Section 102.01 of the Specifications, and the Contractor may be temporarily disqualified from bidding on contracts with the Department as provided in Section 102.08, if progress remains unsatisfactory at the time of preparation of the next monthly progress estimate. The Engineer may delay these actions when a Contract time extension is under consideration.

VII. Measurement and Payment

There will be no separate payments for Progress Schedule, TWLA Schedule, or SIA submissions, or for attending scheduling meetings. All costs associated with the preparation and submission of the Baseline Progress Schedule, Update Progress Schedule, Revised Baseline Progress Schedule, TWLA Schedule, and SIA; or attendance of schedule meetings shall be considered incidental.

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 109—MEASUREMENT AND PAYMENT**

SECTION 109—MEASUREMENT AND PAYMENT of the Specifications is amended as follows:

SECTION 109.08—Partial Payments is replaced in its entirety with the following:

(a) **General**

Partial payments will be based on a monthly progress estimate consisting of approximate quantities and value of work performed as determined by the Engineer. When the method of measurement for a Contract item is in units of each or lump sum, the value of work accomplished for partial payment will be determined on a pro rata basis. Partial payments will be made once each month for the work performed in accordance with the Contract requirements. The Contractor will be given the opportunity to review the monthly progress estimate prior to each partial payment. Upon final acceptance, one last monthly estimate will be prepared and any additional payment due will be vouchered for payment.

The monthly progress estimates will be prepared in accordance with the following schedule:

1. **Contractor companies whose name begins with the letter A through F:** The monthly progress estimate will be prepared on the 4th day of each month, beginning on the first 4th day following the date of the Contract execution, and on the same day of the succeeding months as the work progresses.
2. **Contractor companies whose name begins with the letter G through P:** The monthly progress estimate will be prepared on the 11th day of each month, beginning on the first 11th day following the date of the Contract execution, and on the same day of the succeeding months as the work progresses.
3. **Contractor companies whose name begins with the letter Q through Z:** The monthly progress estimate will be prepared on the 20th day of each month, beginning on the first 20th day following the date of the Contract execution, and on the same day of the succeeding months as the work progresses.

For contracts without a payment bond, the Contractor shall submit to the Engineer a letter from each materials supplier and subcontractor involved stating that the Contractor has paid or made satisfactory arrangements for settling all bills for materials and subcontracted work that was paid on the previous month's progress estimate. The Department will use the source of supply letter and approved subletting request to verify that certifications have been received for work that was paid on the previous monthly estimate. The Contractor shall furnish these and other certificates as are required as a prerequisite to the issuance of payment for the current monthly estimate.

The Department may withhold the payment of any partial or final estimate voucher or any sum(s)

thereof from such vouchers if the Contractor fails to make payment promptly to all persons supplying equipment, tools, or materials; or for any labor he uses in the prosecution of the Contract work.

Unless otherwise provided under the terms of the Contract, interest shall accrue at the rate of one percent per month.

Contractors doing business as an individual must provide their social security numbers; proprietorships, partnerships, and corporations must provide their federal employer identification numbers.

(b) Payment to Subcontractors

Payment to subcontractors shall be in accordance with the provisions of Code of Virginia § 2.2- 4354 and § 2.2-4355 as follows.

1. Department has paid Contractor for Subcontractor's Work.

Upon the Department's payment to the Contractor for the subcontractor's portion of the work as shown on the monthly progress estimate and the receipt of payment by the Contractor for such work, the Contractor shall make compensation in full to the subcontractor. For the purposes of this Section, payment of the subcontractor's portion of the Work shall mean that payment has been issued for that portion of the Work that was identified on the monthly progress estimate for which the subcontractor has performed service.

The Contractor shall take one of the following two actions within 7 days after receipt of payment from the Department for the subcontractor's portion of the Work as shown on the monthly progress estimate:

- a. Pay the subcontractor for the proportionate share of the total payment received from the agency attributable to the Work performed by the subcontractor; or
- b. Notify the Department and subcontractor, in writing, of his intention to withhold all or a part of the subcontractor's payment along with the reason for nonpayment.

In the event payment is not made as required, the Contractor shall pay interest at the rate of one percent per month, unless otherwise provided in the Contract, to the subcontractor on all amounts that remain unpaid after 7 days, except for the amounts withheld as provided in this Section.

2. Department has not paid Contractor for Subcontractor's Work.

In the event that the Contractor has not received payment from the Department for work performed by a subcontractor under the Contract, the Contractor is liable for the entire amount owed to such subcontractor and shall pay such subcontractor within 60 days of the receipt of an invoice following satisfactory completion of the work for which the subcontractor has invoiced. The Contractor shall not be liable for amounts otherwise reducible due to the subcontractor's noncompliance with the terms of the Contract. However, in the event that the Contractor withholds all or part of the amount invoiced by the subcontractor under the terms of the Contract, the Contractor shall notify the subcontractor within 50 days of the receipt of such invoice, in writing, of his intention to withhold all or part of subcontractor's payment with the reason for nonpayment, specifically identifying the contractual noncompliance, the dollar amount being withheld, and the lower-tier subcontractor responsible for the contractual noncompliance. Payment by the party contracting with the Contractor shall not be a condition precedent to payment to any lower-tier subcontractor, regardless of the Contractor receiving payment for amounts owed to them. Any contrary provisions shall be unenforceable.

3. Nothing in this Section shall be construed to (i) apply to or prohibit the inclusion of any retainage provisions in a construction contract or (ii) apply to contracts awarded solely for professional services as that term is defined in Code of Virginia § 2.2-4301 where the Department is contracting directly with an architectural and engineering firm.

4. The Contractor shall include in each of its subcontracts provisions requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower tier subcontractor.

5. If the Contractor fails to make payment to the subcontractor within the time frames specified herein, the subcontractor shall notify the Engineer and the Contractor's bonding company in writing. The Contractor's bonding company shall be responsible for insuring payment in accordance with this Section and Section 107.01.

(c) **Retainage**

If the Engineer determines the Contractor's progress is unsatisfactory according to Section 108.03 or other applicable Contract documents, the Engineer will send a notice of unsatisfactory progress to the Contractor advising him of such determination. This notification will also advise the Contractor that five percent retainage of the monthly progress estimate is being withheld and will continue to be withheld for each month the Contractor's actual progress is determined to be unsatisfactory.

When the Engineer determines that the Contractor's progress is satisfactory in accordance with these requirements, the 5 percent retainage previously withheld because of unsatisfactory progress will be released in the next monthly progress estimate, and the remaining monthly progress estimates will be paid in full provided the Contractor's progress continues to be satisfactory.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
SECTION 512—MAINTAINING TRAFFIC – NON-SCHEDULES (LUMP SUM)**

SECTION 512 of the Specifications is amended as follows:

Section 512.03—Procedures is amended to include the following:

The Contractor shall submit a plan, sequenced with his plan of operations, to the Engineer for maintenance of traffic for his review prior to commencement of work. The plan shall be designed and implemented according to the *Virginia Work Area Protection Manual*, the *MUTCD* and the Department generated project-specific temporary traffic control plan or requirements provided in the Contract. When the Department provides a sequence of construction in the Contract, the plans or estimated quantities for maintenance of traffic items are for estimating purposes only.

Section 512.04—Measurement and Payment is replaced with the following:

Maintenance of traffic including flagger service, pilot vehicles, electronic arrows, warning lights, channelizing devices, traffic barrier service, traffic barrier service guardrail terminals, impact attenuator service, construction pavement markings, construction pavement message markings, temporary pavement markers, eradication of existing pavement markings, temporary detours, aggregate material, Type III barricades, construction signs, and truck mounted attenuators will be paid for on a lump sum basis as follows:

- (a) **Per structure** wherein, the lump sum price bid shall be for providing maintenance of traffic for a single structure identified in the Contract by its structure number. No measurement will be made.
- (b) **Per route and location(s)** wherein, the lump sum price bid shall be for providing maintenance of traffic for work at a specified location on a single specified route or, specified locations grouped together on a single specified route as one lump sum item. No measurement will be made as detailed in the Contract.

The Contractor's price bid shall include, but not be limited to; providing a person to meet the basic work zone traffic control and intermediate work zone traffic control requirements of Section 105.14 of the Specifications; furnishing, placing, maintaining, replacing, relocating, adjusting, aligning, removing, flagger service, pilot vehicles, warning lights, electronic arrow, channelizing devices, traffic barrier service, traffic barrier service guardrail terminals, impact attenuator service, construction pavement markings, construction pavement message markings, temporary pavement markers, eradication of existing pavement markings, temporary detours, aggregate material, Type III barricades, construction signs, truck mounted attenuators, and all labor, material and equipment incidental to completing this work according to the *Virginia Work Area Protection Manual* and traffic engineering guidelines and principles. Site specific adjustments to maintenance of traffic operations specified by the *Virginia Work Area Protection Manual* and the *MUTCD* such as quantity, location, or spacing of traffic control devices within construction limits or on any approaches to the project, required by the Engineer to improve traffic operation or safety shall be considered an alteration in the work according to the provisions of Section 104.02 of the Specifications.

The Contractor will be paid 30 percent of the lump sum bid price upon satisfactory installation of the required maintenance of traffic items to commence construction operations and active prosecution of the work. Contingent upon active pursuit of the work, the Contractor will receive monthly payments for maintenance of traffic based on the daily dollar amount of the bid price for maintenance of traffic until 90 percent of the unit bid price is paid. The remaining 10 percent will be paid for after all maintenance of traffic items are removed at final acceptance of the Contract.

Additional traffic control layout detail items that are determined and authorized by the Engineer to be necessary to ensure the safety of the traveling public and are **in addition to the number required** by the traffic control layout details in the *VWAPM*, the drawings in herein, and the Contract, will be measured and paid for as follows, therefore, the provisions of Section 104.02 will not apply:

- **Flagger service** shall include furnishing certified flagger, paddles and safety equipment. Where additional flagger service is required, as determined and authorized by the Engineer, flagger service will be measured in hours and paid for at the rate of **\$15** per hour of use.

When flagger service is used for the Contractor's convenience, such as for ingress and egress of construction equipment or materials, payment will not be made. **Note:** The required flaggers described in the two flagging conditions in Section 512.03(h) of the Specifications will not be measured as a separate pay item but will be considered incidental to the traffic control operations described.

- **Pilot vehicles** shall include furnishing vehicles, necessary warning devices, drivers, fuel, and maintenance. Where additional pilot vehicles are required as determined and authorized by the Engineer, such vehicles will be measured in hours of actual use and will be paid for at the rate of **\$23** per hour of employed use.
- **Electronic arrows** shall include furnishing arrow panels, fuel, maintenance, and a truck or trailer having flashing amber warning lights for mobility of the electronic arrow. Where additional electronic arrows are required as determined and authorized by the Engineer, electronic arrows will be measured in hours of actual use and will be paid for at the rate of **\$5** per hour for each hour of employed use.
- **Warning lights** for use on sign panels or installed on traffic barrier service will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include maintaining, relocating, and removing.
- **Group 1 channelizing devices** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items.
- **Group 2 channelizing devices**, not designated in the Contract as a separate pay item but where additional Group 2 channelizing devices are required as determined and authorized by the Engineer, these will be measured in days and paid for at the rate of **\$1** per day per device. This price shall include furnishing and maintaining devices, removing devices when no longer required and signs. When group 2 channelizing devices are moved to a new location or are removed and re-installed at the same location, they will be measured for separate payment. However, when group 2 channelizing devices are moved within the lane or from one lane to another by simply moving the devices across the lane edge line without removal from the roadway, no additional payment will be made.
- **Traffic barrier service** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include warning lights, delineators, barrier vertical panels, fixed object attachments, patching restraint holes, fixed object attachments used on traffic barrier service in locations where existing guardrail is in place including restoring existing guardrail to its original condition, maintaining, and removing traffic barrier service when no longer required.
- **Traffic barrier service guardrail terminal** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include furnishing, installing, moving to a new location as directed or approved by the Engineer, and removing when no longer needed.
- **Impact attenuator service** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include Impact attenuators used with barrier openings for equipment access.
- **Construction pavement markings** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include furnishing marking materials, preparing the surface, adhesive, installation, maintaining, removing removable markings when no longer required, inspections, and testing.
- **Construction pavement message markings** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include marking materials, preparing the surface, adhesive, maintaining, and removing removable markings when no longer required.
- **Temporary pavement markers** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include furnishing and installing pavement markers, surface preparation, adhesive, and maintaining and replacement of lost or damaged markers and removing the pavement markers and adhesive when no longer required.
- **Aggregate material** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include preparing the grade and furnishing, placing, maintaining, and removing material as required.

- **Type III barricades** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include furnishing and placing barricades, retroreflective sheeting, maintaining, relocating to new locations and removing when no longer required.
- **Construction signs** except those already required by the Contract (which includes those signs required by the VWAPM, the drawings herein, and such signs as “**Loose Gravel**”, “**Unmarked Pavement**”, and “**Low Shoulder**” that may be required by the Engineer to ensure the safety of the traveling public due to the nature of the Contractor’s operations) when determined and authorized by the Engineer, will be measured in square feet and paid for at **\$20** per square foot. This payment, based on square footage, shall be compensation for furnishing, placing, relocating, covering, uncovering, and removing the sign(s) when no longer needed for the duration of the project; multiple payments for the same sign used more than once will not be allowed. Such extra signs will consist of either a greater number of the standard signs already listed in the applicable traffic control layout details in the VWAPM, the drawings herein, and the Contract, or other signs included in the VWAPM but not originally considered applicable for use on this Contract.
- **Truck mounted attenuators**, not designated in the Contract as a separate pay item but where additional Truck Mounted Attenuators are required as determined and authorized by the Engineer, these will be measured in hours of actual use required, and will be paid for at the rate of **\$22** per employed hour. This price shall include furnishing the truck mounted attenuator, mounting vehicle, lights, electronic arrows, if allowed but not required, and maintenance. When electronic arrows are used at the option of the Contractor in lieu of the rotating or high intensity amber strobe light, the cost of the electronic arrow shall be included in the price for truck mounted attenuators. When electronic arrows are required and authorized as determined by the Engineer and not incidentally mounted (and permitted) on such truck mounted attenuator support vehicles, they will be paid for separately as specified herein.
- **Portable traffic control signal** will not be measured for separate payment. The cost thereof shall be included in the price for other appropriate pay items. This shall include portable traffic control signal equipment, installation, energy source, maintaining, adjusting, aligning, removing and relocating equipment.
- **Portable Changeable Message Signs (PCMS)**, not designated in the Contract as a separate pay item but where additional Portable Changeable Message Signs are required as determined and authorized by the Engineer, these will be measured in hours of actual use and paid for at the rate of **\$15** per hour for each hour of employed use. This price shall be full compensation for furnishing or mobilizing the unit(s) to the project, maintenance, operation, and repositioning the unit(s).

Payment will be made under:

| <u>Pay ItemA</u> | <u>Pay Unit</u> |
|--|-----------------|
| Maintenance of traffic (Structure No.) | Lump sum |
| Maintenance of traffic (Route and Location[s]) | Lump sum |

TECHNICAL SPECIFICATIONS

SECTION 02000 ADDITIVE BID ITEMS

PART I - GENERAL

This Section includes administrative and procedural requirements governing Additive Items.

Selected materials and equipment are specified in the Contract Documents by the Additive Items. The Additive Items shall include installation. Additive Items have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when additional information is available for evaluation. Additive Items are in addition to the base bid and are in addition to items shown on the design plans. If necessary, additional requirements that are not part of the design plans or are not included in Additive Items will be issued by Change Order.

Types of Additive Bid Items include the following:

1. Volume/quantity additive bid items.
2. Unit cost additive bid items.

Additive Bid Items shall be inclusive of all labor and materials for work complete and in place. Adjustments for lesser or greater amounts of volume/quantity and unit cost additive bid items will be made by change order. Procedures for submitting and handling Change Orders are included in The General Conditions of the contract for construction.

PART II- PRODUCTS

Refer to applicable sections for conformance with project requirements.

PART III- EXECUTION

Prior to use of Additive Bid Items, Owner or Owner's representative must approve.

Coordinate materials and their installation for each allowance with related materials and installations to ensure that each additive item is completely integrated and interfaced with related work.

PART IV- MEASUREMENT AND PAYMENT

All materials will be measured in accordance with VDOT Road and Bridge Specifications.

Payment will be made for all materials approved and installed in accordance with project specifications.

At the earliest feasible date after completion of the work involving volume/quantity, advise the Engineer of the final quantity of each product or system by an additive item. Final Contract amount shall be adjusted upward or downward based on actual quantity authorized and unit prices. Unused quantities of Additive Bid Items will be credited back to the contract. Quantities shall be verified by Owner's representative.

END OF SECTION

SECTION 02050

BIKE /PEDESTRIAN FACILITIES AND ADA COMPLIANCE- TOLERANCES

The following information regarding tolerances is in addition to and pertains to items that can be found in **SECTION 504, SIDEWALKS, STEPS, AND HANDRAILS, of the ROAD AND BRIDGE SPECIFICATIONS**, as well as any other multi-purpose paths or accommodations that must meet ADA standards found on the plans.

SECTION 504 references SECTION 316 which has the following requirements for finished grade:

316.05—Thickness and Finished Grade Tolerances

After placement of the final pavement layer, finished grade elevations shall be within ± 0.04 foot of the elevations indicated in the plans, unless otherwise specified, provided that the actual cross slope does not vary more than 0.20 percent from the design cross slope indicated in the plans and the pavement thickness conforms to the thickness tolerances specified herein.

If the Engineer determines either the finished grade elevations or cross slope exceeds the tolerances specified, the Contractor shall submit to the Engineer for approval a plan of corrective action.

Finished grades shall be constructed to the proposed cross sections, and cross slopes shall be constructed to the proposed typical section slopes indicated on the plans. The Contractor shall correct or replace areas found to deviate from the indicated cross slopes by 0.20 percent or more at no additional cost to the Department.

For the items referenced above, Section 316.05- Thickness and Finished Grade Tolerances is revised to reflect:

After placement of material, finished grade elevations shall be at the grades specified on the plans. Any deviation in finished grade that would produce a finished product that does not comply with plan and ADA standards , will require the Contractor to remove and replace with work that is compliant with plans and ADA standards.

Finished grades shall be constructed to the proposed cross sections, and cross slopes shall be constructed to the proposed typical section slopes indicated on the plans. The Contractor shall correct or replace areas found to deviate from the indicated cross slopes at no additional cost to the Department.

END OF SECTION

SECTION 02100

CONTROL OF MATERIAL

The following information is in addition to that found in SECTION 106 – CONTROL OF MATERIAL the Road and Bridge Specifications:

Section 106.04 is revised to add/revise the following definitions.

SUITABLE/SATISFACTORY SOIL MATERIALS: Soils that are defined as on-site soils complying with ASTM D2487 soil classification groups SC or CL. Borrow material from off-site sources shall meet the above satisfactory soil classifications, shall have a minimum CBR value of 10 in accordance with VDOT VTM-8 and must be approved by the Engineer prior to placement.

UNSUITABLE/UNSATISFACTORY SOIL MATERIALS: Soils that are defined as those complying with ASTM D2487 soil classification groups CH, MH, OL, OH, and PT.

END OF SECTION

SECTION 02150

CLEARING AND GRUBBING

PART 1 GENERAL

This work shall consist of clearing, grubbing, removing, and disposing of vegetation, debris, and other objects within the construction limits except for vegetation and objects that are designated to be preserved, protected, or removed in accordance with the requirements of other provisions of the VDOT Road and Bridge specifications.

END OF SECTION

SECTION 02200

EARTHWORK

PART I - GENERAL

This work shall consist of constructing roadway earthwork in accordance with Section 303 of the current edition of the Road and Bridge Specifications and in conformity with the specified tolerances for the lines, grades, typical sections, and cross sections shown on the plans or as established by the Engineer. Earthwork shall include regular, borrow, undercut, and minor structure excavation; constructing embankments; disposing of surplus and unsuitable material; shaping; compaction; sloping; dressing; and temporary erosion and siltation control work.

Control of surface drainage and groundwater is critical because of the moisture sensitivity of on-site soils. The Contractor shall be required to provide adequate and positive site drainage throughout construction. Any subgrade soils which have been weakened due to inadequate drainage, saturation and/or disturbance shall be undercut and replaced with compacted structural fill at no additional cost to the Owner.

Construction activities shall be planned to maintain positive drainage away from the construction area throughout grading operations.

The following information is in addition to that found in the Road and Bridge Specifications:

Excavation for this project is UNCLASSIFIED, and includes excavation to subgrade (or subsoil) elevations indicated, regardless of character of materials and obstructions encountered.

END OF SECTION

SECTION 02250

SUBGRADE AND SHOULDERS

PART 1 GENERAL

This work shall consist of constructing the subgrade and shoulders to the cross section and grade shown on the plans and within the specified tolerances indicated on the plans and in these specifications.

The following information is in addition to that found in SECTION 305 – SUBGRADE AND SHOULDERS the Road and Bridge Specifications:

Prior to placement of SUBBASE COURSE, as detailed in SECTION 308, Subgrade shall be proofrolled in addition to required compaction tests per Section 305.03. Proofrolling is defined as:

PROOFROLLING: All roadway subgrade shall be proofrolled with a loaded tandem dump truck. The Geotechnical Inspector and County Construction Coordinator inspector, as applicable, will monitor the proofrolling and determine areas of unsuitable bearing material, with inspection report/results given to Engineer and Owner. Any unacceptable movement observed during the proofroll shall be a basis for failing the subgrade.

END OF SECTION

SECTION 02300

MAINTENANCE OF TRAFFIC (MOT)

PART 1 GENERAL

This work shall include but is not limited to 1) maintaining and protecting traffic through areas of construction, 2) maintaining public and private entrances and mailbox turnouts, 3) constructing and obliterating detours, 4) installing and maintaining temporary roads and travel surfaces (gravel or asphalt), 5) installing, maintaining, and eradicating(if necessary) all types of temporary pavement markings and 6) protecting the traveling public within the limits of the project and over detours that are not a part of the state highway system in accordance with the contract documents. Temporary pavement markings/lane delineators shall be installed no later than 24 hours after existing markings are removed.

The following revises **Section 512.04 – Measurement and Payment** of the Road and Bridge Specifications and **SS51202-0909**:

Maintenance of Traffic will be a lump sum price for all materials, labor, and other items needed to implement all phases of the Traffic Maintenance Plan as shown on the plans or as changed by the Contractor. Payment on this line item will be based on the percentage of time elapsed under the contract. For example, on an 8-month project, each month the allowable charge against this line item would be 12.5% of the total lump sum.

END OF SECTION

SECTION 02800



DIVISION II – MATERIALS

SPECIAL PROVISION COPIED NOTES (SPCNs), SPECIAL PROVISION (SPs) and SUPPLEMENTAL SPECIFICATIONS (SSs)

These sheets may also be found at the following locations:

Global Web Access: <http://www.virginia-dot.org/business/const/spec-default.asp>

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
ROADSIDE DEVELOPMENT AND EROSION
CONTROL**

July 12, 2016

I. DESCRIPTION

This work shall consist of providing erosion and siltation control for areas disturbed by excavation, trenching, grading or construction operations in accordance with this provision, *Virginia Erosion and Sediment Control Law, Regulations and Certification Regulations* and as directed by the Engineer.

II. MATERIALS

Silt fence shall be in accordance with Section 245 of the Specifications.

Seed shall be in accordance with Section 244 of the Specifications. The second sentence of the first paragraph of Section 244.02 (c) is deleted.

Fertilizer shall be in accordance with Section 244 of the Specifications. Mulch shall be in accordance with Section 244 of the Specifications.

III. PROCEDURES

Prior to commencing excavation or grading operations the Engineer will review the area and direct the Contractor when and where any required erosion and siltation control devices shall be installed. All temporary silt fence specified will be measured and paid for in accordance with Section 303 of the Road and Bridge Specifications.

The Contractor shall exercise care when performing open trench or foundation excavations, the excavated material shall be confined along the open trench or foundation and all excavated material shall be used as backfill or removed from the construction site at the end of the day. Disposal of unsuitable material shall be in accordance with Section 106 of the Specifications. In the event the Contractor does not use the material as backfill or remove the material from the site at the end of the day, the Contractor shall install temporary silt fence at no additional cost to the Department to prevent erosion.

The Contractor shall restore and seed areas disturbed by excavation, grading, or construction operations. Seeding shall be in accordance with Section 603 of the Specifications with the following seed mixes at the listed rates per acre:

| Bristol, Culpepper, Fredericksburg, Lynchburg, Richmond, Salem and Staunton Districts | |
|--|---------------------------------------|
| FALL – WINTER 9-5 to 4-1 | SPRING – SUMMER 4-1 to 9-5 |
| 20 lbs. Winter Wheat or Barley (Nurse Crop) | 10 lbs. Annual Ryegrass (Nurse Crop) |
| 100 lbs. Tall Fescue | 100 lbs. Tall Fescue |

Slopes 2:1 or greater – Add 20 pounds of Crownvetch or Sericea Lespedeza to the above mix

| Hampton Roads District | |
|---|---------------------------------------|
| FALL – WINTER 9-5 to 4-1 | SPRING – SUMMER 4-1 to 9-5 |
| 20 lbs. Winter Wheat or Barley (Nurse Crop) | 10 lbs. Annual Ryegrass (Nurse Crop) |
| 100 lbs. Tall Fescue | 100 lbs. Tall Fescue |
| 50 lbs. Bermudagrass (Unhulled) | 50 lbs. Bermudagrass (Hulled) |

Slopes 2:1 or greater – Add 20 pounds of Sericea Lespedeza to the above mix NOTE: Hard Fescue may be substituted for Tall Fescue

Mulch shall be applied at a rate of two-tons per acre in accordance with Section 603 of the Specifications.

Fertilizer shall be 15-30-15 applied at a rate of 600-pounds per acre in accordance with Section 603 of the Specifications.

IV. MEASUREMENT AND PAYMENT

The seeding shall include site preparation, seed, fertilizer, mulching; finishing and maintaining seeded areas until final acceptance, and restoring disturbed areas prior to final acceptance.

This work will not be measured for separate payment but will be included in the price bid for other items of work.

(SPACE LEFT BLANK INTENTIONALLY)

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 202—FINE AGGREGATE**

SECTION 202—FINE AGGREGATE of the Specifications is revised as follows:

Section 202.02 – Materials is amended by inserting the following:

Lightweight aggregate can also be used as a fine aggregate and shall conform to Section 206.

Section 202.03(e) – Deleterious Material is replaced with the following:

Deleterious Material: The amount of deleterious material in sands shall be not more than the following:

| Material | % by Weight | AASHTO Test Method |
|--|--------------------|-------------------------------|
| Clay lumps | 0.25 | T 112 |
| Shale, mica, coated grains, soft or flaky particles | 1.0 | T 113 |
| Organic material | 0 | T 21 |
| Total material passing No. 200 sieve by washing ^{1,2} | | T 11 and T 27 |
| For use in concrete subject to abrasion | 3 | |
| For other concrete | 5 | |

¹In the case of stone sand, if the material passing the No. 200 sieve is dust of fracture, essentially free from clay and shale, the percentages shown for use in concrete subject to abrasion and in other concrete may be increased to 5% and 7%, respectively.

²In the case of blends of stone sand and natural sand, provided the natural sand contains no greater than 3% passing the No. 200 sieve for use in concrete subject to abrasion and no greater than 5% for other concrete, then the stone sand limits of 5% and 7% shall apply to the blend.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 203 – COARSE AGGREGATE**

SECTION 203 – COARSE AGGREGATE is amended as follows:

Section 203.02 – Materials is amended by replacing the first paragraph with the following:

Coarse aggregate shall consist of crushed stone, crushed slag, crushed or uncrushed gravel, or lightweight aggregate. Coarse aggregate shall be clean, hard, tough, and durable pieces free from: adherent coatings and deleterious amounts of friable, thin, elongated, or laminated pieces; soluble salts; or organic materials.

Section 203.02(e) – Lightweight coarse aggregate is inserted as follows:

Lightweight coarse aggregate shall conform to Section 206.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 204 – STONE FOR MASONRY, RIPRAP, POROUS BACKFILL, AND GABIONS**

SECTION 204 – STONE FOR MASONRY, RIPRAP, POROUS BACKFILL, AND GABIONS of the Specifications is amended as follows:

Section 204.02(c) – Porous backfill is replaced with the following:

Porous backfill shall be No. 78 or 8 aggregate, at least Grade B. Crushed glass meeting the gradation requirements specified in Section 203.02(d) may be directly substituted for No. 78 and 8 aggregates. Lightweight aggregate conforming to Section 206 for coarse aggregate and meeting the 3/4-inch or 1/2-inch grading in AASHTO M 195 may be directly substituted for No. 78 and 8 aggregates.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 206 – LIGHTWEIGHT AGGREGATE**

SECTION 206 – LIGHTWEIGHT AGGREGATE is replaced by the following:

206.01 – Description

These specifications cover lightweight aggregate used in the production of hydraulic cement concrete, internally cured concrete using pre-wetted lightweight aggregate, and asphalt surface treatment.

206.02 – Detail Requirements

Lightweight aggregate shall consist of clay, shale, or slate expanded through a sintering or rotary kiln.

The requirements for normal weight aggregate and concrete shall apply to lightweight concrete when a reduced density is specified or when internally-cured concrete (where a portion of the fine aggregate is replaced with pre-wetted lightweight fine aggregate) is specified, except for the following:

- (a) **Lightweight aggregate used in hydraulic cement concrete** shall conform to AASHTO M 195 and the following requirements.
1. **Grading:** Gradation for fine and coarse aggregates shall conform to AASHTO M 195. Tests to verify conformance shall be performed in accordance with AASHTO T 27.
 2. **Soundness:** Soundness for fine aggregate shall conform to the freeze and thaw requirements of Table II-2. Soundness for coarse aggregate shall conform to the freeze and thaw requirements of Table II-4. Soundness shall be tested in accordance with AASHTO T 103.
 3. **Void Content:** Void content requirements for fine aggregate shall not apply to lightweight aggregate.
 4. **Deleterious Material:** The amount of deleterious material in fine aggregate shall conform to Section 202 for stone sand. The amount of deleterious material in coarse aggregate shall conform to Section 203.
 5. **Abrasion Loss:** Abrasion loss for coarse aggregate shall conform to the Grade A requirements in Table II-5.
 6. **Flat and Elongated Particles:** Coarse aggregate shall conform to Section 203.
- (b) **Lightweight aggregate used for asphalt surface treatment** shall conform to AASHTO M 195 except that Sections 3, 6, and 8 will not apply. Grading shall conform to Table II-3 except that the maximum percentage by weight of material passing the No. 8 sieve shall be 16% and passing the No. 16 sieve shall be 9%.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATION
SECTION 210 – ASPHALT MATERIALS**

SECTION 210 – ASPHALT MATERIALS of the Specifications is amended as follows:

Section 210.04(e) – Thin Hot Mix Asphalt Concrete Overlay tack coat is inserted as follows:

Thin Hot Mix Asphalt Concrete Overlay tack coat shall conform to the following:

| Test on Emulsion | Method | Min | Max |
|---|---------------|------------|------------|
| Viscosity at 77° F, SSF | AASHTO T 59 | 20 | 100 |
| Sieve Test ¹ , % | AASHTO T 59 | — | 0.05 |
| 24 hour storage stability ² , % | AASHTO T 59 | — | 1 |
| Residue from distillation at 400° F ³ , % | AASHTO T 59 | 63 | |
| Oil portion from distillation ml of oil per 100g emulsion | | | 2 |
| Demulsibility, % 35 ml 0.02 N CaCl ₂ or 35 ml 0.8% dioctyl sodium sulfosuccinate | AASHTO T 59 | 60 | |

¹The sieve test is waived if successful application of the material has been achieved in the field.

²After standing undisturbed for 24 hours, the surface shall show no white, milky colored substance, but shall be a smooth homogeneous color throughout.

³AASHTO T59 with modifications to include a 400° F +/- 10° F maximum temperature to be held for a period of 15 minutes.

| Test on Residue From Distillation | Method | Min | Max |
|--|---------------|------------|------------|
| Elastic Recovery ¹ , % | AASHTO T 301 | 60 | — |
| Penetration @ 77° F, 100 g, 5 sec. dmm. | AASHTO T 49 | 60 | 150 |

¹With exception that the elongation is 20 cm and the test temperature is 50° F.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 211 – ASPHALT CONCRETE**

SECTION 211 – ASPHALT CONCRETE of the Specifications is amended as follows:

Section 211.01 – Description is replaced with the following:

Asphalt concrete shall consist of a combination of mineral aggregate and asphalt material mixed mechanically in a plant specifically designed for such purpose. An equivalent single-axle load (ESAL) will be established by the Engineer, and SUPERPAVE mix types may be specified as one of the types listed as follows:

| Mix Type ¹ | Equivalent Single-Axle Load (ESAL) Range (millions) | Minimum Asphalt Performance Grade (PG) ² | Nominal Maximum Aggregate Size ³ |
|-----------------------|---|---|---|
| SM-4.75A | 0 to 3 | 64S-16 | No. 4 |
| SM-4.75D | 3 to 10 | 64H-16 | No. 4 |
| SM-4.75E | 3 to 10 | 64E-22 | No. 4 |
| SM-9.0A | 0 to 3 | 64S-16 | 3/8 in |
| SM-9.0D | 3 to 10 | 64H-16 | 3/8 in |
| SM-9.0E | Above 10 | 64E-22 | 3/8 in |
| SM-9.5A | 0 to 3 | 64S-16 | 3/8 in |
| SM-9.5D | 3 to 10 | 64H-16 | 3/8 in |
| SM-9.5E | Above 10 | 64E-22 | 3/8 in |
| SM-12.5A | 0 to 3 | 64S-16 | 1/2 in |
| SM-12.5D | 3 to 10 | 64H-16 | 1/2 in |
| SM-12.5E | Above 10 | 64E-22 | 1/2 in |
| IM-19.0A | Less than 10 | 64S-16 | 3/4 in |
| IM-19.0D | 10 to 20 | 64H-16 | 3/4 in |
| IM-19.0E | 20 and above | 64E-22 | 3/4 in |
| BM-25.0A | All ranges | 64S-16 | 1 in |
| BM-25.0D | Above 10 | 64H-16 | 1 in |

¹SM = Surface Mixture; IM = Intermediate Mixture; BM = Base Mixture

²Minimum Asphalt Performance Grade (PG) is defined as the minimum binder performance grade for the job mixes as determined by AASHTO T170 or AASHTO M332.

³Nominal Maximum Aggregate Size is defined as one sieve size larger than the first sieve to retain more than 10 percent aggregate.

Asphalt concrete shall conform to the requirements for the mix type designated on the plans or elsewhere in the Contract for use. At the Contractor's option, an approved Warm Mix Asphalt (WMA) additive or process may be used to produce the asphalt concrete (AC) mix type designated.

Table II-12A – Standard Deviation is renamed Aggregate Properties and is replaced with the following:

**TABLE II-12A
Aggregate Properties**

| Mix Type | Coarse Aggregate Properties | | | Fine Aggregate Properties | |
|----------|-----------------------------|-------------------|-------------------------|---------------------------|----------|
| | CAA | | ASTM D4791 | SE | FAA |
| | 1 fractured face | 2 fractured faces | F & E (5:1) % by weight | | |
| SM-4.75A | | | | 40% min | 40% min |
| SM-4.75D | | | | 45% min | 45% min |
| SM-4.75E | | | | 45% min | 45% min |
| SM-9.0 A | 85% min. | 80% min. | 10% max. ¹ | 40% min. | 40% min. |
| SM-9.0 D | 85% min. | 80% min. | 10% max. ¹ | 45% min. | 45% min. |
| SM-9.0 E | 95% min. | 90% min. | 10% max. ¹ | 45% min. | 45% min. |

| | | | | | |
|-----------|----------|----------|-----------------------|----------|----------|
| SM-9.5 A | 85% min. | 80% min. | 10% max. ¹ | 45% min. | 45% min. |
| SM-9.5 D | 85% min. | 80% min. | 10% max. ¹ | 45% min. | 45% min. |
| SM-9.5 E | 95% min. | 90% min. | 10% max. ¹ | 45% min. | 45% min. |
| SM-12.5 A | 85% min. | 80% min. | 10% max. ¹ | 45% min. | 45% min. |
| SM-12.5 D | 85% min. | 80% min. | 10% max. ¹ | 45% min. | 45% min. |
| SM-12.5 E | 95% min. | 90% min. | 10% max. ¹ | 45% min. | 45% min. |
| IM-19.0 A | 85% min. | 80% min. | 10% max. ¹ | 45% min. | 45% min. |
| IM-19.0 D | 95% min. | 90% min. | 10% max. ¹ | 45% min. | 45% min. |
| IM-19.0 E | 95% min. | 90% min. | 10% max. ¹ | 45% min. | 45% min. |
| BM-25.0 A | 80% min. | 75% min. | 10% max. ¹ | 45% min. | 45% min. |
| BM-25.0 D | 80% min. | 75% min. | 10% max. ¹ | 45% min. | 45% min. |

¹10 percent measured at 5:1 on maximum to minimum dimensions

Table II-13 – Asphalt Concrete Mixtures: Design Range is replaced with the following:

TABLE II-13
Asphalt Concrete Mixtures: Design Range

| Mix Type | Percentage by Weight Passing Square Mesh Sieves | | | | | | | | | | | |
|---------------|---|--------|--------|------------------|--------|--------|-------|--------|--------|--------|---------|------|
| | 1 1/2 in | 1 in | 3/4 in | 1/2 in | 3/8 in | No. 4 | No. 8 | No. 16 | No. 30 | No. 50 | No. 200 | |
| SM-4.75 A,D,E | | | | 100 ¹ | 95-100 | 90-100 | | | 30-55 | | | 6-13 |
| SM-9.0 A,D,E | | | | 100 ¹ | 90-100 | 90 | 47-67 | | | | | 2-10 |
| SM-9.5 A,D,E | | | | 100 ¹ | 90-100 | 90 | 58-80 | | | 23 max | | 2-10 |
| SM-12.5 A,D,E | | | 100 | 95-100 | 90 | 58-80 | 34-50 | | | 23 max | | 2-10 |
| IM-19.0 A,D,E | | 100 | 90-100 | 90 | -- | -- | 28-49 | | | | | 2-8 |
| BM-25.0 A,D | 100 | 90-100 | 90 | -- | -- | -- | 19-38 | | | | | 1-7 |
| C (Curb Mix) | | | max. | 100 | 92-100 | 70-75 | 50-60 | | | 28-36 | 15-20 | 7-9 |

¹A production tolerance of 1% will be applied to this sieve regardless of the number of tests in the lot.

Table II-14 – Mix Design Criteria is replaced with the following:

TABLE II-14
Mix Design Criteria

| Mix Type | VTM (%) Production | VFA (%) Design | VFA (%) Production | Min. VMA (%) | Fines/Asphalt Ratio | No. of Gyration N Design |
|-------------------------|--------------------|----------------|--------------------|--------------|---------------------|--------------------------|
| SM4.75A ^{2,4} | 3.0-6.0 | 70-75 | 70-80 | 16.5 | 1.0-2.0 | 50 |
| SM4.75D ^{2,4} | 3.0-6.0 | 70-75 | 70-80 | 16.5 | 1.0-2.0 | 50 |
| SM4.75E ^{2,4} | 3.0-6.0 | 70-75 | 70-80 | 16.5 | 1.0-2.0 | 50 |
| SM-9.0A ^{1,2} | 2.0-5.0 | 75-80 | 70-85 | 17.0 | 0.6-1.3 | 50 |
| SM-9.0D ^{1,2} | 2.0-5.0 | 75-80 | 70-85 | 17.0 | 0.6-1.3 | 50 |
| SM-9.0E ^{1,2} | 2.0-5.0 | 75-80 | 70-85 | 17.0 | 0.6-1.3 | 50 |
| SM-9.5A ^{1,2} | 2.0-5.0 | 75-80 | 70-85 | 16.0 | 0.7-1.3 | 50 |
| SM-9.5D ^{1,2} | 2.0-5.0 | 75-80 | 70-85 | 16.0 | 0.7-1.3 | 50 |
| SM-9.5E ^{1,2} | 2.0-5.0 | 75-80 | 70-85 | 16.0 | 0.7-1.3 | 50 |
| SM-12.5A ^{1,2} | 2.0-5.0 | 73-79 | 68-84 | 15.0 | 0.7-1.3 | 50 |
| SM-12.5D ^{1,2} | 2.0-5.0 | 73-79 | 68-84 | 15.0 | 0.7-1.3 | 50 |
| SM-12.5E ^{1,2} | 2.0-5.0 | 73-79 | 68-84 | 15.0 | 0.7-1.3 | 50 |
| IM-19.0A ^{1,2} | 2.0-5.0 | 69-76 | 64-83 | 14.0 | 0.6-1.3 | 50 |
| IM-19.0D ^{1,2} | 2.0-5.0 | 69-76 | 64-83 | 14.0 | 0.6-1.3 | 50 |

| | | | | | | |
|-------------------------|---------|-------|-------|------|---------|----|
| IM-19.0E ^{1,2} | 2.0-5.0 | 69-76 | 64-83 | 14.0 | 0.6-1.3 | 50 |
| BM-25.0A ^{2,3} | 1.0-4.0 | 67-87 | 67-92 | 13.0 | 0.6-1.3 | 50 |
| BM-25.0D ^{2,3} | 1.0-4.0 | 67-87 | 67-92 | 13.0 | 0.6-1.3 | 50 |

¹Asphalt content should be selected at 4.0% air voids for A & D mixes, 3.5% air voids for E mix.

²Fines-asphalt ratio is based on effective asphalt content.

³Base mix shall be designed at 2.5% air voids. BM-25A shall have a minimum asphalt content of 4.4% unless otherwise approved by the Engineer. BM-25D shall have a minimum asphalt content of 4.6% unless otherwise approved by the Engineer.

⁴ Asphalt content shall be selected at 5.0 percent air voids.

Section 211.03(d)8 – For surface mixes is replaced with the following:

For surface mixes, permeability test data shall be submitted in accordance with VTM 120 using either single point verification or the regression method for each surface mix having a different gradation. The specimen height shall be one inch for SM-4.75 mix types. If the average of the permeability results from the single point verification method exceeds 150×10^{-5} cm/sec, or if the regression method predicts a permeability exceeding 150×10^{-5} cm/sec at 7.5% voids, the Contractor shall redesign the mixture to produce a permeability number less than 150×10^{-5} cm/sec.

Section 211.04(a) – Types SM-9.0A, SM-9.0D, SM-9.0E, SM-9.5A, SM-9.5D, SM-9.5E, SM-12.5A, SM-12.5D, and SM-12.5E asphalt concrete is renamed **Types SM-4.75A, SM-4.75D, SM-4.75E, SM-9.0A, SM-9.0D, SM-9.0E, SM-9.5A, SM-9.5D, SM-9.5E, SM-12.5A, SM-12.5D, and SM-12.5E asphalt concrete** and replaced with the following:

Types SM-4.75A, SM-4.75D, SM-4.75E, SM-9.0A, SM-9.0D, SM-9.0E, SM-9.5A, SM-9.5D, SM-9.5E, SM-12.5A, SM-12.5D, and SM-12.5E asphalt concrete shall consist of crushed stone, crushed slag, or crushed gravel and fine aggregate; slag or stone screenings; or a combination thereof combined with asphalt cement. For all surface mixes, except where otherwise noted, no more than 5% of the aggregate retained on the No. 4 sieve and no more than 20% of the total aggregate may be polish-susceptible. At the discretion of the Engineer, SM-9.5AL or SM-12.5AL may be specified and polish susceptible aggregates may be used (without percentage limits). Unless Type C (curb mix) is specified by the Engineer in the Contract, SM9.0, SM-9.5, and SM-12.5 mix types are acceptable for use in the construction of asphalt curbing.

Section 211.04(e) – Type SM-9.5, SM-12.5, IM-19.0 and BM-25.0 asphalt concrete is renamed **Type SM-4.75, SM-9.5, SM-12.5, IM-19.0 and BM-25.0 asphalt concrete** and amended to replace the first paragraph with the following:

Type SM-4.75, SM-9.5, SM-12.5, IM-19.0 and BM-25.0 asphalt concrete may be designated E (polymer modified), or stabilized (S). Asphalt concrete mixtures with the E designation may not be stabilized.

Table II-15 – Process Tolerance is replaced with the following:

**TABLE II-15
Process Tolerance**

| Tolerance on Each Laboratory Sieve and Asphalt Content: Percent Plus and Minus | | | | | | | | | | | | | |
|--|-----------------------|------|-----|-----|-----|------|-------|-------|--------|--------|--------|---------|------|
| No. Tests | Top Size ¹ | 1 ½" | 1" | ¾" | ½" | 3/8" | No. 4 | No. 8 | No. 16 | No. 30 | No. 50 | No. 200 | A.C. |
| 1 | 0.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 8.0 | 6.0 | 5.0 | 2.0 | .60 |
| 2 | 0.0 | 5.7 | 5.7 | 5.7 | 5.7 | 5.7 | 5.7 | 5.7 | 5.7 | 4.3 | 3.6 | 1.4 | 0.43 |
| 3 | 0.0 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 4.4 | 3.3 | 2.8 | 1.1 | 0.33 |
| 4 | 0.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 4.0 | 3.0 | 2.5 | 1.0 | 0.30 |
| 5 | 0.0 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 | 2.7 | 2.2 | 0.9 | 0.27 |
| 6 | 0.0 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 3.3 | 2.4 | 2.0 | 0.8 | 0.24 |
| 7 | 0.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 2.3 | 1.9 | 0.8 | 0.23 |
| 8 | 0.0 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.8 | 2.1 | 1.8 | 0.7 | 0.21 |
| 12 | 0.0 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 2.3 | 1.7 | 1.4 | 0.6 | 0.17 |

¹Defined as the sieve that has 100% passing as defined in Table II-13.

Section 211.09 – Adjustment System is amended by replacing the first paragraph and following table with the following:

If a lot of material does not conform to the acceptance requirements of Section 211.08, the Department will determine adjustment points as follows:

**Adjustment Points for Each 1% the Gradation Is Outside the Process
Tolerance Permitted In Table II-15**

| Sieve Size | (Applied in 0.1% increments) |
|-------------------|-------------------------------------|
| 1 1/2 in | 1 |
| 1 in | 1 |
| 3/4 in | 1 |
| 1/2 in | 1 |
| 3/8 in | 1 |
| No. 4 | 1 |
| No. 8 | 1 |
| No. 16 | 1 |
| No. 30 | 2 |
| No. 50 | 2 |
| No. 200 | 3 |

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 223 – STEEL REINFORCEMENT**

SECTION 223 – STEEL REINFORCEMENT of the Specifications is amended as follows:

Section 223.02(a)3 – Welded wire fabric is replaced with the following:

Welded wire fabric shall conform ASTM A1064. When used in continuously reinforced hydraulic cement concrete pavement wire fabric shall be deformed, furnished in flat sheets, and shall conform to ASTM A497, high yield of 70,000 psi.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 234 – GLASS BEADS AND RETROREFLECTIVE OPTICS**

SECTION 234 – GLASS BEADS FOR REFLECTORIZING TRAFFIC MARKINGS of the Specifications is replaced as follows:

234.01 – Description

This specification covers glass beads and retroreflective optics applied on the surface or incorporated into traffic-marking materials so as to produce a retroreflective surface.

234.02 – Detail Requirements

Glass beads and retroreflective optics shall be supplied from a supplier listed on Materials Approval List No. 76.

The Contractor shall provide a written certification that each batch of glass beads or retroreflective optics used in or on VDOT pavement markings meets VDOT specifications and does not exceed the AASHTO M 247 maximum concentration limits for Lead and Arsenic.

- (a) **Glass beads** shall have a composition designed to be highly resistant to traffic wear and weather. Materials other than glass will be allowed if the pavement marking product was tested on the NTPEP test deck with the alternative bead material.

Glass beads shall have a Refractive Index of 1.50-1.79 when tested as per AASHTO T 346.

Glass beads shall conform to AASHTO M 247, except that at least 80 percent of the beads shall be round when tested in accordance with ASTM D 1155, Procedure B.

- (b) **Retroreflective Optics** shall have a concentration designed to be highly resistant to traffic wear and weather. Retroreflective Optics shall be composed of glass beads, ceramic materials, or a combination of glass beads or ceramic materials affixed to a glass bead core.

Retroreflective Optics shall have a Refractive Index of 1.8 or higher when tested as per AASHTO T 346.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 235 – RETROREFLECTORS**

SECTION 235 – RETROREFLECTORS of the Specifications is deleted and replaced as follows:

235.01 – Description

Retroreflectors are retroreflective surfaces that redirect the vehicle headlights back to the driver to delineate the road. The retroreflective surface may consist of a plastic prismatic reflector or retroreflective sheeting. Retroreflectors are used with:

- Pavement Markers (Permanent and Temporary)
- Delineators (Guardrail, Barrier, Flexible Post, Road Edge)

Pavement markers and Delineators shall be approved by reviewing performance data from one or both of the following test programs:

- (a) AASHTO's National Transportation Product Evaluation Program (AASHTO/NTPEP). Test data values used for approval may be based upon the data generated per the applicable NTPEP Work Plan.
- (b) VDOT Test Facility – VDOT may elect to evaluate performance from their own test facility.

235.02 – Detail Requirements

- (a) **Inlaid Pavement Markers** – Holders for inlaid pavement markers shall be made of polycarbonate plastic nominally 4.75 inches wide excluding breakaway tabs, and shall be able to hold retroreflectors from the Department's Approved List 22 under Inlaid Pavement Markers. The top of the the retroreflector shall be 1/8 inch below the pavement surface when installed with the breakaway positioning tabs resting on the pavement surface.

Retroreflectors for inlaid pavement markers shall have a nominal width of 4 inches excluding the holders.

- (b) **Pavement Markers (Temporary)** – Refer to VTM-70 for testing and approval
- (c) **Pavement Markers (Permanent)** – Refer to VTM-70 for testing and approval
- (d) **Delineators** – Refer to VTM-70 for testing and approval
- (e) **Aluminum panels for delineators** shall be at least 0.064 inch thick conforming to ASTM B-209, alloy 5052.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 246 – PAVEMENT MARKING**

SECTION 246 – PAVEMENT MARKING of the Specifications is amended as follows:

Section 246.03(g) – Temporary Pavement Marking Materials is replaced with the following:

Temporary Pavement Marking Materials other than paint shall consist of Type D, Class III, removable, wet reflective tape and Type E removable black, non-reflective tape. Determination of conformance will include, but not be limited to, the evaluation of test data from AASHTO’s NTPEP or other VDOT Test Facilities.

1. Wet Reflective, Removable Tape (Type D, Class III):

Wet reflective, removable tape shall be a durable, retro-reflective pliant material consisting of a mixture of polymeric materials, pigments, and glass beads (reflective optics) evenly distributed throughout its cross-sectional area and embedded into the surface. This tape shall be suitable for use on both asphalt and hydraulic cement concrete surfaces and shall be selected from the Department’s Approved List 17.

a. **Initial Approval** - Maintained retroreflectivity (dry and wet), color (including luminance), and adhesive bond rating shall conform to the following requirements after the material has been installed on the test deck for 90 days:

(1) **Maintained Dry Retroreflectivity:** The dry photometric quantity to be measured is the coefficient of retroreflected luminance (RL) in accordance with ASTM E1710 for 30-meter geometry when measured in the skip line or centerline areas.

**Coefficient of Retroreflected Luminance (RL) (mcd/ft²/fc) Dry Retro Removable
Tape-Type D, Class III**

| Color | Initial | 90 Days In-Service |
|--------|---------|--------------------|
| White | 250 | 150 |
| Yellow | 200 | 100 |

(2) **Maintained Wet Retroreflectivity:** The wet photometric quantity to be measured is the coefficient of retroreflected luminance (RL) in accordance with VTM 124 (Visual Evaluation or ASTM E2177, Recovery Method) when measured in the skip line or centerline areas.

**Coefficient of Retroreflected Luminance (RL) (mcd/ft²/fc) Wet Retro Removable
Tape-Type D, Class III**

| Color | Initial | 90 Days In-Service |
|--------|---------|--------------------|
| White | 150 | 100 |
| Yellow | 125 | 75 |

(3) **Day and Nighttime Color and Luminance (Y%):** According to ASTM D6628.

(4) **Adhesive Bond Rating:** The average adhesive bond rating (from transverse and longitudinal lines) shall be 3 or higher according the NTPEP Work Plan.

(5) **Skid Resistance:** The initial skid resistance shall be at least 45 BPN when tested according to ASTM E303, if available.

(6) **Thickness:** Per the manufacturer’s recommendation.

(7) **Adhesion:** No line shall be displaced, torn or missing.

b. **Batch Testing:**

Wet reflective, removable tape batch testing will be performed by the Department on samples obtained from the point of manufacture or from the field in accordance with the Materials Division's Manual of Instructions. Test results shall be compared against the following specifications and requirements:

- (1) **Retroreflectivity:** Refer to initial requirements
- (2) **Day and Night Color and Luminance:** Refer to initial requirements
- (3) **Thickness:** Refer to initial requirements
- (4) **Width:** The width shall be no less than the nominal width and no greater than 1/8" of the nominal width.
- (5) **Length:** The length shall be no less than the length stated on the manufacturer's packaging.
- (6) **Skid Resistance:** Refer to initial requirements.

2. **Removable Black, Non-Reflective Tape (Type E):**

Removable black, non-reflective tape shall be a durable, pliant material consisting of a mixture of polymeric materials, pigments and a friction material evenly distributed throughout its cross-sectional area and embedded into the surface. Removable black, non-reflective tape shall be suitable for use on asphalt concrete pavement surfaces, and shall be selected from the Department's Approved List 17.

a. **Initial Approval** - Maintained adhesive bond rating shall conform to the following requirements after the material has been installed on the test deck for 90 days:

- (1) **Adhesive Bond Rating:** The average adhesive bond rating (from transverse and longitudinal lines) shall be 3 or higher according to the NTPEP Work Plan.
- (2) **Skid Resistance:** The initial skid resistance shall be at least 45 BPN when tested according to ASTM E303, if available.
- (3) **Thickness:** Per the manufacturer's recommendation.
- (4) **Adhesion:** No line shall be displaced, be torn or missing.

b. **Batch Testing**

Black removable, non-reflective tape batch testing will be performed by the Department on samples obtained from the point of manufacture or from the field in accordance with the Materials Division's Manual of Instructions. Test results shall be compared against the following specifications:

- (1) **Skid Resistance:** Refer to initial requirements
- (2) **Thickness:** Refer to initial requirements
- (3) **Width:** The width shall be no less than the nominal width and no greater than 1/8" of the nominal width.
- (4) **Length:** The length shall be no less than the length stated on the manufacturer's packaging.



DIVISION III – ROADWAY CONSTRUCTION

SPECIAL PROVISION COPIED NOTES (SPCNs), SPECIAL PROVISION (SPs) and SUPPLEMENTAL SPECIFICATIONS (SSs)

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STANDARD 300 SERIES SPCNs, SPs and SSs

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| | | |
| | | |

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
RESTORING EXISTING PAVEMENT

I. DESCRIPTION

This work shall consist of restoring existing pavement, removed for installation or repair of utilities such as, but not limited to pipe culverts, conduits, water and sanitary sewer items.

II. MATERIALS

Asphalt Concrete shall conform to Section 211 of the Specifications.

Aggregate Subbase material shall conform to Section 208 of the Specifications.

Asphalt Material shall conform to Section 210 of the Specifications.

Fine Aggregate shall conform to Section 202 of the Specifications.

Coarse Aggregate for surface treatment shall conform to Section 203 of the Specifications.

Hydraulic Cement Concrete Class A3 shall conform to Section 217 of the Specifications.

Steel Reinforcement shall conform to Section 223 of the Specifications.

III. PROCEDURES

Pavement restoration shall be according to this Provision and plan notes.

Backfill shall be according to Section 302.03(a)2.g. of the Specifications.

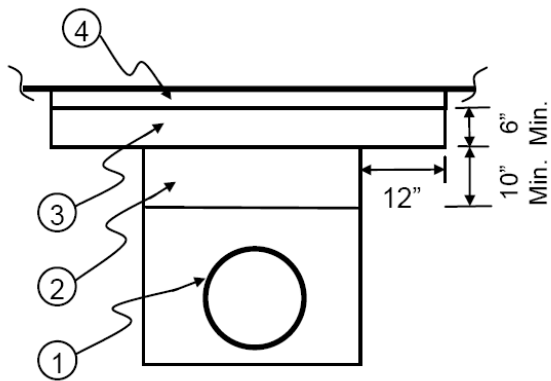
Asphalt Concrete shall be placed and compacted according to Section 315 of the Specifications.

Surface Treatment shall be placed according to the special provision for Asphalt Surface Treatment and the attached drawing.

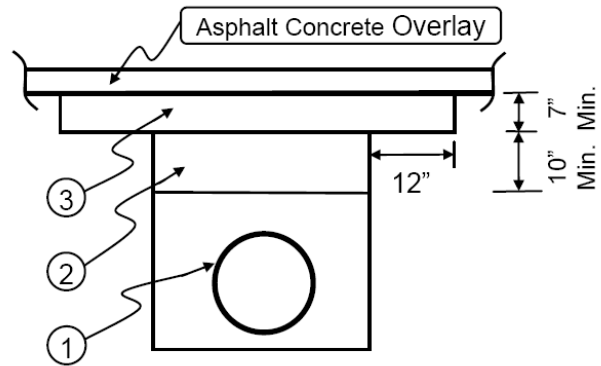
Concrete Pavement shall be placed according to the special provision for Patching Hydraulic Cement Concrete Pavement and this special provision. Open trench in Hydraulic Cement Concrete Pavement should be located at existing transverse joints if at all possible. If concrete pavement is removed within two feet of an existing transverse joint, pavement removal shall be extended two feet beyond the joint. Reinforcing steel and dowels shall be installed according to Road and Bridge Standard PR-2. Joint replacement shall be according to Road and Bridge Standard PR-2.

IV. MEASUREMENT AND PAYMENT

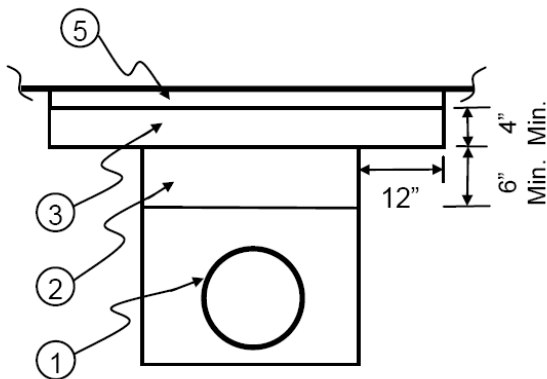
Restoring Existing Pavement unless otherwise specified will not be measured for separate payment, the cost thereof shall be included in the price bid for the utility to which it pertains according to Section 302.04, Section 520.06 or Section 700.05 of the Specifications, as appropriate. However, widths and depths in excess of the attached drawing that are authorized or directed by the Engineer will be paid for according to Section 109.05 of the Specifications.



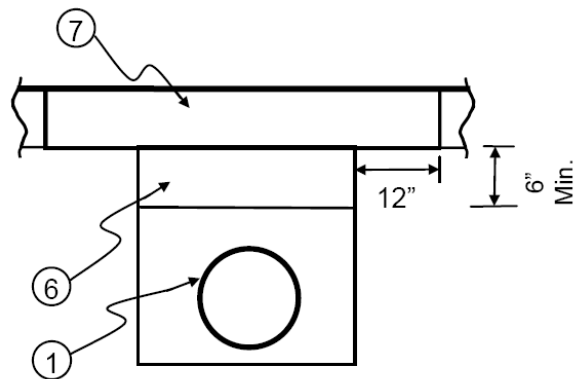
PAVEMENT STRUCTURE
Asphalt Conc. Base and Surface



PAVEMENT STRUCTURE
Scheduled for Asphalt Conc. Overlay



PAVEMENT STRUCTURE
Aggregate Base and Surface Treatment



PAVEMENT STRUCTURE
Hydraulic Cement Concrete

NOTES:

The following methods for restoring existing pavement shall be adhered to unless otherwise specified on the plans.

1. Pipe culverts, conduits and utility items shall be installed according to the applicable Road and Bridge Standards and Specifications.
2. Subbase - Aggregate material Type 1, Size 21A or 21B.
3. Asphalt Concrete Type BM-25.0
4. Surface - Asphalt Concrete Type SM-9.5D @ 165 lbs. per sq. yd.
5. Surface - Blotted Seal Coat Type C: The initial seal and final seal shall be CRS-2, CMA-2 or CMS-2h liquid asphalt material @ 0.17 gal./sq. yd. with 15 lbs. of No. 8P stone/sq. yd. each. The blot seal shall be CRS-2, CMS-2 or CMS-2h liquid asphalt material @ 0.15 gal./sq. yd. with 10 lbs. of fine aggregate grade B sand per sq. yd.
6. Subbase - Aggregate material Type 1 Size 21B
7. Surface - Hydraulic Cement Concrete, high early strength, matching existing structure for depth and surface texture.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
USE OF NUMBER 10 SCREENINGS**

I. DESCRIPTION

This Special Provision cover the use of No. 10 Screenings in various applications on the Project. No. 10 Screenings shall be used in locations designated in the Contract.

II. MATERIALS

1. **No. 10 Screenings** (also known as quarry dust, rock dust, quarry screenings, rock screenings and quarry byproduct) may be used as an acceptable source of borrow material for the applications described herein. No. 10 Screenings shall conform to the requirements herein and elsewhere in the Contract. For the purpose of this Special Provision, No. 10 Screenings shall be defined as any material that is a byproduct of rock crushing processes, and either has a gradation of 100% passing the 3/8" Sieve and less than 20% passing the No. 200 Sieve, or meets the No. 10 coarse aggregate gradation. No. 10 Screenings shall also have a minimum CBR value of 15 and be either non-plastic or have liquid limit less than 25 and a plasticity index less than 9.
2. **Low-plasticity clay or silt** shall conform to classification CL or ML according to ASTM D2487.

III. PROCEDURES**1. Embankment**

No. 10 Screenings shall be compacted to 95% of Standard Proctor dry density, and shall be compacted in the field within a water content range of 2 percentage points either side of the optimum water content. For laboratory optimum water contents greater than 9%, a field optimum water content target of 8.5% shall be used. Both dry density and optimum water content shall be obtained according to VTM-1.

When landscaping is required in areas of No. 10 Screenings use, the Contractor shall make accommodations for landscaping as trees and larger shrubs will not be able to root properly in No. 10 Screenings.

The top and sides of unconfined areas consisting solely of No. 10 Screenings shall be capped with low-plasticity clay or silt material to deter water from penetrating into and saturating embankments constructed of No. 10 Screenings. Fills less than 10 feet in height shall be capped on the sides and top with a minimum 2 feet of low-plasticity clay or silt. At a minimum, fills greater than 10 feet in height shall be capped with 3 feet of low-plasticity clay or silt.

In low-lying areas, drainage areas or areas identified as active or potential wet zones during construction, a separation layer between the bottom of the placed fill and original ground shall be placed to mitigate the potential destabilization of a No. 10 Screenings embankment. The separation layer should be at least 8-inches thick and composed of No. 1 or No. 57 aggregate or another open graded aggregate wrapped in drainage fabric. Riprap bedding fabric meeting the requirements of Section 245 of the Specifications shall be placed between the separation layer and the No. 10 Screenings.

If an embankment greater than 10 feet in height is constructed, survey points shall be taken after the fill is complete at bi-weekly intervals until 2 consecutive measurements are each less than 1/4 inch to ensure that settlement is not occurring. If settlement issues are identified, the Contractor or Design-Builder shall mitigate the causes of settlement as needed (e.g., additional asphalt, ground improvement techniques, removing and replacing settled locations if isolated, etc.).

2. Structure backfill, building foundation soil, road subgrade, undercut replacement, fill under approach slabs

No. 10 Screenings used for these purposes shall have a CBR of at least 30, shall be compacted to 95% of Standard Proctor dry density (100% under approach fills), and shall be compacted in the field within a water content range of 2 percentage points either side of the optimum water content. For laboratory optimum water contents greater than 9%, a field optimum water content target of 8.5% should be used. Both dry density and optimum water content shall be obtained using VTM-1.

These applications should typically be in confined areas. Where there is no confinement, capping of the unconfined sides shall be as in Paragraph 1 above.

In low-lying areas, drainage areas or areas identified as active or potential wet zones during construction, the No. 10 Screenings shall be wrapped in drainage fabric.

3. Pipe Backfill

Pipe backfill shall be performed in accordance with Standard Drawing PB-1 and Section 302.03(a)2g of the Specifications unless noted herein. No. 10 Screening may be used as either Regular Backfill or Class I Backfill, as shown in Standard Drawing PB-1. Regular Backfill material within the limits of roadway embankments and under existing or proposed roadway shall meet a minimum CBR value of 15.0 as determined by VTM-8. Ground line shall be considered the top of trench at the time of pipe installation. When pipe does not project above ground line, Regular Backfill shall extend to the top of the pipe trench in fills or subgrade in cuts. Outlet pipes for storm water management basins shall be installed as noted on the plans. The cost of furnishing, placing and compacting the Regular Backfill and disposing of unsuitable material excavated from the trench shall be included in the price of the pipe and will not be measured and for separate payment.

4. Reinforced Fill for Mechanically Stabilized Earth Walls

No. 10 Screenings used for these purposes shall have a friction angle of at least 34 degrees, with up to 60% passing the No. 40 sieve. They shall be compacted to 95% of Standard Proctor dry density, and shall be compacted in the field within a water content range of 2 percentage points either side of the optimum water content. For laboratory optimum water contents greater than 9%, a field optimum water content target of 8.5% should be used. Both dry density and optimum water content shall be obtained using VTM-1. If the use of No. 10 Screenings conflicts with any other Contract requirement for reinforced fill for MSE walls, No. 10 Screenings shall not be used for this purpose.

5. Soft ground stabilization

No. 10 Screenings may be used as a replacement or stabilizing agent for soft or unsuitable soils in parking areas, under building pads or foundations, or under roadways. In the event soft or unsuitable soils are identified, No. 10 Screenings may replace or be mixed into the soil in a prescribed percentage to improve the bearing capacity of the soil. Replacement shall require confinement by surrounding ground. For mixing, the percentage of screenings to be used shall be determined by sampling the soft/unsuitable soil and mixing with varying percentages of No. 10 Screenings in the laboratory. Proctor samples and CBR samples of each mixture shall be prepared in accordance VTM-1 and VTM-8, respectively. The mixture resulting in the desired minimum CBR will determine the minimum amount of No. 10 Screenings to be used. Field mixing of the No. 10 Screenings shall be accomplished by layering the appropriate amount of screenings on top of the soft/unsuitable soil followed by blending to a depth of 8 inches to achieve the blend percentage determined in the laboratory. Mixing shall be accomplished by means of a self-propelled or self-powered machine equipped with a mechanical rotor or other approved type of mixer that will thoroughly blend the No 10 Screenings with the soil.

IV. MEASUREMENT AND PAYMENT

No. 10 screenings, when a pay item, will be measured in tons, and paid for at the Contract ton price based on certified weigh tickets from the source of supply. This price shall include furnishing, transporting, and placing No. 10 screenings; and all work incidental to their use (e.g., capping embankments in accordance with Section III-1 herein).

Payment will be made under:

| Pay Item | Pay Unit |
|-------------------|-----------------|
| No. 10 Screenings | Ton |

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 305 – SUBGRADE AND SHOULDERS**

SECTION 305 – SUBGRADE AND SHOULDERS of the Specifications is amended as follows:

Section 305.02 – Materials is replaced with the following:

- (a) **Materials** may consist of material in place, treated material in place, or imported material. Imported material may be borrow material, select material, or other material as shown on the plans or specified in the Contract. Materials other than regular excavation or borrow material that are shown on the Plans or specified in the Contract shall conform to the applicable requirements of these Specifications.
- (b) **Geotextile** materials used for subgrade stabilization or separation shall conform to Section 245.03(d).

Section 305.03(d) – Geotextile (Subgrade Stabilization) is renamed **Geosynthetics** and replaced with the following:

Geosynthetics includes Geotextile used for subgrade separation or stabilization, and geogrid.

1. **Subsurface preparation:** Before placing the geotextile, geogrid, or combination of both, prepare the subgrade in accordance with Sections 304 and 305. Separation and stabilization geotextiles shall not be placed when weather conditions, in the judgement of the Engineer, are not suitable to allow placement of geotextiles or cover materials. These include wet or snowy conditions, rainfall, temperatures below freezing, frost, or excessively windy conditions.
2. **Geotextile or geogrid placement.** Place geogrid on top of geotextile when both are shown at the same elevation in the Plans. Place the geosynthetic in the direction of traffic. Geosynthetic shall be smooth and free of wrinkles and folds. Placement by dragging the geosynthetic across the finished surface will not be allowed. On curves, the geotextile may be folded or cut to conform to the curve. The fold or overlap shall be in the direction of traffic and held in place by pins, staples or piles of aggregate subbase or base materials. Overlap in the direction of construction. Overlap at least 24 inches at the ends and sides of adjoining sheets or sew the joints according to the Manufacturer's recommendations. Do not place longitudinal overlaps below anticipated wheel loads or joints. Hold the geosynthetic in place with pins, staples, or piles of aggregate subbase or base materials.

Replace or repair geosynthetic that is torn or punctured. Remove the damaged area and place a patch of the same type of geosynthetic overlapping 36 inches beyond the damaged area or sew a seam around the entire perimeter of the damaged area.

3. **Initial layer placement and compaction:** Place initial layer in accordance with Sections 308 and 309.

If during placement of the geosynthetic, the equipment causes subgrade rutting in excess of 2 inches, end dump the backfill material onto the geotextile or geogrid from the edge of the geosynthetic or from previously placed cover material. Do not operate equipment directly on the geosynthetic. Spread the end-dumped pile of cover material maintaining the minimum specified lift thickness over the geosynthetic. Avoid sudden stops, starts, or turns of the construction equipment. Fill ruts from construction equipment with additional cover material. Do not blade material down to remove ruts. If rutting continues to exceed 2 inches during placement, decrease the construction equipment size, decrease the equipment weight, or increase the first lift thickness as directed by the Engineer.

Compact in accordance with Sections 308 and 309. Do not use sheepsfoot or studded compaction equipment. Compact the cover material with pneumatic-tire or non-vibratory smooth drum rollers.

Tracked equipment shall not be operated directly on top of geosynthetic. Rubber-tire equipment may pass over the geosynthetic if the geosynthetic is not damaged by the equipment (causing excessive rutting, 2 inches or greater); the Contractor shall specifically avoid sudden braking or sharp turning, and shall maintain low speed.

4. **Subsequent layer placement and compaction.** Place and compact subsequent layers in accordance with Sections 308 and 309.

Section 305.04 – Measurement and Payment is amended by replacing the tenth paragraph with the following:

Geotextile will be measured in square yards, complete-in-place. Overlaps and seams will not be measured for separate payment. The accepted quantity of geotextile will be paid for at the contract square yard price. This price shall include furnishing, placing, lapping, and seaming material.

Section 305.04 – Measurement and Payment is amended by revising the Pay Item Table as follows:

The following pay items are removed:

| Pay Item | Pay Unit |
|-------------------------------------|-----------------|
| Geotextile (Subgrade stabilization) | Square yard |

The following pay items are inserted:

| Pay Item | Pay Unit |
|-------------------|-----------------|
| Geotextile (type) | Square yard |

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 315 – ASPHALT CONCRETE PLACEMENT**

SECTION 315 – ASPHALT CONCRETE PLACEMENT of the Specifications is amended as follows:

Section 315.04(b)2 – When the base temperature is between 40 degrees F and 80 degrees F is renamed **When the base temperature is between 40°F and 80°F** and replaced with the following:

When the base temperature is between 40°F and 80°F the Contractor shall use Table III-2 to determine the minimum laydown temperature of the asphalt concrete mixes. At no time shall the base temperature for base (BM) and intermediate (IM) mixes be less than 40°F. At no time shall the laydown temperature for base (BM) and intermediate (IM) mixes be less than 250°F.

The minimum base and laydown temperatures for surface mixes (SM) shall never be less than the following:

| PG Binder/Mix Designation | Percentage of Reclaimed Asphalt Pavement (RAP) Added to Mix | Minimum Base Temperature | Minimum Placement Temperature |
|---------------------------|---|--------------------------|-------------------------------|
| PG 64S-22 (A) | <=25% | 40°F/50°F ^{1,2} | 250°F/270°F ^{1,2} |
| PG 64S-22 (A) | >25% | 50°F ² | 270°F ² |
| PG 64H-22 (D) | <=30% | 50°F ² | 270°F ² |
| PG 64E-22 (E) | <=15% | 50°F ² | 290°F ² |
| PG 64S-22 (S) | <=30% | 50°F ² | 290°F ² |

¹Minimum base temperature 50°F and placement temperature 270°F for SM-4.75 mixes regardless of WMA use.

²For SM-4.75 mixes, the temperatures are the minimum base temperature and placement temperature regardless of WMA use.

The Contractor shall employ a MTV during the placement of SM-4.75 mixtures when the ambient or base temperature is between 50°F and 60°F.

Section 315.05(b) – Conditioning Existing Surface is amended by replacing the second paragraph with the following:

When specified in the Contract, before placement of asphalt concrete, the Contractor shall seal longitudinal and transverse joints and cracks by the application of an approved crack sealing material in accordance with Section 322.

Section 315.05(d) – Compacting is amended by inserting the following after the seventh paragraph:

For SM-4.75 mixes, breakdown rolling shall be accomplished with steel wheel rollers with a minimum weight of 10 tons. SM-4.75 mixes shall receive at least three breakdown roller passes before intermediate and finish rolling.

Table III-3 – Density Requirements is replaced with the following:

**TABLE III-3
Density Requirements**

| Mixture Type | Min. ControlStrip Density (%) ¹ |
|------------------------------|--|
| SM-9.5A, 12.5A | 92.5 |
| SM-9.5D, 12.5D | 92.5 |
| SM-9.5E, 12.5E | 92.5 |
| IM-19.0A, IM-19.0D, IM-19.0E | 92.2 |
| BM-25.0A, BM-25.0D | 92.2 |

¹The control strip density requirement is the percentage of Theoretical Maximum Density (TMD) of the job-mix formula by SUPERPAVE mix design or as established by the Engineer based on two or more production maximum theoretical density tests.

Table III-4 – Payment Schedule for Lot Densities is renamed Payment Schedule for Control Strips and replaced with the following:

TABLE III-4
Payment Schedule for Control Strips

| % TMD | % of Payment |
|---|--------------|
| Greater than 96.5 | 95 |
| 92.2 ¹ /92.5 ² – 96.5 | 100 |
| 90.0-92.1 ¹ /92.4 ² | 90 |
| 88.0-89.9 | 80 |
| Less than 88.0 | 75 |

¹For IM and BM mixes only.

²For SM mixes only.

Table III-4A – Payment Schedule for Method A Lot Densities is inserted as follows:

TABLE III-4A
Payment Schedule for Method A Lot Densities

| % TMD | % of Payment |
|---|--------------|
| Greater than 96.5 | 95 |
| 92.2 ¹ /92.5 ² – 96.5 | 100 |
| 90.0 – 92.1 ¹ /92.4 ² | 90 |
| 88.0 – 89.9 | 80 |
| Less than 88.0 | 75 |

¹For Intermediate and Base Mixes only.

²For Surface Mixes only.

Table III-4B – Payment Schedule for Method B Lot Densities is inserted as follows:

TABLE III-4B
Payment Schedule for Method B Lot Densities

| % of Target Control Strip Density | % of Payment |
|-----------------------------------|--------------|
| Greater than 102.0 | 95 |
| 98.0 to 102.0 | 100 |
| 97.0 to less than 98.0 | 95 |
| 96.0 to less than 97.0 | 90 |
| Less than 96.0 | 75 |

Table III-5 – Payment Schedule for Surface, Intermediate and Base Courses is replaced with the following:

TABLE III-5
Payment Schedule for Surface, Intermediate and Base Courses (Not sufficient quantity to perform density roller pattern and control strip)

| % TMD | % of Payment |
|---|--------------|
| Greater than or equal to 92.2 ¹ /92.5 ² | 100 |
| 90.0-92.1 ¹ /92.4 ² | 90 |
| 88.0-89.9 | 80 |
| Less than 88.0 | 75 |

¹The minimum TMD percentage for Intermediate and Base Mixes

²The minimum TMD percentage for Surface Mixes

Table III-6 – Payment Schedule for Surface, Intermediate and Base Courses is replaced with the following:

TABLE III-6
Payment Schedule for Surface, Intermediate and Base Courses (Asphalt Patching)

| % TMD | % of Payment |
|-------------------------------|--------------|
| Greater than or equal to 91.5 | 100 |
| 90.2-91.4 | 95 |
| 88.3-90.1 | 90 |
| Less than or equal to 88.2 | 75 |

Section 315.05(e) – Density is replaced with the following:

Density will be determined in accordance with Method A for all interstate and limited access routes, and for primary and secondary routes with an ADT of at least 2,000 and at least 20’ in width. Method B will be used for all other routes. Control Strips will not use Method A or B, but will use the methods described in Section 315.05(e)1a.

1. The Contractor shall perform roller pattern and control strip density testing on surface, intermediate, and base courses in accordance with VTM 76. The Contractor shall have a certified Asphalt Field Technician II perform all density testing.

Density shall be determined with a thin-lift nuclear gauge conforming to VTM 81 or from the testing of plugs or cores taken from the roadway where the mixture was placed. Density test locations shall be marked and labeled in accordance with VTM 76. When acceptance testing is performed with a nuclear gauge, the Contractor shall have had the gauge calibrated within the previous 12 months by an approved calibration service. In addition, the Contractor shall maintain documentation of such calibration service for the 12-month period from the date of the calibration service. The required density of the compacted course shall not be less than 98.0 percent or more than 102.0 percent of the target control strip density.

Nuclear density roller pattern and control strip density testing shall be performed on asphalt concrete overlays placed directly on surface treatment roadways and when overlays are placed at an application rate less than 125 pounds per square yard, based on 110 pounds per square yard per inch, on any surface. In these situations, the Engineer will not require sawed plugs or core samples and the minimum control strip densities as specified in Table III-3 will not be required. The required density of the compacted course shall not be less than 98.0 percent or more than 102.0 percent of the target control strip.

The Engineer will divide the project into “control strips” and “test sections” for the purpose of defining areas represented by each series of tests.

- a. **Control Strip:** Control strips shall be constructed in accordance with the Specifications and VTM 76.

The term *control strip density* is defined as the average of 10 determinations selected at stratified random locations within the control strip.

The Contractor shall construct one control strip at the beginning of work on each roadway and shoulder course and on each lift of each course. The Engineer will require the Contractor to construct an additional control strip whenever a change is made in the type or source of materials; whenever a significant change occurs in the composition of the material being placed from the same source; or when there is a failing test strip. During the evaluation of the initial control strip, the Contractor may continue paving operations, however, paving and production shall be discontinued during construction and evaluation of any additional control strips. If two consecutive control strips fail, subsequent paving operations shall not begin or shall cease until the Contractor recommends corrective actions to the Engineer and the Engineer approves the Contractor proceeding with the corrective actions. If the Contractor and the Engineer mutually agree that the required density cannot be obtained because of the condition of the existing pavement structure, the target control strip density shall be determined from the roller pattern that achieves the optimum density and this target control strip density shall be used on the remainder of the roadway that exhibits similar pavement conditions.

Either the Engineer or the Contractor may initiate the construction of an additional control strip at any time.

The length of the control strip shall be approximately 300 feet and the width shall not be less than 6 feet. On the first day of construction or beginning of a new course, the control strip shall be started between 500 and 1,000 feet from the beginning of the paving operation. The Contractor shall construct the control strip using the same paving, rolling equipment, procedures, and thickness as shall be used for the remainder of the course being placed.

The Contractor’s Asphalt Field Level II Technician shall take one reading at each of 10 stratified random locations. No determination shall be made within 12 inches of the edge of any application width for surface and intermediate mixes or within 18 inches of the edge of any application width for base mixes. The average of these 10 determinations shall be the control strip density recorded to the nearest 0.1 pound per cubic foot. The minimum control strip density shall be determined in accordance with VTM 76.

The control strip shall be considered a lot. If the control strip density conforms to the requirements in Table III-3, the Engineer will consider the control strip to be acceptable and the control strip density shall become the target control strip density.

If the Engineer determines that the control strip requirements in Table III-3 cannot be met due to in-situ pavement conditions, Method 'B' will be used for acceptance and payment and density adjustments will be waived. Otherwise, if the density does not conform to the requirements specified in Table III-3, the tonnage placed in the control strip and any subsequent paving before construction of another control strip will be paid for in accordance with Table III-4. The Contractor shall take corrective action to comply with the density requirement specified in Table III-3.

- b. **Test section (lot):** For the purposes of both contractor quality control and for determining acceptance, the Engineer will consider each day's production as a lot unless the paving length is less than 3,000 feet or more than 7,500 feet, regardless of the method of acceptance (Method A or B). When paving is less than 3,000 feet, that day's production will be combined with the previous day's production or added to the next day's production to create a lot as described below.

The standard size of a lot will be 5,000 feet (five 1,000-foot sublots) of any pass 6 feet or greater made by the paving train for the thickness of the course. If the Engineer approves, the lot size may be increased to 7,500 feet with five 1,500-foot sublots when the Contractor's normal daily production exceeds 7,000 feet. Pavers traveling in echelon will be considered as two passes. When a partial lot occurs at the end of a day's production or upon completion of the project, the lot size will be redefined as follows:

- If the partial lot contains one or two sublots, the sublots will be added to the previous lot.
- If the partial lot contains three or four sublots, the partial lot will be redefined to be an entire lot.

The Contractor shall test each lot for density by taking a nuclear density gauge reading from two random test sites selected by the Engineer within each subplot. When saw plugs or cores are used to determine acceptance, a single test site per subplot will be selected by the Engineer. Test sites will not be located within 12 inches of the edge of any application width for surface and intermediate mixes or within 18 inches of the edge of any application width for base mixes.

The Engineer will compare the average of the subplot density measurements to the target nuclear density, or for plugs and cores, to the target percent of theoretical maximum density achieved on the control strip to determine the acceptability of the lot. The Contractor shall immediately notify the Engineer and institute corrective action if two consecutive sublots produce density results less than 98% or more than 102% of the target control strip density.

Density testing for acceptance will not be performed on areas too thin or irregular to test accurately, such as open-graded friction courses, and wedge-and-leveling courses. Areas that are difficult to compact due to subgrade support or space limitations, including but not limited to crossovers and gore areas, will be placed in accordance with Section 315.05(e)2.

For purposes of density determination, acceptance, and payment, Main Pavement is defined to include travel lanes, shoulders 6 feet or greater, turn lanes, ramps, and acceleration/deceleration lanes.

(1) Method 'A' (plugs or cores)

Any pay adjustment will only be applied to Main Pavement.

The Contractor shall perform acceptance testing for density for each subplot by obtaining one plug, defined as a sawed 4-inch by 4-inch specimen, or one 4-inch-diameter core, at a single random test site selected by the Engineer. More than one plug or core can be taken if the original sample is damaged.

The sub-lot site shall be marked as described in VTM 76. The bulk specific gravity of the plugs or cores shall be determined in accordance with VTM 6. The density of the plugs or cores shall be determined in accordance with VTM 22, except that the daily Rice values obtained by the contractor for the mix will be used for calculating percent density (instead of using the 5-day running average as noted in VTM 22).

Plugs or cores shall be taken from the pavement and bulked in the presence of the Engineer unless otherwise approved. The Department reserves the right to have the plugs or cores bulked on the project site. In the event of any uncertainty around the bulking procedures or results, the Department further reserves the right to re-bulk the samples. The Contractor will have the right to witness the re-bulking. The Contractor will be responsible for maintaining the cores until approved for disposal by the Department.

The Contractor shall number subplot test sites sequentially per lot, mark these on the pavement, fill them with the paving mixture, and compact them prior to the completion of each day of production.

The Contractor shall clean and straighten any irregular edges before filling and compacting. Liquid tack material shall be applied so it visibly covers all plug or core hole surfaces (sides, bottom, etc.). Hot mix asphalt paving mixture available on the same day of paving, or other permanent patching material as approved by the Engineer, shall be placed into the plug or core hole and compacted with a 10-pound weighted hand tool or greater compactive effort with rollers or other equipment available on-site and approved by the Engineer. The tonnage of each lot for the pay adjustment will be based on the lot's width and length and the mixture application rate as designated in the Contract or as revised by the Engineer. Payment will be made in accordance with Table III-4A.

If a minimum of 80% of each test section lot's core/plug samples is no lower than 92.5% of TMD for Surface Mixes and 92.2% of TMD for Intermediate and Base Mixes and the lot average results in 100% payment, then the Engineer will increase the unit bid price for AC mixture by 5%. BM-25.0D+0.4 and BM-25.0D+0.8 shall not be eligible for five percent pay increase.

Longitudinal joints shall also be tested for density using a nuclear density gauge at each test site in the subplot. For surface and intermediate mixes, the edge of the gauge shall be placed within 4 inches of the joint. For base mixes, the edge of the gauge shall be placed within 6 inches of the joint. The Contractor shall not place the gauge over top of the joint. The joint density value shall be recorded. The Contractor shall report to the Engineer and institute corrective action if a single longitudinal joint density reading is less than 95% of the target control strip density. The Engineer will not use the values obtained from the joint readings in payment calculation. The Contractor shall furnish the test data developed during the day's paving to the Engineer by the end of the day's operations.

(2) Method 'B' (nuclear gauge)

Any pay adjustment will only be applied to Main Pavement.

The Contractor shall test each lot for density by taking a nuclear density gauge reading from two random test sites selected by the Engineer within each subplot. Test sites will not be located within 12 inches of the edge of any application width for surface and intermediate mixes or within 18 inches of the edge of any application width for base mixes.

The Engineer will compare the average of the subplot density measurements to the target nuclear density, or for cores, to the target percent of theoretical maximum density achieved on the control strip to determine the acceptability of the lot. Once the average density of the lot has been determined, the Engineer will not allow the Contractor to provide additional compaction to raise the average. The Contractor shall immediately institute corrective action if two consecutive sublots produce density results less than 98% or more than 102% of the target control strip density.

Longitudinal joints shall also be tested for density using a nuclear density gauge at each test site in the subplot. For surface and intermediate mixes, the edge of the gauge shall be placed within 4 inches of the joint. For base mixes, the edge of the gauge shall be placed within 6 inches of the joint. The Contractor shall not place the gauge over top of the joint. The joint density value shall be recorded. The Contractor shall report to the Engineer and institute corrective action if a single longitudinal joint density reading is less than 95 percent of the target control strip density. The Engineer will not use the values obtained from the joint readings in payment calculation. The Contractor shall furnish the test data developed during the day's paving to the Engineer by the end of the day's operations.

The tonnage of each lot for the pay adjustment will be based on the lot's width and length and the mixture application rate as designated in the Contract or as revised by the Engineer. Payment will be made in accordance with the requirements of Table III-4B.

(3) Verification, Sampling, and Testing (VST)

The Engineer at any time on any project may perform lot density verification testing regardless of whether Method A or B is being used for density acceptance. Lot density verification is performed by testing plugs or

cores. The Contractor shall be responsible for taking plugs or cores for testing. The Engineer will perform verification testing of the plugs or cores.

On surface, intermediate, and base mixes, the Contractor shall take two plugs or cores per VST lot at locations selected by the Engineer. If the Engineer determines the density of the plugs or cores does not conform to the requirements for the lot in question or the same payment percentage determined by the Contractor's testing for that lot, then the Contractor may request additional sampling to be invoked. The Contractor shall take one additional plug or core from the remaining sublots. Payment for that lot, based on the results of the initial two plugs or cores or referee procedure, will be in accordance with the Table III-4A for Method A on the basis of the percentage of the theoretical maximum density or Table III-4B for Method B on the basis of the percentage of the control strip bulk density achieved.

2. **Surface, intermediate, and base courses** not having a sufficient quantity of material to run a roller pattern and control strip, and unique sections defined on the Plans or within the Contract that are 3,500 feet or less and at least 6 feet in width shall be compacted to a minimum density of 92.5% for surface mixes or 92.2% for intermediate and base mixes as determined in accordance with VTM 22. The Contractor shall be responsible for cutting cores or sawing plugs for testing by the Department. One plug or core shall be obtained within the first 500 feet of small quantity paving and every 1000 feet thereafter for testing by the Department. Plug or core locations shall be randomly selected by the Engineer. If the density is determined to be less than the minimum, the Engineer will make payment in accordance with Table III-5.

Any section in which a mixture (e.g., SM-9.0) is being placed at an application rate of less than 125 pounds per square yard (based on 110 pounds per square yard per inch) that does not have a sufficient quantity of material for a roller pattern and control strip shall be compacted by rolling a minimum of three passes with a minimum 8-ton roller. The Engineer will not require density testing.

For asphalt patching, the minimum density of 91.5% of the maximum theoretical density will be determined in accordance with VTM 22. The Contractor is responsible for cutting cores or sawing plugs. One set of cores or plugs shall be obtained within the first 20 tons of patching material and every 100 tons thereafter for testing by the Contractor or the Department. The Engineer will randomly select plug or core locations. If the density is less than the 91.5%, payment will be made on the tonnage within the 20 or 100 ton lot in accordance with Table III-6.

Section 315.05(g) – Rumble Strips is replaced with the following:

Rumble Strips: This work shall consist of constructing rumble strips or rumble stripes on mainline shoulders or centerlines of highways by cutting concave depressions into existing asphalt concrete surfaces as shown on the Standards Drawings and as directed by the Engineer. Rumble stripes are defined as edgeline or centerline rumble strips with permanent longitudinal pavement markings subsequently installed within the rumble strip grooves.

Rumble strips and rumble stripes shall be installed in accordance with the RS-Series Standard Drawings. The Contractor shall demonstrate to the Engineer the ability to achieve the desired surface regarding alignment, consistency, and conformity with these Specifications and the Standard Drawings before beginning production work on mainline shoulders or centerlines. The test site shall be approximately 25 feet longitudinally at a location mutually agreed upon by the Contractor and Engineer. Pavement markings for rumble stripes shall be applied after the grooves have been cut. The grooves shall be thoroughly cleaned and the surface prepared before pavement marking application, in accordance with the Standard Drawings and Section 704. Overspray of pavement marking materials shall not extend more than one inch beyond the lateral position of the pavement marking line shown in the RS-Series Standard Drawings.

Rumble strips shall not be installed on shoulders of bridge decks, in acceleration or deceleration lanes, on surface drainage structures, or in other areas identified by the Engineer.

Waste material resulting from the operation shall be removed from the paved surface and shall be disposed of in accordance with Section 106.04.

Section 315.05(i) – Coating designed surface cuts is inserted as follows:

Designed Surface Cuts are roadway features installed by cutting or grinding into a road surface, for example, Rumble strips, rumble stripes, and plastic inlaid marker grooves.

Designed Surface Cuts shall be coated with liquid asphalt coating (emulsion) when the Designed Surface Cuts are being cut into an existing asphalt surface (i.e. more than one year since placement); when new Designed Surface Cuts are being cut into

the pavement surface in conjunction with a surface treatment, latex emulsion, or slurry seal pavement operation; or when the proposed plant mix surface is less than one inch deep.

Liquid asphalt coating (emulsion) shall not be used when Designed Surface Cuts are being cut into new pavement, or being cut in conjunction with plant mix paving operations where the proposed plant mix surface is one inch or greater in depth. When liquid asphalt coating (emulsion) is required, the Contractor shall coat the entire rumble strip area with the liquid asphalt coating (emulsion) using a pressure distributor following the cutting and cleaning of the depressions of waste material. For rumble strips installed on the shoulder, the approximate application rate shall be 0.1 gallons per square yard. For centerline rumble stripes and plastic inlaid marker grooves, the approximate application rate shall be 0.05 gallons per square yard. The application temperature shall be between 160 degrees F and 180 degrees F. For shoulder rumble strips and plastic inlaid marker grooves, overspray shall not extend more than 2 inches beyond the width of the cut depressions and shall not come in contact with pavement markings.

If liquid asphalt coating (emulsion) is applied before installation of the plastic inlaid marker, then the bottom of the plunge cut shall be protected during liquid asphalt coating (emulsion) application so as to avoid inhibiting the ability of the marker epoxy to bond to the bottom of the plunge cut. If the liquid asphalt coating (emulsion) is applied after the plastic inlaid marker has been installed, then the retroreflector shall be protected during the liquid asphalt coating (emulsion) application to prevent the coating material from dirtying or damaging the retroreflector, with the protection removed after the coating has been completed.

Section 315.08 – Measurement and Payment is amended by replacing the third paragraph with the following:

Liquid Asphalt Cement, when a pay item, will be measured in tons in accordance with Section 109.01 except that transporting vehicles shall be tare weighed before each load. When used in the mixture, the weight will be adjusted in accordance with the percentage of asphalt indicated by laboratory extractions.

Section 315.08 – Measurement and Payment is amended by deleting the sixth paragraph.

Section 315.08 – Measurement and Payment is amended by replacing the tenth paragraph with the following:

Liquid asphalt coating will be measured in square yards and will be paid for at the Contract square yard price. This price shall include cleaning Designed Surface Cuts before application of the coating, furnishing and applying coating, and protection of all retroreflectors.

Section 315.08 – Measurement and Payment is amended by revising the Pay Item Table as follows:

The following pay items are removed:

| Pay Item | Pay Unit |
|--|-----------------|
| Liquid asphalt coating (Rumble strips) | Square yard |
| Rumble Strip (Asphalt) | Linear foot |

The following pay items are inserted:

| Pay Item | Pay Unit |
|-------------------------------------|-----------------|
| Liquid asphalt coating (type) | Square yard |
| Rumble Strip (shape, pavement type) | Linear foot |

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 319 – THIN HOT MIX ASPHALT CONCRETE OVERLAY**

SECTION 319 – THIN HOT MIX ASPHALT CONCRETE OVERLAY of the Specifications is inserted as follows:

319.01 – Description

This work shall consist of the production and placement of a Thin Hot-Mix Asphalt Concrete Overlay (THMACO) according to the Plans, Specifications, and as directed by the Engineer.

319.02 – Materials

- (a) **Asphalt cement** shall be a performance graded asphalt (PG) 64V-28 conforming to AASHTO M 332 and Section 210 or as designated by the Engineer
- (b) **RAP:** Recycled asphalt pavement material will not be permitted.
- (c) **Coarse aggregate** shall conform to Section 203 or as directed by the Engineer. Water Absorption when tested according to AASHTO T 85 shall be at most 2%. Material retained on the No. 4 sieve and larger sieves shall conform to the following when tested according to ASTM D4791:

| Flat & Elongated Ratio | Maximum Content |
|-----------------------------------|------------------------|
| 3:1 | 25% |
| 5:1 | 10% |

- (d) **Fine aggregate** shall conform to Section 202, except for grading, which shall be tested according to AASHTO TP 33 (Method A) with a value of at least 45% and a sand equivalent value of at least 50 when tested according to AASHTO T 176.
- (e) **Mineral filler** shall conform to Section 201.
- (f) **Fiber additive** when required shall be cellulose or mineral fiber approved by the Engineer based on supplier's certification of properties and documentation of success in similar applications in hot mix asphalt.
- (g) **Antistripping additive** shall be used. It may be hydrated lime or a chemical additive from the Department's Approved List 7 or a combination of both. The approved chemical additive shall be added at a rate of not less than 0.30% by weight of the total asphalt content of the mixture. The mixture shall produce a tensile strength ratio (TSR) of at least 0.80 for the design and production tests. The TSR shall be determined according to AASHTO T 283, including a freeze-thaw cycle (4-inch specimens compacted with a Marshall Hammer or 3.5 by 6-inch specimens when compacted with a gyratory compactor); except that the 16-hour curing time requirement and the 72 to 96-hour storage period will not be enforced by the Department. Design tests shall use the same materials that are to be used in the production mix and shall be conducted in a laboratory approved by the Department.

When a chemical additive is used, it shall be added to the asphalt cement prior to the introduction of the asphalt cement into the mix. Any chemical additive or particular concentration of chemical additive found to be harmful to the asphalt material or that changes the original asphalt binder performance grade (PG) shall not be used.

- (h) **Hydrated lime** shall conform to ASTM C977. Hydrated lime shall be added at a rate of at least 1% by weight of the total dry aggregate.

A separate bin or tank and feeder system shall be provided to store and accurately proportion the dry or slurried lime into the aggregate. The lime and aggregate shall be mixed by pugmill or other Department approved means to achieve a uniform lime coating of the aggregate before entering the drier. If lime is added in dry form, the aggregate shall contain at least 3% free moisture. The Department will not permit the stockpiling of lime treated aggregate.

The feeder system shall be controlled by a proportioning device, which shall be accurate to within ± 10 percent of the specified amount. The proportioning device shall have a convenient and accurate means of calibration. A flow indicator or sensor shall be

provided with the proportioning device and interlocked with the plant controls, aggregate feed, or weigh system, such that production of the mixture shall be consistently maintained and, if there is a stoppage of the lime feed, interrupted. The method of introducing and mixing the lime and aggregate shall be subject to approval by the Engineer before beginning production.

319.03 – MIX FORMULA

The Contractor shall submit for the Engineer’s approval, a job mix formula within the following design ranges of percent passing each sieve size as noted:

| Sieve Size | Percent By Weight Passing Square Mesh Sieves | Production Tolerance (Single Test) |
|------------|--|------------------------------------|
| 1/2 in | 100 | -2 |
| 3/8 in | 85-100 | ± 5 |
| #4 | 25-40 | ± 4 |
| #8 | 19-32 | ± 4 |
| #16 | 15-23 | ± 3 |
| #30 | 10-18 | ± 3 |
| #50 | 8-13 | ± 3 |
| #100 | 6-10 | ± 2 |
| #200 | 4-7 | ± 1 |

| Asphalt Content, % | Production Tolerance (Single Test) |
|------------------------|------------------------------------|
| 5.0 – 5.5 ¹ | ±0.2 |

¹Target asphalt content shall result in a minimum film thickness of 9 microns.

In addition to the job mix submittal, the Contractor shall submit ignition furnace calibration data according to VTM 102 and aggregate property test results prepared by an approved testing laboratory for the aggregate components or aggregate blend.

Job mixes outside the above design range will be considered by the Engineer based on mix performance documented by the supplier to eliminate or minimize flushing or visual deficiencies and may include changes to gradation, asphalt content or the use of fibers. The Engineer may require limited production of less than 300 tons for verification of an acceptable mix, before the Engineer’s approval of the job mix.

319.04 – SURFACE PREPARATION

Before beginning paving operations, the existing pavement surface shall be cleaned of all accumulated dust, mud, vegetation or other debris, which may affect the bond of the THMACO by the Contractor.

Pavement cracks or joints 1/4-inch or more in width shall be cleaned and filled with a sealant material conforming to Section 322.04. Quantities and payment will be according to Section 322.

Pavement markers, thermoplastic pavement marking and tape pavement markings shall be removed before beginning paving operations. Pavement irregularities greater than 1 inch in depth shall be filled with a material designated in the Contract or approved by the Engineer. Payment for the material will be according to Section 315.

Utility structures shall be protected and referenced before paving for location and adjustment (when necessary) after paving at no cost to the Department.

319.05 – Tack Coat

Unless otherwise directed in the contract, two options for placing the tack coat are available.

- (a) **Option 1:** A tack coat of asphalt emulsion conforming to Section 210(e) or other emulsion approved by the Engineer shall be applied before placement of the asphalt concrete. The tack coat shall be placed within 10 seconds of placing the THMACO unless otherwise directed by the Engineer. At no time should any part of the paving machine come into contact with the tack coat before the overlay is applied. The emulsion shall be uniformly applied with a paver spray bar, except hand spray equipment may be used in areas inaccessible to the paver spray bar as directed by the Engineer; inaccessible areas are exempt from the 10-second criterion. The emulsion asphalt shall be applied at a temperature recommended by the supplier at a starting rate of 0.25 gallons per square yard ±0.02 unless otherwise approved by the Engineer.
- (b) **Option 2:** An hot-applied Non-Tracking tack coat conforming to Section 310 and listed on Approved List 50.1A shall be applied before placement of the THMACO. The tack coat shall be uniformly applied with a spray bar paver or a mechanical distributor,

except hand spray equipment may be used in areas inaccessible. The tack coat shall be applied at a temperature recommended by the supplier at a residual rate of 0.14 gallons per square yard ± 0.02 unless otherwise approved by the Engineer.

319.06 – Placement of Hot Mix Asphalt

The application rates of the overlay shall range from 80 pounds per square yard to 85 pounds per square yard in order to result in a 3/4-inch compacted lift thickness.

The thin lift of hot mix asphalt shall be placed by a paver designed for the placement of thin lifts as designated in the contract. The asphalt mix shall be delivered to the paver hopper at a temperature of $315^{\circ}\text{F} \pm 15^{\circ}\text{F}$ measured in the paver hopper. The paver shall be capable of placing the asphalt mix at a speed of 30 feet per minute. When the base temperature is 50°F or above, placement of the asphalt concrete wearing course will be permitted.

319.07 – Compaction

Two steel double drum rollers weighing no less than 10 tons shall perform compaction of the asphalt mix. No less than two passes shall be completed before the surface temperature of the asphalt has reached 185°F .

319.08 – Acceptance

The Contractor shall perform gradation and asphalt cement content tests on one sample taken in a random manner approved by the Engineer from each 500 tons of production. The material will be considered acceptable for gradation and asphalt content, if the results obtained are within the tolerance allowed from the job mix formula in the above table. Material represented by test results outside the tolerance may be removed and replaced with acceptable material by the Contractor at no additional cost to the Department at the discretion of the Engineer.

Should visual examination by the Engineer reveal that the material in any load, or portion of the paved roadway is contaminated, segregated, or flushed with asphalt cement, that load, or portion of the paved roadway may be rejected without additional sampling of the material.

319.09 – Warranty

The Contractor shall provide a one-year warranty from the date of final acceptance on all THMACO surfaces. The Department will periodically monitor the overlay surface installed throughout the warranty period for compliance and acceptability. The Contractor shall repair any area that fails before the end of the warranty period and shall do so within 14 days after Department notification unless otherwise directed by the Department. Failure of the THMACO surface is defined as the loss of adhesion of the material to the underlying layer resulting in a pothole greater than 1 square foot of area (delamination). The Engineer shall notify the Contractor of the date for the warranty inspection at the end of the warranty period and the Contractor shall be present at the inspection.

319.10 – Measurement and Payment

Thin hot mix asphalt concrete will be measured in tons and paid for at the contract unit price per ton, which shall include warranty, tack coat, surface preparation (except crack and joint sealing), all materials, additives, labor and equipment as described herein to install and complete the work.

Crack and joint sealing will be paid according to Section 322.

Payment will be made under:

| Pay Item | Pay Unit |
|-------------------------------|-----------------|
| Thin Hot Mix Asphalt Concrete | Ton |

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 320 – BM-25.0D WITH INCREASED ASPHALT CONTENT**

SECTION 320 – BM-25.0D WITH INCREASED ASPHALT CONTENT of the Specifications is inserted as follows:

320.01 – Description

This work shall consist of supplying, testing and installing asphalt concrete base with additional asphalt binder. BM-25.0D with additional asphalt binder content (BM-25.0D+0.4 and BM-25.0D+0.8) shall conform to all of the requirements of a standard BM-25.0D in Section 211 except as provided herein.

Construction and Acceptance of one or more courses of asphalt concrete consisting of BM-25.0D+0.4 or BM-25.0D+0.8 asphalt concrete base shall be according to BM-25.0D in Section 315 and the density specified herein.

320.02 – Materials

Materials shall conform to Section 211 and 315.02.

320.03 – Job Mix Formula

The mixes shall conform to all of the requirements of a standard BM-25.0D in Section 211 except as noted herein.

An equivalent single axle load (ESAL) will be established by the Engineer and the mix types may be specified as one of the types listed in Table III-7.

**TABLE III-7
Mix Design Requirements**

| Mix Type | Equivalent Single Axle Load (ESAL) Range (millions) | Final Asphalt Performance Grade (PG) | NMA ¹ |
|--------------------------|--|---|------------------|
| BM-25.0D (+0.4 and +0.8) | All ranges | 64H-16 | 1” |

¹Nominal Maximum Aggregate Size (NMA) is defined as one sieve size larger than the first sieve to retain more than 10 percent aggregate.

To determine the asphalt binder content for the BM-25.0D plus additional asphalt binder, an approved BM-25.0D conforming to Section 211 will be used to determine the optimum asphalt binder content and aggregate gradations. While the optimum asphalt binder content for the BM-25.0D will be selected at 2.5% in accordance with Section 211, the initial asphalt binder content for the BM-25.0D+0.4 or BM-25.0D+0.8 will be selected using the 3.5% air voids. The additional asphalt binder (0.4% or 0.8%) will be added to the initial asphalt binder content at 3.5% air voids in order to establish the design asphalt binder content.

During production the BM-25.0D+0.4 and BM-25.0D+0.8 mixes shall be controlled according to Table III-8.

**TABLE III-8
Production Criteria**

| Mix Type | VTM Production (%) | VFA (%) | Min. VMA (%) | Fines/Asphalt Ratio | Number of Gyration | |
|--------------|-----------------------|------------|--------------------|------------------------|--------------------|-----------|
| | | | | | N Design | N Initial |
| BM-25.0D+0.4 | 1.0 – 4.0 | 67 – 92 | 12.0 | 0.6 – 1.3 | 65 | 7 |
| BM-25.0D+0.8 | 0.5 – 3.5 | 67 – 92 | 12.0 | 0.6 – 1.3 | 65 | 7 |

The Laboratory mixing temperature shall be 310°F to 320°F and the compaction temperature shall be 295°F to 300°F for both testing and design.

Field correction factor. The field correction factor is determined by subtracting the bulk specific gravity of the aggregate from the effective specific gravity of the aggregate determined at the JMF asphalt binder content achieved.

**TABLE III-8A
Recommended Performance Grade of Asphalt Binder**

| Mix Type | Percentage of Reclaimed Asphalt Pavement (RAP) in Mix | |
|--------------------------|---|--------------------|
| | %RAP < 25.0 | 25.0 ≤ %RAP ≤ 35.0 |
| BM-25.0D (+0.4 and +0.8) | PG 64H-22 | PG 64S-22 |

320.04 – Testing

When asphalt binder is extracted and recovered according to AASHTO T 170, the recovered asphalt binder shall meet the required grade specified in Table III-7.

320.05 – Acceptance and Adjustment

Acceptance and adjustments shall be according to BM-25.0D in Section 211.08 and 211.09.

320.06 – Density

Density shall be determined in accordance with Section 315.05(e). The minimum density requirements for BM-25.0D+0.4 and BM-25.0D+0.8 are shown in Table III-9.

**TABLE III-9
DENSITY REQUIREMENTS**

| Mixture Type | Minimum Control Strip Density (%) ¹ |
|--------------|--|
| BM-25.0D+0.4 | 94.0 |
| BM-25.0D+0.8 | 96.0 |

¹The control strip density requirement is the percentage of theoretical maximum density of the job mix formula by SUPERPAVE® mix design or as established by the Engineer based on two or more production maximum theoretical density tests.

320.07 – Measurement and Payment

BM-25.0D+0.4 and BM-25.0D+0.8 will be measured in tons and paid for at the Contract ton price. This price shall include all materials and labor specified in Section 315 as modified in this Section for asphalt concrete base.

Payment will be made under:

| Pay Item | Pay Unit |
|--|----------|
| Asphalt Concrete Base Course Type BM-25.0D+0.4 | Ton |
| Asphalt Concrete Base Course Type BM-25.0D+0.8 | Ton |

VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 322 – ASPHALT SURFACE PREPARATION AND OVERLAY

SECTION 322 – ASPHALT SURFACE PREPARATION AND OVERLAY of the Specifications is inserted as follows:

322.01 – Description

This work shall consist of preparation of existing pavement before resurfacing, and placement of asphalt concrete overlay pavement courses on existing paved roadway surfaces. This work shall be performed in accordance with Sections 211 and 315, Sections 248 and 317 where Stone Matrix Asphalt (SMA) is specified, and as specified herein. Where pavement planing is required it shall be performed in accordance with Section 515 and as specified herein. This work is applicable only to the routes or areas designated to be overlaid in the Contract and as authorized by the Engineer.

322.02 – Materials

- (a) **Asphalt concrete** shall conform to Section 211. Stone Matrix Asphalt (SMA) shall conform to Section 248.
- (b) **Asphalt for Tack Coat** shall conform to Section 210 and shall be applied in accordance with Section 310.
- (c) **Type A Crack Sealant** shall be a hot-poured modified asphalt rubber with granulated crumb rubber and latex plasticizers and shall conform to ASTM D6690. The proportions of the materials, by weight, shall be up to 80% asphalt and up to 25% crumb rubber.
- (d) **Type B Crack Sealant** material shall consist of PG 64H-22 and polyester fibers from the Department's Approved List 32. The Contractor shall provide the PG 64H-22 suppliers data for heating. Fibers shall not exceed 5% by weight. Fiber loading will be determined at the project site in order to minimize the need for over banding as described. The fiber loading shall be approved by the Engineer before use.
- (e) **Type C Crack Sealant** material shall consist of PG 64H-22 and polyester fibers from the Department's Approved List 32 at 5% by weight. The Contractor shall provide the PG 64H-22 suppliers data for heating.
- (f) **Crumb rubber** shall be 100 percent vulcanized rubber and conform to the following gradation requirements:

| Sieve | Percent Passing |
|--------------|------------------------|
| No. 10 | 100% |
| No. 40 | 0-40% |

322.03 – Equipment

Equipment for furnishing and placing asphalt concrete overlay shall conform to Section 315. Equipment for furnishing and placing Stone Matrix Asphalt (SMA) shall conform to Section 317. Pavement planing equipment shall conform to Section 515.

Proper crack sealing equipment must be used for the specific material listed according to the manufacturer's recommendations for the Sealant specified. The equipment for hot applied sealant compounds shall be a melting kettle of double boiler, indirect heating type, using oil as a heat-transfer medium. The kettle shall have an effective mechanically operated agitator, a re-circulation pump and shall be equipped with a positive thermostatic temperature control which shall be checked for calibration before beginning work. The unit shall be capable of maintaining the specified mixing temperature within 10°F. Manufacturer's recommendations for mixing and application temperatures shall be followed with the latter being measured at the nozzle of the applicator wand. Overheating or direct heating of the sealant material will not be permitted. The hoses, connectors and applicator wand shall all be insulated.

322.04 – Sealing Cracks in Asphalt Concrete Surfaces or Hydraulic Cement Concrete Pavement

Type A crack sealant materials shall be used on pavements which will not be overlaid with asphalt concrete within one year. Type B crack sealant material shall be used to fill cracks in pavements that will be overlaid with asphalt concrete within one year. Type C crack sealant shall be used when routing, cleaning, and sealing cracks in asphalt concrete surfaces that may or may not be overlaid within one

year. The Contract will designate which sites are to use each material. Cracks ranging in width from 1/8 inch to 1-1/2 inches shall be sealed. Cracks that exceed 1-1/2 inches are not included for crack sealing.

The sealant shall not be placed when the ambient or pavement temperatures fall below 45°F, or when moisture is present in the crack to be sealed.

Before sealing, cracks shall be thoroughly cleaned as approved by the Engineer using an oil free hot air blasting heat lance capable of a velocity of 3000 fps at 300°F. Cracks shall be cleaned such that all dirt, debris, moisture and other foreign materials that will prevent bonding of the sealant are removed to a minimum depth of 1 inch. All foreign material (i.e., dirt, grass, rocks) shall be removed from the pavement to prevent re-contamination of the crack. Cracks shall be completely dry before sealing. Any crack not meeting the approval of the Engineer shall be re-cleaned and dried.

The sealant shall be pumped directly into the crack from the heater-melter unit at the temperature specified by the manufacturer immediately following the cleaning of each crack. Cracks shall be sealed using the methods herein as approved by the Engineer.

- (a) **Type A crack sealant** shall be installed from the bottom up in a continuous manner such that the crack is completely filled level with the pavement surface, and the sealant shall overlay the crack at the pavement surface leaving a maximum "over-banded" appearance of 1-inch wide on each side of the crack. The material shall not continue to flow beyond these limits once a crack is sealed. The height of the sealant above the pavement surface shall not exceed 1/8 inch. For this method of sealing, the applicator wand shall be equipped with a shoe that will produce the extruded over-band as well as completely fill the crack.
- (b) **Type B crack sealant** shall be installed from the bottom up in a continuous manner such that the crack is completely filled level with the pavement surface. The sealant may overlay the surface on each side of the by no more than 1/2 inch or leave a no "over-banded" appearance. The material shall not continue to flow beyond these limits once a crack is sealed. The height of the sealant above the pavement surface shall not exceed 1/8 inch. For this method of sealing, the applicator wand shall be equipped with a shoe that will minimize the extruded over-band as well as completely fill the crack.
- (c) **Type C crack sealant:** Before sealing, the cracks shall be routed to a minimum depth of 1 inch and to a minimal width of 1/2 inch. Cracks shall be filled from the bottom up in a continuous manner such that the crack is completely filled level with the pavement surface, and the sealant shall overlay the crack at the pavement surface leaving a no "over-banded" appearance. The material shall not continue to flow beyond these limits once a crack is sealed. The height of the sealant above the pavement surface shall not exceed 1/8 inch.

Before starting each day's operation, the applicator wand and hose shall be heated in accordance with the equipment manufacturer's recommendations and the material in the heater-melter unit re-circulated.

The applicator wand shall be returned to the mixing unit and the sealant material re-circulated immediately upon completion of each crack sealing.

Any crack in hydraulic cement concrete pavement which cannot be filled due to the sealant draining into a large void, shall be plugged with a suitable material (i.e. backer rod) approved by the Engineer before the project, and then filled. After being plugged, recleaning of the crack may be required before filling with sealant.

The Contractor shall measure and record the temperature of the material on 2-hour intervals during the heating and application of the crack sealing material. For Type A material, the material shall never be heated over 420°F. For Type B and C material, the material shall not be heated above 375°F. Any material heated above these temperatures shall be discarded (i.e. all material in the heater-melter unit) at no expense to the Department. Additionally, if the material becomes lumpy or has poor flow at elevated temperature, then the material shall be discarded (i.e. all material in the heater-melter unit) at no expense to the Department.

Traffic shall be kept off the pavement surface until the crack sealant has cured to the point it will not track or be distorted by traffic. The Contractor shall replace, at his or her expense, any sealant that pulls out within 96 hours after opening the pavement to traffic.

322.05 – Asphalt Concrete Scratch/Leveling Course Before Resurfacing

Scratching or leveling a crack sealed, scabbed or distorted pavement surface (milled or unmilled) shall be done using the appropriate asphalt mixes in areas designated by the Engineer. Scratching and leveling shall only be applicable to the routes or areas designated to be overlaid in this contract and where the Engineer has authorized the limits. Scratching and leveling shall be completed before the overlay paving operation.

- (a) **Scratch/level Type I** is a localized scratch and level of the pavement, including crack sealed, distorted or scabbed areas, making up no more than 50% of the surface area to be overlaid in each distinct paving site or location on the Contract.

(b) **Scratch/level Type II** is a widespread scratch and level of the pavement, including crack sealed, distorted or scabbed areas, making up more than 50% of the surface area to be overlaid in each distinct paving site or location on the Contract.

For surfaces that will receive a direct overlay, the Engineer will designate the limits of surface area for scratch/leveling course to be installed before beginning the work. For pavements that are milled, the Engineer will identify and designate the limits of surface area for scratch/leveling course to be placed as the work progresses in accordance with Section 105.03. Areas designated for scratch/leveling course shall be thoroughly cleaned before applying tack coat.

A tack coat shall be applied to all exposed surfaces of the area which will receive asphalt material according to Section 310. Asphalt concrete scratch or leveling material shall be the surface mix asphalt designated in the contract or as approved by the Engineer. SMA shall not be used as a scratch/leveling course material. Limestone mixes (L) may be used in leveling courses when approved by the Engineer.

Asphalt material shall be placed in a lift of no more than 2 inches in depth; typical lifts are approximately 1 inch in depth. Asphalt may be placed with variable depth thickness as necessary for leveling. After each lift, it shall be compacted with equipment according to Section 315.03(c) using a minimum of 3 passes of a minimum 8 ton roller. Density testing will not be required. Care shall be taken to ensure the surface of the finished repaired area conforms to the grade of the surrounding pavement.

Scratching and leveling shall be completed before the overlay or resurfacing. If a scratch or level placement fails before overlay, the Contractor will be responsible for removing and replacing the failed material at no cost to the Department.

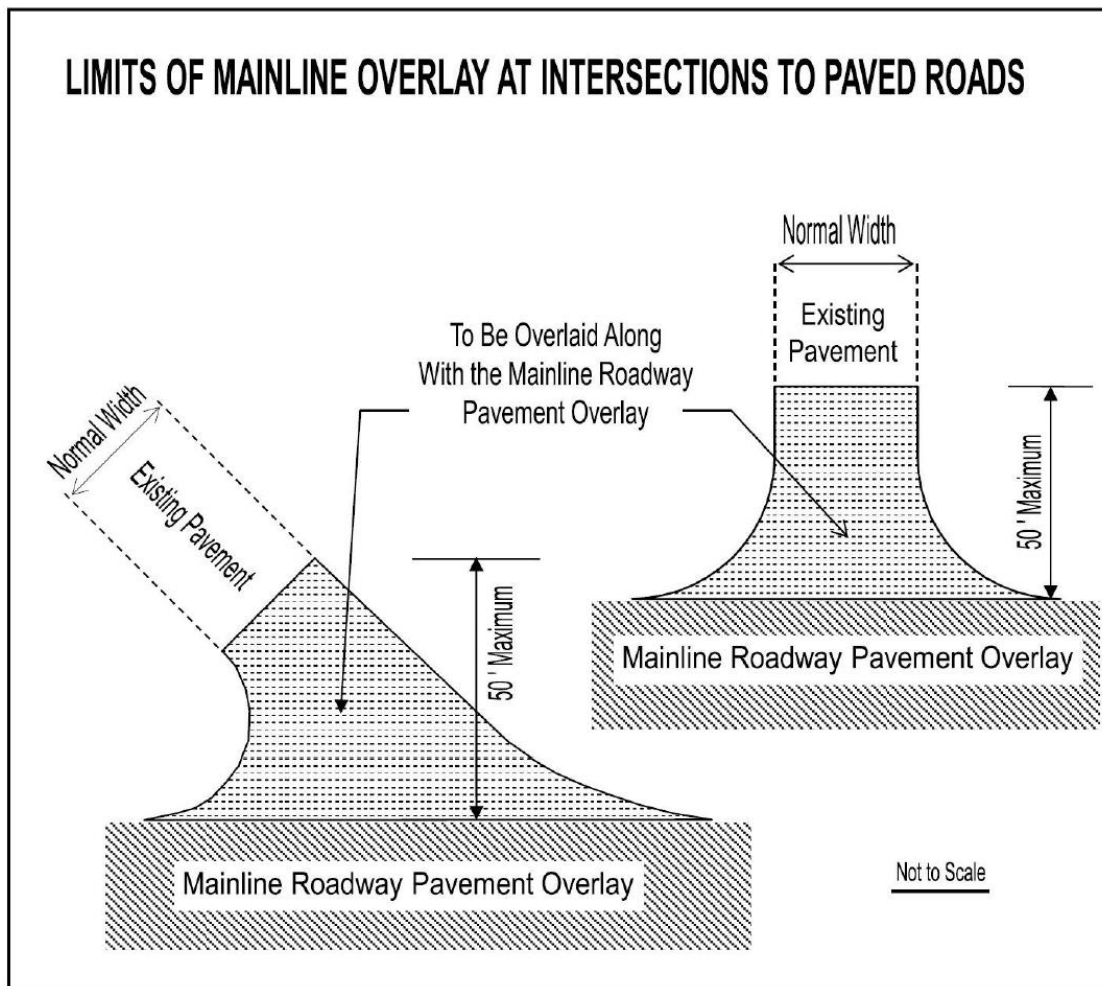
322.06 – Limits of Mainline Overlay at Intersections to Paved Roads

The Contractor shall overlay the intersecting paved road from the edge of pavement of the mainline roadway pavement overlay to a point that includes the entire radius of the intersecting paved road according to Figure III-10. This distance from the edge of pavement of the mainline roadway pavement overlay shall not exceed 50 feet measured according to Figure III-10.

On curb and gutter sections where planing is required for the mainline roadway overlay, planing shall also be required on the intersecting paved road area before these areas are overlaid.

FIGURE III-10 Limits of Mainline Overlay at Intersections to Paved Roads

LIMITS OF MAINLINE OVERLAY AT INTERSECTIONS TO PAVED ROADS



Asphalt concrete overlay pavement placed on existing paved roadway surfaces that intersects the mainline roadway pavement overlay shall be constructed using a method approved by the Engineer, which shall include the cutting back to expose the course. The approved method shall provide a smooth transition between new pavement and existing pavement. Such tie-ins shall conform to Section 315.05(c) except that all joints at tie-in locations shall be tested using a 10-foot straightedge according to Section 315.07(a).

322.07 – Placement of Asphalt Concrete Overlays

Placement of Asphalt Concrete Overlays shall conform to Section 315 and the requirements herein. Where pavement planing is required it shall be performed according to Section 515. No placement of an overlay or deck planing will be permitted on a bridge deck without the prior written approval of the District Bridge Engineer.

Limitations of operations for placing asphalt concrete overlays shall be according to Section 108.02, the Contract requirements, and as specified herein.

Before beginning paving overlay operations the Contractor shall clean accumulated dust, mud, or other debris that may adversely affect the bond of the new overlay from the existing pavement surface to the satisfaction of the Engineer. The cost for cleaning and surface preparation shall be included in the bid price for the asphalt concrete.

Sealing pavement cracks or joints and filling pavement irregularities greater than 1 inch deep using approved materials and specified procedures herein will be performed by the Engineer ahead of the Contractor's operations or included in the work performed by the Contractor. When such corrective work is performed by the Contractor, the work will be paid for as designated by the specific pay items in the Contract.

The Contractor shall remove thermoplastic and tape pavement markings and raised pavement markers before performing paving overlay operations. Thermoplastic and tape pavement markings shall be at least 90 percent eradicated so as not to interfere with bonding of pavement overlay or the transfer of the existing marking thickness up through the overlay. This work shall be performed in accordance with Sections 512 and 704 except as otherwise permitted herein.

The Contractor shall protect and reference utility structures before paving in order to locate or adjust these structures, if necessary, after paving operations are completed. The protection and referencing of utility structures shall be at no cost to the Department.

Temporary transverse pavement-wedge tie-ins shall be constructed where pavement overlay operations are temporarily halted as allowed or required herein, in Section 315, elsewhere in the Contract, or by the Engineer. Each temporary tie-in shall be no less than 3 feet in length for every inch of depth of overlaid pavement and shall consist of a mix that is suitable as a surface mix asphalt to provide a smooth transition between the installed overlay and existing pavement or bridge deck. Such temporary tie-ins shall be constructed before the overlaid pavement is opened to traffic.

Final transverse pavement tie-ins shall be constructed to provide a smooth transition between newly overlaid pavement and existing pavements, bridge decks, and existing pavement underneath bridge overpasses. Such tie-ins shall conform to Standard Drawing ACOT-1 or Section 315.05(c) as applicable, except that all joints at tie-in locations shall be tested using a 10-foot straightedge in accordance with Section 315.07(a). When planing is necessary at tie-ins to existing pavement or bridge decks to obtain the required overlay depth specified in the Contract, the existing pavement shall be planed according to the ACOT-1 Standard or the requirements herein.

No pavement overlay shall decrease the vertical clearance under a bridge. In situations where the pavement under the overpass cannot be planed in direct proportion to the overlay to be placed, the new pavement is to be tied down to the existing pavement under the overpass at least 75 feet from the outer edges of the bridge overpass according to Standard Drawing ACOT-1.

The ACOT-1 Standard for asphalt concrete overlay transitions shall apply when there is at least 1 inch of grade change between the finished asphalt concrete overlay surface and the existing pavement surface and where any of the following conditions exist:

- Bridge decks or bridge overpasses are located within the project site to receive the overlay.
- The Contractor has to tie-in the top course of asphalt concrete overlay to an existing hydraulic cement concrete pavement surface.
- The Contractor has to tie-in the top course of the asphalt concrete overlay to an existing asphalt concrete pavement surface and planing is included in the Contract as pay item.

When tying in the top course of the asphalt concrete overlay to an existing asphalt concrete pavement surface and there is no pay item in the Contract for planing, the asphalt concrete overlay tie-in shall conform to Section 315.07(a).

Rideability pay adjustments will not apply to the first 105 feet (0.02 of a mile) measured from the line of the tie-in.

If an emergency or an unforeseen circumstance such as equipment failure or breakdown occurs during the Contractor's operations that prevents the Contractor from squaring up the overlaid surface on adjacent lanes before a weekend, a holiday or a temporary shutdown, any additional signage, traffic control devices, or markings or markers required to protect the traveling public shall be provided at the Contractor's expense.

The Contractor shall ensure positive drainage is provided for all overlaid surfaces according to Section 315.05(c).

(a) Roadways with Posted Speed Limit of 55 Mph or Greater

The Contractor shall install asphalt concrete overlays to the depths specified for the specific routes identified in the Contract. Where asphalt concrete is being overlaid by 2 inches or less on roadways carrying traffic, the Contractor shall have the option of squaring up the overlay operation at the end of each workday or squaring up all travel lanes, excluding shoulders, before the weekend. Shoulders shall be squared up within 48 hours after the weekend unless required sooner elsewhere in the Contract, and before continuing mainline paving. All lanes including shoulders must be squared up before holidays or any temporary shutdowns.

Where overlays of more than 2 inches are being placed, the Contractor must square up the overlay operation at the end of each workday. This requirement shall apply to travel lanes and shoulders.

Asphalt concrete pavement overlay operations shall be performed in only one travel lane at a time. Under no circumstance will the Contractor be allowed to overlay a portion of the width of a travel lane, ramp, or loop and leave it exposed to traffic.

Where uneven pavement joints exist either transversely or longitudinally at the edges of travel lanes due to the overlay operations, the Contractor shall provide advance warning signage and traffic control devices for the scope of the overlay operation the Contractor is performing according to the details provided in the Contract. The cost for the advance warning devices and signage

shall be included in the cost of other appropriate items. Temporary pavement markings and markers required as a result of staging such operations will be measured and paid for according to Section 512 and 704.

Ramps, exits, and turn lanes are to be paved in such a manner that a longitudinal joint with a surface elevation of 1 inch or more between the existing pavement and the overlay (where the overlay is the higher of the two elevations) will not be left for vehicles to cross within the posted speed limits in a “run-on” situation. Ramps, exits, and turn lanes are to be paved to the extent that the joint crossed by traffic is traversed at an angle close to 90 degrees (perpendicular), or the ramp, exit and turn lane shall be squared up with the adjacent mainline lane at the time of installation.

Only approved mixes that have been verified according to Section 211.03(f) and have met the requirement for roller pattern density shall be placed on limited access roadways.

(b) All Other Roadways

Where asphalt concrete is being overlaid to a height of 2 inches or less on roadways carrying traffic, the Contractor shall have the option of squaring up the overlay operation at the end of each workday or squaring up all lanes including shoulders at least once every 4 consecutive workdays, excluding weekends. All lanes including shoulders must be squared up before weekends, holidays, or any temporary shutdowns.

Where overlays of more than 2 inches are being placed on roadways carrying traffic the Contractor shall square up the overlay operation at the end of each workday. This requirement shall apply to travel lanes and shoulders. Asphalt concrete pavement overlay operations shall be performed in only one travel lane at a time. Under no circumstance will the Contractor be allowed to overlay a portion of the width of a travel lane, ramp, or loop and leave it overnight.

Where uneven pavement joints exist either transversely or longitudinally at the edges of travel lanes due to the overlay operations, the Contractor shall provide advance warning signage and traffic control devices at his expense according to the details provided in the Contract for the scope of overlay operation he is performing.

322.08 – Measurement and Payment

Crack Sealant/Filler for cracks or joints will be measured by the pound using either the Conversion Approach or the Direct Measurement Approach. For the Conversion Approach, the Engineer, or an appointed representative, shall measure the amount of material in the heater-melter unit at the beginning of the day. For the Direct Measurement approach, the Contractor shall provide the Engineer the certified weight of the heater-melter unit at the beginning and end of each day. During the day’s operation, the Engineer will log all additional material added to the heater-melter unit. The Engineer will determine the pounds of material applied for payment purposes. No payment will be made for waste or unused material.

When using the Conversion Approach, the Contractor shall use a calibrated measuring rod to determine the actual quantity of material in gallons and shall be converted to pounds taking consideration for the temperature of the material at the time of placement. A chart or other approved conversion method furnished by the sealant material manufacturer or supplier shall be used to perform the conversion from gallons to pounds.

Crack Sealant/Filler Type A and Type B will be measured in pounds and paid for at the Contract pound price. This price shall be full compensation for providing the sealant and filler, complete-in-place, including cleaning and sealing the cracks and for all tools, labor, equipment, materials and incidentals related fully completing the installation.

Crack Sealant/Filler Type C will be measured in pounds and paid for at the Contract pound price. This price shall be full compensation for providing the sealant and filler, complete-in-place, including routing, cleaning, and sealing the cracks and for all tools, labor, equipment, materials and incidentals related fully completing the installation.

Asphalt Concrete, including overlay at intersections to paved roads, will be measured and paid for in accordance with Section 315.

Stone Matrix Asphalt, including overlay at intersections to paved roads, will be measured and paid for in accordance with Section 317.

When the Proposal has a Pay Item corresponding to scratching/leveling in the Schedule of Items then that Pay Item will include the work designated in the corresponding Pay Item Definition below and be paid at the price designated by the Bidder. If the Proposal has no Pay Item for scratching/leveling as described herein, that work shall meet the descriptions herein and will be measured and paid for as described herein.

Scratch/Leveling Course Type I will be measured in tons of asphalt material and paid for at the rate of two times the Contract ton price of the mix types of asphalt authorized by the Engineer. This price shall include preparing the area, furnishing and applying tack coat, furnishing and applying asphalt material, and compaction.

Scratch/Leveling Course Type II will be measured in tons of asphalt material and paid for at the rate of one and one-half times the Contract ton price of the mix types of asphalt authorized by the Engineer. This price shall include preparing the area, furnishing and applying tack coat, furnishing and applying asphalt material, and compaction.

Payment will be made under the following, when included in the “Schedule of items”,

| Pay Item | Pay Unit |
|-----------------------------|-----------------|
| Crack Sealant/Filler (Type) | Pound |
| Scratch/Level (Type) | Tons |

SS323-002020-01

September 9, 2020

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 323 – ASPHALT PATCHING OF EXISTING FLEXIBLE AND RIGID PAVEMENT AND SHOULDERS**

SECTION 323 – ASPHALT PATCHING OF EXISTING FLEXIBLE AND RIGID PAVEMENT AND SHOULDERS of the Specifications is inserted as follows:

323.01 – Description

This work shall consist of repairing specified sections of existing flexible, rigid or composite pavements by removing all or part of the defective materials in the sections and replacing them with asphaltmix paving material. The locations of the repairs will be specified in the Contract or directed by the Engineer.

Partial Depth Hydraulic Cement Concrete (HCC) Patching shall consist of the removal of areas of unsound HCC pavement material to a depth of no more than 50 percent of the maximum pavement thickness and replacement with asphalt concrete as specified in the Contract document and as directed by the Engineer. The pavement thickness is defined as the thickness of the HCC.

Shoulder Patching shall consist of the removal of specified areas of the full thickness of the pavement section in the shoulder only to the top of the base material (bound or un-bound) and replacement with asphalt concrete as specified in the Contract or as directed by the Engineer.

323.02 – Materials

(a) **Asphalt concrete mixtures** shall conform to Section 211.

(b) **Tack coat** shall conform to Section 310.

323.03 – Equipment

Saw cutting equipment shall be capable of sawing neat vertical faces along the patch boundaries. The use of a carbide-toothed wheel saw shall not be permitted for sawing the patch boundaries in rigid pavements. A carbide-tipped wheel saw may be used for additional saw cuts provided that a minimum 3-inch clearance from the sawed boundary is maintained.

Material in the areas identified for shoulder patching may be removed by a milling machine, backhoe, or other excavating equipment as approved by the Department.

Equipment for furnishing and placing asphalt concrete overlay shall conform to Section 315.

323.04 – Procedures

Asphalt patches shall be placed in accordance with Section 315. The existing pavement shall be removed with a minimum disturbance to the aggregate base material and the faces of the remaining pavement shall be cut to a smooth, vertical face without ragged edges.

The existing pavement shall be removed by milling, grinding, saw cutting or any other approved method to the specified depth for the full perimeter of the designated area. The Contractor shall clean this area of any debris or loose particles before applying tack. Tack coat shall be applied to surface and vertical faces of exposed asphalt concrete at a rate of 0.2 gallon per square yard. Exposed base aggregate shall be primed with tack coat at an application rate of 0.4 gallon per square yard. Where HCC is encountered on bitumen over concrete composite pavements before reaching the specified depth, the depth of the patch shall then be limited to the top elevation of the HCC. Before applying the patch, the bottom of the excavation of all patches shall be cleaned of all loose and foreign materials and stabilized by hand or mechanical tamping.

HCC pavement to be removed shall be sawed along the transverse and longitudinal boundaries, including the lane and shoulder/lane joints as shown on the Plans or as directed by the Engineer. Additional saw cuts inside the patch boundaries will be permitted to facilitate the concrete removal operation. During the removal operations, utmost care shall be exercised to minimize disturbance and damage to the reinforcing steel, and the adjacent pavement and shoulder. Before applying the patch, the bottom of the excavation of all patches shall be cleaned of all loose and foreign materials.

Manual placement will be permitted for installation of the asphalt concrete, when approved by the Engineer. Control strip and pavement profile measurements will not be required. Density shall conform to Section 315.05(e). Variation between surfaces at the run on and run off joints shall not be more than 1/4 inch when tested with a 10-foot straight edge. When the surface of the asphalt patch will also be the final riding surface, that surface shall conform to the tolerances in Section 315.07(a). The Contractor shall correct humps and depressions exceeding the specified tolerance or the defective work shall be removed and replaced with new material.

The existing pavement materials that are removed shall be hauled away from the repair site immediately, and disposed of properly by the Contractor in accordance with Section 106.04.

Minimum and maximum lift thickness for patching with Superpave asphalt concrete mixes shall be maintained during construction of the patches in conformance with the following:

| SUPERPAVE ASPHALT CONCRETE LIFT THICKNESS (PATCHING) | | | |
|---|---------------------|---------------------|-------------------------|
| NMAS (mm) | MINIMUM (in) | MAXIMUM (in) | RECOMMENDED (in) |
| 9.0 | 0.75 | 1.5 | 1.0 |
| 9.5 | 1.25 | 2.0 | 1.5 |
| 12.5 | 1.5 | 2.0 | 1.75 |
| 19.0 | 2.0 | 3.0 | 2.0 |
| 25.0 | 2.5 | 4.0 | 3.0 |

Patching and surface preparation shall be completed before the overlay or resurfacing. If an Asphalt Patch fails before overlay, the Contractor will be responsible for removing and replacing the failed patch at no cost to the Department.

323.05 – Measurement and Payment

Payment for all patching will be adjusted for density in accordance with Section 315.05(e) and Table III-6.

Partial Depth HCC Patching will be measured in square yards and will be paid for at the Contract square yard price for the mix and depth specified. This price shall be full compensation for furnishing materials and installing pavement patches complete in place. The work shall include, but not be limited to supplying materials, saw cutting, milling, grinding, removing and disposing of existing material,

the cost to haul and place asphalt concrete, and all labor, equipment, tools, supervision, fuel and incidentals necessary to complete the work.

Shoulder Patching will be measured in square yards and will be paid for at the Contract square yard price for the mix and depth specified. The payment shall be full compensation for furnishing materials and installing pavement patches on the shoulder complete in place. The work shall include, but not be limited to supplying materials, saw cutting, milling, grinding, removing and disposing of existing material, the cost to haul and place asphalt concrete, and all labor, equipment, tools, supervision, fuel and incidentals necessary to complete the work.

Travel Lane Patching will be measured in tons and will be paid for at the Contract ton price for the mix specified. The payment shall be full compensation for furnishing materials and installing pavement patches in the travel lanes complete in place. The work shall include, but not be limited to supplying materials, saw cutting, milling, grinding, removing and disposing of existing material, the cost to haul and place asphalt concrete, and all labor, equipment, tools, supervision, fuel and incidentals necessary to complete the work.

Liquid asphalt tack or prime will not be measured for separate payment and the cost to furnish and apply the liquid asphalt shall be included in the bid price for patching.

When Surface Preparation and Restoration is a Pay Item, that Pay Item will include the work designated in the corresponding Pay Item Definition below and be paid at the Contract price. Otherwise, that work shall meet the descriptions herein and will be measured and paid for as described herein.

Surface Preparation and Restoration Type I is a localized disintegration of the pavement, including distorted areas, no more than 5 inches in depth and no more than 20 square feet in surface area. Surface Preparation and Restoration Type I will be measured in tons of asphalt material and paid for at the rate of three times the Contract ton price of the mix types of asphalt authorized by the Engineer. This price shall include removing and disposing of unsuitable material, preparing the area, furnishing and applying tack coat, furnishing and applying asphalt material, and compaction.

Surface Preparation and Restoration Type II is a localized disintegration of the pavement, including distorted areas, no more than 5 inches in depth and more than 20 square feet in surface area. Surface Preparation and Restoration Type II will be measured in tons of asphalt material and paid for at the rate of four times the Contract ton price of the mix types of asphalt authorized by the Engineer. This price shall include removing and disposing of unsuitable material, preparing the area, furnishing and applying tack coat, furnishing and applying asphalt material, and compaction.

Surface Preparation and Restoration Type III is a localized disintegration of the pavement more than 5 inches in depth with limits of the surface area as defined by the Engineer. Surface Preparation and Restoration Type III will be measured in tons of asphalt material and paid for at the rate of five times the Contract ton price of the mix types of asphalt authorized by the Engineer. This price shall include removing and disposing of unsuitable material, preparing the area, furnishing and applying tack coat, furnishing and applying asphalt material, and compaction.

Payment will be made under:

| Pay Item | Pay Unit |
|---|-----------------|
| Partial Depth PCC Patching (Asphalt Patch Mix Type and Depth) | Square Yard |
| Shoulder Patching (Shoulder Mix Type and Depth) | Square Yard |
| Travel Lane Patching (Patch Mix Type) | Ton |
| Surface Preparation and Restoration (Type) | Ton |



DIVISION V

SPECIAL PROVISION COPIED NOTES (SPCNs), SPECIAL PROVISION (SPs) and SUPPLEMENTAL SPECIFICATIONS (SSs)

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cn512-000310-00

POLICE PATROLS — The Contractor is advised that the Department will use Police patrols in construction work zones when traffic flow problems are anticipated, to enhance the safety of both the public and construction personnel, during the life of this contract.

4-25-88c; Reissued 7-12-16 (SPCN) [formerly cn512-030100-00]

UNIFORMED FLAGGERS - The Contractor shall utilize off-duty uniformed police officers for control of traffic through signalized intersections during periods when the control equipment is non-operational. It is expressly understood that the work under this pay item exceeds the requirements and duties typically associated with flagger service. Off duty police officers will not be required to have VDOT flagger certification to perform this work. Police assisted flagger service will be measured and paid for in hours of in duty service. This price will be full compensation for furnishing uniform officers and all associated costs.

Payment will be made under:

| Pay Item | Pay Unit |
|--------------------|-----------------|
| Uniformed Flaggers | Hours |

9-29-08; Reissued 7-12-16_(SPCN)

CONTRACTOR MAINTENANCE OF TEMPORARY MARKINGS – The second, third, and fourth paragraphs of Section 512.03(k)3 of the Specifications will also apply to Sections 512.03(k)1 and 512.03(k)2 of the Specifications.

6-13-17 (SPCN)

FLAGGER SERVICE — The Contractor shall provide certified flaggers in sufficient numbers and locations as necessary for control and protection of vehicular and pedestrian traffic in accordance with the VWAPM, or as directed by the Engineer. Flaggers shall use sign paddles to regulate traffic in accordance with the VWAPM. Certified flaggers shall conform to Section 105.14 of the Specifications.

Flagger Service will be measured in hours of operation, per flagger, as required by Section 512.03(b) of the Specifications and authorized or approved by the Engineer; and will be paid for at the contract unit price per hour. This price shall include paddles and safety equipment.

| Pay Item | Pay Unit |
|-----------------|-----------------|
| Flagger Service | Hour |

3-9-17 (SPCN)

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 512 – MAINTAINING TRAFFIC**

SECTION 512 – MAINTAINING TRAFFIC of the Specifications is amended as follows:

Section 512.02(f) – Temporary (Construction) signs is replaced with the following:

Temporary (Construction) signs shall have retroreflective sign sheeting in accordance with Sections 247 and 701.

Sign substrates for rigid temporary signs and temporary overlay panels shall be fabricated of either aluminum at least 0.080-inches thick, conforming to Section 229.02(a); 0.4-inch-thick corrugated polypropylene; 0.4-inch-thick corrugated polyethylene plastic; or 0.079-inch-thick aluminum/plastic laminate as approved by the Engineer. Sign substrates shall be smooth, flat, and free of metal burrs or splinters.

Sign substrate materials for signs mounted on drums, Type 3 barricades, and portable sign stands shall be as specified below and shall be the same material that was used when the device was approved in accordance with National Cooperative Highway Research Program (NCHRP) Report 350 or MASH.

Sign Substrates for Type 3 Barricades and Portable Sign Stands

Rollup sign
0.4 inch thick corrugated polypropylene or polyethylene plastic
0.079 inch thick aluminum/plastic laminate

Sign Substrates for Drums

0.4 inch thick corrugated polypropylene or polyethylene plastic

Section 512.03 – Procedures is amended by replacing the sixth and seventh paragraphs with the following:

The Contractor shall correct ineffective or unacceptable work zone traffic control devices immediately unless allowed otherwise by the Contract.

The color of Automated Flagger Assistance Device trailers, arrow board trailers, portable traffic control signal trailers, ITS trailer equipment, and portable changeable message sign trailers and sign frames shall be either Virginia highway orange (DuPont Color No. LF74279 AT or color equivalent) or federal yellow. The back traffic facing trailer frame, where the signal and brake lights are located, shall be fully covered with 2 inch high retroreflective sheeting conforming to Section 247.02(c). The sheeting shall have alternating 11 inch wide vertical red stripes and 7 inch wide vertical white stripes.

The Contractor shall locate, remove, and dispose of all existing asphalt-embedded Snowplowable Raised Pavement Marker (SRPM) castings which lie within a travel lane that has been shifted during construction for three months or longer. The cavity left by the removal of the existing marker shall be cleaned of debris, filled with an approved mix design for resurfacing or material found on the Department's Approved List 78, and compacted before shifting traffic.

Section 512.03(a) – Temporary (Construction) Signs is replaced with the following:

Temporary (Construction) Signs: The Contractor shall furnish, install, remove, relocate, and maintain temporary signs and sign panels necessary for prosecution of the work. Installation shall be in accordance with Section 701. The Contractor shall also furnish and install those signs not listed in the *VWAPM* that may be required by the Engineer.

Signs shall be fabricated in accordance with the MUTCD and *VWAPM*. If the Contractor proposes a sign message not included in the Plans, *VWAPM*, or MUTCD, then the Contractor shall submit a sign fabrication detail to the Engineer for approval before fabrication.

The Contractor shall relocate, cover, uncover, remove, and reinstall existing signs that conflict with the signs needed for maintenance of traffic. Covering of existing signs shall be accomplished in accordance with Section 701.03(d).

The Contractor shall ensure an unrestricted view of sign messages. The Contractor shall furnish and install flags for temporary signs, as directed by the Engineer; however flags will not be required for use on portable sign supports.

Sign location, lateral placement, and mounting height shall conform to the *VWAPM*, the *MUTCD*, the Contract, and as directed by the Engineer. The Contractor shall furnish all sign supports and hardware for use with temporary signs.

When the sign sequence is not provided in the plans, either by illustration or reference to a typical traffic control figure in the *VWAPM*, the Contractor shall submit a sketch of his proposed sign sequence to the Engineer for approval before installation.

Temporary signs shall be mounted using wooden post supports, square tube sign post supports, or portable sign stands, except where noted otherwise on the Plans. Portable sign stands shall not be used longer than three consecutive days (72 continuous hours). Wooden and square tube post installations shall be in accordance with Standard Drawing WSP-1.

Portable sign stands manufactured on or before December 31, 2019 may be used if they are in good working condition, conform to NCHRP Report 350 Test Level 3 or MASH, and are a product shown on the Department's Approved Lists for NCHRP-350 or MASH Approved Products. Portable sign stands manufactured after December 31, 2019 shall conform to MASH and shall be a product shown on the Department's Approved List for MASH Approved Products. The Contractor shall submit a certification letter stating the brands and models of portable sign stands to be used along with a copy of the certification letters indicating compliance with NCHRP Report 350 Test Level 3 or MASH.

Portable sign stands shall include decals, stenciling, or some other durable marking system that indicates the manufacturer and model number of the stands. Such marking shall be of sufficient size so it is clearly legible to a person in a standing position.

The Contractor shall erect, maintain, move, and be responsible for the security of sign panels and shall ensure an unrestricted view of sign messages for the safety of traffic.

Section 512.03(g)2b(1) – Drums is replaced with the following:

Drums shall be round or partially round; made from plastic; have a minimum height of 36 inches; have a cross-sectional width no less than 18 inches in any direction; have a closed top; and shall conform to the *VWAPM*. Drums shall be designed to allow for separation of ballast and drum upon vehicular impact but not from wind and vacuum created by passing vehicles. The base of the unit height shall not exceed 5 inches. Two-piece drums may have a flared drum foundation, a collar not exceeding 5 inches in height and be of suitable shape and weight to provide stable support. One-piece drums that comply with these requirements may be used.

Section 512.03(g)2b(3) – Direction indicator barricades is deleted.

Section 512.03(h) – Traffic Barrier Service is replaced with the following:

Traffic Barrier Service shall be of sufficient length to provide anchorage and protection of traffic and personnel in work areas.

The Contractor shall begin continuous progressive prosecution of the work protected by the barrier once the barrier is in place until its completion. If the Contractor ceases to continuously prosecute such work, the Engineer may cause the Contractor to discontinue operations in other areas on the project and concentrate work efforts behind the traffic barrier service until that work is completed. The Contractor shall remove the traffic barrier service when the Engineer determines work is completed to the extent that traffic barrier service is no longer required.

While performing work activities, workers and equipment shall remain behind the protection of the traffic barrier service except as approved by the Engineer. Work outside traffic barrier service protection shall only proceed under the protection and direction of approved traffic control devices or flagger service to safeguard workers and traffic in advance of and at the point the traffic barrier service is opened for ingress or egress adjacent to the travel lane. The Engineer will not permit any equipment extending into an open travel lane.

Barrier openings for access to the work area may be provided only along tangent sections or along curved sections on the inside of traffic and shall be limited to the minimum length required for equipment access. The Contractor shall delineate and maintain normal pavement alignment at the barrier opening with Type D pavement marking.

Repairs to traffic barrier service shall match existing barrier so that positive connections can be maintained.

Delineators and barrier panels shall have reflectorized sheeting conforming to Section 247, shall be from the Department's Approved List 23, and shall be installed on traffic barrier service in accordance with the *VWAPM*.

The Contractor shall maintain the structural integrity of the barrier and its alignment while it is in use and shall maintain any associated warning lights, barrier delineators, barrier panels, and other devices in functional, clean and visible conditions at all times.

1. **Guardrail barrier service and terminal treatments** shall be installed in accordance with Section 505 except that the offset distance shall be as specified by the Engineer. The Contractor may be permitted to reuse guardrail or its hardware used for traffic barrier service guardrail for permanent installation provided the guardrail material is acceptable to the Engineer and conforms to Section 505 and the Standard Drawings for such guardrail. Marred galvanized surfaces shall be repaired in accordance with Section 233. Terminal treatments shall be permanently identified with a device specific Manufacturers' identification number by stamping or marking with a durable weather resistant material in accordance with § 33.2-274.1 of the Code of Virginia.
2. **Traffic barrier service** (concrete or longitudinal steel) shall be installed in accordance with the Plans and Standard Drawings or as directed by the Engineer, who will design according to Appendix A of the VWAPM. When traffic barrier ends at guardrail, fixed object attachment methods for construction zone shall be used to connect the barrier to the guardrail. Installation shall include additional guardrail posts and attachments as required. The traffic barrier, at a minimum, shall be tapered with the end of the barrier located behind the adjacent guardrail post in accordance with the VWAPM. Barrier connections shall be snug to prevent motion between sections.

Traffic barrier service used as a parapet shall be anchored as shown on the Plans or Section 500 of the Standard Drawings. Anchor holes in bridge decks shall be drilled with a rotary impact drill or other approved equipment that will limit damage to the deck. Anchor holes shall be located to avoid cutting reinforcing steel. Upon removal of the parapet, anchor holes shall be cleaned and filled with Type EP-4 or EP-5 epoxy mortar conforming to Section 243.

The Department will not permit the use of concrete traffic barrier service for permanent installations on bridge structures.

Traffic barrier service sections manufactured on or before December 31, 2019 and successfully tested to NCHRP 350 or MASH 2009 may be used until December 31, 2029, if they are in good working condition, and are a product shown on the Department's Approved Lists for NCHRP-350 or MASH Approved Products. Traffic barrier service sections manufactured after December 31, 2019, and all products in use after December 31, 2029, shall conform to MASH 2016 or its successor, and shall be from the Department's Approved List for Provisionally Approved MASH Products. All traffic barrier service runs shall be interlocking barrier of the same design or type.

The Contractor shall visually inspect all traffic barrier service shipped to a project before placing it in use. Concrete barrier sections shall be structurally sound with no concrete missing along the top, bottom, sides, or end sections of the barrier; no through cracks; and no exposed rebar. The Contractor shall promptly remove any traffic barrier service found by the Contractor or Engineer to be unacceptable due to inadequate structural integrity or functionality and replace the concrete barrier service at no cost to the Department.

Concrete barrier service shall be cleaned or coated sufficiently to afford good visibility and uniformity of appearance. The Engineer will review and must approve the layout and anchorage method for job specific applications before the barrier is authorized for installation.

With the approval of the Engineer, the Contractor may use additional traffic barriers for his convenience but at his own expense.

Section 512.03(i) – Impact Attenuator Service is replaced with the following:

Impact Attenuator Service: The Contractor shall install impact attenuator service at locations shown on the Plans or designated by the Engineer. An object marker for temporary impact attenuator shall be installed on the attenuator according to the details shown in the Standard Drawings. The object marker for impact attenuator service shall have reflective sheeting conforming to Section 247 featuring alternating diagonal black and orange 3 inch stripes sloping downward at an angle of 45 degrees in the direction vehicular traffic is to pass. Impact attenuators shall be permanently identified with a device specific Manufacturers' identification number by stamping or marking with a durable weather resistant material in accordance with § 33.2-274.1 of the Code of Virginia.

Impact Attenuator Service not shown on the Plans may be used at the request of the Contractor for the Contractor's convenience at the Contractor's expense.

All impact attenuator service shall be reviewed and approved by the State Location and Design Engineer before installation.

Impact Attenuators manufactured on or before December 31, 2019 and successfully tested to NCHRP 350 or the MASH 2009 may continue to be used until December 31, 2029. Impact Attenuators manufactured after December 31, 2019 shall meet MASH 2016 and shall be from the Department's Approved List for Provisionally Approved MASH Products.

Section 512.03(j)2c – Equipment is replaced with the following:

12 inch aluminum or polycarbonate traffic signal head sections with backplates mounted in the vertical display arrangement. Signal head sections may be mounted in the horizontal display arrangement when approved by the Engineer. Signal head sections and backplates shall conform to Section 238.

Section 512.03(k) – Temporary (Construction) Pavement Markings is replaced with the following:

Temporary (Construction) Pavement Markings shall be installed at locations shown on the Plans, the *VWAPM*, and as directed by the Engineer. Temporary pavement markings shall conform to Section 704 and be selected from the Department's Approved List 17. Temporary pavement markings are classified as Type A or B (temporary markings), Type D, Class III (removable tape), and Type E (non-reflective black removable tape).

The Contractor shall install temporary pavement markings in accordance with the manufacturer's recommendations, except that if the manufacturer's recommendation for material thickness and quantity of beads is less than that used when the material was tested by the NTPEP, the minimum product application rates shall conform to the NTPEP approved test rates for the specific marking. The Contractor shall furnish a copy of the manufacturer's installation recommendations, including the NTPEP data for product thickness and glass bead quantities to the Engineer.

The Contractor shall maintain the temporary pavement markings and shall correct any deficient markings by reapplying markings as directed or needed. The Department considers deficient any temporary pavement markings that provide inadequate guidance to motorists due to inadequate retroreflectivity, color qualities, or adherence to the pavement. The Engineer will make a visual nighttime inspection of all temporary pavement markings to identify areas where markings have inadequate retroreflectivity. Other deficient qualities may be identified by visual inspection at any time.

Markings that no longer adhere to the pavement, and may cause guidance problems for motorists, or are inadequately retroreflective as determined by the Engineer shall be replaced by the Contractor, with the following exceptions:

- Reapplication of skip line temporary pavement markings is not required unless the pavement marking does not adhere or inadequate retroreflectivity qualities are present for at least two consecutive skip lines.
- Reapplication of centerline (except skip lines) or edge line temporary pavement markings is not required unless the pavement marking does not adhere or inadequate retroreflectivity qualities are present for a continuous section of at least 70 feet.
- Reapplication of transverse markings is not required unless the pavement marking does not adhere or inadequate retroreflectivity qualities are present for a continuous section of at least 3 feet.

The Contractor may take retroreflectivity readings to counter visual observations by the Engineer as the basis for replacement of temporary pavement markings. These measurements shall be taken within 48 hours after the Contractor has been notified of the visual determination by the Engineer of deficient markings. The Engineer will grant additional time to the Contractor when inclement weather prevents accurate measurement of the temporary pavement markings.

The Contractor shall brush any form of debris from the marking before taking the retroreflectivity readings. Retroreflectivity measurements shall be taken in the presence of the Engineer using Contractor furnished equipment conforming to ASTM E1710. A copy of the operating instructions for the reflectometer shall be furnished to the Engineer before taking the measurements. The Contractor shall calibrate and operate the equipment in accordance with the manufacturer's instructions. The photometric quantity to be measured is the coefficient of retroreflected luminance (R_L), which shall be expressed as millicandelas per square foot per footcandle (mcd/sf/ftc). Measurements shall be taken at three random locations within each area of markings that are suspected of being inadequately retroreflective. When the length of the questionable visually inspected area is greater than 1 mile, the Contractor shall take measurements at three locations per mile segment or portion thereof. Measurements for all lines shall be taken in the middle of the line horizontally. Measurements for skip lines shall be taken in the middle of their length. Measurements for transverse lines shall be taken outside of the wheel path locations. The Engineer

will designate the locations along the line segments where the measurements shall be taken. The Contractor shall make a log of the measurements and their locations and provide a copy to the Engineer. When the average of the three readings for an area is below 100 mcd/sf/ft, the Contractor shall reapply the markings as indicated.

Temporary (construction) pavement markings found in need of reapplication in accordance with these requirements shall be reapplied by the Contractor at no additional cost to the Department, with the following exceptions:

- Type D markings that have been under traffic for more than 180 days and requires reapplication will be paid for at the contract unit price when reapplied, unless the manufacturer's warranty coverage is still applicable.
- Markings damaged by the Department's snow removal or other maintenance and construction operations will be paid for at the contract unit price.

Deficient temporary pavement markings shall be replaced in the time specified in Section 704 for the maximum duration of unmarked roads.

Eradication for reapplication of Type A or B pavement markings is not required if allowed by the marking manufacturer, if the existing marking is well adhered and the total thickness of the existing and reapplied marking combined will not exceed 40 mils. If not well adhered, 90 percent of the existing markings shall be eradicated before reinstallation of the markings.

Existing Type D markings that are deficient (no longer retaining sufficient retroreflectivity) shall be removed before reapplication of new Type D, Class III markings.

1. **Temporary Type A or B pavement markings** shall be used where the roadway is to be resurfaced before changes in the traffic pattern or where pavement is to be demolished and traffic patterns will not change before demolition.
2. **Type D, Class III pavement markings** shall be used on final roadway surfaces or in areas where traffic patterns are subject to change before pavement is resurfaced, unless otherwise specified in the Contract.

On non-final pavement surfaces, the Contractor may install Type A or B pavement markings when the surface temperature of the pavement is below the manufacturer's minimum application temperature for a Type D pavement marking. In such cases, the Contractor shall select a Type A or B product known to perform the best under those temperature conditions. When a Type A or B pavement marking is used instead of a Type D pavement marking due to the surface temperature being below the manufacturer's minimum application temperature, the Contractor will be paid at the contract unit price for Type D pavement marking. This shall include the Type A or B marking and any necessary eradication of the Type A or B pavement marking.

3. **Type D, Class III contrast pavement markings** shall be used for all longitudinal temporary pavement markings on bridge decks and hydraulic cement concrete riding surfaces if all of the following are met:
 - The road has a speed limit of 45 MPH or greater.
 - The hydraulic cement concrete riding surface in question is at least 300 feet in length.
 - The temporary markings are planned for at least 15 days of use.

Type D, Class III contrast markings are not required for any markings that are parallel to and within two feet of existing guardrail or other longitudinal barrier.

4. **Type E pavement markings** shall be used to cover existing markings in accordance with paragraph (l) herein.
5. **Temporary pavement markers** shall be installed with temporary pavement markings in accordance with paragraph (m) herein.

Section 512.03(l) – Eradicating Pavement Markings is replaced with the following:

Eradicating Pavement Markings: Markings that may conflict with desired traffic movement, as determined by the Engineer, shall be eradicated as soon as practicable: either immediately before the shifting of traffic or immediately thereafter and before the conclusion of the workday during which the traffic shift is made. Work shall be done in accordance with Section 704 except as noted herein.

The Contractor shall perform eradication by grinding, blasting, or a combination thereof. Blasting may be performed using water blasting, sand blasting, hydroblasting (combination of sand and water), or shot blasting. Water blasting and hydroblasting shall be done with equipment that includes a vacuum recovery system and capability to adjust the water pressure.

The Contractor may submit other methods for eradication for the Engineer's approval; however, the Department will not permit obscuring existing pavement markings with black paint or asphalt as a substitute for removal or obliteration. The Contractor shall minimize roadway surface damage when performing the eradication. The Contractor shall repair the pavement if eradication of pavement markings results in damage to or deterioration of the roadway presenting unsafe conditions for motorcyclists, bicyclists, or other road users. Pavement repair, when required, shall be performed using a method approved by the Engineer.

The Contractor shall ensure workers are protected in accordance with Section 107.17 when eradicating pavement markings.

The Contractor shall vacuum or collect the eradication residue (removed markings, debris, and water) during and immediately after the eradication operation. Dust shall be collected during the entire operation. The Contractor shall ensure that no debris enters inlets or waterways.

Eradication residue from the removal of any pavement markings is considered to be a nonhazardous waste material and shall be disposed of in a properly permitted waste disposal facility in accordance with applicable state and federal laws and regulations. The Department does not require Contractor testing of the eradication residue for the eight Resource Conservation Recovery Act metals.

When markings are removed for lane shifts, transitions, or other areas or conditions required in the VWAPM, 100% of the pavement marking shall be removed.

Type E pavement markings may be used to cover existing markings instead of eradication on asphalt concrete surfaces. The Contractor shall use this material to cover markings as indicated in the Plans or as directed by the Engineer. Type E pavement marking shall be applied in accordance with the manufacturer's recommendations. Type E markings shall not be adhered to the pavement for more than 120 days. Type E markings shall not be used on HCC surfaces or bridge decks.

When eradicating symbols and messages, the entire theoretical box bounding the outermost limits of the markings shall be uniformly eradicated.

Eradication of 24" lines shall be considered nonlinear marking eradication.

Section 512.03(m) – Temporary Raised Pavement Markers is replaced with the following:

Temporary Raised Pavement Markers shall be installed with temporary pavement markings where required by the VWAPM and where directed by the Engineer. Temporary raised pavement markers shall not be used with Type E markings.

Temporary raised pavement markers shall be installed at the spacing required by the VWAPM, and as shown on Standard Drawing PM-8. . The Contractor may install two one-way markers instead of each two-way marker at no additional cost to the Department.

Temporary raised pavement markers shall be installed with a hot applied bitumen adhesive, except epoxy may be used on hydraulic cement concrete roadways and non-final surfaces of asphalt concrete roadways. Pavement damage caused by removing markers shall be repaired in kind by the Contractor at no additional cost to the Department.

The Contractor shall replace damaged, ineffective, or missing temporary raised pavement markers upon notification by the Engineer at no additional cost to the Department. Markers damaged by the Department's snow removal operations or other maintenance and construction operations, however, will be paid for at the contract unit price.

Section 512.03(p) – Construction (Temporary) Pavement Message and Symbol Markings is replaced with the following:

Construction (Temporary) Pavement Message and Symbol Markings shall be the color, shape, and size required by the MUTCD, Standard Drawing PM-10, and the Plans. The Contractor shall install message and symbol markings in accordance with MUTCD, Section 704 the VWAPM, and the Standard Drawings.

Temporary pavement message and symbol markings shall be installed and maintained using the material specified on the Plans in accordance with Section 512.03(k).

Pavement message/symbol markings shall be installed at locations shown on the Plans and at locations designated by the Engineer.

Temporary pavement message markings shall be maintained in accordance with Section 512.03(k). Retroreflective measurements conforming to Section 512.03(k) shall be taken out of the wheel path locations. The pavement message/symbol marking shall be replaced when the average of the three readings for the symbol/message is below 100 mcd/sf/ft.

Section 512.03(q) – Type 3 Barricades is replaced as follows:

Type 3 Barricades: Type 3 barricades shall conform to NCHRP Report 350, Test Level 3, or MASH. Type 3 barricades shall be selected from those shown on the Department's Approved Lists for NCHRP 350 or MASH Approved Products. The Contractor shall provide a certification letter stating the brands and models of Type III barricades from the list proposed for the project. Instead of using Type 3 barricades on the listing, the Contractor may use other brands and models, if he submits a copy of the FHWA acceptance letter indicating the proposed substitutes complies with NCHRP Report 350, Test Level 3, or MASH before use.

Type 3 Barricades shall be installed and ballasted in accordance with the VWAPM.

Section 512.03(r) – Truck-mounted or trailer mounted attenuators is replaced as follows:

Truck-mounted or trailer-mounted attenuators (TMAs): Truck-mounted and trailer-mounted attenuators manufactured on or prior to December 31, 2019 may be used if they are in good working condition, conform to Test Level 3 of NCHRP Report 350 or MASH, and are a product shown on the Department's Approved Lists for NCHRP-350 or MASH Approved Products. TMAs manufactured after December 31, 2019 shall conform to MASH Test Level 3 and shall be a product shown on the Department's Approved List for MASH Approved Products.

The Contractor shall submit catalog cuts/brochures of the TMA and a copy of the certification letter documenting NCHRP 350/MASH compliance of the specific TMA before their use on the project. TMAs shall be permanently identified with a device-specific manufacturers' identification number by stamping or marking with a durable weather resistant material in accordance with § 33.2-274.1 of the Code of Virginia.

The weight of the support vehicle shall be as recommended by the manufacturer of the Truck/ Trailer-mounted attenuator. The Contractor shall provide a copy of the manufacturer's recommendations to the Engineer, a copy of the original weigh ticket for the support vehicle, and a self-certification letter stating the support vehicle has not been altered since the original weight ticket was issued. The weigh ticket shall contain adequate information to identify the ticket with the applicable support vehicle. A copy of the self-certification and weigh ticket shall be available in the support vehicle at all times and upon request.

Additional weight may be added to the support vehicle to achieve the range recommended by the manufacturer of the Truck/Trailer-mounted attenuator provided the total weight is properly balanced without overloading any one axle, and is within the Gross Vehicle Weight Recommendation of the support vehicle. The added weight shall be securely attached to the support vehicle to prevent movement during an impact or movement of the vehicle. The additional weight and attachment method shall be self-certified by the Contractor and a copy of the self-certification letter shall be with the support vehicle at all times or a final stage manufacturer's certification sticker may be placed on the inside door of the altered vehicle.

The Truck/Trailer-mounted attenuator shall be no less than 72 inches wide and no more than 96 inches wide. There shall be no additional devices such as signs, lights, and flag holders attached to the Truck/Trailer-mounted attenuator except those that were tested on the Truck/Trailer-mounted attenuator and provided by the manufacturer of the Truck/Trailer-mounted attenuator.

The support vehicle shall have at least one vehicle warning light functioning while in operation in accordance with the VWAPM. When allowed by the VWAPM, an electronic arrow operated in the caution mode may be used with the vehicle warning light. When installing and removing lane closures on a multilane roadway as well as when performing mobile operations, the support vehicle shall be equipped with both vehicle warning lights and an arrow board.

The support vehicle shall be operated and parked in accordance with the manufacturer's recommendations.

If the Truck/Trailer-mounted attenuator is impacted, resulting in damage that causes the unit to be ineffective, all work requiring the use of the Truck/Trailer-mounted attenuator shall cease until such time that repairs can be made or the Contractor provides another acceptable unit.

Section 512.03(s) – Portable Changeable Message Signs is amended to replace the second and third paragraphs with the following:

The sign shall be capable of sequentially displaying at least 2 phases of 3 lines of text each with appropriate controls for selection of messages and variable off-on times. Trailer-mounted PCMS shall be capable of displaying 3 lines of 8-character 18-inch text in a single phase, and vehicle-mounted PCMS shall be capable of displaying 3 lines of 8-character 10-inch text in a single phase. Each character module shall at a minimum use a five wide by seven high pixel matrix. The message shall be composed from keyboard entries.

Access to PCMS control mechanisms shall be physically locked at all times when deployed to deter message tampering.

The message shall be legible in any lighting condition. Motorists should be able to read the entire PCMS message twice while traveling at the posted speed.

The sign panel support shall provide for an acceptable roadway viewing height that shall be at least 7 feet from bottom of sign to crown of road.

Section 512.03(w) – Portable Temporary Rumble Strips (PTRS) is replaced as follows:

Portable Temporary Rumble Strip (PTRS):

A PTRS may be made of rubber or recycled rubber. It shall have a recessed, raised or grooved design to prevent movement and hydroplaning. PTRS color shall be in accordance with the VWAPM.

A PTRS shall consist of interlocking or hinged segments of equal length that prevent separation when in use. The combined overall usable length of the PTRS shall be between 10 feet 9 inches and 11 feet. The width of the PTRS shall be 12 to 13 inches. PTRS shall be between 5/8 inch and 1.0 inch in height. The weight of each roadway strip shall be between 100 and 120 pounds. The leading and departing edge taper shall be between 12 and 15 degrees.

Each roadway length of the PTRS shall have either a minimum of one cutout handle in the end of the rumble strip, or an interlocking segment which can be used as a handle for easy deployment or removal.

The manufacturer of the PTRS shall provide a signed affidavit that states the PTRS is able to withstand being run over by an 80,000 pound vehicle and retain its original placement with minor incidental movement of 6 inches or less during an 8 hour deployment. Incidental movement of the PTRS shall be parallel with other rumble strips in an array but shall not move so that its placement compromises the performance and safety of the other rumble strips, workers or the traveling public.

The PTRS shall be installed in accordance with manufacturers installation instructions, without the use of adhesives or fasteners.

PTRS Placement shall be in accordance with the VWAPM.

Section 512.04 – Measurement and Payment is amended to replace the thirteenth paragraph with the following:

Impact attenuator service will be measured in units of each and will be paid for at the Contract each price for the type specified. This price shall include installing, maintaining, and removing impact attenuator and object marker. Impact attenuators used with barrier openings for equipment access will not be measured for separate payment but the cost thereof shall be included with other appropriate items. When impact attenuator service is moved to a new location, as directed or approved by the Engineer, the relocated terminal will be measured for separate payment. Payment for impact attenuator service will not be made until the work behind the corresponding barrier service is actively pursued.

Section 512.04 – Measurement and Payment is amended to replace the twentieth paragraph with the following:

Eradication of existing nonlinear pavement markings will be measured in square feet based on a theoretical box defined by the outermost limits of the nonlinear pavement markings as defined in Standard Drawing PM-10. Nonlinear pavement markings shall include but not be limited to, arrows, images, symbols, and messages. Eradication of existing nonlinear pavement markings will be paid for at the contract unit price per square foot. This price shall include removing nonlinear pavement markings, cleanup, and disposing of residue.

Section 512.04 – Measurement and Payment is amended to replace the 29th paragraph with the following:

Portable Temporary Rumble Strip (PTRS) Array will be measured in Days per array and will be paid for at the Contract Day price. An Array shall consist of three rumble strips. This price shall include installing, maintaining, removing devices when no longer required, and relocating throughout the day.

Section 512.04 – Measurement and Payment is amended by revising the Pay Item Table as follows:

The following pay items are removed:

| Pay Item | Pay Unit |
|---------------------------------|-----------------|
| Portable temporary rumble strip | Each |

The following pay items are inserted:

| Pay Item | Pay Unit |
|---------------------------------------|-----------------|
| Portable temporary rumble strip array | Day |

PLANING OR MILLING PAVEMENT OF UNCERTAIN THICKNESS – If, due to the existing thin pavement structure and depth of the planing operation (except Trench Widening), the underlying soils or foundation aggregate is exposed, the Contractor shall immediately halt his operations and contact the Engineer to determine the immediate and potential condition of the roadway or roadway shoulder. If the Engineer determines that the immediate or potential condition of the roadway or roadway shoulder is or will become unacceptable or unsafe, the Contractor shall submit a plan to pave back all sections of the roadway or roadway shoulder within 24 hours from when they were planed or milled at no additional cost to the Department. The Contractor will not be allowed to resume his operations until this plan is accepted by the Engineer, and the Contractor is prepared to execute it. If the Contractor fails to submit a plan within 24 hours of exposing underlying soils or foundation aggregates, the Engineer may conduct the remaining milling and paving for that route in accordance with Section 105.14(e) of the Specifications.

10-24-17 (SPCN)

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
COLD PLANING (MILLING) ASPHALT CONCRETE OPERATIONS**

I. DESCRIPTION

This provision shall govern cold planing (milling) asphalt concrete operations in preparation for pavement repair and/or pavement overlay. Cold planing of asphalt concrete pavement shall be performed according to Section 515 of the Specifications and the requirements herein.

II. GENERAL PROCEDURES

The Contractor is permitted to perform either regular pavement planing or performance pavement planing to the Contract specified depth or as directed by the Engineer in order to provide a uniform sound substrate prior to paving roadways designated in the schedules according to Section 315 of the Specifications, the requirements herein, or elsewhere in the Contract.

A. Regular and Performance Planing

The following general conditions apply to either type of cold pavement planing:

Limitations of operations for planing shall be performed according to Section 108.02 of the Specifications, other Contract specific requirements, and as specified herein.

Where the depth of planing designated in the Contract or directed by the Engineer is 2 inches or less, the Contractor shall have the option of planing the abutting lane or shoulder on alternate days or squaring up the planing operation at the end of each work shift. However, abutting lanes or shoulders shall be planed and squared up regardless of planing depth prior to holidays or any temporary shutdowns.

Where the depth of planing designated in the Contract or directed by the Engineer is greater than 2 inches in the Contract, the Contractor shall square up the planing operation at the end of each workday or plane adjacent lanes including abutting shoulders within the same day for the length of that day's planing operation.

The Contractor will not be permitted to plane a portion of the width of a travel lane, ramp, loop or shoulder and leave it unpaved and open to traffic. Abutting shoulders may also be planed during single and multiple lane planing operations. Planing operations shall be planned and performed to maintain positive drainage according to Section 315.05(c) of the Specifications.

In the event an emergency or an unforeseen circumstance such as equipment failure or breakdown occurs during the Contractor's operations and such emergency or unforeseen circumstance within his control prevents the Contractor from squaring up the planed surface on adjacent lanes prior to a holiday or temporary shutdown, any additional signage, traffic control devices or temporary markings or markers required to protect the traveling public shall be the Contractor's responsibility and at his expense.

Where uneven pavement joints exist either transversely or longitudinally at the edges of travel lanes, the Contractor shall provide advance warning signage and traffic control devices to inform the traveling public according to the details provided in the Contract for the scope of operation he is performing. The cost for such advance warning signage and traffic control devices shall be included in the cost of other appropriate items

Where appropriate according to Contract requirements and site specific conditions, the existing asphalt concrete layers shall be planed to permit the transition of the top course of the asphalt concrete overlay according to the details of the ACOT-1 Standard. Any sub-courses termination may be notched into the existing pavement or blended with the next course of pavement.

B. Performance Planing Only Limitations:

When the Contractor elects to performance plane on roadways specified to be planed to a depth of 2 inches or less, the Contractor shall performance plane only that amount of pavement which can be paved back within the time allowance specified herein for completion of planing the roadway or portion of roadway. The Contractor is required to perform pavement surface testing as specified in Section 515.04 of the Specifications to verify the Contractor has achieved the acceptable surface texture specified in that Section prior to opening the performance planed surface to traffic. Additional traffic control devices and signage required for the extended pave back time allowance specified herein for performance planing operations versus the traffic control devices required for the pave back operations for regular pavement planing operations specified herein shall be at the Contractor's expense.

III. ROADWAY CLASSIFICATION LIMITATIONS

The following restrictions, based on the type of roadway, shall apply:

A. All Interstates and other Limited Access Roadways including Ramps and Loops posted at 55 Mph or Greater

1. Regular planing and performance planing in multiple lanes

The Contractor shall plan, execute and maintain pavement planing operations to avoid trapping water on the roadway. On roadways with a combination of 3 or 4 lanes and shoulders (i.e. 2 travel lanes and 1 or 2 shoulders in one direction) where the travel lanes and shoulders will not be completely planed to drain prior to the start of paving operations, planing shall be performed so that water will not pond on the travel surface. When the Contract does not include the removal of the shoulder at the specific roadway planing location, the Contractor shall cut drainage outlets through the shoulder at locations the Engineer designates (excluding curb and gutter sections) for those portions of the planed roadway that are to be opened to traffic. The Contractor shall restore the shoulders to their original grades once paving operations are completed, unless otherwise directed by the Engineer. The cost for cutting and restoring roadway shoulders shall be included in the price bid for other items of work.

On roadways with a combination of 5 or more lanes and shoulders (i.e. 3 or more travel lanes and 2 shoulders in one direction), the extent to which the interior lanes shall be planed will be such that the planed portions can be repaved within the work-zone time limits unless provisions are made to mitigate the ponding of water (i.e., milling adjacent lane(s) and shoulders or cutting drainage outlets through the shoulder).

Ramps and exits shall be planed in such a manner that an even longitudinal joint (elevation difference of greater than 1 inch) is not left for vehicles to cross within the posted speed limits in a "run on" situation. To prevent this, the Contractor can plane ramps and exits to the extent that the joint line between new and existing pavement crossed by traffic is traversed at an angle close to ninety (90) degrees per the ACOT-1 Standard for temporary transverse joints or can perform tapered planing along the ramp/exit longitudinal joint to provide a smooth transition for vehicles to cross, or can square up ramp or exit pavement with the adjacent mainline lane at the time of installation.

The following additional restrictions will apply to roadways where **regular pavement planing** is applicable:

- The Contractor will be limited in the case of regular pavement planing, whether in a single lane or multiple lane operation, to only that amount of pavement that can be paved back within 24 hours of completion of planing that roadway or portion of roadway.
- The Contractor shall pave all roadways, ramps and loops planed during the week before that weekend.
- On roadways with a combination of 4 or more lanes and shoulders (i.e. 2 or more travel lanes and 2 shoulders) in one direction, all travel lanes must be paved back before the weekend. Up to two thousand five hundred (2,500) feet of shoulder may be planed and left over the weekend provided the portion of planed shoulder left unpaved over the weekend is paved within 24 hours after the end of the weekend period.

The following additional restrictions will apply to roadways where **performance pavement planing** is planned by the Contractor:

- Performance planing may be performed in multiple lanes across the entire widths of the lanes up 4 miles of travel lane unless otherwise stated in the Contract. Performance planed travel lanes surfaces must be paved back within 96 hours from the end of the performance planing operation
- Where the Contractor decides to performance plane multiple lanes, the Contractor shall be responsible for furnishing and installing advance warning signage and traffic control devices to inform the traveling public according to the details provided in the Contract. Temporary pavement markings and markers used for lane demarcation on performance planed surfaces will be according to Section 704.04 of the Specifications and the *Special Provision for SECTION 704—PAVEMENT MARKINGS AND MARKERS* included in the Contract. The cost for such warning devices and advance signage required by multiple lane planing operations shall be included in the cost of other appropriate items unless otherwise specified in the Contract by a specific pay item(s) for separate payment.

B. Non-Limited Access Roadways with an ADT of 10,000 or Greater (Traffic Group XV and above) and a Posted Speed Limit of 45 Mph or Greater

1. Regular planing and performance planing in multiple lanes

The Contractor shall plan and proceed with the pavement planing operation to avoid trapping water on the roadway. On roadways with a combination of 3 or 4 lanes and shoulders (i.e. 2 travel lanes and 1 or 2 shoulders) in one direction where the travel lanes and shoulders will not be completely planed prior to the start of paving operations, planing operations shall be performed so water will not pond on the travel surface. When the Contract does not include the removal of the shoulder, the Contractor shall cut drainage outlets through the shoulder at locations the Engineer designates, excluding curb and gutter sections, for those portions of the planed roadway that are to be opened to traffic. The Contractor shall restore the shoulders to their original grades once paving operations are completed, unless otherwise directed by the Engineer. The cost for cutting and restoring the roadway shoulder shall be included in the price bid for other items of work.

On roadways with a combination of 5 or more lanes and shoulders (i.e. 3 or more travel lanes and 2 shoulders in one direction), the extent of pavement planing on the interior lanes shall be such that the planed surface can be repaved within the timeframe of the work-zone time limits unless provisions are made to mitigate the ponding of water (i.e. planing adjacent lane(s) to mitigate the ponding of water).

The following additional restrictions will apply to roadways where **performance pavement planing** is planned by the Contractor:

- Performance planing may be performed in multiple lanes across the entire widths of the lanes up a total of 4 miles of travel lane unless otherwise stated in the Contract.
- Performance planed travel lane surfaces must be paved back within 10 days from the start of the performance planing operation.
- Where the Contractor decides to performance plane multiple lanes, the Contractor shall be responsible for furnishing and installing advance warning signage and traffic control devices to inform the traveling public according to the details provided in the Contract. The cost for such warning devices and advance signage required by multiple lane planing operations shall be included in the cost of other appropriate items unless otherwise specified in the Contract by a specific pay item(s) for separate payment. Temporary pavement markings required by such operations will be handled according to Section 704.04 and the *Special Provision for SECTION 704—PAVEMENT MARKINGS AND MARKERS* included in the Contract.

The following additional restrictions will apply to roadways where **regular pavement planing** is applicable:

- The Contractor will be limited whether in a single lane or multiple lane operation, to only that amount of pavement that can be paved back within 24 hours of completion of planing that roadway or portion of roadway.

- The Contractor shall pave all roadways that have been regular planed during the week before that weekend.
- On roadways with a combination of 4 or more lanes and shoulders (i.e. 2 or more travel lanes and 2 shoulders in one direction, all travel lanes must be paved back before the weekend. Up to two thousand five hundred (2,500) feet of shoulder may be planed and left over the weekend provided the portion of planed shoulder left unpaved over the weekend is paved within 24 hours after the end of the weekend period.

C. All Other Roadways

1. Regular Pavement Planing (single or multiple lanes)

If the Contractor elects to perform regular pavement planing the Contractor will be permitted to leave up to two miles of travel lane open to the traveling public provided such planing (milling) is performed across the entire lane width. This same total length restriction will apply in cases where multiple-lane regular pavement planing is permitted in the Contract or allowed by the Engineer. The Contractor will be limited in the case of regular pavement planing, whether in a single lane or multiple lane operation, to only that amount of pavement that can be paved back within 96 hours of completion of planing that roadway or portion of roadway.

2. Performance Pavement Planing

When the Contractor elects to performance plane roadways specified to be planed to a depth of 2 inches or less, the Contractor shall plane only the amount of pavement that can be paved back within 14 calendar days of completion of planing that roadway or portion of roadway. The Contractor is required to perform pavement surface testing as specified in Section 515.04 of the Specifications to verify the Contractor has achieved the acceptable surface texture prior to opening the performance planed surface to traffic. The additional traffic control devices and signage required for the 14 calendar day pave back operation allowance for performance planing operations shall be at the Contractor's expense.

Temporary pavement markings required by such operations will be handled according to Section 704.04 and the *Special Provision for SECTION 704—PAVEMENT MARKINGS AND MARKERS* included in the Contract.

Roadways on which the roadway edges (i.e. edge milling) are to be planed shall be paved back within 10 days from the completion of the planing operation.

IV. MEASUREMENT AND PAYMENT

Measurement and payment will be according to Section 515.05 of the Specifications.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
REMOVAL OR CONNECTION OF ASBESTOS CEMENT PIPE**

I. GENERAL

The Contractor is advised that the existing pipe on this project that is scheduled for removal or for connection may contain asbestos. The Contractor shall assume any pipe designated on the plans as asbestos cement (A/C) pipe contains asbestos in a quantity sufficient to be a health hazard if found in a friable condition or made friable during removal or connection. A/C pipe is a "facility component" as defined in 40 CFR 61.141. The U.S. Environmental Protection Agency and the Virginia Department of Labor and Industry consider A/C pipe to be Category II non-friable asbestos-containing materials. Disposal of A/C is regulated by the Virginia Department of Environmental Quality.

II. PROCEDURES

Modifications of, connections to, or removal of A/C pipe that involve breaking, crushing, saw-cutting or abrading shall comply with the VDOT *Special Provision for Asbestos Removal for Road Construction Projects*.

This Special Provision applies to all removal modifications to A/C pipe where the A/C pipe is removed intact by disconnecting at the slip (bell) joint (with no breakage) and where any subsequent connections are made without disturbing the integrity of the existing pipe. If at any time the Contractor determines that the pipe cannot be removed without breakage, abrading, cutting or crushing, the Contractor shall cease work and resume operations according to the VDOT *Special Provision for Asbestos Removal for Road Construction Projects*.

The Contractor shall spray and saturate pipe joints with amended water prior to disturbing any pipe.

No "T"-type connections shall be made to existing pipe by internally piercing or breaking existing potable water pipe without pre- and post-connection monitoring for asbestos fibers in water downstream of the connection. Any results that exceed 7 million fibers per liter (7MFL) shall be reported immediately to the Engineer.

VDOT, at its discretion, may employ an asbestos project monitor to observe and monitor removal operations of intact A/C pipe. If such monitoring determines that asbestos fibers are being released above the applicable action level or the pipe becomes friable, the Contractor shall cease operations on the pipe and take appropriate corrective action to comply with all applicable federal, state, and local regulations.

Removal, connection, hauling, and disposal shall be performed according to 40CFR 61.140-61.157 (Subpart M-National Emission Standard for Asbestos), with 29 CFR 1926.1101 (Subpart Z-Toxic and Hazardous Substances), and with all state, regional, and local standards. The Contractor shall ensure that the intact A/C pipe sections remain intact during loading and hauling of the material to the licensed disposal facility. The Contractor shall double bag or wrap A/C pipe in plastic and seal and mark the materials. The Contractor shall only dispose of the material in a permitted landfill that provides daily soil cover and only after the Contractor has provided notification to the landfill that the material is non-friable/non-regulated ACM. Within 35 days of the deposit of the waste in the landfill, the Contractor shall submit to the Engineer a copy(s) of the certificate of disposal from the landfill. VDOT must receive all acceptable waste manifests/certificates of disposal prior to making payment to the Contractor.

With approval of the Engineer, abandoned portions of A/C pipe may be left in place of origin and backfilled provided that the pipe is not crushed; however, pipe that is scheduled to be abandoned may not be removed and re-deposited. With approval of the Engineer, the Contractor may pump grout into buried lines that are no longer in service to maintain the structural weight bearing capacity of the area. No on-site burial of crushed A/C pipe will be allowed.

III. MEASUREMENT AND PAYMENT

Connection to existing A/C pipe will be measured and paid for at the contract unit price per each for each connection.

Removal of existing A/C pipe (without disturbing integrity of pipe) will be measured and paid at the contract unit price per linear foot for the length of pipe actually removed (back to the closest joint).

Payment for these items shall include all material, labor, and equipment necessary for excavation, disassembly, tie-ins, backfill, line abandonment including grout, documentation and disposal of A/C pipe.

Payment will be made under:

| <u>Pay Item</u> | <u>Pay Unit</u> |
|---------------------------------|------------------------|
| Connection to Existing A/C Pipe | Each |
| Remove Existing A/C Pipe | Linear Foot |

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 520 – WATER AND SANITARY SEWER FACILITIES**

Section 520 – Water and Sanitary Sewer Facilities is amended as follows:

Section 520.02(r) – Flowable backfill is inserted as follows:

Flowable backfill shall conform to Section 249 and 509.

Section 520.03 Procedures is amended to replace the first paragraph with the following:

The Contractor shall be responsible for anticipating and locating underground utilities and obstructions in accordance with Section 105.08. In areas where the utility owner’s specifications conflict with the Contract, the utility owners’ specifications shall govern

Section 520.03 – Procedures is amended to replace the fourth paragraph with the following:

The Contractor shall abandon existing water and sewer lines and appurtenances and manholes not required in the completed system as directed by the Engineer. Abandoned materials shall become the property of the Contractor, unless otherwise noted on the plans, upon satisfactory replacement with the new installation. The Contractor shall clean abandoned pipe that is not removed of debris and plug it with Class A3 concrete at open ends if the utility is less than 8 inches inside diameter. If the abandoned pipe is 8 inches inside diameter or greater, the Contractor shall clean the pipe of debris and fill it entirely with Class A3 concrete or flowable backfill.

Section 520.06 – Measurement and Payment is amended by inserting the following after the fifteenth paragraph:

Concrete will be measured in cubic yards and will be paid for at the Contract cubic yard price. This price shall include furnishing and placing of concrete not included in other pay items, and installing plugs.

Flowable Backfill will be measured and paid for in accordance with Section 509.

Section 520.06 – Measurement and Payment is amended by revising the Pay Item Table as follows:

The following pay item is removed:

| Pay Item | Pay Unit |
|-------------------|-----------------|
| Flowable Backfill | Cubic Yard |

ABATEMENT OF ASBESTOS CONTAINING MATERIALS - The Contractor shall abate the Asbestos Containing Materials (ACM) identified in the Abatement Table below in accordance with the Special Provision for Asbestos Removal for Road Construction Demolition Projects.

| Abatement | | | | |
|------------------|-----------------|-------------|-----------|----------|
| Structure Number | NESHAP Category | Description | Condition | Quantity |
| | | | | |

11-5-18 (SPCN)

ALL REFERENCES MADE TO SECTIONS REFER TO THE 2020 VDOT ROAD AND BRIDGE SPECIFICATIONS



DIVISION VII

SPECIAL PROVISION COPIED NOTES (SPCNs), SPECIAL PROVISION (SPs) and SUPPLEMENTAL SPECIFICATIONS (SSs)

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**VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
MODIFICATIONS TO AASHTO’S SIGN STRUCTURE SPECIFICATION**

I. GENERAL REQUIREMENTS

Lighting (conventional and high mast), signal (overhead, mast arm and span wire), pedestal poles, overhead (span, cantilever and butterfly) sign structures, and ITS structures (camera poles, dynamic message signs (DMS), etc.) shall conform to the requirements of the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, 6th Edition (LTS-6), 2013 with 2015 interims* as modified by this Special Provision. Any AASHTO Specification optional design parameter noted as “may be used at the discretion of the owner” that are not addressed in this document shall not be used for design.

Modifications to span or height limits shown on the plans shall be approved by the Regional Traffic Engineer.

II. WIND LOADING (LTS-6 Article 3.8 and Appendix C)

1. The alternate method for wind pressures provided in AASHTO Appendix C shall be used. Linear interpolation between wind contours is not permitted. The next higher contour shall be used for design. Reduced forces shall not be used for free swinging traffic signal and free swinging sign wind loadings.
2. **LTS-6 Article C.2** is supplemented with the following: Wind speeds using 50-year mean recurrence shall be used for all conventional light poles, high mast light poles, ITS device support poles, and overhead sign structures (span, cantilever and butterfly).
3. Mast arm signal poles, mast arms, and strain poles shall be designed using the following wind speeds:

| VDOT Traffic Operations Region | VDOT Districts Within That Region | Design Wind Speed for strain poles, mast arms, and mast arm poles |
|--------------------------------|-----------------------------------|---|
| Southwest | Bristol, Salem, and Lynchburg | 70 MPH |
| Northwest | Staunton and Culpeper | 70 MPH |
| Northern | Northern Virginia | 80 MPH |
| Central | Richmond and Fredericksburg | 80 MPH |
| Eastern | Hampton Roads | 90 MPH |

Mast arm signal pole and strain pole foundations shall be designed for wind speeds at the foundation location using the 25-year mean recurrence.

4. For special wind regions in Bristol District shown in Figure 3.8.3-2 of LTS-6, the selection of the design wind speed shall consider localized effects. The minimum design wind speed for 50 year mean in these areas is 90 MPH, 25 year mean in these areas is 80 MPH and 10 year mean in these areas is 70 MPH.
5. For structures elevated above the surrounding terrain (e.g. bridge mounted light pole, overhead sign, and other structures), the height factor shall be increased to account for the increased wind effects.

III. STEEL DESIGN

1. **Laminated Structures (LTS-6 Article C5.1):** Laminated or multi-ply structures shall only be used in tapered sections.
2. **Holes and Cutouts, Unreinforced and Reinforced (LTS-6 Article 5.14.5):** The location and size of hand holes and cutouts shall be in accordance with the details shown in the Standard Drawings. For high mast light poles, the width of

unreinforced and reinforced holes and cutouts in the cross-sectional plane of the tube shall not be greater than 50 percent of the tube diameter at that section.

3. **Welding:** A connection detail using a full penetration groove weld with a backing ring may be considered for all traffic structures. For tubes 18” diameter and greater, the backing ring shall be attached at the top and bottom face of the ring using a continuous fillet weld. For tubes less than 18” diameter, the backing ring shall be attached at the bottom face using a continuous fillet weld and the top shall be caulked to provide a thick durable continuous seal. The caulk shall be a durable material approved by the Engineer which is formulated for this type of Industrial application..
4. **Diameter:** Mast arm signal pole structures shall have the following maximum column and arm outside diameters, unless otherwise approved by the Engineer.

| Configuration | Arm Length | Design Loading | Max. column diameter at base of column | Max. arm diameter at base of arm |
|---------------|---|---|--|----------------------------------|
| Dual arm | Length of one arm exceeds 70 feet or total length of both arms exceeds 130 feet | Varies (Project specific loads will be provided on the Plans) | 22 inches | 20 inches |
| | All other dual-arm structures | Design loading does not exceed Standard Drawing MP-3 | 20 inches | 18 inches |
| Single arm | > 75 feet | Varies (Project specific loads will be provided on the Plans) | 22 inches | 20 inches |
| | ≤ 75 feet | “Case 2” loading as per Standard Drawing MP-3 | 22 inches | 20 inches |
| | | “Case 1” loading as per Standard Drawing MP-3 | 20 inches | 18 inches |

IV. FATIGUE DESIGN

1. **Fatigue Importance Categories (LTS-6 Article 11.6):** The following fatigue importance categories shall apply to structures:

| Fatigue Importance Categories | | |
|---|--------------------------------|------------------|
| Structure Type | Span Length ¹ , ft. | Fatigue Category |
| All structures supporting dynamic message signs or partial dynamic message signs ³ | All span lengths | Category I |
| Overhead sign span structure | > 150 | Category I |
| | ≤ 150 | Category II |
| Overhead sign cantilever structure | > 50 | Category I |

| | | |
|---|------------------|----------------------------|
| | ≤ 50 | Category II |
| Overhead sign butterfly structure | All span lengths | Category II |
| | > 75 | Category I |
| Signal mast arm structure ² | 50 to ≤ 75 | Category II |
| | < 50 | No fatigue design required |
| Overhead signal structure | > 190 | Category I |
| | ≤ 190 | Category II |
| High mast light poles | All lengths | Category I |
| Signal span wires, conventional lights poles and ITS device support poles (excluding DMS) | | No fatigue design required |

¹Span length is defined as center-to-center of column(s) for span structure and face-of-column to tip of arm for cantilever and signal structures.

²For twin mast arms, the pole, arms and connections shall be designed for the applicable fatigue category for the longest arm attached.

³Partial dynamic message signs may be treated as static signs for the purposes of determining Fatigue Category if the dynamic message portion of the sign does not exceed the thickness or weight of an equivalently-sized extruded aluminum sign.

2. **Mitigation Devices (LTS-6 Article 11.6 and 11.7.1):** Mitigation devices shall not be used in lieu of designing for fatigue.
3. **Aluminum light poles (LTS-6 Article 11.6 and 11.7.1):** Internal first and second mode vibration dampeners shall be provided and installed according to the manufacturer's instructions in all cases. External dampeners may be used if approved by the Engineer.
4. **Galloping Loads (LTS-6 Article 11.7.1):** Galloping loads shall not be considered in the design of overhead sign cantilevered structures with four chord trusses, signal mast arm structures, and multi-chord overhead signal structures.
5. **Truck-Induced Gust Loads (LTS-6 Article 11.7.1.3):** Truck induced gust loads shall not be considered in the design of signal mast arm and overhead signal structures.
6. **Vertical Deflection (LTS-6 Article 11.8):** The vertical deflection of the free end of the arm for overhead sign cantilevered structures due to the wind load effects of galloping or truck-induced gusts shall not exceed 8".

V. FOUNDATION DESIGN

The AASHTO Standard Specifications for Highway Bridges, 1996, and the 1997 and 1998 Interim Specifications, as referenced in the AASHTO *Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals*, are modified as follows:

1. **Geotechnical Design:** The factor of safety shall be as follows:

| MINIMUM FACTORS OF SAFETY¹ | | | |
|--|---|---------------------------------|-----------------------|
| | Drilled Shaft | | |
| | Overhead Sign Structures and all other types of ancillary structures except for Mast arm traffic Signals | Mast arm traffic Signals | Spread Footing |
| Tip resistance/ Bearing pressure | 1.75 | 1.75 | 2.0 |
| Torsion/Sliding/Skin Friction | 2.0 ² | 1.3 ² | 1.2 ³ |
| Overturning (Broms Method) | 2.25 | 2.25 | 1.5 |

¹The factors of safety shown above already account for the 1.33/1.40 group overload/overstress factor. No reduction shall be applied to the design loading used in the analysis.

²Torsion Resistance shall be evaluated as specified by the AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS (Seventh Edition, 2014) Section 10.8.3.5- Nominal Axial Compression Resistance of Single Drilled Shafts. A value of 1.0 shall be used in lieu of the resistance factors as shown in Table 10.5.5.2.4-1.

³Passive resistance shall be reduced by 50% to limit foundation movement.

In capacity calculations for the foundation design of a drilled shaft, the soil resistance of the top 1.5 feet shall be neglected in the analysis for torsion/skin friction/tip resistance. The full length of the shaft from the ground surface to the tip may be used in overturning/horizontal deflection. The remainder of the shaft may be assumed to be fully effective in supporting applied loads.

2. **Horizontal Deflection:** In lieu of Broms method, COM624P or other commercially available software may be used to evaluate the overturning of shafts and to estimate shaft deflections. For mast arm signals and span wire signals, the total horizontal deflection shall be limited to 0.75 inches at the ground level and the tip of the pile deflection shall not exceed -0.25 inches. For other structures, the total horizontal deflection shall be limited to 0.50 inches at the ground level and the tip of the pile deflection shall not exceed -0.15 inches. The loading used in the analysis shall not be reduced by the allowable overload/overstress factor. The shafts shall be modeled such that the nonlinear flexural rigidity (non-linear EI, or “cracked” section) is accounted for when the horizontal deflections are calculated.
3. **Reinforcement:** Where tremie placement of concrete is anticipated, a minimum spacing of 5 inches or 10 times the size of the largest coarse aggregate whichever is greater shall be provided in both horizontal and vertical direction. For dry shafts, a smaller space of 5 times the size of the largest coarse aggregate may be considered. A dry shaft is when the amount of standing water in the base of the shaft prior to concreting is less than or equal to 3 inches and water is entering the shaft at a rate of less than 12 inches/hour.

**VIRGINIA DEPARTMENT OF TRANSPORTATION
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS
SECTION 704 – PAVEMENT MARKINGS AND MARKERS**

SECTION 704 – PAVEMENT MARKINGS AND MARKERS of the Specifications is amended as follows:

Section 704.02 – Materials is amended to replace the first paragraph with the following:

For Type B, Class VI pavement marking materials that are to be applied to latex emulsion or slurry seal surfaces, the selected Type B, Class VI manufacturer shall be a manufacturer that approves and warrants their product for application on that type of surface.

Section 704.03 – Procedures is amended to replace the second paragraph with the following:

The Contractor shall have a certified Pavement Marking Technician present during all temporary pavement marking, permanent pavement marking, and pavement marker operations, except Flexible Temporary Pavement Marker (FTPM) installation.

Section 704.03 – Procedures is amended to replace the fourth through tenth paragraph with the following:

If the Contractor cannot have permanent pavement markings installed within the time limits specified, the Contractor shall install and maintain temporary pavement markings within the same time limits at no additional cost to the Department until the permanent pavement markings can be installed. Installation, maintenance, and removal or eradication of temporary pavement markings shall be according to Section 512.

The Contractor may mark the locations of proposed permanent markings on the roadway by installing premarking materials. Premarkings may be accomplished by installing removable tape, chalk, or lumber crayons, except pavement markings such as stop lines, crosswalks, messages, hatching, etc., shall be premarked using chalk or lumber crayons. Premarkings for yellow markings may be white or yellow. Premarkings for other colors shall be white.

When tape is used as a premarking material, premarking shall consist of 4- inch by 4-inch-maximum squares or 4-inch-maximum diameter circles spaced at 100-foot minimum intervals in tangent sections and 50-foot minimum intervals in curved sections. At locations where the pavement marking will switch colors (e.g., gore marking) the ends of the markings may be premarked regardless of the spacing.

When the Contractor uses chalk or lumber crayon as a premarking, the entire length of the proposed pavement marking may be premarked.

Premarkings shall be installed so their installation will not affect the adhesion of the permanent pavement markings. When removable tape is used as the premarking material and the lateral location of such premarkings to location of the final pavement markings exceeds 6 inches, the tape shall be removed at no additional cost to the Department.

The Contractor shall exercise caution and protect the public from damage while performing pavement marking operations. The Contractor shall be responsible for the complete preparation of the pavement surface, including, but not limited to, removing dust, dirt, loose particles, oily residues, curing compounds, concrete laitance, residues from eradication, and other foreign matter immediately before installing pavement markings. The pavement surface shall be clean and dry at the time of pavement marking installation and shall be tested in accordance with VTM 94 before permanent installation, with the VTM 94 test results noted on Form C-85. The Contractor shall provide the equipment indicated in VTM 94 that are needed to perform the moisture test before application.

Section 704.03 – Procedures is amended by replacing the thirteenth paragraph with the following:

Non-truck mounted equipment shall be regulated to allow for calibration of the amount and type of material applied.

Section 704.03 – Procedures is amended to replace the eighteenth paragraph with the following:

Glass beads and retroreflective optics shall be applied at the rate specified herein or as specified in the Department's Approved List for the specific pavement marking product. Beads and optics shall be evenly distributed over the entire lateral and longitudinal surface of the marking. The Contractor shall apply beads to the surface of liquid markings with a bead dispenser attached to the applicator that shall uniformly dispense beads simultaneously on and into the just-applied marking. The bead dispenser shall be equipped with a cut-off control synchronized with the applied marking material cut off control so that the beads are applied totally on the marking. Beads shall be applied while the liquid marking is still fluid, resulting in approximately 60% embedment in the marking's surface. Beads installed on crosswalks and stop lines on roadways with curbs only (no gutter) may be hand applied for two feet at the end of each line next to the curb with 100 percent of the beads embedded 50% to 60% into the marking's surface.

Section 704.03(a)1 – Type A markings is replaced with the following:

Type A markings shall be applied in accordance with the manufacturer's installation instructions. When applying atop existing pavement markings, the existing marking shall first be swept or eradicated to the extent necessary to ensure that the surface of the existing marking is clean, chalk free (not powdery), and well adhered.

Glass beads for Type A, Class I markings shall be AASHTO M 247 Type 1 Beads applied at a minimum rate of 6 pounds per gallon of paint

Retroreflective optics for Type A, Class II markings shall be applied as noted in the Department's Approved List 20 for the selected pavement marking product.

The Contractor may substitute Type A, Class I cold weather paint (traffic paint designed for application at temperatures below 40 °F) for Type A, Class I conventional paint at no additional cost to the Department. Cold weather paint shall be from the Department's Approved List 20.

Section 704.03(a)2 – Type B markings is amended to replace the third paragraph with the following:

Non-truck mounted equipment for application of thermoplastic material shall include an extrude die with a burner, temperature controller, agitator, and mechanical bead applicator to allow for the correct amount of material to be applied.

Section 704.03(a)2a – Thermoplastic (Class I) is amended to replace the fourth through sixth paragraphs with the following:

Thermoplastic shall not be applied over existing pavement markings of materials other than paint or thermoplastic, unless the existing marking is 90 percent worn away or eradicated. When applying thermoplastic over existing paint or thermoplastic, the existing marking shall first be swept or eradicated to the extent necessary to ensure that the surface of the existing marking is clean, chalk free (not powdery), and well adhered.

Thermoplastic marking material shall be applied at thickness of 90 mils (\pm 5 mils) above the riding surface, whether dense or open graded surface.

Glass beads and retroreflective optics shall be surface applied at the rate of 10 pounds per 100 square feet unless specified otherwise on the Materials Division's Approved Products List 43 for the specific thermoplastic product.

Section 704.03(a)2b – Preformed thermoplastic (Class II) is amended to replace the first and second paragraphs with the following:

Preformed thermoplastic (Class II) material shall be installed in accordance with the manufacturer's installation instructions. A primer or sealer manufactured by or recommended by the preformed thermoplastic manufacturer shall be applied to all hydraulic cement concrete surfaces and to asphalt concrete surfaces in accordance with the manufacturer's installation instructions.

Preformed thermoplastic shall not be applied over existing pavement markings of materials other than paint or thermoplastic, unless the existing marking is 90 percent worn away or eradicated. When applying preformed thermoplastic over existing paint or thermoplastic, the existing marking shall first be swept or eradicated to the extent necessary to ensure the surface of the existing marking is clean, chalk free (not powdery), and well adhered.

Permanent transverse rumble strips shall be applied using two strips of white Type B, Class II material. The bottom strip shall be 250 mils thick and 4 inches wide, and the top strip shall be 125 mils thick and 2 inches wide (centered atop the bottom strip), unless noted otherwise in the plans. Transverse rumble strips shall be installed in arrays as per the Standard Drawings and the plans.

Section 704.03(b) – Pavement messages and symbols markings is amended to replace the second paragraph with the following:

Surface temperature at time of application shall be in accordance with manufacturer’s installation instructions. If the installation instructions do not specify minimum surface temperature, then the markings shall not be installed unless the surface temperature at time of application is 50°F or higher. Surface temperature requirements shall not be considered met if the temperature is forecasted to drop below the minimum within two hours of application. The Contractor may heat the pavement for a short duration to dry the pavement surface and bring the surface temperature to within the allowable temperatures for pavement marking installation, at no extra cost to the Department. Heat torch temperatures shall not exceed 300°F. The Contractor shall monitor pavement temperature to ensure it does not rise above 120°F at any time. Any damage to the pavement shall be promptly repaired at no extra cost to the Department.

Message and symbol markings include, but shall not be limited to, those detailed in Standard Drawing PM-10.

The sizes and shapes of symbols and characters shall match the size and shape specified in Standard Drawing PM-10 or elsewhere in the Contract. Hand-drawn or “stick” symbols or characters will not be allowed.

Table VII-3 is replaced with the following:

**TABLE VII-3
Pavement Markings**

| Type | Class | Name | Film Thickness (mils) | Pavement Surface | Application Limitations | Appr. List No. |
|------|-------|--|--|------------------|--|----------------|
| A | I | Conventional or Cold-Weather Traffic Paint | 15 ± 1 when wet | AC HCC | May be applied directly after paving operations | 20 |
| A | II | High Build Traffic Paint | 25 ± 2 when wet | AC HCC | May be applied directly after paving operations | 20 |
| B | I | Thermoplastic Alkyd | 90 ± 5 | AC HCC | May be applied directly after paving operations | 43 |
| | I | Thermoplastic Hydrocarbon | 90 ± 5 when dry | AC HCC | Do not apply less than 30 days after paving operations | 43 |
| | II | Preformed Thermoplastic | 120-130 | AC HCC | Manufacturers installation instructions | 73 |
| | III | Epoxy resin | 20 ± 1 when wet | AC HCC | Manufacturers installation instructions | 75 |
| | IV | Plastic-backed preformed Tape | 60 - 120 | AC HCC | Manufacturer’s installation instructions | 17 |
| | VI | Patterned preformed Tape | 20 min ¹ 65 min ² | AC HCC | (Note 4) | 17 |
| | VII | Polyurea | 20 ± 1 | AC HCC | Manufacturer’s installation instructions | 74 |
| D | III | Wet Reflective Removable tape | (Note 3) | AC HCC | Temporary pavement marking | 17 |

| | | | | | |
|---|---------------------------------------|----------|----|---|----|
| E | Removable black tape (Non-Reflective) | (Note 3) | AC | Temporary pavement marking for covering existing markings | 17 |
|---|---------------------------------------|----------|----|---|----|

¹Thinnest portion of the tape's cross section.

²Thickest portion of the tape's cross section.

³In accordance with manufacturer's installation instructions.

⁴In accordance with the manufacturer's installation instructions, except that Type B, Class VI markings on new plant mix asphalt surfaces shall be inlaid into the freshly installed asphalt surface and not surface-applied.

Section 704.03(d)1 – Snowplowable raised pavement markers is renamed **Section 704.03(d)1 – Inlaid Pavement Markers** and replaced as follows:

Inlaid Pavement Markers shall be installed with retroreflectors with front-side and back-side colors as per Standard Drawing PM-8.

The Contractor shall not install markers on existing bridge decks. Inlaid Pavement Markers shall be installed on new bridge decks where required by the Plans.

Inlaid Pavement Markers shall be placed in relation to pavement joints and cracks as follows:

- In existing Asphalt Concrete pavement, new or existing Hydraulic Cement Concrete pavement, and bridge decks, the edge of the groove shall be at least 2 inches from pavement joints and cracks, ensuring that the finished line of markers is straight in accordance with the tolerance for pavement markings specified in Section 704.03 of the Specifications. Offset from the longitudinal joint shall take precedence over straightness of the line of markers.
- In new Hydraulic Cement Concrete pavement or when installed in conjunction with new latex modified microsurfacing or slurry seal treatments, the edge of the groove shall be at least 2 inches from all longitudinal and transverse surface course pavement joints and 1 inch maximum off alignment from the corresponding pavement marking line. The finished line of markers shall be straight in accordance with the tolerance for pavement markings specified in Section 704.03 of the Specifications. Straightness of the line of markers and alignment with the corresponding pavement marking line takes precedence over offset from the surface course joint.

Retroreflectors shall be affixed to holders, using an adhesive from the Department's Approved List 22 (Inlaid Pavement Markers) prior to installation.

Inlaid Pavement Markers shall be installed as per Standard Drawing PM-8.

Tapered grooves and plunge cuts shall be cut using diamond blades that can accurately control the groove dimensions, resulting in smooth uniform tapers and smooth groove bottoms and ensuring the pavement does not tear or ravel. The Contractor shall remove all dirt, grease, oil, loose or unsound layers, and any other material from the groove which would reduce the bond of the adhesive. Pavement surfaces shall be maintained in a clean and dry condition until the marker is placed.

Holders shall be installed in the same shift as grooving.

The epoxy adhesive shall be thoroughly mixed until it is uniform in color, and applied in accordance with the manufacturer's installation instructions. The Contractor shall partially fill the plunge cut with sufficient epoxy adhesive such that the epoxy adhesive bed area is equal to the bottom area of the holder. The Contractor shall then set the holder in the epoxy adhesive such that the breakaway tabs are resting on the road surface, the holder is centered in the cut, and then fill in additional epoxy adhesive if necessary so the entire perimeter of the holder is completely surrounded in epoxy, with the epoxy level with the edge of the holder in accordance with the manufacturer instructions.

The Contractor shall remove all adhesive and foreign matter from the face of the retroreflector or replace the retroreflector if adhesive and foreign matter cannot be removed. The marker shall be replaced if it is not properly positioned and adhered in the plunge cut.

Section 704.03(d)2 – Raised Pavement Markers is renamed **Nonplowable Raised Pavement Markers** and is replaced with the following:

Nonplowable raised pavement markers shall be bonded to the surface in accordance with the manufacturer’s installation instructions. The bonding material shall be from the Department’s Approved List 22 for the specific marker.

Section 704.04 – Measurement and Payment is amended to replace the fifth paragraph with the following:

Pavement markers will be measured in units of each for the type specified and will be paid for at the contract unit price per each. This price shall include surface preparation, furnishing, installing, prismatic retroreflectors, pavement cutting, adhesive, holders, quality control tests, and daily log.

Section 704.04—Measurement and Payment is amended by revising the Pay Item Table as follows:

The following pay items are removed:

| Pay Item | Pay Unit |
|------------------------------------|---------------------|
| Pavement message marking (Message) | Each or Linear Foot |

The following pay items are inserted:

| Pay Item | Pay Unit |
|--|---------------------|
| Pavement message marking (Message, Type or class material) | Each or Linear Foot |

VIRGINIA DEPARTMENT OF TRANSPORTATION
2016 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS

SUPPLEMENTAL SECTION 704—PAVEMENT MARKINGS AND MARKERS

SECTION 704—PAVEMENT MARKINGS AND MARKERS of the Specifications is amended as follows:

Section 704.03(a) Pavement Markings is amended to include the following:

The Contractor shall provide written certification that all preformed symbols/characters, or the templates used to create such symbols/characters for non-preformed markings, match the size and shape specified in the *VDOT Road And Bridge Standards* and the contract documents.

Section 704.03(a)2 Type B Markings is amended to replace the third paragraph with the following:

Non-truck mounted equipment for application of thermoplastic material shall be of the screed extrude type with a screw-drive or shall be self-propelled and regulated to allow for calibration of the amount of material applied. Non-truck mounted equipment for application of epoxy resin material shall also be self-propelled and regulated to allow for calibration of the amount of material applied.

Section 704.03(a)2a Thermoplastic (Class I) is replaced with the following:

Section 704.04—Measurement and Payment is amended to replace paragraphs two and three with the following:

Pavement message markings will be measured in units of each or linear feet and will be paid for at the contract unit price per each per location or linear foot as applicable for the size and/or type and class specified. This price shall include surface preparation, premarking, furnishing, installing, quality control tests, daily log, guarding devices, primer/adhesive, glass beads, reflective optics materials when required, and warranty.

Payment will be made under:

Pay Item

Pay Unit

Pavement message marking (Symbol or Text, Size, Type and Class)

Each or linear foot

APPENDIX INDEX

APPENDICES

DESCRIPTION

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**ALL VDOT FORMS ARE AVAILABLE IN WRITEABLE PDF'S AT THE FOLLOWING LINK:
<http://vdotforms.vdot.virginia.gov/> USING THE FORM NUMBER PROVIDED**

APPENDIX A

MONTHLY PROGRESS STATUS REPORT

ATTACHMENT

MONTHLY PROJECT SUMMARY REPORT
COUNTY OF HANOVER, VIRGINIA

MEETING DATE:

1A. List items from Schedule which are **AHEAD OF SCHEDULE**:

1B. List items from Schedule which are **RIGHT ON SCHEDULE**:

1C. List items from Schedule which are **BEHIND SCHEDULE**:

1D. Is the project on Schedule _____ Yes _____ No

2A. Number of weeks **AHEAD** of Schedule _____

2B. Number of weeks **BEHIND** Schedule _____

3. If behind, what is the Contractor doing to get back on schedule?

4. When does the Contractor anticipate the Project to be back on Schedule? Date: ____

5. Are there any outstanding change order items? _____ Yes _____ No
If so, list them:

6. Description of work in place: _____

APPENDIX B

MONTHLY PROGRESS STATUS REPORT- ADVERSE WEATHER SUMMARY

7. Adverse Weather Summary:

7A – Adverse weather is defined and interpreted by the Owner to be weather which meets the criterion of NATIONAL OCEANIC AND ATMOSPHEREIC ADMINISTRATION (NOAA) as listed below. Adverse weather will be considered in any time extension requests when the running balance of actual weather is in EXCESS of the running balance allowed in the NOAA averages, AND according to all terms of the Contract, AND when such excess, when applied to the current phases of the project construction, may cause some delay in the construction schedule.

7B – NATIONAL OCEANIC AND ATMOSPHEREIC ADMINISTRATION DATA:

Ten year NOAA average for number of days each month with measurable precipitation (MP) of 0.1” or more and 1.0” or more of snow or ice pellets and number of days each month where freezing temperature (FT) remains at 32° F or below.

| | | | | | | | |
|-----------|--------------|----------|--------------|----------|--------------|----------|--------------|
| | <u>MP/FT</u> | | <u>MP/FT</u> | | <u>MP/FT</u> | | <u>MP/FT</u> |
| January | 10/03 | February | 09/02 | March | 11/00 | April | 09/00 |
| May | 11/00 | June | 10/00 | July | 11/00 | August | 10/00 |
| September | 08/00 | October | 07/00 | November | 08/00 | December | 09/02 |

7C – TABULATION:

| | | | |
|-------------------------|----------------|---------------|-------------------|
| | NOAA Days | | |
| | <u>Allowed</u> | <u>Actual</u> | <u>Difference</u> |
| | MP/FT | MP/FT | MP/FT |
| Balance brought forward | _____/____ | _____/____ | _____/____ |
| This Month (_____) | _____/____ | _____/____ | _____/____ |
| Balance carried forward | _____/____ | _____/____ | _____/____ |

8. Description of Work in Place: _____

SUBMITTED: _____ DATE: _____

SIGNED BY: _____ TITLE: _____

APPENDIX C

DBE Policy Statement

Verbiage for DBE Policy Statement:

It is the policy of the Hanover County that Disadvantaged Business Enterprises (DBE) as defined in 49 CFR Part 26 must have the maximum opportunity to participate in the performance of federal contracts. A list of Virginia Department of Minority Business Enterprise certified DBE firms is maintained on their web site (<http://www.VDMBE.state.va.us>) under the DBE Directory of Certified Vendors and a list of Metropolitan Washington Airports Authority certified DBE firms are maintained on their web site (<http://www.metwashairports.com>) under DBE Directory. Contractors are encouraged to take all necessary and reasonable steps to ensure that DBE firms have the maximum opportunity to compete for and perform services on contract, including participation in any subsequent supplement contracts. If the contractor intends to subcontract a portion of the services on the project, the contractor is encouraged to seek out and consider DBEs as potential subcontractors. The contractor is encouraged to contact DBEs to solicit their interest, capability and qualifications. Any agreement between a contractor and a DBE whereby the DBE promises not to provide services to other contractors is prohibited.

The DBE contract goal for this procurement is 2%.

APPENDIX D

VDOT C-56 FORM

U.S. DEPARTMENT OF
LABOR
Wage and Hour and Public
Contracts Division

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF
TRANSPORTATION STATEMENT
OF COMPLIANCE**

Form Approved
Budget Bureau No. 44-R1093

Date _____

I, _____ do hereby state:

(Name of signatory party)

(Title)

(1) That I pay or supervise the payment of the persons employed by _____ on
(Contractor or subcontractor)

the _____ ; that during the payroll period commencing on the _____ day of _____
(Building or work)

20 _____ and ending the _____ day of _____, 20 _____, all persons employed on said project have been paid the full weekly wages earned, that no rebates have been or will be made directly or indirectly to or on behalf of said _____

_____ from the full weekly wages earned by any person and that no deductions have been made

(Contractor or Subcontractor)

either directly or indirectly from the full wages earned by any person, other than permissible deductions as defined in Regulations, Part 3 (29 CFR Subtitle A), issued by the Secretary of Labor under the Copeland Act as amended (48 Stat. 948.63 Stat. 108, 72 Stat.967; 76 Stat. 357; 40 USC. 276c), and described below:

(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete: that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.

(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training, United States Department of Labor.

(4) That:

(a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS

In addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits as listed in the contract have been or will be made to appropriate programs for the benefit of such employees, except as noted in Section 4(c) below.

or

(b) WHERE FRINGE BENEFITS ARE PAID IN CASH

Each Laborer or mechanic listed in the above referenced payroll has been paid as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.

(c) EXCEPTIONS

| EXCEPTION (CRAFT) | EXPLANATION |
|-------------------|-------------|
| | |
| | |
| | |
| | |
| Remarks | |

| | |
|----------------|-----------|
| Name and Title | Signature |
|----------------|-----------|

The willful falsification of any of the above statements may subject the contractor or subcontractor to civil or criminal prosecution. See Section 1001 of Title 18 and Section 231 of Title 31 of the United States code.

INSTRUCTIONS FOR PREPARATION OF STATEMENT OF COMPLIANCE

This statement of compliance meets needs resulting from the amendment of the Davis-Bacon Act to include fringe benefits provisions. Under this amended law, the contractor is required to pay fringe benefits as predetermined by the Department of Labor, in addition to payment to the minimum rates. The contractor's obligation to pay fringe benefits may be met by payment of the fringes to the various plans, funds, or programs or by making these payments to the employees as cash in lieu of fringes.

The contractor should show on the face of his payroll all monies paid to the employees whether as basic rates or as cash in lieu of fringes. The contractor shall represent in the statement of compliance that he is paying to others fringes required by the contract and not paid as cash in lieu of fringes. Detailed instructions follow:

Contractors who pay all required fringe benefits:

A contractor who pays fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Secretary of Labor shall continue to show on the face of his payroll the basic cash hourly rate and overtime rate paid to his employees, just as he has always done. Such a contractor shall check paragraph 4(a) of the statement to indicate that he is also paying to approved plans, funds, or programs not less than the amount pre-determined as fringe benefits for each craft. Any exception shall be noted in Section 4(c).

Contractors who pay no fringe benefits:

A contractor who pays no fringe benefits shall pay to the employee and insert in the straight time hourly rate column of his payroll an amount not less than the predetermined rate for each classification plus the amount of fringe benefits determined for each classification in the applicable wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringes, the overtime rate shall not be less than the sum of the basic predetermined rate, plus the half time premium on the basic or regular rate plus the required cash in lieu of fringes at the straighttime rate. To simplify computation of overtime, it is suggested that the straight time basic rate and cash in lieu of fringes be separately stated in the hourly rate column, thus \$3.25/.40. In addition, the contractor shall check paragraph 4(b) of the statement to indicated that he is paying fringe benefits in cash directly to his employees. Any exceptions shall be noted in Section 4(c).

Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the employees as cash in lieu of fringes. Any exceptions to Section 4(a) or 4(b), whichever the contractor may check, shall be entered in Section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid the employees as cash in lieu of fringes, and the hourly amount paid to plans, funds or programs as fringes.

APPENDIX E

FORM C-57- HIGHWAY CONSTRUCTION CONTRACTORS MONTHLY EEO REPORT

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
HIGHWAY CONSTRUCTION CONTRACTORS
MONTHLY EEO REPORT**

Project No. _____

REPORT for the MONTH & YEAR of

Contract ID No. _____

MONTHLY EEO REPORT

| | | | | | |
|--|--|-------------------------------|--------------------------------|-------------------------------|--|
| 1. MARK APPROPRIATE BLOCK <input type="checkbox"/> Contractor <input type="checkbox"/> Subcontractor | | 2. COMPANY NAME, CITY, STATE: | 3. FED PROJECT No.: | 4. DOLLAR AMOUNT OF CONTRACT: | 5. TYPE OF CONSTRUCTION |
| 6. COUNTY AND STATE | | 7. PERCENT COMPLETE | 8. BEGINNING CONSTRUCTION DATE | | 9. ESTIMATED PEAK EMPLOYMENT MONTH & YEAR (a) NO. OF EMPLOYEES (b) |

10. EMPLOYMENT DATA

| JOB CATEGORIES | TABLE A | | | | | | | | | | | | | | TABLE B | | | | | | | |
|-----------------------|----------------|---|-------------------------------|---|------------------|---|--------------------|---|---------------------------|---|-------|---|--------------------------|---|-------------------|---|-------|---|-------------|---|---------------------|---|
| | TOTAL EMPLOYED | | TOTAL RACIAL/ ETHNIC MINORITY | | BLACK or AFRICAN | | HISPANIC OR LATINO | | AMERICAN INDIAN OR ALASKA | | ASIAN | | NATIVE HAWAIIAN OR OTHER | | TWO OR MORE RACES | | WHITE | | APPRENTICES | | ON THE JOB TRAINEES | |
| | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F | M | F |
| OFFICIALS | | | | | | | | | | | | | | | | | | | | | | |
| SUPERVISORS | | | | | | | | | | | | | | | | | | | | | | |
| FOREMEN/WOMEN | | | | | | | | | | | | | | | | | | | | | | |
| CLERICAL | | | | | | | | | | | | | | | | | | | | | | |
| EQUIPMENT OPERATORS | | | | | | | | | | | | | | | | | | | | | | |
| MECHANICS | | | | | | | | | | | | | | | | | | | | | | |
| TRUCK DRIVERS | | | | | | | | | | | | | | | | | | | | | | |
| IRONWORKERS | | | | | | | | | | | | | | | | | | | | | | |
| CARPENTERS | | | | | | | | | | | | | | | | | | | | | | |
| CEMENT MASONS | | | | | | | | | | | | | | | | | | | | | | |
| ELECTRICIANS | | | | | | | | | | | | | | | | | | | | | | |
| PIPEFITTER/PLUMBERS | | | | | | | | | | | | | | | | | | | | | | |
| PAINTERS | | | | | | | | | | | | | | | | | | | | | | |
| LABORERS-SEMI SKILLED | | | | | | | | | | | | | | | | | | | | | | |
| LABORERS-UNSKILLED | | | | | | | | | | | | | | | | | | | | | | |
| TOTAL | | | | | | | | | | | | | | | | | | | | | | |

TABLE C (Table B data by racial status)

| | | | | | | | | | | | | | | | | | | | | | | |
|--|--|--|--|--|--|--|--|--|---------|--|--|--|--|--|--|--|--|--|--|--|--|--|
| APPRENTICES | | | | | | | | | | | | | | | | | | | | | | |
| OJT TRAINEES | | | | | | | | | | | | | | | | | | | | | | |
| 8. PREPARED BY: (Signature and Title of Contractors Representative) | | | | | | | | | 9. DATE | | | | | | | | | | | | | |

Form FHWA- 1391 (Rev. 06-10)

PREVIOUS EDITIONS ARE OBSOLETE

APPENDIX F

VDOT FORM C-58

NOTICE ON TITLE 18 US CODE SECTION 1020



NOTICE

The highway construction underway at this location is a Federal or Federal-aid project and is subject to applicable State and Federal laws, including Title 18, United States Code, Section 1020, which reads as follows:

“Whoever, being an officer, agent, or employee of the United States, or 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 costs thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction of 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 a material fact in any statement, certificate, or report submitted pursuant to the provision of the Federal Aid Road Act approved July 11, 1916 (39 Stat. 355) as amended and supplemented,

Shall be fined under this title or imprisoned not more than five years, or both.”

Any person having reason to believe this statute is being violated should report the same to the agency representative(s) named below.

| | | |
|-----------------------------|--|--|
| State Transportation Agency | U.S. Department of Transportation Hotline for Fraud, Waste, & Abuse 1-800-424-9071 | Federal Highway Administration Division Administrator |
|-----------------------------|--|--|

FHWA Form-1022 (Revised May2015)

APPENDIX G

VDOT FORM C-59

WAGE RATE INFORMATION

EMPLOYEE RIGHTS

UNDER THE DAVIS-BACON ACT

FOR LABORERS AND MECHANICS EMPLOYED ON FEDERAL OR FEDERALLY ASSISTED CONSTRUCTION PROJECTS

PREVAILING WAGES

You must be paid not less than the wage rate listed in the Davis-Bacon Wage Decision posted with this Notice for the work you perform.

OVERTIME

You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 in a work week. There are few exceptions.

ENFORCEMENT

Contract payments can be withheld to ensure workers receive wages and overtime pay due, and liquidated damages may apply if overtime pay requirements are not met. Davis-Bacon contract clauses allow contract termination and debarment of contractors from future federal contracts for up to three years. A contractor who falsifies certified payroll records or induces wage kickbacks may be subject to civil or criminal prosecution, fines and/or imprisonment.

APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

PROPER PAY

If you do not receive proper pay, or require further information on the applicable wages, contact the Contracting Officer listed below:

or contact the U.S. Department of Labor's Wage and Hour Division.



WAGE AND HOUR DIVISION
UNITED STATES DEPARTMENT OF LABOR

1-866-487-9243
TTY: 1-877-889-5627
www.dol.gov/whd



WH1321 REV 10/17

APPENDIX H

FORM C-63

DBE- SWAM PAYMENT COMPLIANCE

REPORT

<http://vdotforms.vdot.virginia.gov/SearchResults.aspx?filename=C63.pdf>

APPENDIX I

FORM C-64

EEO INFORMATION REQUEST

<http://vdotforms.vdot.virginia.gov/SearchResults.aspx?strFormNumber=C-64>

APPENDIX J

FORM C-48

**SUBCONTRACTOR/SUPPLIER SOLICITATION
AND UTILIZATION FORM**

<http://vdotforms.vdot.virginia.gov/SearchResults.aspx?strFormNumber=C-48>

APPENDIX K

FORM C-49


DBE GOOD FAITH DOCUMENTATION

<http://vdotforms.vdot.virginia.gov/SearchResults.aspx?strFormNumber=C-49>

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
DBE GOOD FAITH EFFORTS DOCUMENTATION

--DO NOT DETACH--

**THIS INFORMATION MUST BE SUBMITTED
WITHIN 2 DAYS AFTER BID OPENING IF YOUR
BID DOES NOT MEET THE PROJECT DBE
REQUIREMENTS, OR
WHEN REQUESTED BY VDOT**

CONTRACT I.D. NUMBER [REDACTED]
PROJECT NUMBER (NFO)0360-042-V16
FHWA NUMBER CM-5A27(785)
DISTRICT RICHMOND
DATE BID SUBMITTED [REDACTED]
BIDDER'S NAME [REDACTED]
SIGNATURE  [REDACTED]
TITLE [REDACTED]
VENDOR NUMBER [REDACTED]
DBE GOAL FROM BID PROPOSAL [REDACTED]

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
DBE GOOD FAITH EFFORTS DOCUMENTATION

CONTRACT I.D. NO. _____ DATE SUBMITTED _____

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER _____ SIGNATURE _____
TITLE _____

NAMES OF CERTIFIED DBEs AND THE DATES ON WHICH THEY WERE SOLICITED TO BID ON THIS PROJECT

INCLUDE THE ITEMS OF WORK OFFERED AND THE DATES AND METHODS USED FOR FOLLOWING UP INITIAL SOLICITATIONS TO DETERMINE WHETHER OR NOT DBEs WERE INTERESTED.

| NAMES AND VENDOR NUMBERS OF DBEs SOLICITED | DATE OF INITIAL SOLICITATION | ITEM(S) OF WORK | FOLLOW-UP METHODS AND DATES |
|--|------------------------------|-----------------|-----------------------------|
| | | | |

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY

ATTACH COPIES OF SOLICITATIONS, TELEPHONE RECORDS, FAX CONFIRMATIONS, ELECTRONIC INFORMATION, ETC.

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
DBE GOOD FAITH EFFORTS DOCUMENTATION

CONTRACT I.D. NO. _____ DATE SUBMITTED _____

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER _____ SIGNATURE _____
TITLE _____

TELEPHONE LOG

| DBE(s) CALLED | TELEPHONE NUMBER | DATE CALLED | TIME CALLED | CONTACT PERSON OR VOICE MAIL STATUS |
|---------------|------------------|-------------|-------------|-------------------------------------|
| | | | | |

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
DBE GOOD FAITH EFFORTS DOCUMENTATION

CONTRACT I.D. NO. _____ DATE SUBMITTED _____

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER _____ SIGNATURE _____
TITLE _____

ITEM(S) OF WORK THAT THE BIDDER MADE AVAILABLE TO DBE FIRMS

IDENTIFY THOSE ITEM(S) OF WORK THAT THE BIDDER MADE AVAILABLE TO DBE FIRMS OR THOSE ITEM(S) THE BIDDER IDENTIFIED AND DETERMINED TO SUBDIVIDE INTO ECONOMICALLY FEASIBLE UNITS TO FACILITATE DBE PARTICIPATION. FOR EACH ITEM LISTED, SHOW THE DOLLAR VALUE AND PERCENTAGE OF THE TOTAL CONTRACT AMOUNT. IT IS THE BIDDER'S RESPONSIBILITY TO DEMONSTRATE THAT SUFFICIENT WORK TO MEET THE GOAL WAS MADE AVAILABLE TO DBE FIRMS.

| ITEM(S) OF WORK MADE AVAILABLE | BIDDER NORMALLY PERFORMS ITEM(S) (Y/N) | ITEM(S) BROKEN DOWN TO FACILITATE PARTICIPATION (Y/N) | AMOUNT IN DOLLARS | PERCENTAGE OF CONTRACT |
|--------------------------------|--|---|-------------------|------------------------|
| | | | | |

NOTE: INFORMATION REQUIRED FOR THIS SECTION CONTINUED ON SHEET 5
ATTACH ADDITIONAL PAGES IF NECESSARY

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
DBE GOOD FAITH EFFORTS DOCUMENTATION

CONTRACT I.D. NO. _____ DATE SUBMITTED _____

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER _____ SIGNATURE _____
TITLE _____

ADDITIONAL INFORMATION REGARDING ITEM(S) OF WORK THAT THE BIDDER MADE AVAILABLE TO DBE FIRMS (Continued From Sheet 4)

ITEM(S) OF WORK MADE AVAILABLE, NAMES OF SELECTED FIRMS AND DBE STATUS, DBEs THAT PROVIDED QUOTES, PRICE QUOTE FOR EACH FIRM, AND THE PRICE DIFFERENCE FOR EACH DBE IF THE SELECTED FIRM IS NOT A DBE.

| ITEM(S) OF WORK MADE AVAILABLE(CONT.) | NAME OF SELECTED FIRM AND VENDOR NUMBER | DBE OR NON-DBE | NAME OF REJECTED FIRM(S) | QUOTE IN DOLLARS | PRICE DIFFERENCE IN DOLLARS |
|---------------------------------------|---|----------------|--------------------------|------------------|-----------------------------|
| | | | | | |

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY.

IF THE FIRM SELECTED FOR THE ITEM IS NOT A DBE, PROVIDE THE REASON(S) FOR THE SELECTION ON A SEPARATE PAGE AND ATTACH.

PROVIDE NAMES, ADDRESSES, AND TELEPHONE NUMBERS FOR THE FIRMS LISTED ABOVE.

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
DBE GOOD FAITH EFFORTS DOCUMENTATION

CONTRACT I.D. NO. _____ DATE SUBMITTED _____

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER _____ SIGNATURE  _____
TITLE _____

ADVERTISEMENTS OR PROOFS OF PUBLICATION.

NAMES AND DATES OF EACH PUBLICATION IN WHICH A REQUEST FOR DBE PARTICIPATION FOR THE PROJECT WAS PLACED BY THE BIDDER. ATTACH COPIES OF PUBLISHED ADVERTISEMENTS OR PROOFS OF PUBLICATION.

| PUBLICATIONS | DATES OF ADVERTISEMENT |
|--------------|------------------------|
| | |

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
DBE GOOD FAITH EFFORTS DOCUMENTATION

CONTRACT I.D. NO. _____ DATE SUBMITTED _____

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER _____ SIGNATURE _____
TITLE _____

NAMES OF AGENCIES CONTACTED TO PROVIDE ASSISTANCE

NAMES OF AGENCIES (SEE SPECIAL PROVISION FOR 107.15) AND THE DATES THESE AGENCIES WERE CONTACTED TO PROVIDE ASSISTANCE IN CONTACTING, RECRUITING, AND USING DBE FIRMS. IF THE AGENCIES WERE CONTACTED IN WRITING, ATTACH COPIES OF SUPPORTING DOCUMENTS.

| NAME OF AGENCY | METHOD AND DATE OF CONTACT | RESULTS |
|----------------|----------------------------|---------|
| | | |


NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY.

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
DBE GOOD FAITH EFFORTS DOCUMENTATION

CONTRACT I.D. NO. [REDACTED] DATE SUBMITTED [REDACTED]

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER [REDACTED] SIGNATURE [REDACTED] 
TITLE [REDACTED]

TECHNICAL ASSISTANCE AND INFORMATION PROVIDED TO DBEs

EFFORTS MADE TO PROVIDE INTERESTED DBEs WITH ADEQUATE INFORMATION ABOUT THE PLANS, SPECIFICATIONS, AND REQUIREMENTS OF THE BID DOCUMENTS TO ASSIST THE DBEs IN RESPONDING TO A SOLICITATION.

IDENTIFY THE DBEs ASSISTED, THE INFORMATION PROVIDED, AND THE DATE OF CONTACT. ATTACH COPIES OF SUPPORTING DOCUMENTS.

| DBEs ASSISTED | INFORMATION PROVIDED | DATE OF CONTACT |
|---------------|----------------------|-----------------|
| [REDACTED] | [REDACTED] | [REDACTED] |

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY.

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
DBE GOOD FAITH EFFORTS DOCUMENTATION

CONTRACT I.D. NO. _____ DATE SUBMITTED _____

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER _____ SIGNATURE _____

TITLE _____

EFFORTS MADE TO ASSIST DBEs OBTAIN BONDING, LINES OF CREDIT, INSURANCE, ETC.

EFFORTS MADE TO PROVIDE INTERESTED DBEs IN OBTAINING BONDING, LINES OF CREDIT, INSURANCE, NECESSARY EQUIPMENT, SUPPLIES, MATERIALS, OR RELATED ASSISTANCE OR SERVICES, EXCLUDING SUPPLIES AND EQUIPMENT THE SUBCONTRACTOR PURCHASES OR LEASES FROM THE PRIME CONTRACTOR OR ITS AFFILIATES.

IDENTIFY THE DBEs ASSISTED, THE ASSISTANCE OFFERED, AND THE DATES OF SERVICES OFFERED AND PROVIDED. ATTACH COPIES OF SUPPORTING DOCUMENTS.

| DBEs ASSISTED | ASSISTANCE OFFERED | DATES SERVICES OFFERED AND/OR PROVIDED |
|---------------|--------------------|--|
| | | |

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY.

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
DBE GOOD FAITH EFFORTS DOCUMENTATION

CONTRACT I.D. NO. [REDACTED] DATE SUBMITTED [REDACTED]

IF THE DBE GOAL ESTABLISHED FOR THIS CONTRACT HAS NOT BEEN MET OR VDOT REQUESTS THE SUBMITTAL THEREOF, THE BIDDER IS REQUIRED TO SUBMIT GOOD FAITH EFFORTS AS OUTLINED IN THIS DOCUMENT.

THE BIDDER ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY REPRESENTS THE INFORMATION CONTAINED HEREIN.

BIDDER [REDACTED] SIGNATURE [REDACTED] 
TITLE [REDACTED]

ADDITIONAL DATA TO SUPPORT DEMONSTRATION OF GOOD FAITH EFFORTS

| ADDITIONAL DATA TO SUPPORT DEMONSTRATION OF GOOD FAITH EFFORTS |
|--|
| [REDACTED] |

NOTE: ATTACH ADDITIONAL PAGES, IF NECESSARY

APPENDIX L

FORM C-104

**BIDDER STATEMENT FOR FEDERALLY
FUNDED PROJECTS**

<http://vdotforms.vdot.virginia.gov/SearchResults.aspx?strFormNumber=C-104>

**COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION**

PROJECT: (NFO) 0360-042-V16

FHWA: CM-5A27(785)

This form must be completed, signed and returned with bid; and failure to do so may result in the rejection of your bid. **THE CONTRACTOR SHALL AFFIRM THE FOLLOWING STATEMENT EITHER BY SIGNING THE AFFIDAVIT AND HAVING IT NOTARIZED OR BY SIGNING THE UNSWORN DECLARATION UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE UNITED STATES.** A SEPARATE FORM MUST BE SUBMITTED BY EACH PRINCIPAL OF A JOINT VENTURE BID.

STATEMENT. In preparation and submission of this bid, I, the firm, corporation or officers, agents or employees thereof did not, either directly or indirectly, enter into any combination or arrangement with any persons, firm or corporation or enter into any agreement, participate in any collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. Section 1) or Article 1.1 or Chapter 12 of Title 18.2 (Virginia Governmental Frauds Act), Sections 59.1-9.1 through 59.1-9.17 or Sections 59.1-68.6 through 59.1-68.8 of the Code of Virginia.

AFFIDAVIT

The undersigned is duly authorized by the bidder to make the foregoing statement to be filed with bids submitted on behalf of the bidder for contracts to be let by the Commonwealth Transportation Board.

Signed at _____, this ____ day of _____, 20 ____
County (City), STATE

(Name of Firm) By: _____ (Signature) _____ Title (print)

STATE of _____ COUNTY (CITY) of _____

To-wit: _____

I _____, a Notary Public in and for the State and County(City) aforesaid, hereby certify that this day _____

personally appeared before me and made oath that he is duly authorized to make the above statements and that such statements are true and correct.

Subscribed and sworn to before me this _____ day of _____, 20 ____

My Commission expires _____

Notary Public

OR

UNSWORN DECLARATION

The undersigned is duly authorized by the bidder to make the foregoing statement to be filed with bids submitted on behalf of the bidder for contracts to be let by the Commonwealth Transportation Board.

Signed at _____, this ____ day of _____, 20 ____
County (City), STATE

(Name of Firm) By: _____ (Signature) _____ Title (print)

APPENDIX M

FORM C-105

BIDDER CERTIFICATION FOR FEDERALLY FUNDED PROJECTS

<http://vdotforms.vdot.virginia.gov/SearchResults.aspx?strFormNumber=C-104>

ORDER NO.:
CONTRACT ID. NO.:

Form C-105
Rev. 7-13-05

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
AFFIDAVIT

PROJECT: (NFO) 0360-042-V16

FHWA: CM-5A27(785)

This form must be completed, signed, notarized and returned with bid; and failure to do so, may result in the rejection of your bid. A separate form must be submitted by each principal of a joint venture bid.

1. I, the firm, corporation or officers, agents or employees thereof have neither directly nor indirectly entered into any combination or arrangement with any person, firm or corporation or entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with such contract, the effect of which is to prevent competition or increase the cost of construction or maintenance of roads or bridges.

During the preceding twelve months, I (we) have been a member of the following Highway Contractor's Associations, as defined in Section 33.2-1106 of the Code of Virginia. (If none, so state).

| NAME | Location of Principal Office |
|------|------------------------------|
| | |
| | |
| | |

2. I (we) have , have not , participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that I/We have , have not , filed with the joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor [41 CFR 60-1.7(b)(1)], and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contract or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7(b) (1) prevents the award of contract and subcontract unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

(Continued)

ORDER NO.:
CONTRACT ID. NO.:

Form C-105
page 2

3. The bidder 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 three year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offence 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 above; and
 - (d) Where the bidders is unable to certify to any of the statements in this certification, the bidder shall show an explanation below.

Explanations will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any explanation noted, indicate below to whom it applies, initiating agency, and dates of action. Providing false information may result in federal criminal prosecution or administration sanctions. The bidder shall provide immediate written notice to the Department if at any time the bidder learns that its certification was erroneous when submitted or has become erroneous by reason of change circumstances.

The undersigned is duly authorized by the bidder to make the foregoing statements to be filed with bids submitted on behalf of the bidder for contracts to be let by the Commonwealth Transportation Board.

Signed at _____, this ____ day of _____, 20 ____
County (City), STATE

(Name of Firm) By: _____ (Signature) _____ Title (print)

STATE of _____ COUNTY (CITY) of _____

To-wit: I _____, a Notary Public in and for the State and

County(City) aforesaid, hereby certify that this day _____ personally appeared before me and made oath that he is duly authorized to make the above statements and that such statements are true and correct.

Subscribed and sworn to before me this _____ day of _____, 20 ____

My Commission expires _____

Notary Public

APPENDIX N

FORM C-111

MINIMUM DBE REQUIREMENTS

[http://vdotforms.vdot.virginia.gov/SearchResults.aspx?strFormNumber=C-111%20\(Correct%20Form\)](http://vdotforms.vdot.virginia.gov/SearchResults.aspx?strFormNumber=C-111%20(Correct%20Form))

APPENDIX O

FORM C-112

**CERTIFICATION OF BINDING
AGREEMENT WITH DBE FIRMS**

[http://vdotforms.vdot.virginia.gov/SearchResults.aspx?strFormNumber=C-112\)](http://vdotforms.vdot.virginia.gov/SearchResults.aspx?strFormNumber=C-112)

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
CERTIFICATION OF BINDING AGREEMENT
WITH
DISADVANTAGED BUSINESS ENTERPRISE FIRMS

Project No.: (NFO)0360-042-V16

Federal Project No.:CM-5A27(785)

This form is to be submitted in accordance with the Department's Special Provision for Section 107.15.

It is hereby certified by the below signed Contractors that there exists a written quote, acceptable to the parties involved preliminary to a binding subcontract agreement stating the details concerning the work to be performed and the price which will be paid for the aforementioned work. This document is not intended to, nor should it be construed to, contain the entire text of the agreement between the contracting parties. This document does not take the place of, nor may it be substituted for, an official subcontracting agreement in those situations that may require such an agreement. A copy of the fully executed *subcontract agreement* shall be submitted to the Engineer within fourteen (14) business days after contract execution.

It is further certified that the aforementioned mutually acceptable quote and fully executed subcontract agreement represent the entire agreement between the parties involved and that no conversations, verbal agreements, or other forms of non-written representations shall serve to add to, delete, or modify the terms as stated.

The prime Contractor further represents that the aforementioned mutually acceptable quote and fully executed subcontract agreement shall remain on file for a period of not less than one year following completion of the prime's contract with the Department or for such longer period as provisions of governing Federal or State law or regulations may require. For purposes of this form, the term Prime Contractor shall refer to any Contractor utilizing a DBE subcontractor, regardless of tier, in which they are claiming DBE credit toward the contract goal.

Contractors further jointly and severally represent that said binding agreement is for the performance of a "commercially useful function" as that term is employed in 49 C.F.R. Part 26.55 (c), (d).

**TO BE SIGNED BY THE SUBCONTRACTOR TO THE PRIME CONTRACTOR, AND ANY LOWER TIER
SUBCONTRACTORS HAVING A CONTRACT WITH THE BELOW NAMED DBE FIRM**

Prime Contractor

By: _____
Signature Title

Date:

First Tier
Subcontractor if
Applicable

By: _____
Signature Title

Date:

Second Tier
Subcontractor if
Applicable

By: _____
Signature

Title

Date: _____

Third Tier
Subcontractor if
Applicable

By: _____
Signature

Title

Date: _____

DBE Contractor

By: _____
Signature

Title

Date: _____