



## **INVITATION FOR BID DOCUMENTS**

**for**

### **21<sup>st</sup> Street Corridor Improvements (Sycamore Avenue to Forest Avenue)**

**VDOT Project No. *EN22-103-245, P101, C501, UPC# 121167*  
Federal Aid No. TAP-5103(125)**

**and**

### **CDBG Streetlights (Sycamore Ave – 20<sup>th</sup> Street to 22<sup>nd</sup> Street) (21<sup>st</sup> Street – Railroad to Sycamore Ave)**

**CDBG Project No. 21-21-09**

**CITY OF BUENA VISTA  
DEPARTMENT OF COMMUNITY DEVELOPMENT**

**INVITATION FOR BID 2025-04-002**

**April 17, 2025**

***PREPARED FOR:***

City of Buena Vista  
Department of Community  
Development  
2039 Sycamore Ave  
Buena Vista, Virginia 24416

***PREPARED BY:***

City of Buena Vista  
Department of Community  
Development  
and  
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**21<sup>st</sup> Street Corridor Improvements (TAP)  
Sycamore Avenue Street Lights (CDBG)  
City of Buena Vista Invitation for Bid #04-002-2025  
VDOT Project No. EN22-103-245, P101, C501, UPC# 121167  
CDBG Project No. 21-21-09**

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## 1.0 DESCRIPTION OF THE PROJECT

**21<sup>st</sup> Street Corridor Improvements** involves the construction of replacing the existing traffic signals at 21<sup>st</sup> Street/Sycamore Avenue and at 21<sup>st</sup> Street/Magnolia Avenue, upgrading ADA curb ramps at 21<sup>st</sup> Street/Sycamore Avenue, and at 21<sup>st</sup> Street/Forest Avenue, installing new drainage structures, ADA curb ramps, and curb extensions. The work will include clearing, demolition of concrete and full depth asphalt pavement, asphalt milling/paving, drainage structure removal/abandonment and installation, erosion & sediment control, signage, adjustment of existing utilities, installation of curb & gutter, traffic signal pole removal and installation, installation of traffic signal heads and pedestrian push buttons, installation of junction boxes, installation of signal wire to the existing signal cabinet, and other items necessary for the completion of the work.

**CDBG Streetlights Project** involves the construction of new streetlights along both sides of Sycamore Avenue from 20<sup>th</sup> Street to 22<sup>nd</sup> Street, and along the north side of 21<sup>st</sup> Street from Sycamore Avenue to the Railroad. Work includes new street light poles and foundations, replacement of select sidewalk panels, and installation of wiring to the existing street light control cabinet, and other items necessary for the completion of the work.

Contractors must be on VDOT's current Pre-qualified list at the time/ date set for the opening of bids in order to be eligible for this contract.

**Attention is drawn to the requirement for submission of VDOT Forms C-48, C-49 (if applicable), C-104, C-105, C-111, and C112 along with the Bid Form and Bid Bond for this Invitation for Bids. Failure to do so may result in rejection of your bid.**

## 2.0 **INSTRUCTIONS TO BIDDERS**

### 2.1 **DUE DATE AND PLACE OF BID OPENING**

Sealed paper bids, subject to the specifications and conditions contained herein and attached hereto, will be received in the City of Buena Vista City Hall, 2039 Sycamore Ave Buena Vista, VA 24416, until but no later than **2:00 p.m.** local time prevailing, May 15 2025, and then publicly opened and read immediately thereafter for the following:

21<sup>st</sup> Street Corridor Improvements (TAP)  
CDGB Streetlights Project

### 2.2 **INVITATION FOR BID DOCUMENTS**

The City of Buena Vista Invitation for Bid (IFB) No. for this project is: **#2025-04-002**

The IFB documents can be shared via the following method:

- A. Upon request, electronic documents will be provided via e-mailed download link File Transfer at no cost to the bidder. Please email [Thomas.Ruff@Timmons.com](mailto:Thomas.Ruff@Timmons.com) and [Evan.Robohm@Timmons.com](mailto:Evan.Robohm@Timmons.com) for a link to download the bid documents and plans.

**Electronic Documents:** Project documents (Invitation for Bids, Project Manuals, Drawings, and any other applicable documents) provided electronically are solely for use by the Bidder for the convenience of preparing a bid response for the project. Electronic documents shall not be altered, and shall not be reproduced for any purpose other than the express purpose stated above. Any conclusion or information obtained or derived from such electronic files will be at the Bidder's risk. If there is a discrepancy between the electronic files and the hard copies on file with the City, the hard copies govern. If CAD files are available, the City does not release, nor authorize its engineering and design consultants to release them prior to execution of the Notice to Proceed.

**Contractors must be on VDOT's current Pre-qualified list at the time/ date set for the opening of bids in order to be eligible for this contract.**

**Attention is drawn to the requirement for submission of VDOT Forms C-48, C-49 (if applicable), C-104, C-105, C-111, and C112 along with the Bid Form and Bid Bond for this Invitation for Bids. Failure to do so may result in rejection of your bid.**

**Please direct any and all questions regarding the Invitation for Bid and/ or Invitation for Bid Documents in writing to Timmons Group, Thomas Ruff at [Thomas.Ruff@Timmons.com](mailto:Thomas.Ruff@Timmons.com).**

## 2.3 REQUESTS FOR INTERPRETATION OF BID DOCUMENTS AND INVITATION FOR BID ADDENDA

Any and all questions and/ or requests for interpretation of bid documents must be submitted in writing to Timmons Group, Thomas Ruff at Thomas.Ruff@Timmons.com. by 5:00 PM on May 1, 2025.

Unless otherwise altered by addenda, the last official addendum shall be issued by 5:00 PM on May 3, 2025.

## 2.4 CONTRACTOR BUSINESS LICENSE

In accordance with 23 CFR 635.110 and the *Code of Virginia* Section 54.1-1100 as amended, contractors that for a fixed price, commission, fee, or percentage undertake to bid upon, or accepts, or offers to accept, orders or contracts for performing, managing, or superintending in whole or in part, the construction, removal, repair or improvement of any building or structure permanently annexed to real property owned, controlled, or leased by him or another person or any other improvement to such real property, are required to hold a business license issued by the Virginia Board for Contractors, phone (804)367-8511. All Bidders shall obtain the required license prior to submission of a bid or be able to obtain the required license subsequent to award of the contract in order for the bid to be considered. The successful bidder shall provide evidence of the required license prior to the City executing this contract, if not provided prior to submission of a bid.

### **Class of License Definitions:**

Class A Contractor – perform or manage construction, removal, repair, or improvements when (i) the total value referred to in a single contract or project is \$120,000 or more, or (ii) the total value of all such construction, removal, repair, or improvements undertaken by such person within any 12-month period is \$750,000 or more.

Class B Contractor – perform or manage construction, removal, repair, or improvements when (i) the total value referred to in a single contract or project is \$10,000 or more, but less than \$120,000, or (ii) the total value of all such construction, removal, repair or improvements undertaken by such person within any 12-month period is \$150,000 or more, but less than \$750,000.

The Contractor license shall have the appropriate specialty classification that is predominant for the respective work.

Contractor is required to possess a Class **A/B** Contractor's Business License for this project.

## **2.5 RESPONSIBILITY OF BIDDER**

The Bidder shall make a careful examination of the project site, shall familiarize itself with existing conditions, and shall satisfy itself as to the quantity and quality of materials and workmanship required for the Work. The Bidder shall carefully and thoroughly examine the Plans, General Conditions, Technical Specifications, Bid Form, Agreement, Forms of Bonds and all other documents included in the Invitation for Bid before submitting a Bid.

In order to be given consideration, requests for interpretation of bid documents must be submitted in writing to the Engineer by the date and time specified in the Supplemental Conditions. Any and all such interpretations and any supplemental instructions provided by the Engineer will be in the form of written addenda to the Invitation For Bid. The Engineer will endeavor to send addenda by e-mail, mail, or fax to the prospective bidders at respective numbers/addresses furnished by the bidders for such purposes; however, each bidder is solely responsible for obtaining all addenda. Failure of any bidder to receive any such addendum or interpretation shall not relieve such bidder from any obligation under the bid as submitted. All addenda so issued shall become part of the contract documents.

The submission of a Bid shall constitute a warranty by the Bidder that it has complied with the requirements of this paragraph. The Bidder is bound by the bid and its bid reflects an affirmative representation that it has examined the project thoroughly.

## **2.6 FORM OF BID**

All Bids must be made on the Bid Form contained herein. The Bidder shall type or write in ink, both in words and in numerals, the price for which he proposes to furnish all materials, plant, equipment, tools, sheeting or bracing, scaffolds and other facilities; and to perform all labor and services necessary or proper for the completion of the work in strict accordance with the true intent of the Plans and Invitation for Bid Documents, and subject at all times to the approval of the Engineer. All bids shall be signed in the space provided for a signature on the cover sheet and returned. If the bidder is a partnership or corporation, the bidder shall show the title of the individual signing the bid, and if the individual is not the president or vice president of the partnership or corporation, if requested, the bidder shall submit proof that the individual has the authority to bind the partnership or corporation.

No interlineation, alteration or erasure of the Bid will be accepted. No oral, telegraphic, or telephonic proposals, modifications, or interpretations will be considered. Bids concerning separate bid invitations, must not be combined on the same form or placed in the same envelope. Bids submitted in violation of this provision may not be considered.

## **2.7 BID GUARANTY**

Each bid shall be accompanied by a bid bond from a Surety company satisfactory to the City Attorney, or his designee, or a Certified or Cashier's Check, made payable to: Treasurer, City of Buena Vista, in an amount equal to five percent of the total bid price. Attorneys-in-fact who sign Bid Bonds must file with each bond a certified and effective dated copy of their power of attorney. Each Bid Bond and the accompanying power of attorney should bear the same date. In case of the failure of the bidder to execute the contract within the prescribed time, the City may, at its option consider the bidder in default, in which case the bid bond accompanying the bid shall become the property of the City.

## **2.8 DELIVERY OF BID**

Bids shall be submitted in a sealed envelope with the IFB number and due date and time written on the outside of the envelope. The time of receipt shall be determined by the time clock stamp in the Procurement Department. Bidders are responsible for ensuring that bids are stamped by Procurement Department personnel before the deadline. Late bids shall be rejected. Bids or changes to bid responses shall not be accepted electronically.

## **2.9 OMISSIONS AND DISCREPANCIES**

Should a Bidder find discrepancies in, or omissions from, the plans or other Invitation for Bid Documents, or should he be in doubt as to their meaning, he shall at once notify the Engineer who may issue a written instruction to all Bidders.

## **2.10 REJECTION OF BID**

The Owner reserves the right to waive irregularities and technicalities and to reject any and/or all Bids. Without limiting the generality of the foregoing, any Bid which is incomplete, obscure, or irregular may be rejected; any Bid having interlineation, erasures or corrections may be rejected; any Bid accompanied by an insufficient or irregular certified check or Bid Bond may be rejected. Not more than one Bid from any individual, firm, partnership, or corporation, under the same or different names, shall be submitted. Reasonable grounds for believing that any Bidder is interested in more than one Bid on the same project will cause the rejection of all Bids in which the Bidder is interested.

## **2.11 SUBCONTRACTORS**

The Bidder's attention is called to the requirement that not more than fifty (50) percent of the construction, labor, and services necessary to construct the improvements defined in these Invitation for Bid documents shall be subcontracted. The amount of any subcontract proposed by any bidder shall be provided to the City upon request.

Form FHWA-1273 must be physically incorporated in each subcontract and each lower tier subcontract. Each subcontractor is required to be insured. Copies of subcontracts and proof of insurance must be provided to City of Buena Vista prior to that subcontractor beginning work on the Project.

## **2.12 ACCEPTANCE OF BID AND ITS EFFECT**

The Contract, if awarded, will be to the lowest responsive and responsible Bidder whose Bid complied with the requirements of the Owner. All bids submitted shall be binding for sixty (60) calendar days following the bid opening date. The Owner will either award the project or reject all Bids received within the sixty (60) calendar days after the formal opening of Bids. The acceptance of a Bid will be a written Notice of Award, signed by the Owner, and no other act shall constitute the acceptance of a Bid. The bid shall be deemed accepted by the City upon mailing of the Notice of Award.

The successful Bidder shall execute four (4) copies of the Agreement and furnish satisfactory Performance Bond, Labor and Material Payment Bond, and necessary certificates of insurance within fifteen (15) days after Notice of Award. Failure to so execute the Agreement will result in forfeiture of the Bidder's claim to the work and his Bid Bond or guarantee will be retained by the Owner to the extent necessary to make up the difference between the Bid and the second low bid.

### **2.13 DISABILITY PROVISION**

If you are an individual with a disability and require a reasonable accommodation, please notify the City of Buena Vista three working days prior to need.

### **2.14 QUALITY EXPECTATION STATEMENT**

City of Buena Vista, through its quality initiative, is a recognized leader in providing quality products and services at the most effective cost possible. Therefore, the City fully expects, requires, and shall hold all Contractors, and all agents, staff, representatives, and subcontractors of the Contractor, responsible for, and accountable to, the highest quality standards of professional workmanship, products and services. In the spirit of the City's quality initiative, the Contractor shall be expected to become a member of the team and perform or provide all work, services and products with a target of "zero defects - zero rework".

### **2.15 BIDDER QUALIFICATIONS/REFERENCES**

The City reserves the right to request bidder(s) to furnish a written statement of their qualifications and/or to provide a list of references. The City may contact all references furnished by bidder(s). The right is further reserved by the City to contact references other than, and/or in addition to, those furnished by the bidder.

If a bidder maintains VDOT Prequalification, they may not be disqualified based on experience or references. The City will only be allowed to award to the lowest responsive responsible bidder. VDOT must concur with the disqualifications.

### **2.16 PROPRIETARY INFORMATION**

*Code of Virginia* Section 2.2-4342(F) as amended, states: "Trade secrets or proprietary information submitted by a bidder, offeror, or Contractor in connection with a procurement transaction or prequalification application submitted pursuant to subsection B of 2.2-4317 shall not be subject to the Virginia Freedom of Information Act (2.2-3700 et seq.); however, the bidder, offeror, or Contractor shall (i) invoke the protections of this section prior to or upon submission of the data or other materials, (ii) identify the data or other materials to be protected, and (iii) state the reasons why protection is necessary." If the exemption from disclosure, provided by *Code of Virginia* Section 2.2-4342(F) as amended, is not properly invoked then the bids will be subject to disclosure pursuant to applicable law.

## **2.17 DISADVANTAGED BUSINESS ENTERPRISES (DBE) POLICY STATEMENT**

It is the policy of City of Buena Vista 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 Small Business and Supplier Diversity (DSBSD) certified DBE firms is maintained on their web site (<http://www.SBSD.virginia.gov>) 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 the 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 requirement for this project is 5%. The Contractor shall provide proper good faith documentation on the applicable VDOT forms if the required 5% cannot be achieved.

## **2.18 OFFICE CLOSURE**

In the event that City of Buena Vista government offices are not operating under normal staffing levels or if the location for bid submission or bid opening is inaccessible due to inclement weather or other emergency situations at the published time, the bid submission or bid opening will default to the next regular business day at the same time.

## **2.19 AWARD NOTIFICATION**

For information pertaining to the bid tabulation, decision to award and/or award of this procurement transaction, bidder may access public notification electronically on the City website.

## **2.20 DISCREPANCIES BETWEEN WORDS AND NUMERALS**

Discrepancies between words and numerals will be resolved in favor of words. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor 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.

## **2.21 AMENDMENTS OR REQUESTS TO WITHDRAW BIDS BY A BIDDER PRIOR TO OPENING**

A bidder may amend and/or withdraw their bid before the due date and time designated for receipt of bids. All requests from a bidder to return their bid shall be in writing, addressed to the Procurement Department, and signed by a person authorized to represent the person or firm that submitted the bid. The bidder may be contacted by telephone to verify the authorization of the return request and the signature involved if there is doubt as to the document's authenticity. All amendments to the bid are to be initialed by an individual authorized to represent the bidder.

## **BID FORM**

To: City of Buena Vista Department of Community Development

For the Construction of: 21<sup>st</sup> Street Corridor Improvements and CDBG Streetlights Project

The undersigned Bidder has carefully examined the site of work, the Plans, the General Conditions, Technical Specifications, Supplemental Conditions, the Agreement, the Form of Performance and Labor and Material Payment Bonds and all other documents included in the Invitation for Bid for the construction of the above named project, and in compliance with this Invitation for Bid Document will provide all the necessary machinery, tools, apparatus, and other means of construction, and do all the work and furnish all materials called for in accordance with the requirements of the City and the true intent of the Contract Documents, and with an **anticipated Notice to Proceed date of May 29, 2025, will complete the CDBG Streetlights Project by August 28, 2025, and will complete the 21<sup>st</sup> Street Corridor Improvements project by November 28, 2025.**

For the Total Lump Sum of: \_\_\_\_\_

\_\_\_\_\_ ( \_\_\_\_\_ ) DOLLARS

The undersigned Bidder further understands that all supplies and materials covered by this Bid shall be new and of the best quality and the highest grade workmanship. The Bidder certifies by the submission of this Bid that there has been no violation of copyrights or patent rights in manufacturing, producing, or selling the product or services shipped or ordered as a result of this Bid. The successful Bidder shall, at his own expense, defend any and all actions or suits charging such infringements, and will save City of Buena Vista, its officers, employees, and agents harmless from any and all liability, loss, or expense occasioned by any such violation.

The Bidder acknowledges receipt of the following Addenda: \_\_\_\_\_

Accompanying this Bid is a Bid Bond/certified check in the amount of \_\_\_\_\_ payable to Treasurer, City of Buena Vista, which is to be forfeited to the extent necessary to make up the difference between the Bid and the second low bid, or if the undersigned shall fail to execute the Agreement and furnish satisfactory Performance and Labor and Material Payment Bonds under the conditions and within the time specified.

The undersigned Bidder agrees to begin the work not later than ten (10) days after the date specified in the Notice to Proceed and to prosecute the work in such manner as to complete it within the time limit as set forth above. In the event the said work is not completed within the time limit above stated, Bidder shall be liable and hereby agrees to pay the Owner as liquidated damages and not as a penalty the sum specified as liquidated damages in the Supplemental Conditions per calendar day for each and every day that the said work remains incomplete after the expiration of the Final completion date.

Va. Contractor License Number \_\_\_\_\_

Award of this bid shall be made to the lowest responsive and responsible bidder based upon the total lump sum provided on the Bid Form.

**CONTRACTOR'S AUTHORIZATION TO TRANSACT BUSINESS**

In accordance with the Virginia State Corporation Commission Registration requirement in paragraph 66 of the General Conditions, the bidder shall check one of the following. The bidder is:

a corporation or other business entity with the following SCC identification number:  
\_\_\_\_\_ -OR-

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

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-

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. No award shall be issued to a bidder who fails to provide the required information unless a waiver of these requests is granted by the chief executive of the local governing body (the City reserves the right to determine in its sole discretion whether to allow such waivers):

**CERTIFICATION OF NON-COLLUSION AND SIGNATURE SHEET**

**This sheet must be signed and submitted with bid in order for bid to be considered.**

My signature below certifies that:

- I agree to abide by all conditions of this bid and that I am authorized to sign this bid;
- the accompanying bid is not the result of, or affected by, any unlawful act of collusion with another person or company engaged in the same line of business or commerce, or any act of fraud punishable under § 18.2-498 of the *Code of Virginia*. Furthermore, I understand that fraud and unlawful collusion are crimes under the Virginia Governmental Frauds Act, the Virginia Government Bid Rigging Act, the Virginia Antitrust Act, and Federal Law, and can result in fines, prison sentences, and civil damage awards; and
- the accompanying bid is in compliance with applicable provisions of the State and Local Government Conflict of Interests (§ 2.2-3100 et. seq. of the *Code of Virginia*). Specifically, without limitation, no City/School Board employee or a member of the employee's immediate family shall have a proscribed personal interest in a contract.
- the accompanying bid is in accordance with applicable provisions of the Virginia Public Procurement Act, Art. 6 Ethics in Public Contracting (§§ 2.2-4367 et. seq. of the *Code of Virginia*), and any other applicable law as set forth therein.

**Complete Legal Name of Firm:**

\_\_\_\_\_

**Check One:**  Individual  Partnership  Corporation  LLC  Joint Venture

**Mailing**

**Address:**

\_\_\_\_\_

\_\_\_\_\_

**Remit**

**To**

**Address:**

\_\_\_\_\_

\_\_\_\_\_

**Signature:**

\_\_\_\_\_

**Name**

**(type/print):**

\_\_\_\_\_ **Title:** \_\_\_\_\_

**Email**

**Address:**

\_\_\_\_\_

Fed ID No.: \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_ Fax  
(\_\_\_\_) \_\_\_\_\_

**We hereby provide the following information to City of Buena Vista regarding our business. We understand that it is provided for statistical purposes only and all firms submitting bids will receive equal consideration.**

**Minority-Owned Business:** Yes \_\_\_\_\_ No \_\_\_\_\_  
**Women-Owned Business:** Yes \_\_\_\_\_ No \_\_\_\_\_  
**City of Buena Vista Business:** Yes \_\_\_\_\_ No \_\_\_\_\_  
**Service Disabled Veteran-Owned Business:** Yes \_\_\_\_\_ No \_\_\_\_\_  
**Small Business:** Yes \_\_\_\_\_ No \_\_\_\_\_

## CHANGE ORDER PRICES

Bids shall be **LUMP SUM** and shall include **ALL WORK** necessary to complete the project to the full intent of the plans and accompanying bid documents. Estimated quantities are provided, but are not intended to over-ride information shown on the Plans, and do not include all incidentals necessary to complete the work. The Lump Sum price provided by the bidder includes all material quantities required to perform the project. With the exception of allowance items, material quantities will not be tracked and used as justification for payment during construction. Allowance items are identified in Section 4.23 and are intended to represent conditions expected to be encountered in the project. Allowance items will be tracked, and the Owner will pay extra for or be provided a credit for the over-runs or under-runs of these items at the unit prices quoted herein.

In the event that a Change Order becomes necessary during the life of the project, the Contractor will be paid extra or shall credit the Owner, as the case may be, on the basis of the unit prices quoted herein; these quantities are not to be used for routine over-runs or under-runs, unless the change is so significant as to justify a Change Order as defined in Section 3.28. 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. These unit prices shall be good for the duration of the contract.

. Items listed below may or may not be on the bid plans. Unit prices shall be provided for each item, except those clearly labeled as not applicable (N/A). If a change order is required during construction that utilizes an item denoted as N/A or a unit price that is otherwise rejected, the price for that work will be determined based on Section 4.22. Bids may be deemed unresponsive if a unit price is not provided for every item listed on the bid form.

<u>Line No.</u>	<u>VDOT Item No.</u>	<u>VDOT Spec No.</u>	<u>Item Description</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>
1.	513SD20-0001	513	MOBILIZATION	1	LS	N/A
2.	517SD20-0001	517	CONSTRUCTION SURVEYING	1	LS	N/A
3.	N/A	N/A	MATERIALS TESTING	1	LS	N/A
4.	301SD20-0001	301	CLEARING AND GRUBBING	1	LS	\$ _____
6.	515SD20-0004	515	FLEXIBLE PAVEMENT PLANING 0" - 2"	1172	SY	\$ _____
7.	515SD20-0005	515	FLEXIBLE PAVEMENT PLANING ABOVE 2" - 4"	71	SY	\$ _____
10.	510SX20-0001	510	REMOVE SIDEWALK AND ENTRANCE	425	SY	\$ _____
11.	510SX20-0002	510	REMOVE COMB. CURB AND GUTTER	360	LF	\$ _____
12.	508SD20-0004	508	DEMOLITION OF PAVEMENT FLEXIBLE	315	SY	\$ _____
13.	302SD20-0239	302	DROP INLET DI-2A	2	EA	\$ _____

14.	302SX20-0026	302	NS MODIFY EXST DROP INLET	2	EA	\$ _____
15.	510SX20-0040	510	NS REMOVE EXIST. FRAME & COVER	4	EA	\$ _____
16.	510SD20-0050	510	ADJUST EXIST FRAME & COVER	3	EA	\$ _____
17.	509SD20-0001	509	FLOWABLE BACKFILL	1	CY	\$ _____
18.	510SX20-0026	510	NS REMOVE EXIST. DROP INLET	2	EA	\$ _____
19.	315SD20-0008	315	ASPHALT CONC.TY. SM-9.5D	150	TON	\$ _____
20.	315SD20-0010	315	ASPHALT CONCRETE TY. BM-25.0A	35	TON	\$ _____
21.	308SD20-0012	308	AGGR. BASE MATL. TY. I NO. 21B	207	TON	\$ _____
22.	502SD20-0011	502	STD. CURB CG-2	145	LF	\$ _____
23.	502SD20-0012	502	RADIAL CURB CG-2	20	LF	\$ _____
25.	502SD20-0023	502	RADIAL COMB. CURB & GUTTER CG-6	190	LF	\$ _____
26.	504SD20-0002	504	CG-12 DETECTABLE WARNING SURFACE	145	SY	\$ _____
27.	502SX20-0003	502	NS CONCRETE VALLEY GUTTER	40	LF	\$ _____
28.	504SD20-0003	504	HYDRAULIC CEMENT CONC. SIDEWALK 4"	425	SY	\$ _____
29.	512SP20-0002	512	NS MAINTENANCE OF TRAFFIC	1	LS	\$ _____
31.	700SD20-0012	700	RELOCATE EXISTING 1 POST GROUND MOUNTED SIGN PANEL	6	EA	\$ _____
32.	700SD20-0003	700	REMOVE EXISTING 1 POST SIGN STRUCTURE	2	EA	\$ _____
33.	700SD20-0037	700	SIGN POST STP-1, 2 1/2", 12 GAUGE	30	LF	\$ _____
34.	700SD20-0041	700	CONCRETE SIGN FOUNDATION STP-1, TYPE D	2	EA	\$ _____
35.	602SD20-0001	602	TOPSOIL CLASS A 2"	0.04	ACRE	\$ _____
36.	603SD20-0002	603	TEMPORARY SEED	4	LB	\$ _____
37.	603SD20-0003	603	REGULAR SEED	6	LB	\$ _____
38.	603SD20-0004	603	OVERSEEDING	5	LB	\$ _____
39.	603SD20-0014	603	FERTILIZER NITROGEN - N	4	LB	\$ _____

40.	603SD20-0015	603	FERTILIZER PHOSPHOROUS - P	5	LB	\$ _____
41.	603SD20-0016	603	FERTILIZER POTASSIUM - K	3	LB	\$ _____
45.	507SD20-0027	507	HIGH VISIBILITY FENCE, 4'	500	LF	\$ _____
46.	703SD20-0011	703	PEDESTRIAN ACTUATION PA-2 (APS)	16	EA	\$ _____
47.	700SX20-0024	700	NS PEDESTAL POLE PF-2, 15'	8	EA	\$ _____
48.	700SD20-0069	700	CONCRETE FOUNDATION PF-2	8	EA	\$ _____
49.	700SD20-0114	700	14/7 CONDUCTOR CABLE	1055	LF	\$ _____
50.	700SD20-0111	700	14/3 CONDUCTOR CABLE	990	LF	\$ _____
51.	700SD20-0120	700	14/2 CONDUCTOR CABLE SHIELDED	960	LF	\$ _____
52.	703SD20-0007	703	TRAFFIC SIGNAL HEAD SECTION 12" HVS BACKPLATE	48	EA	\$ _____
53.	510SX20-0039	510	NS REMOVE EXIST. SIGNAL CABLE	1000	LF	\$ _____
54.	703SD20-0038	703	HANGER ASSEMBLY SMB-2, TWO WAY	16	EA	\$ _____
55.	703SD20-0040	703	HANGER ASSEMBLY SMB-3, TWO WAY	16	EA	\$ _____
56.	703SD20-0060	703	PEDESTRIAN SIGNAL HEAD SP-8	16	EA	\$ _____
57.	700SD20-0178	700	JUNCTION BOX JB-S2	9	EA	\$ _____
58.	510SX20-0031	510	NS MODIFY EXIST. JUNCTION BOX FOR CONDUIT ENTRY	3	EA	\$ _____
59.	700SD20-0194	700	2" PVC CONDUIT	145	LF	\$ _____
60.	700SD20-0198	700	TRENCH EXCAVATION ECI-2	45	LF	\$ _____
61.	703SD20-0044	703	REMOVE EXISTING POLE	8	EA	\$ _____
62.	703SD20-0045	703	REMOVE EXISTING FOUNDATION	10	EA	\$ _____
63.	705SX20-0001	705	NS FURNISH & INSTALL POLE-TOP GLOBE LIGHT	23	EA	\$ _____
64.	700SD20-0144	700	8 CONDUCTOR CABLE	2495	LF	\$ _____
65.	705SX20-0001	705	NS LP-2 TYPE A STREET LIGHT POLE	15	EA	\$ _____

66.	700SD20-0149	700	CONCRETE FOUNDATION LF-1 TY. A	15	EA	\$ _____
						—
67.	812SD20-0002	812	BORED ITS CONDUIT HDPE 2"	155	LF	\$ _____
						—
68.	700SD20-0197	700	TRENCH EXCAVATION ECI-1	75	LF	\$ _____
						—
69.	510SX20-0031	510	NS MODIFY EXIST. CABINET FOR 2" PVC CONDUIT ENTRY	1	EA	\$ _____
						—
70.	502SX20-0010	502	NS SAW CUT H.C.C. ITEMS	80	LF	\$ _____
						—

**BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned, \_\_\_\_\_

\_\_\_\_\_ as Principal, and

\_\_\_\_\_ as Surety, are hereby

held and firmly bound unto City of Buena Vista, Virginia as owner in the penal sum of

\_\_\_\_\_ for payment of which, well and

truly to be made, we hereby jointly and severally bind ourselves, successors and assigns. Signed,

this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

The Condition of the above obligation is such that whereas the Principal has submitted to City of Buena Vista, Virginia a certain BID, attached

hereto and hereby made a part hereof to enter into an Agreement in writing, for the construction of

21<sup>st</sup> Street Corridor Improvements and CDGB Streetlights Project.

NOW, THEREFORE,

(a) If said BID shall be rejected, or

(b) If said BID shall be accepted and the Principal shall execute and deliver an Agreement in the form attached hereto (properly completed in accordance with said BID) and shall furnish a BOND for his faithful performance of said Agreement, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all respects perform the Agreement created by the acceptance of said BID, then this obligation shall be void; otherwise, the same shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its BOND shall be in no way impaired or affected by any extension of the time within which the OWNER may accept such BID; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

\_\_\_\_\_  
Principal

\_\_\_\_\_  
Surety

By: \_\_\_\_\_

IMPORTANT - Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the state where the project is located.

**AGREEMENT**

**THIS AGREEMENT**, made this \_\_\_\_\_ by and between the City of Buena Vista, Virginia, hereinafter called "OWNER" and \_\_\_\_\_ doing business as \_\_\_\_\_ (an Individual) or (a Partnership) or (a Corporation) hereinafter called "CONTRACTOR".

**WITNESSETH:** That for and in consideration of the payments and agreements hereinafter mentioned:

1. The CONTRACTOR will commence and complete construction of:  
21<sup>st</sup> Street Corridor Improvements  
CDBG Streetlights Project  
City of Buena Vista Invitation for Bid #2025-04-002
2. The CONTRACTOR shall furnish all of the material, supplies, tools, equipment, labor, and other services necessary for the complete construction of the PROJECT described herein.
3. The CONTRACTOR will commence the work required by the CONTRACT DOCUMENTS within Ten (10) calendar days after the date of the NOTICE TO PROCEED and will complete the same by not later than 96 **Days (CDBG Streetlights Project) and 186 Days (21<sup>st</sup> Street Corridor Improvements)** after NOTICE TO PROCEED unless the date for completion is extended otherwise by the CONTRACT DOCUMENTS.
4. The CONTRACTOR shall perform all of the WORK described in the CONTRACT DOCUMENTS and shall comply with the terms therein for the sum of:

\_\_\_\_\_  
(\$ \_\_\_\_\_).

5. The term "CONTRACT DOCUMENTS" means and includes the following:
  - (A) Instructions to BIDDERS
  - (B) BID FORM
  - (C) BID BOND
  - (D) Agreement
  - (E) General Conditions
  - (F) Supplemental Conditions
  - (G) Labor and Material Payment BOND
  - (H) Performance BOND
  - (I) Change Order(s)
  - (J) DRAWINGS prepared by Timmons Group
  - (K) SPECIFICATIONS dated October 2024
  - (L) ADDENDA:

No. \_\_\_\_\_, dated \_\_\_\_\_, 20\_\_\_\_.  
No. \_\_\_\_\_, dated \_\_\_\_\_, 20\_\_\_\_.

6. The OWNER shall pay to the CONTRACTOR in the manner and at such times as set forth in the General Conditions such amounts as required by the CONTRACT DOCUMENTS.
7. The undersigned Contractor shall indemnify and hold the City of Buena Vista, Virginia (the "City"), and its officers, agents, and employees, and the Virginia Department of Transportation (VDOT) harmless from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from the performance or nonperformance of the work, including but not limited to any such claim, damage, loss or expense, that is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, including the loss of use resulting therefrom, or to economic loss; provided, however, that the Contractor's indemnification obligation under this agreement shall be limited to claims, damages, losses, and expenses caused in whole or in part by any act or omission of the Contractor, or any Subcontractor (a "Subcontractor") performing work required by the Contract, or anyone directly or indirectly employed by any of them or anyone for whose acts Contractor or its Subcontractor may be liable. Contractor, or any Subcontractor may be liable, regardless of whether or not such claims, damages, losses, and expenses are caused in part by a party indemnified hereunder.

The Contractor's indemnification obligation hereunder with respect to any and all claims against the City or any of its officers, agents or employees, or VDOT by any employee or statutory employee of the Contractor, or of any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts the Contractor or Subcontractor may be liable, shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under Worker's Compensation Acts, Disability Benefit Acts or other Employee Benefit Acts.

The Contractor's indemnification obligation hereunder shall not extend to the liability of the Engineer, his agent or employees arising out of (1) the preparation or approval of maps, drawings, opinions, reports, surveys, change orders, designs or specifications, or (2) the giving of or the failure to give directions or instructions by the Engineer, his agents or employees provided such giving or failure to give is the primary cause of the injury or damage. The Contractor's indemnification obligation contained in this paragraph is in addition to any other indemnification obligation of the Contractor set forth within the Contract Documents.

8. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
9. **Employment Discrimination** (*Code of Virginia*, Section 2.2-4311, as amended)

During the performance of the Contract, the Contractor agrees as follows:

- A. 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.
- B. 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.
- C. 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.
- D. The Contractor shall include the provisions of the foregoing paragraphs A, B, and C in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.

10. Neither party shall be held liable or responsible to the other party nor be deemed to have defaulted under or breached this Contract for failure or delay in fulfilling or performing any obligation under this Contract when such failure or delay is caused by or results from causes beyond the reasonable control of the affected party, including but not limited to fire, floods, embargoes, war, acts of war (whether war is declared or not), insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, acts of God or acts, epidemics, omissions or delays in acting by any governmental authority; provided, however, that the party so affected shall use reasonable commercial efforts to avoid or remove such causes of nonperformance, and shall continue performance hereunder with reasonable dispatch whenever such causes are removed. Either party shall provide the other party with prompt written notice of any delay or failure to perform that occurs by reason of force majeure. The parties shall mutually seek a resolution of the delay or the failure to perform as noted above..

IN WITNESS WHEREOF, the parties have hereunto set their hands the day and year first above written.

**CONTRACTOR**

BY \_\_\_\_\_  
(Signature)

NAME \_\_\_\_\_  
(Typed or Printed)

TITLE \_\_\_\_\_

ADDRESS \_\_\_\_\_

\_\_\_\_\_

**CITY OF BUENA VISTA**

BY \_\_\_\_\_  
(Signature)

NAME Tom Roberts  
(Typed or Printed)

TITLE Director of Community Development

**CHANGE ORDER**

CITY OF BUENA VISTA IFB# 2025-04-002

VDOT State Project # EN22-103-245, P101, C501

VDOT UPC # 121167

Date: \_\_\_\_\_

NAME OF PROJECT: 21<sup>st</sup> Street Corridor Improvements and CDBG Streetlights Project

OWNER: **City of Buena Vista**

CONTRACTOR: \_\_\_\_\_

The following changes are hereby made to the CONTRACT DOCUMENTS:

<b>CHANGE TO CONTRACT PRICE:</b>	<u>Decrease in Contract Price</u>	<u>Increase in Contract Price</u>
1.	\$ _____	\$ _____
2.	\$ _____	\$ _____
3.	\$ _____	\$ _____
(continue on separate sheet if necessary)		
TOTALS	\$ _____	\$ _____
NET CHANGE IN CONTRACT PRICE		\$ _____
Original Contract Price		\$ _____
Previously Approved Change Orders		\$ _____
Current Adjusted Contract Price		\$ _____
The contract price due to this Change Order will be (Increased)		
	(Decreased) by	\$ _____
The new adjusted contract price including this Change Order		
		\$ _____

**The charges included in this change order have been reviewed and determined to be mathematically correct.**

\_\_\_\_\_  
**(Engineer)**

**CHANGE TO CONTRACT TIME:**

Original Contract Completion Date \_\_\_\_\_

Previously Approved Change Orders \_\_\_\_\_

Current Adjusted Contract Completion Date \_\_\_\_\_

The contract time due to this Change Order will be (Unchanged)  
(Increased)  
(Decreased) by \_\_\_\_\_ Days

The new adjusted Contract Completion Date will be \_\_\_\_\_

---

**DESCRIPTION OF CHANGES:**

---

**JUSTIFICATION:**

---

**COST VALIDATION:**

---

**CATEGORY & RESPONSIBILITY:**

---

Contractor and City agree that this work order resolves and settles all claims, demands, or damages of any kind relating to or arising out of the work set forth in this work order, including, but not limited to delay, impact, home and field office overhead and acceleration.

This document will become a supplement to the Contract and all provisions will apply hereto.

Requested by \_\_\_\_\_ (Contractor/ City of Buena Vista) \_\_\_\_\_ (Date)

Recommended by \_\_\_\_\_ (Engineer) \_\_\_\_\_ (Date)

Accepted by \_\_\_\_\_ (Officer of Contractor, Title) \_\_\_\_\_ (Date)

Approved by \_\_\_\_\_ (City of Buena Vista) \_\_\_\_\_ (Date)

## **BONDS**

A Bid Bond, made payable to the Owner, will be required of all Bidders in the amount specified in the "Instructions to Bidders."

A Labor and Material Payment Bond and a Performance Bond, each in the amount of 100% of the Contract Price, including additions or deductions, with a corporate surety authorized to do business in the State of Virginia, rated no less than A VII by A.M. Best, and otherwise acceptable in all respects to the Owner's Attorney will be required for the faithful performance of the Contract. VDOT shall be listed as a Dual Obligee Rider on the Performance Bond to meet the VDOT Land Use permitting requirements. The Bonds shall be on the forms included in these Specifications. The Contractor shall show satisfactory evidence of compliance with all bond requirements before entering into any agreement to sublet any of the work to be done under this Contract. The bonds shall protect the Owner from claims from persons or firms performing labor or furnishing materials and from claims for damages, claims, losses or other expenses to the Owner, including any attorney's fees, arising from failure of the Contractor to perform the Contract, or to correct defective materials or workmanship. Such bonds shall remain in force for a period of at least twelve months after the completion and final acceptance of the project by the Owner. Executed copies of the Labor and Material Payment and Performance Bonds shall be bound with, and become a part of, all copies of the Contract. Prior to the issuance of any bond required by this Contract, the Contractor or Subcontractor shown as principal on the bond shall furnish the insurance company issuing the bond with a copy of the Contract.

Attorneys-in-fact who sign Bid Bonds, Labor and Material Payment Bonds and Performance bonds must file with each bond a certified and effective dated copy of their power of attorney. Each Bid Bond and the accompanying power of attorney should bear the same date. Each Labor and Material Payment Bond and each Performance Bond and the accompanying power of attorney should bear the same date as the date of the Contract.

The party to whom the Contract is awarded will be required to execute the Contract and obtain the Labor and Material Payment Bond and the Performance bond within fifteen calendar days from the date when the Notice of Award together with the Contract is delivered to the Bidder for execution. In case of the failure of the Bidder to execute the Contract within the prescribed time, the Owner may, at his option consider the Bidder in default, in which case the Bid Bond accompanying the Bid shall be forfeited as allowed by law.

**PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENTS: that

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

a \_\_\_\_\_, hereinafter called PRINCIPAL, and  
(Corporation, Partnership or Individual)

\_\_\_\_\_  
(Name of Surety)

\_\_\_\_\_  
(Address of Surety)

hereinafter called SURETY, are held and firmly bound unto \_\_\_\_\_

City of Buena Vista  
\_\_\_\_\_  
(Name of Owner)

2039 Sycamore Ave Buena Vista, VA 24416  
\_\_\_\_\_  
(Address of Owner)

hereinafter called OWNER, in the penal sum of \_\_\_\_\_  
\_\_\_\_\_ Dollars, (\$ \_\_\_\_\_) in lawful money of the United States, for the payment of  
which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and  
severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas the Principal entered into a certain  
contract with the OWNER, dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, a copy of  
which is hereto attached and made a part hereof, for the construction of:

21<sup>st</sup> Street Corridor Improvements  
CDBG Streetlights Project  
City of Buena Vista Contract #2025-04-002

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the  
undertakings, covenants, terms, conditions, and agreements of said contract during the original  
term thereof, and any extensions which may be granted by the OWNER, with or without notice to  
the Surety and during the one year guarantee period, and if he shall satisfy all claims and demands  
incurred under such contract, and shall fully indemnify and save harmless the OWNER from all  
costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay  
the OWNER all outlay and expense which the OWNER may incur in making good any default, then  
this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED FURTHER, that the said Surety for value received hereby stipulates and agrees that its obligation on this bond shall extend and apply to said Contract dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, and to such Contract as it may be amended or otherwise modified by any change, extension of time, alteration or addition to the terms of the Contract or to the WORK or to the SPECIFICATIONS accompanying same, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in \_\_\_\_\_ counterparts  
(number)

one of which shall be deemed an original, this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

ATTEST:

\_\_\_\_\_  
(Principal Secretary)

\_\_\_\_\_  
(Principal)

(SEAL)

BY \_\_\_\_\_

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
Witness as to Principal

\_\_\_\_\_  
(Address)

ATTEST:

\_\_\_\_\_  
Surety

BY \_\_\_\_\_  
(Attorney-In-Fact)

\_\_\_\_\_  
Witness as to Surety

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Address)

IMPORTANT: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

**LABOR AND MATERIAL  
PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENTS: that

\_\_\_\_\_

(Name of Contractor)

\_\_\_\_\_

(Address of Contractor)

a \_\_\_\_\_, hereinafter called PRINCIPAL, and  
(Corporation, Partnership or Individual)

\_\_\_\_\_

(Name of Surety)

\_\_\_\_\_

(Address of Surety)

hereinafter called SURETY, are held and firmly bound unto \_\_\_\_\_

City of Buena Vista

(Name of Owner)

2039 Sycamore Ave Buena Vista, VA 24416

(Address of Owner)

hereinafter called OWNER, in the penal sum of \_\_\_\_\_ Dollars,  
(\$ \_\_\_\_\_) in lawful money of the United States, for the payment of which sum  
well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by  
these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas the Principal entered into a certain  
contract with the OWNER, dated the \_\_\_\_\_ day of \_\_\_\_\_, 2024, a copy of which  
is hereto attached and made a part hereof, for the construction of:

21<sup>st</sup> Street Corridor Improvements  
CDBG Streetlights Project  
City of Buena Vista Contract #2025-04-002

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms,  
SUBCONTRACTORS, and corporations furnishing materials for or performing labor in the  
prosecution of the WORK provided for in such contract and any authorized extension or modification  
thereof, including all amounts due for materials, lubricants, oil, gasoline, coal and coke, repairs on  
machinery, equipment and tools, consumed or used in connection with the construction of WORK,  
and all insurance premiums on said WORK, and for all labor performed in such WORK whether by  
SUBCONTRACTOR or otherwise, then this obligation shall be void; otherwise to remain in full force  
and effect.

PROVIDED FURTHER, that the said Surety for value received hereby stipulates and agrees that its obligation on this bond shall extend and apply to said Contract dated the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, and to such Contract as it may be amended or otherwise modified by any change, extension of time, alteration or addition to the terms of the Contract or to the WORK or to the SPECIFICATIONS accompanying same, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in \_\_\_\_\_ counterparts  
(number)

one of which shall be deemed an original, this the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_.

ATTEST:

\_\_\_\_\_  
(Principal Secretary)

\_\_\_\_\_  
(Principal)

BY \_\_\_\_\_

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
Witness as to Principal

\_\_\_\_\_  
(Address)

\_\_\_\_\_

ATTEST:

\_\_\_\_\_  
Surety

BY \_\_\_\_\_

\_\_\_\_\_  
(Attorney-In-Fact)

\_\_\_\_\_  
Witness as to Surety

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Address)

\_\_\_\_\_

NOTE: Date of BOND must not be prior to date of Contract. If CONTRACTOR is Partnership, all partners should execute BOND.

IMPORTANT: Surety companies executing BONDS must appear on the Treasury Department's most current list (Circular 570 as amended) and be authorized to transact business in the State where the PROJECT is located.

## INSURANCE

The Contractor shall purchase and maintain in force, at his own expense, such insurance as will protect him, the City, and the Virginia Department of Transportation (VDOT) from claims which may arise out of or result from the Contractor's execution of the work, whether such execution be by himself, his employees, agents, subcontractors, or by anyone for whose acts any of them may be liable. The insurance coverages shall be such as to fully protect the Contractor, City, Consulting Professional (if applicable), VDOT, and the general public from any and all claims for injury and damage resulting by any actions on the part of the Contractor, or his forces enumerated above. Cost of said coverage shall be at the Contractor's expense.

The Contractor shall furnish insurance in satisfactory limits, and on forms and of companies that are acceptable to the City's Attorney and/or Risk Management Director and shall require and show evidence of insurance coverages on behalf of any subcontractors (if applicable), before entering into any agreement to sublet any part of the work to be done under this contract. All insurance carriers shall waive any and all subrogation against the City, and it shall be the responsibility of the Contractor/the Contractor's insurance professional to ensure compliance with this requirement.

The Contractor's insurance coverage shall be primary and non-contributory to any program of insurance or self-insurance that the City may or may not have in force, and the insurance required hereunder shall not be interpreted to relieve the Contractor of any obligations under the contract. The Contractor shall remain fully liable for all deductibles and amounts in excess of the coverage actually realized.

The Contractor shall maintain during the initial term and any additional terms of this contract the following equivalent coverage and minimum limits. Coverage must be Broad Form and include Products and Completed Operations, Bodily Injury, Property Damage and Contractual Liability.

1. Commercial General Liability \$1,000,000 Combined Single Limit per occurrence
  - a. The Contractor shall name as additional insureds on the Commercial General Liability policy those property owners requesting this, if the work will take place on their property. The Contractor shall provide Certificates of Insurance evidencing this to the property owners and City's Risk Management Director
  - b. The Contractor shall be responsible for continuing in force completed operations, bodily injury and property damage coverage for a minimum of two (2) years after completion and acceptance of the work.
2. Business Automobile Liability \$1,000,000 Combined Single Limit per occurrence. Coverage should include all owned, hired and non-owned automobiles.
3. Workers' Compensation Virginia Statutory limits including Employers Liability limits of \$100,000 each accident, \$100,000 each disease-each employee, and \$500,000 policy limit.
4. Umbrella Liability in excess of Commercial General Liability and Automobile Liability \$2,000,000 each occurrence and in the aggregate. Such umbrella or excess policy shall provide substantially the same coverage as the underlying Commercial General Liability (including the City and the Virginia Department of Transportation as an additional insured), Business Automobile Liability of Employers' Liability insurance and shall expressly provide that the umbrella or excess liability will drop down over a reduced or exhausted aggregate limit of the underlying insurance.

An insurance certificate shall be provided as evidence of the required insurance. The insurance certificate:

- a. Must reflect that the Commercial General Liability policy names The City – their officers, employees and agents as an additional insured by endorsement to the policy or as required by contract. Additional insured status applies to all work of the names insured performed on behalf of the City.
- b. Must reflect that the policies are endorsed to require no less than 30 days' notice of cancellation or other change in coverage to the City and VDOT.
- c. Must have an authorized signature.
- d. The Certificate Holder should be listed as:

City of Buena Vista  
2039 Sycamore Ave.  
Buena Vista, VA 24416  
IFB/RFP No. 2025-04-002

### **3.0 GENERAL CONDITIONS**

#### **3.1. DEFINITIONS**

**A. AGREEMENT**

The agreement covering the performance of the Work and the furnishing of the materials for the proposed construction. The terms "Agreement" and "Contract" are synonymous and include all Contract Documents as that term is defined in the General Conditions.

**B. BID**

The proposal submitted by a Bidder on the Bid Form consistent with the Instructions to Bidders, to complete the Work for a specified sum of money and within a specified period of time.

**C. BIDDER**

An individual, firm, partnership or corporation qualified in accordance with the Virginia Public Procurement Act, and approved by the Owner, that submits a Bid for the Work, either directly or through a duly authorized representative.

**D. BID BOND**

The bond, with corporate surety, supplied by a Bidder to the Owner on a form acceptable to the Owner, that guarantees the Bidder's compliance with the Instructions to Bidders. A certified check or cashier's check, payable to the owner, delivered with the Bid may also constitute a Bid Bond.

**E. BID DOCUMENTS**

All Invitation for Bid Documents that the Owner or Engineer provides to potential Bidders before the time established for the submission of Bids.

**F. CHANGE ORDER**

An amendment or modification to the Agreement, properly executed by authorized representatives of the Owner and the Contractor on the form provided in the Contract Documents.

**G. COMPLETION OF THE WORK**

Final completion shall be defined as the event that occurs when (1) the Work has been completed, successfully tested and approved in accordance with the Contract Documents, (2) all submittals required by the Contract Documents (including Operation and Maintenance Manuals) have been made, (3) all Punch List items and restoration Work required by the Contract Documents has been completed; and (4) Work is complete and the City has issued Final Acceptance.

**H. CONTRACT BONDS**

The Performance Bond and Labor and Material Payment Bond executed by the Contractor, with corporate surety, on the forms provided in the Contract Documents.

**I. CONTRACT DOCUMENTS**

The Advertisement, Instructions to Bidders, Bid Form, Bid Bond, Bond Requirements, Agreement, General Conditions, Supplemental Conditions, Insurance Provisions (Including Instructions Regarding Insurance Certificates), Labor and Material Payment Bond, Performance Bond, Change Orders, Drawings, Specifications and Addenda, Special Provisions and any other document incorporated by reference into one of these documents.

**J. CONTRACT PRICE**

The amount of money which the Owner and the Contractor have agreed that the Owner will pay to the Contractor for performing and completing the Work.

**K. CONTRACTOR**

The party that has contracted to perform and complete the Work.

**L. ENGINEER**

The consulting engineer who has been designated by the City as engineer for the project, and the Engineer's authorized agents, inspectors or representatives.

**M. FINAL INSPECTION**

The inspection conducted by the Engineer to determine what items of the Work must be completed by the Contractor in order for Completion of the Work to occur. After the Final Inspection is conducted, the Engineer shall provide the Contractor with a Punch List that the Contractor must complete in order for Completion of the Work to occur. The Owner may perform the Final Inspection instead of, or together with, the Engineer.

**N. FORCE ACCOUNT - EXTRA WORK**

Work not within the Scope of Work as described in Paragraph 3.16 of the General Conditions that is determined to be necessary by the owner and Engineer.

**O. INSPECTOR**

The person appointed by the Owner to carry out instructions given by the Owner and to inspect the Work performed and the materials supplied by the Contractor pursuant to this Agreement.

**P. OWNER**

City of Buena Vista, Virginia, a political subdivision of the Commonwealth of Virginia, and its duly authorized officials, agents and employees.

**Q. PLANS**

All drawings or reproductions of drawings that depict or relate to the Work. A pictorial representation of the Work or some portion of the Work, showing design, location and dimensions.

- R. PUNCH LIST**  
The list provided to the Contractor by the Engineer or owner after Final Inspection that includes all items that the Contractor must complete in order for Completion of the Work to occur.
- S. SPECIAL PROVISIONS**  
Virginia Department of Transportation and/or Federal Aid requirements and any Supplemental Conditions included in the Contract Documents.
- T. SPECIFICATIONS**  
The directions, provisions and requirements contained in the Contract Documents relating to the method or manner of performing the Work, or to the quantity or quality of materials to be furnished under the Contract Documents.
- U. SUBCONTRACTOR**  
Any individual, firm or corporation having a direct contract with the Contractor for the performance of any part of the Work.
- V. SUPERINTENDENT**  
The person appointed by the Contractor who is in direct charge of the Work for the Contractor.
- W. TIME OF COMPLETION**  
The time agreed upon by the Owner and the Contractor in the Agreement by which the Contractor is required to accomplish Completion of the Work, plus any extensions of time granted to the Contractor by the Owner pursuant to the Contract Documents.
- X. THE WORK**  
The whole and any part of the construction, labor, materials, equipment, incidentals or services necessary for the Contractor to achieve Completion of the Work as required by the Contract Documents.

### **3.2 AGREEMENT CONSTRUED UNDER VIRGINIA LAWS**

The Agreement and Contract Bonds shall be executed in the State of Virginia and shall be construed in accordance with the laws of the State of Virginia, excepting the law governing conflicts of laws. Any action at law, suit in equity or other adjudicatory proceeding instituted as a result of the performance, non-performance or alleged breach of this Agreement shall be brought in the Circuit Court of the City of Buena Vista, Virginia, to the express exclusion of any other judicial forum.

### **3.3 ASSIGNMENT OF AGREEMENT**

Neither the Agreement, nor any part thereof, nor any monies due or that become due to the Contractor pursuant to the Agreement, may be assigned by Contractor without the prior written approval of the Owner.

### **3.4 SERVING OF NOTICE**

When the Owner is required by the Contract Documents to give written notice, demand or other communication to the Contractor, the Owner's notice, demand or communication shall be deemed to be given when it is deposited in the United States mail, postage pre-paid, and addressed to the address of the Contractor stated in the Agreement or at such other address as the Contractor designates in writing to the Owner.

### **3.5 LAWS AND REGULATIONS**

The Contractor shall comply with all State and Federal laws, local ordinances, other regulations and orders or decrees of bodies or tribunals having jurisdiction over the Contractor or the Work and that affect the performance of the Work or the people who are employed or engaged in performing the Work.

The Contractor shall defend, indemnify and hold harmless the owner and its officers, agents and employees against any claim, liability or judgment arising from or based on the violation of such laws, ordinances, regulations, orders or decrees, whether the violation is committed by the Contractor or by its agents, employees, subcontractors or suppliers.

For questions or additional information regarding environmental requirements for the City, please contact City of Buena Vista's General Services – Environmental Division at (804) 717-6531.

### **3.6 COMPLIANCE WITH SAFETY AND HEALTH LAWS**

The Contractor, its employees and subcontractors shall comply with all current applicable local, state and federal policies, regulations and standards relating to occupational health and safety, including, by way of illustration and not limitation, the standards of the Virginia Occupational Safety and Health Administration for the industry. The provisions of all rules and regulations governing safety as adopted by the Safety Codes Commission of the Commonwealth of Virginia and issued by the Department of Labor and Industry under Title 40.1 of the Code of Virginia/Virginia Occupational Safety and Health shall apply to all work under the contract. The Contractor shall provide, or cause to be provided, all technical expertise, qualified personnel, equipment, tools and material to safely accomplish the work specified and performed by the Contractor.

The Contractor shall provide a supervisor at each job site who is competent, qualified, and authorized on the worksite, and who is familiar with policies, regulations and standards applicable to the work being performed. The supervisor shall be capable of identifying existing and predictable hazards in the surroundings or working conditions which are hazardous or dangerous to employees or the public, and shall be capable of ensuring compliance with all applicable safety and health regulations, and shall have the authority and responsibility to take prompt corrective measures, which may include removal of the Contractor's employees from the work site.

Any activities of the Contractor determined to be hazardous by the City, shall be immediately discontinued by the Contractor upon receipt of either a written or verbal notice from the City to discontinue such activities.

If requested by the City Project Manager, the Contractor shall provide a written health and safety plan for the project prior to proceeding with work.

### **3.7 JOB SAFETY**

The Contractor is responsible for maintaining and implementing appropriate safety measures performing of the Work. The Engineer has not been retained to provide construction review services relating to the Contractor's safety precautions or to means, methods, techniques, sequences or procedures required for the Contractor to perform the Work.

### **3.8 SANITARY PROVISIONS**

The Contractor shall provide and maintain in a neat and sanitary condition sufficient portable toilets and sanitary facilities for the use of its employees and the employees of subcontractors.

### **3.9 CLEAN UP OF JOB SITE**

The Contractor shall clean up the job site as the Work progresses. If the Contractor fails to keep the job site clean, the Owner may require the Contractor to stop all or any portion of the Work until the job site is clean.

### **3.10 PERMITS**

The Contractor is responsible for ensuring that all permits required to perform the work are obtained and that all conditions of those permits are met throughout the duration of the project. Permits for this project that have been obtained by the City, will be obtained by the City, will be transferred to the Contractor and/ or must be obtained by the Contractor are identified in the Supplemental Conditions. Any other permits not identified in the Supplemental Conditions, but required to perform the work, will be the responsibility of the Contractor to obtain. Unless explicitly stated otherwise in the Supplemental Conditions, all charges and expenses associated with obtaining permits or meeting the conditions of the permits shall be the responsibility of the Contractor.

### **3.11 CONTRACT BONDS**

Contract Bonds shall be executed on the form provided by the Owner in the Contract Documents and shall be in an amount not less than the full Contract amount, including any increases in the Contract amount that may be agreed upon between the Owner and Contractor pursuant to the Contract Documents.

### **3.12 INSPECTOR**

The Inspector is authorized by the Owner to inspect and approve all Work and materials. In case of any dispute arising between the Contractor and the Inspector over materials furnished or the manner of performing the Work, the Inspector has the authority to reject material or suspend Work until the dispute is resolved by the Engineer. The Inspector is not authorized to revoke, alter, enlarge, relax or waive any requirements of the Contract Documents or to approve or accept any portion of the Work or issue instructions contrary to the Contract Documents.

The Engineer and Inspector shall have access at all times to all of the Work.

### **3.13 SUPERINTENDENT**

The Contractor shall supervise the Work and shall be represented by a Superintendent who shall have full authority to act on behalf of the contractor as the Contractor's agent and representative. The Superintendent or Contractor shall be on duty at all times while the Work is being done.

### **3.14 MATERIALS AND WORKMANSHIP**

The Contract Documents describe the character and features of the materials and workmanship required to perform the Work. The Contract Documents require first class work and materials in all particulars. In case of any disagreement between the Owner and the Contractor about the meaning and intent of the Contract Documents, the Engineer shall determine the meaning and intent, and the Engineer's determination shall be binding on the Contractor.

### **3.15 NO DEVIATION FROM CONTRACT DOCUMENTS BY THE CONTRACTOR**

In performing the Work, the Contractor shall not deviate from the Contract Documents without the written consent of the Engineer and the Owner. If the Contractor does deviate from the Contract, it shall correct the deviation at its expense in a manner satisfactory to the Engineer and the Owner.

### **3.16 INTERPRETATION OF CONTRACT DOCUMENTS**

In case of discrepancy between or among the Contract Documents, the Engineer shall make all interpretations that are necessary to fulfill the intent of the Contract Documents. The Engineer's interpretation shall be binding on the Contractor.

The Contractor shall verify all figures on the Plans and shall be responsible for the proper coordination of all dimensions as well as all different parts of the Work.

### **3.17 DISCREPANCIES**

The Contractor shall immediately report to the Engineer, in writing, all discrepancies, that it finds between the Contract Documents and site conditions and any inconsistencies or ambiguities in the Contract Documents. The Engineer shall promptly correct such discrepancies, inconsistencies or ambiguities in writing. Work done by the Contractor after it discovers such discrepancies, inconsistencies, or ambiguities, but before the Engineer has provided a written correction, shall be performed at the Contractor's risk.

### **3.18 CONFLICTS WITH LAWS, RULES OR REGULATIONS**

If any requirement of the Contract Documents conflicts with the requirements of any governmental authority having jurisdiction over the project or the job site, then to the extent of such conflict, the Contract Documents shall be superseded by the applicable law, rule, or regulation.

### **3.19 CONTRACTOR'S RESPONSIBILITY FOR THE WORK**

The Contractor shall be responsible for the Work, and shall take all precautions to prevent injuries to persons and property on or about the Work. The Contractor shall bear all losses resulting from any difference in the amount or character of the Work from what the Contractor estimated or expected, or from any difference in the nature of the land in which or on which the Work is done from what the Contractor expected. The Contractor shall defend, indemnify and hold harmless, the Owner, its officers, and agents from all claims relating to labor and materials furnished for the Work; from all claims for violation of patents, trademarks and copyrights used in performing the Work; from injuries to any person performing the Work; from improper materials, implements or labor used; and from any act, omission or neglect of the Contractor, any subcontractor or their employees.

Until Final Acceptance of the Work, the Work shall be under the charge of the Contractor, and the Contractor shall take all necessary precautions against injury or damage to the Work or to any part of the Work from any cause whatsoever, whether arising from the execution or the non-execution of the Work.

The Contractor shall rebuild, repair, restore and make good, at his expense, all injuries or damage to the Work occasioned by any of the above causes before Final Acceptance of the Work.

### **3.20 INCREASED OR DECREASED WORK**

The Owner may increase or decrease the value of the Work at any time, with or without the agreement of the Contractor. The Owner may increase or decrease the Work by adding, omitting or relocating sections, whether shown on the Plans or not.

If the increase, decrease, or relocation of the Work is substantially the same in nature as the remainder of the Work, then the Contract Price shall be adjusted based on the unit prices contained in the Contract Documents. Whenever additional work involves a substantial change in the nature of the design of the Work or in the type of construction, the additional Work shall be performed in accordance with the specifications and as directed by the Engineer, provided, however, that before the Contractor begins to perform the additional Work, a Change Order shall be executed by the parties.

### **3.21 CHANGE OF PLANS**

The Engineer, with the approval of the Owner, may make alterations for line, grade, plan positions, dimensions, materials or any other part of the Work either before or after commencement of the Work.

### **3.22 CERTIFICATION OF MATERIALS**

At the Pre-Construction Meeting, the Contractor shall furnish to the Engineer and the Inspector a completed VDOT Form C-25 for all materials to be used on the project. Unless otherwise approved by the Engineer in writing, it is required that the VDOT Form C-25 for a material be approved prior to that material being installed on the project.

### **3.23 CORRECTION OF WORK**

The Contractor shall promptly remove from the premises all work rejected by the Engineer or Inspector for failure to comply with the Contract Documents, whether the rejected work is incorporated into the Work or not. After removing the rejected work, the Contractor shall promptly replace and re-execute the work in accordance with the Contract Documents, without expense to the Owner. The Contractor shall repair, at its own expense, all work of other contractors that is destroyed or damaged by the Contractor or any subcontractor.

All removal and replacement work shall be performed at the Contractor's expense. If the Contractor does not remove rejected work within ten (10) calendar days after it receives written notice from the Owner or Engineer to remove it, the Owner may remove the rejected work, and store the materials, at the expense of the Contractor.

### **3.24 EXISTING STRUCTURES**

The location of existing sewers, water and gas pipes, conduits and other structures across, along or under the area of the Work are not necessarily shown on the Contract Documents, and if shown, the description, composition, location, depth and dimensions of those structures may not be correct. The Owner shall not be responsible to the Contractor for any delays or extra costs incurred by the Contractor as a result of any discrepancy between the actual location of existing structures and the Contract Documents or as built drawings. The Contractor shall have a working pipe locator on the job at all times.

The Contractor shall dig such test holes as are needed to locate existing underground structures. The contractor shall dig such test holes only after giving 48 hours prior notice to the Owner and to the owner of the underground structure.

### **3.25 CARE FOR EXISTING STRUCTURES**

The Contractor shall be liable for all damage to any existing structure or property arising from its negligence or carelessness. The Contractor shall protect and maintain all underground, overhead or surface utilities encountered while performing the Work. The Contractor shall locate and adjust water valve boxes on existing water lines in order to facilitate turning water off so that appropriate tie-ins can be made.

Forty-eight (48) hours prior to commencing work, the Contractor shall contact the Utility Information Center ("Miss Utility"), telephone number 1-800-552-7001, for assistance in locating existing underground utilities.

The Contractor shall not kill, deface, or cut down trees unnecessarily, both within and outside of project work areas or easements. The Contractor shall be responsible for all damage to property not in the Work area or easements.

### **3.26 SUBSURFACE CONDITIONS**

The Contractor shall promptly, except in emergency, before such conditions are disturbed, notify the Owner in writing of subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents; or of physical conditions at the site, either unknown or differing from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

### **3.27 INDEPENDENT TESTING**

The Contractor shall provide all material testing required in accordance with current edition of the VDOT Inspection Manual; however, the Owner may employ an independent testing laboratory to conduct tests of materials, supplies, machinery, tools, or other equipment supplied by the Contractor when the Owner believes it to be necessary to assure compliance with the Contract Documents. The Contractor shall cooperate with the Owner in facilitating these tests. All test results shall be furnished to the Inspector and the Engineer upon completion of the individual tests such that records can be kept up to date throughout the project. The Contractor shall notify the Inspector immediately upon receipt of a failing test result.

### **3.28 EXTRA WORK**

Any work that is necessary for Completion of the Work that is not described in Section 3.16, the Scope of Work, is Extra Work and shall be paid for in one of the following manners:

- A. At a price agreed upon in writing between the Contractor and Owner.
- B. In the event of work covered by unit prices included in the Bid Schedule, at a price derived from application of unit prices to the quantities necessary to complete the extra work.

Change Orders shall be agreed upon prior to beginning Extra Work. Once agreed upon, the Change Order resolves and settles all claims, demands, or damages of any kind resulting to or arising out of the work set for in the Change Order, including, but not limited to delay, impact, home and field office overhead and acceleration. No Change Order shall in any manner or to any extent relieve the Contractor or his Surety of any obligation under the contract. All Change Orders given in accordance with the Agreement are a part of the Agreement and are subject to each and every term or requirement of the Agreement.

The Contractor is responsible for all damages caused by the carelessness or lack of skill of the Contractor, the subcontractors, or employees of the Contractor or subcontractor in doing Extra Work.

### **3.29 PROGRESS OF THE WORK**

The Contractor shall provide an adequate force of labor and equipment to prosecute the Work to ensure the Completion of the Work within the time limit for Completion as set forth in the Agreement.

The Contractor shall provide all manpower and equipment necessary to meet the progress schedule. In the event periodic estimates indicate that the schedule progress is not being met, the Owner or Engineer may require the Contractor to furnish in writing to the Engineer the method the Contractor proposes to employ to bring the project into compliance with the progress schedule. The Owner may withhold payments if the Work is behind the progress schedule or otherwise not being performed in accordance with the terms of the Contract Documents.

### **3.30 TIME OF COMPLETION**

Time is of the essence in performing this Contract. The Contractor shall perform and complete the Work in accordance with the Contract Documents before the expiration of the time limit stipulated in the Bid, the Agreement and any extensions of time that are agreed upon pursuant to the procedure for granting extensions of time set forth in the Contract Documents. The amount of time permitted for Completion of the Work contemplates ordinary delays to construction work of a similar character. The Contractor shall not be entitled to an extension of time or additional compensation for ordinary delays in the Completion of the Work or for delays occasioned by inclement weather or accidents. Such delays will not relieve the Contractor from maintaining the rate of progress specified herein or from completing the Work within the stipulated time limit.

If delays are caused by acts of God, acts of government, unavoidable strikes, Extra Work, or other causes or contingencies not enumerated in the preceding paragraph and if they are beyond the control or responsibility of the Contractor, the Contractor may request the Owner to allow additional time to perform and complete the Work. If the Owner determines that the delay is properly excusable, the Owner will, in writing, extend the time for completion of the Work by the amount of time that the Owner believes to be appropriate. The Contractor agrees that such extension of time shall constitute his sole remedy against the Owner for such delays. Contractor shall not have or assert any claim for, nor shall he be entitled to any additional compensation or damages on account of such delays. If the delay is due solely to the negligence of the Owner, or any of its officers or employees, the Contractor may also request from the Owner an adjustment in the Contract Price for actual costs incurred by the Contractor to perform and complete the Work. The Contractor shall be entitled to an adjustment in Contract Price only for actual costs, as that term is defined in Section 3.36. If the owner determines that the delay is of the nature described in this subparagraph and that an adjustment in price is warranted, the owner may, in writing, grant an adjustment in the price for the Work in amount deemed appropriate by the Owner.

Within ten (10) calendar days from the beginning of any delay for which Contractor is entitled to an extension of time or additional compensation, the Contractor shall submit in writing to the Owner, with a copy to the Engineer, its request for adjustment in price or extension of time for the completion of the Work. Any such request shall set forth the cause and particulars of the delay, the details of the delay, and documentation supporting the extension or adjustment requested. The Owner shall review the information and documentation submitted by the Contractor and shall respond to the Contractor in writing. If the Contractor fails to comply with any requirement of this subparagraph the Contractor shall be precluded from making any claim for an adjustment in the Contract Price or extension of time for Completion of Work due to the delay. In no event shall the Owner's officers, agents or employees have any liability to the Contractor, any subcontractors, or any agents, servants or employees of the Contractor or sub-contractors with respect to or arising out of any actual or alleged delay in the Contractor's performance.

### **3.31 TERMINATION FOR BREACH OF NON-PERFORMANCE**

If the Contractor fails to perform the Work promptly and diligently, or if the Contractor breaches the Agreement in any other way, the Owner may:

- A. After providing the Contractor with fifteen (15) days written notice, supply any workmen, equipment or materials necessary to ensure that the Work is performed promptly and diligently. The Owner may deduct the cost of supplying additional workmen, equipment or materials from payments due to the Contractor;
- B. Terminate the Agreement, enter upon the premises, take possession of all equipment, materials, or appurtenances, and employ any person or persons to finish the Work.

In case of termination of the Agreement by the Owner pursuant to this paragraph, the Contractor shall not be entitled to receive any further payment from the Owner until Completion of the Work has occurred. After completion of the Work, the Owner shall pay to the Contractor the amount of the unpaid balance due to the Contractor at the time the Agreement was terminated minus the cost incurred by the Owner to complete the Work. If the cost incurred by the Owner to complete the Work exceeds the unpaid balance due to the Contractor, the Contractor shall be due no money from the Owner and, instead, the Contractor shall pay to the Owner the difference between the unpaid balance due and the Owner's cost to complete the Work.

The cost incurred by the Owner to complete the Work shall be audited by the Engineer. The Engineer's certification of the Owner's cost shall be binding upon the Contractor.

### **3.32 WAIVER OF ONE BREACH NOT WAIVER OF OTHERS**

No waiver by the Owner or its agents or employees of any breach of this Agreement by the Contractor shall be construed as a waiver of any other or subsequent breach of the Agreement by the Contractor. All remedies provided by this Agreement are cumulative, and in addition to each and every other remedy under the law.

### **3.33 LIQUIDATED DAMAGES**

The rate of progress and the time for completion of the Work are essential conditions of the Agreement. The Work shall be prosecuted regularly, diligently, and without interruption at a rate that will ensure Completion of the Work in the time specified in the Contract Documents.

Time is of the essence under this Agreement.

If the Contractor fails to accomplish Final Completion of the Work in accordance with the Contract Documents within the time stated in the Agreement or within any time as extended in writing by the Owner, the Contractor shall pay to the Owner the sum specified as liquidated damages in the Supplemental Conditions for each and every calendar day after the date agreed upon by the parties for Final Completion has passed until Final Completion of the Work is accomplished.

The above sums are agreed upon by the parties as the liquidated damages, and not a penalty, that the Owner will suffer by reason of the delay by the Contractor in accomplishing Completion of the Work, resulting in the inability of the Owner to use the improvements at the time agreed upon the parties for Completion. The Owner may deduct and retain liquidated damages out of any monies which may be due, or become due, to the Contractor.

### **3.34 SHOP DRAWINGS**

Contractor shall submit to the Engineer for its approval detailed Shop or Working Drawings ("Shop Drawings") when required to do so by the Engineer for the construction of any part of the Work. Any work done or materials ordered by the Contractor before the Engineer has approved the Shop Drawings relating to the Work or material shall be at the risk of the Contractor. The Contractor shall bear the cost of preparing all Shop Drawings.

All certifications, Shop Drawings and Working Drawings shall include for each product, the manufacturer's name, the type of product, the location of the manufacturer's plant, and the project name and number. The Contractor shall furnish the Engineer with all blue prints, copies of Shop Drawings and material certifications that are required by the Engineer for approval. Upon Completion of the Work, the Contractor shall submit the original tracings to the Engineer, if the Engineer so requires.

The purpose of Shop Drawings is to demonstrate to the Engineer that the Contractor understands the design concept of the Work by indicating which equipment and material it intends to furnish and install and by detailing the fabrication and installation methods it intends to use. The Engineer's approval of Shop Drawings relates to the general concept and not the detail of the Work, and the Engineer's approval will not relieve the Contractor from responsibility for errors or omissions in dimensions or quantities. Approved Shop Drawings are not Change Orders.

If approved Shop Drawings deviate from or conflict with the Contract Documents, the Contractor shall comply with the Contract Documents.

### **3.35 FINAL INSPECTION**

Before Final Inspection of the Work, the Contractor shall clean up the site of the Work including all rights-of-way, and shall leave the site in a clean, neat and sanitary condition. Contractor shall remove all machinery, tools, surplus material, temporary buildings, and other structures from the site of the Work.

When the Work is complete and the area cleaned up, the Contractor shall request a Final Inspection of the Work by the Engineer and Owner. After the Final Inspection, the Engineer shall prepare a Punch List. After the Contractor has completed all Work on the Punch List, and the project is ready for Final Acceptance by the Owner, the Contractor shall request in writing an inspection for Final Acceptance of the Work by the Engineer and Owner.

### **3.36 USE OF WORK**

Whenever in the opinion of the Engineer or Inspector any portion of the Work is completed or in acceptable condition for use, it may be used by the Owner for the purpose intended. However, such use by the Owner does not constitute acceptance of any portion of the Work, or a waiver of any of the provisions of the Contract Documents.

### **3.37 PAYMENT**

If the Contractor performs properly all of the obligations of the Contract Documents, the Owner shall pay the Contractor for the performance of the Work in the manner and within the time specified in the Contract Documents. The Owner also agrees to pay the Contractor for Extra Work in accordance with the terms of the Contract Documents. The Contractor shall make requests for payment by submitting one (1) copy of the monthly estimate for partial payment to the Owner on a form acceptable to the Owner, as set forth in Section 3.47, entitled Monthly Estimates.

### **3.38 SALES AND USE TAXES**

The Owner shall make no payment to the Contractor for sales or use tax that is not included in the Contract Price at the time the Agreement is executed by the Owner.

### **3.39 MONTHLY ESTIMATES**

On the 20th day of each month or at any other regular time agreed upon by the Owner and Contractor, the Contractor and the Inspector shall prepare and submit to the Engineer a monthly estimate for Partial Payment. Monthly estimates shall be supported by a document that indicates the percentage of work performed for items identified in the approved Schedule of Values for the project.

The Owner shall pay to the Contractor all sums due under the monthly estimate within 30 days after receipt of the approved monthly estimate by the owner, unless the Owner asserts a right to withhold some or all of the payment under the provisions of the Contract Documents.

### **3.40 PARTIAL PAYMENT NO WAIVER OF RIGHTS**

Partial payments made under this Agreement by the Owner are not evidence of the proper performance of the Agreement by the Contractor either in whole or in part, and no payment made by the Owner shall be construed to be an acceptance of defective or improper work. No act of the Owner or the Engineer, or the representative of either of them, in superintending or directing the Work, no failure to disapprove or reject any material used in the Work, and no extension of time for the Completion of the Work shall be construed as acceptance of the Work either in whole or in part. Acceptance of the Work by the Owner shall occur only upon issuance of Final Acceptance in accordance with the General Conditions of the Contract.

Before Final Payment is made, the Contractor shall sign and attest to a statement accepting the Final Payment in full satisfaction and settlement of all claims on account of the Work done and materials furnished under the Agreement, and certifying that all claims of others against the Contractor for material provided or labor performed have been paid and satisfied in full.

### **3.41 FINAL ACCEPTANCE**

Final Acceptance occurs when the City issues to the Contractor a written statement that the Contractor has completely performed all Punch List items, has made all necessary submittals to the Owner and Engineer and has satisfied all of the Contractor's obligations under the Contract Documents.

### **3.42 FINAL PAYMENT**

After receiving satisfactory evidence from the Contractor that all labor and material bills have been paid and as soon as practicable after the completion of the Work, the Contractor and Inspector shall prepare a final estimate of the amount of the Work, and the value thereof, and the Owner shall, within 30 days after such final estimate is made, pay to the Contractor the entire sum due after deducting therefrom all previous payments, and all deductions to be retained by the Owner under any of the provisions of the Contract Documents. All prior estimates and payments shall be subject to correction in the final estimate of payment.

### **3.43 RIGHT TO AUDIT PROVISION**

Contractor's records, which shall include but not be limited to accounting records, written policies and procedures, subcontract files (including proposals of successful and unsuccessful bidders), original estimates, estimating worksheets, correspondence, change order files (including documentation covering negotiated settlements), and any other supporting evidence necessary to substantiate charges related to the Agreement (all the foregoing hereinafter referred to as "records") shall be open to inspection and subject to audit and/or reproduction, during normal working hours, by Owner's agent or its authorized representative to the extent necessary to adequately permit evaluation and verification of any invoices, payments or claims submitted by the Contractor or any of his payees pursuant to the Contract Documents. The records subject to examination shall also include, but not be limited to, those records necessary to evaluate and verify direct and indirect costs (including overhead allocations) as they may apply to costs associated with the Agreement.

For the purpose of such audits, inspections, examinations and evaluations, the Owner's agent or authorized representative shall have access to the records from the effective date of the Agreement, for the duration of the Work, and until two (2) years after the date of Final Payment by Owner to Contractor pursuant to the Contract Documents.

Owner's agent or its authorized representative shall have access to the Contractor's facilities, shall have access to all necessary records, and shall be provided adequate and appropriate work space, in order to conduct audits in compliance with this article. Owner's agent or its authorized representative shall give Contractor reasonable advance notice of intended audits.

Contractor shall require all subcontractors, insurance agents, and materials suppliers (collectively referred to as "payees") to comply with the provisions of this article by insertion of the requirements hereof in a written contract agreement between Contractor and payee. Failure to obtain such written contracts which include such provisions shall be reason to exclude some or all of the related payees' costs from amounts payable to the Contractor pursuant to the Agreement.

If an audit inspection or examination performed pursuant to this paragraph, discloses overcharges of any nature by the Contractor to the Owner in excess of five percent (5%) of the total billings made by the Contractors pursuant to the Contract Documents, the actual cost of the Owner's audit shall be paid by the Contractor.

### **3.44 WARRANTY PERIOD**

The Contractor guarantees the quality and workmanship of the Work beginning on the date of Final Acceptance. The Warranty Period shall be one year.

### **3.45 DRUG FREE WORKPLACE (*Code of Virginia, Section 2.2-4312, as amended*)**

During the performance of this contract, the contractor agrees to:

- A. Provide a drug-free workplace for the contractor's employees
- B. 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.
- C. State in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace.
- D. Include the provisions of the foregoing clauses in every subcontract or purchase order 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 in accordance with this chapter, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.

### **3.46 PROCEDURES FOR CLAIMS AND DISPUTES**

A claim is a demand/assertion by the Contractor seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The responsibility to substantiate claims shall rest with the Contractor. Claims must be initiated by the Contractor with a written Notice of Intent to File a Claim within fifteen (15) days after occurrence of the event giving rise to such claim or within fifteen (15) days after the claimant first recognizes the condition giving rise to the claim, whichever is later. Among other things, the Intent to File a Claim shall include: (a) the assumptions the Contractor made during the preparation of its bid that form the basis for its allegation, (b) an explanation of the defect, error, or inconsistency in the plans or other contract documents that the Contractor could not have reasonably identified prior to the date the Agreement for the project is signed, and (c) an estimated impact that the alleged defect, error, or inconsistency has had on the Contractor's price or time to perform the work. Impacts to the Contractor's price shall be supported by breaking down any alleged Extra Work into the items and unit prices included in the Bid Schedule to the greatest extent possible. Impacts to the Contractor's time shall be supported with a critical path method (CPM) schedule that specifically identifies delays to the Contractor's critical path to complete the work.

An Intent to File a Claim must be initiated by written letter to the Owner. Submittal of an Intent to File a Claim by the Contractor must be submitted within the time limits and include supporting documentation prescribed by this paragraph as a condition precedent to the institution of litigation by the Contractor with respect to the subject matter of that claim. The Contractor is required to submit any supporting documentation requested by the City in regards to an Intent to File a Claim within fifteen (15) days of the City's request.

Within sixty (60) days upon issuance of Final Payment, the Contractor may submit to the City a written Claim for which it properly submitted an Intent to File a Claim while performing the work required for the project. Such claim shall be submitted to the Director of Transportation. Only one such claim shall be submitted, and it shall include all matters for which the Contractor seeks additional compensation and/or time. The Contractor shall not be entitled to any additional compensation or time for any matter that is not submitted as part of such a claim, within the sixty (60) days allowed pursuant to this Section.

### **3.47 PROGRESS MEETINGS**

Engineer shall hold a progress meeting at a time, date and frequency set forth in the pre-construction meeting to review progress to date and resolve all questions for the upcoming progress meeting. Engineer is responsible for the preparation of the progress meeting agenda and minutes. Engineer will forward progress meeting agenda to the Contractor for any additions to agenda.

### **3.48 CONTRACTOR BACKGROUND CHECKS**

In order to preserve the integrity and security of City government operations, contract workers may be required to undergo a criminal background check conducted by City of Buena Vista. The City will conduct these checks for any worker it believes will have unsupervised access to City designated Security Sensitive areas. Contract workers providing goods, services or construction in these designated areas are required to confine themselves to the area of the work. Based on the results of the background check, the contract worker may be disqualified from providing work/services for City of Buena Vista.

### **3.49 VENDOR REWARDS/GIFT PROGRAMS**

It is the policy of the City not to participate in any rewards programs offered by vendors and not to accept any gifts or gift cards, or other rewards from vendors for purchases made by the City. If you customarily provide, or if you plan to provide, rewards programs, gifts or gift cards, or other rewards to your customers for purchases made by such customers, you must identify this fact in your bid and demonstrate in the bid how you have applied the value of such rewards to a reduction in the price of the goods and/or services being offered to the City.

### **3.50 UNAUTHORIZED ALIENS**

In compliance with *Code of Virginia*, Section 2.2-4311.1, as amended, the Contractor agrees that he does not, and shall not during the performance of this contract, knowingly employ an unauthorized alien as defined in the federal Immigration Reform and Control Act of 1986.

### **3.51 CONTRACTOR'S AUTHORIZATION TO TRANSACT BUSINESS**

In accordance with *Code of Virginia* Section 2.2-4311.2 as amended, any bidder organized as a stock or nonstock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the *Code of Virginia*, or as otherwise required by law. Any bidder organized or authorized to transact business in the Commonwealth of Virginia pursuant to Title 13.1 or Title 50 of the *Code of Virginia* shall include in its bid the identification number issued to it by the State Corporation Commission. 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 of the *Code of Virginia*, or as otherwise required by law, shall include in its bid a statement describing why the bidder is not required to be so authorized. This information shall be provided on the Bid Form where noted. Failure to provide the required information may result in the rejection of the bid. The Contractor shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth of Virginia, if so required under Title 13.1 or Title 50 of the *Code of Virginia*, to be revoked or cancelled at any time during the term of the contract. The City may void any contract with a Contractor if the Contractor fails to remain in compliance with provisions of this section.

### **3.52 FEDERALLY FUNDED PROJECTS**

For any projects in which federal funds are to be utilized, if any provisions listed herein conflict with any federal procurement guidelines, the federal procurement guidelines shall prevail.

### **3.53 DEBARMENT STATUS**

By participating in this procurement, the vendor certifies that they are not currently debarred by the Commonwealth of Virginia or the City from submitting a response for the type of goods and/or services covered by this solicitation. Vendor further certifies that they are not debarred from filling any order or accepting any resulting order, or that they are an agent of any person or entity that is currently debarred by the Commonwealth of Virginia or the City. If a vendor is created or used for the purpose of circumventing a debarment decision against another vendor, the non-debarred vendor will be debarred for the same time period as the debarred vendor.

### **3.54 MANDATORY USE OF TERMS AND CONDITIONS FOR RFPs**

Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the proposal; however, the City reserves the right to decide on a case by case basis, in its sole discretion, whether to reject such a proposal.

### **3.55 CLARIFICATION OF TERMS**

If any prospective offeror has questions about the specifications or other solicitation documents, the prospective offeror should contact the City representative whose name

appears on the face of the solicitation no later than ten (10) working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.

### **3.56 PRECEDENCE OF TERMS**

The following General Terms and Conditions APPLICABLE LAWS AND COURTS, ANTI-DISCRIMINATION, ETHICS IN PUBLIC CONTRACTING, IMMIGRATION REFORM AND CONTROL ACT OF 1986, DEBARMENT STATUS, ANTITRUST, MANDATORY USE TERMS AND CONDITIONS, CLARIFICATION OF TERMS, PAYMENT shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.

### **3.57 CHANGES TO THE CONTRACT**

Changes can be made to the contract in any of the following ways:

1. The parties may agree in writing to modify the terms, conditions, or scope of the contract. Any additional goods or services to be provided shall be of a sort that is ancillary to the contract goods or services, or within the same broad product or service categories as were included in the contract award. Any increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.

2. The City may order changes within the general scope of the contract at any time by written notice to the contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The contractor shall comply with the notice upon receipt, unless the contractor intends to claim an adjustment to compensation, schedule, or other contractual impact that would be caused by complying with such notice, in which case the contractor shall, in writing, promptly notify the City of the adjustment to be sought, and before proceeding to comply with the notice, shall await the City's written decision affirming, modifying, or revoking the prior written notice. If the City decides to issue a notice that requires an adjustment to compensation, the contractor shall be compensated for any additional costs incurred as the result of such order and shall give the City a credit for any savings. Said compensation shall be determined by one of the following methods:

- a. By mutual agreement between the parties in writing; or
- b. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the contractor accounts for the number of units of work performed, subject to the City's right to audit the contractor's records and/or to determine the correct number of units independently; or
- c. By ordering the contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The contractor shall present the City with all vouchers and records of expenses incurred and savings realized. The City shall have the right to audit the records of the contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the City within thirty (30) days from the date of receipt of the written order from the City. If the parties fail to

agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the Commonwealth of Virginia Vendors Manual. Neither the existence of a claim nor a dispute resolution process, litigation or any other provision of this contract shall excuse the contractor from promptly complying with the changes ordered by the City or with the performance of the contract generally.

**3.58 DEFAULT**

In case of failure to deliver goods or services in accordance with the contract terms and conditions, the City may terminate this agreement after verbal or written notice without penalty. Upon termination the City may procure the goods or services contracted for 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 City may have.

**3.59 ANNOUNCEMENT OF AWARD**

Upon the award or the announcement of the decision to award a contract as a result of this solicitation, the City will publicly post such notice at the City's municipal building and/or on eVA for a minimum of 10 days.

**3.60 AVAILABILITY OF FUNDS**

It is understood and agreed between the parties herein that the City shall be bound hereunder only to the extent that City Council has appropriated funds that are legally available or may hereafter become legally available for the purpose of this agreement.

**3.61 BID PRICE CURRENCY**

Unless stated otherwise in the solicitation, bidders/offerors shall state bid/offer prices in US dollars.

### **3.62 CIVILITY IN CITY WORKPLACES**

The contractor shall take all reasonable steps to ensure that no individual, while performing work on behalf of the contractor or any subcontractor in connection with this agreement (each, a "Contract Worker"), shall engage in 1) harassment (including sexual harassment), bullying, cyber-bullying, or threatening or violent conduct, or 2) discriminatory behavior on the basis of race, sex, color, national origin, religious belief, sexual orientation, gender identity or expression, age, political affiliation, veteran status, or disability. The contractor shall provide each Contract Worker with a copy of this Section and may require Contract Workers to participate in the City's training on civility in the workplace if contractor's (and any subcontractor's) regular mandatory training programs do not already encompass equivalent or greater expectations. Upon request, the contractor shall provide documentation that each Contract Worker has received such training. For purposes of this Section, "the City workplace" includes any location, permanent or temporary, where a City employee performs any work-related duty or is representing his or her agency, as well as surrounding perimeters, parking lots, outside meeting locations, and means of travel to and from these locations. Communications are deemed to occur in a City workplace if the Contract Worker reasonably should know that the phone number, email, or other method of communication is associated with a City workplace or is associated with a person who is a City employee. The City may require, at its sole discretion, the removal and replacement of any Contract Worker who the City reasonably believes to have violated this Section. This Section creates obligations solely on the part of the contractor. Employees or other third parties may benefit incidentally from this Section and from training materials or other communications distributed on this topic, but the Parties to this agreement intend this Section to be enforceable solely by the City and not by employees or other third parties.

#### **4.0 SUPPLEMENTAL CONDITIONS**

#### **4.1 PROJECT FUNDING**

The 21<sup>st</sup> Street Corridor Improvements project is a federally funded project.

#### **4.2 STANDARDS AND REFERENCE DOCUMENTS**

Construction of this project shall be in conformance with the latest revisions to the *VDOT Road and Bridge Specifications dated 2020*, *VDOT Road and Bridge Standards dated 2016*, and the *VDOT Work Area Protection Manual Revision 2.1 dated 2022*, and the latest editions of the *Virginia Erosion and Sediment Control Handbook*, *Virginia Erosion and Sediment Control Regulations*, 11<sup>th</sup> Edition of the *FHWA Manual on Uniform Traffic Control Devices (MUTCD)*, including all subsequent revisions. In the event of conflict between any of these standards, specifications, or project drawings, the most stringent shall govern.

Notwithstanding any provision contained in the VDOT Special Provisions, when used in the VDOT Supplemental Specifications, Special Provisions, and Special Provision Copied Notes, or in any other provision contained or incorporated into this contract, the following terms shall have the following meanings: “Department” shall mean the City of Buena Vista Department of Community Development; “Engineer” shall mean the engineer hired by City of Buena Vista to perform engineering design for this project, “Inspector” shall mean the person hired by City of Buena Vista to inspect the Work performed and materials supplied by the Contractor, and “Contractor” shall mean the contractor hired by City of Buena Vista to construct the project. This provision explicitly supersedes the second paragraph of VDOT Special Provision (c100II2-0112), VDOT Supplemental Specifications, Special Provisions and Special Provision Copied Notes Revision.

#### **4.4 LIQUIDATED DAMAGES**

Liquidated Damages will be assessed at a rate of **\$600.00** per calendar day in accordance with Section 3.41.

#### **4.5 PROJECT STATUS**

**The contractor is advised of the following project status:**

Utility Relocations: No utility relocations are anticipated as part of both projects governed by the Contract Documents.

CDBG Streetlights Project: This project has a strict deadline to complete all work by July 31, 2025. The City has ordered the street lights and light poles. Contractor shall purchase the street lights and light poles from the City and install per the Contract Documents.

Based on field inspection by the City and the Engineer, there is existing PVC conduit under the sidewalk along both sides of Sycamore Ave (south of 21<sup>st</sup> Street) and along the east side of Sycamore Ave (north of 21<sup>st</sup> Street). The City indicated that the conduit may be accessed by chipping away the small concrete squares in the sidewalk. All proposed light poles shall be placed at these locations, the exact location may deviate from the engineering plan sheets slightly. See photos below.

All street light power conduit shall be terminated at the streetlight cabinet located near the SW corner of 21<sup>st</sup> Street/Sycamore Ave intersection. City staff indicated that the existing conduit along Sycamore Ave provides a route into this cabinet. The streetlights along 21<sup>st</sup> Street (west of Sycamore Ave) will require installation of a new conduit into the existing streetlight cabinet.

Contact Ben Staton (Buena Vista Public Works) for access into the streetlight cabinet or questions related to the existing conduits.



Traffic Signals (VDOT Project): The City has ordered the street lights, signal poles, and controller. Contractor shall purchase the street lights and signal poles from the City and install per the Contract Documents. The Contractor shall furnish and install the remainder of the equipment necessary for the traffic signals. All pedestrian push buttons shall be accessible push buttons (APS) with speech messages and vibro-tactile functionality.

The power for the proposed street lights mounted on the top of the traffic signal poles shall terminate into the traffic signal cabinet with a dedicated breaker switch.

Existing traffic signal conduit has not been field located. As-built plans are not available. The Contractor is responsible for locating the existing traffic signal conduits and installing the traffic signal equipment to the intent of the engineering plan. All existing signal cable shall be removed and discarded.

The Contractor is responsible for demolishing and replacing all sidewalk panels as necessary for installation of the traffic signal equipment. The traffic signal plan for 21<sup>st</sup> Street/Magnolia Ave does not explicitly show concrete replacement; this work is to be per the Contractor's discretion. The Contractor shall not alter the design of the existing curb ramps at this intersection.

Contact Ben Staton (Buena Vista Public Works) for access into the traffic signal cabinets.

Sidewalks and Curb Ramps (VDOT Project): The Contractor shall perform all work within the City right of way. No temporary construction easements or additional right of way were obtained for this project. The Contractor is responsible for locating all utilities within the project area prior to the start of construction. The engineering plan sheets do not show a complete inventory of utilities within the project area.

#### **4.6 PRE-CONSTRUCTION MEETING**

Prior to the start of any construction activities the Contractor shall attend a pre-construction meeting with the Engineer and representatives of City of Buena Vista, VDOT, and other appropriate parties for the purposes of scheduling the work and coordination. A summary of the conference shall be prepared by the Engineer and distributed to the Owner and the Contractor. The Contractor shall acknowledge receipt of the Engineer's summary in writing to the Owner.

#### **4.7 PROGRESS SCHEDULE**

The Contractor shall submit a progress schedule, in a format acceptable to the Engineer, setting forth the best estimate of the time required for the completion of each item of the contract. The progress schedule shall be submitted no later than 10 days after the notice to proceed and must be approved prior to the first estimate. The progress schedule shall be duly executed by the Contractor after acceptance by the Engineer. It is expressly understood that the review and acceptance by the Engineer of the Contractor's progress schedule shall in no way serve to relieve the contractor of its responsibility to complete the work within the contract time.

#### **4.8 PLAN OF OPERATIONS**

The Contractor shall furnish the Engineer a complete and practicable narrative Plan of Operations which will provide for the orderly prosecution of the work. The plan of operations shall be submitted no later than 10 days after the notice to proceed and must be approved prior to the first estimate. The plan of operations shall describe in enough detail to clearly explain the sequence of operations and the period of time required for completion of each item or group of like items in the contract. It is expressly understood that the review and acceptance by the Engineer of the Contractor's plan of operations shall in no way serve to relieve the contractor of its responsibility to complete the work within the contract time.

#### **4.9 SCHEDULE OF VALUES**

The Contractor shall furnish the Engineer a Schedule of Values for the project that identifies the cost of each item included in the Progress Schedule for which the contractor expects to receive payment. The Schedule of Values shall be submitted no later than 10 days after the notice to proceed and must be approved prior to the first estimate. The value associated with each item shall be considered lump sum and inclusive of all direct and indirect costs, overhead, profit, and any other expenses of any kind. Allowance items shall be clearly indicated and noted separately of other work items. The total summation of all items identified in the Schedule of Values shall equal the bid price for the project. The Schedule of Values will be used to validate Monthly Estimates in accordance with Section 3.47.

#### **4.10 PROGRESS MEETINGS**

The Contractor shall attend monthly progress meetings at the offices of the Owner or other designated location for purpose of reporting progress, problems or otherwise expediting the work. Subcontractors shall also attend this meeting when required to resolve specific issues or problems.

#### **4.11 QUALITY CONTROL INSPECTION SERVICES**

The City shall hire an independent materials testing agency to provide all material testing necessary for the project and/or as identified as being formed by the Contractor in the project's Construction Quality Assurance Plan (or CQAP). Tests and testing frequencies shall comply with the most recent version of the Locally Administered Projects (LAP) Manual QA/QC requirements. All materials technicians shall be VDOT-certified, and testing shall be performed in accordance with VDOT specifications and certification manuals of inspection. The Owner shall provide a full-time Project Inspector to oversee the work of the Contractor, but this shall in no way relieve the Contractor of his responsibilities required under the contract or VDOT specifications. All tests results shall be furnished to the Inspectors and the Engineer upon completion of the individual tests such that records can be kept up to date throughout the project. The contractor shall notify the Inspector immediately upon receipt of a failing test result. Source of materials are required.

#### **4.12 CONSTRUCTION SURVEY**

Construction staking shall be performed only by a professional engineer or land surveyor registered in the Commonwealth of Virginia. The engineer/surveyor employed by the Contractor shall be responsible for preparation of a detailed staking plan, which shall be reviewed and approved prior to start of work by the Engineer. A detailed staking plan shall be prepared by the Contractor for, and submitted to, the Engineer for review and approval prior to field staking. The Engineer, or his designated representative, shall review the staked location of all concrete items for line and grade prior to construction. At a minimum, the Contractor shall stake all concrete structures and linear concrete items at a minimum of 25-foot intervals, as well as all radial curb returns grades.

#### **4.13 SIGNAGE**

The Contractor shall furnish and install all signage (temporary and permanent) required for the project. Whenever the Contractor's operations affect vehicular or pedestrian traffic, the Contractor shall be responsible for furnishing, installing and maintaining any and all safety control devices in accordance with the VDOT *Work Area Protection Manual* and as deemed necessary by VDOT and the Engineer.

#### **4.14 WORK ZONE LAYOUTS**

The Contractor shall develop and furnish work zone layouts for approval by the City prior to beginning work if they differ from the MOT plans included in the contract documents. Work zone layouts shall comply with the VDOT *Work Area Protection Manual*.

#### **4.15 BORROW MATERIAL AND DISPOSAL OF EXCESS MATERIAL**

The Contractor shall be responsible for the disposal of all excess materials (including but not limited to concrete, asphalt, undercut, root mat, topsoil and/or fill), obtaining borrow material, and the suitability of all on-site material above subgrade. No extra payment will be made for disposal or importing of soils to the project site regardless of the suitability or unsuitability of on-site soils.

#### **4.16 NORMAL WORKING HOURS**

Normal working hours for the project are **7:00 A.M. to 5:00 P.M., Monday through Friday**. Lane closures shall not be permitted on all streets within the project area without a detour. The Contractor shall maintain minimum one travel lane on all streets within the project area. Exceptions to these lane closure requirements shall require prior written authorization from the City of Buena Vista Department of Community Development.

#### **4.17 LUMP SUM BID REQUIREMENTS**

The Contractor is reminded that bids shall be LUMP SUM and shall include ALL WORK necessary to complete the project to the full intent of the plans. In the event of additions or deductions to the work required by the Contract Documents, the Contractor will be paid extra or shall credit the Owner, as the case may be, in one of the following manners:

- A. At a price agreed upon in writing between the Contractor and Owner
- B. In the event of work covered by unit prices included in the Bid Schedule, at a price derived from application of unit prices to the quantities reflective of the additional or deducted work

No other criteria (such as pay items shown on the plans, or "Measurement and Payment" sections included in VDOT Specifications or VDOT Special Provisions) will be used to determine the value of the work.

#### **4.18 ALLOWANCE ITEMS**

None included at this time.

#### **4.19 PERMITS**

Permits for this project that have been obtained by the City, will be obtained by the City, will be transferred to the Contractor and/ or must be obtained by the Contractor are identified below. Any other permits not identified herein, but required to perform the work (including a City Land Disturbance Permit for any staging areas), will be the responsibility of the Contractor to obtain. Contractor is advised to account for a minimum lead time of 3-4 weeks when applying for a City Land Disturbance Permit, however, the City will expedite approval to the best of its ability.

- A. City Land Disturbance Permit - A City Land Disturbance Permit shall be required for this project. The Contractor shall be responsible for obtaining a City of Buena Vista Land Disturbance Permit the City. The City shall be responsible for any Land Disturbing Permit fees. In addition, the Contractor shall ensure that all operations shall be performed in a manner that minimizes erosion and sedimentation of the street and storm drainage systems. All work shall be performed in accordance with the latest edition of the Virginia Erosion and Sediment Control Manual and the phased sequencing outlined in the plans. The Contractor shall have a DCR Certified Responsible Land Disturber (RLD) on the project site at all times during the construction project where land is being disturbed. The RLD will be responsible for ensuring that all aspects of the VESCM are adhered to during this project.

The Contractor shall ensure that all special and general conditions of all permits required to complete the work are complied with during all phases of construction. All costs of complying with permit conditions shall be borne by the Contractor and under no circumstances shall any such costs be considered Extra Work for which the Contractor is entitled to additional compensation.

#### **4.20 MISS UTILITY**

The Contractor shall be responsible for contacting Miss Utility and obtaining a clear ticket prior to beginning any work.

#### **4.21 ESTABLISHMENT OF GRASS**

The contractor shall be required to establish and maintain a stand of grass on disturbed areas before final acceptance.

#### **4.22 WORK IN THE VICINITY OF UTILITIES**

The contractor shall use caution working in the vicinity of existing waterlines, sanitary force mains, sanitary sewer lines, and other utilities as applicable.

#### **4.23 DISADVANTAGED BUSINESS ENTERPRISE (DBE) GOAL**

The DBE requirement for this project is 5%. The Contractor shall provide proper good faith documentation on the applicable VDOT forms if the required 5% cannot be achieved.

#### 4.24 AS-BUILT PLANS

The Contractor shall prepare and submit to the engineer the “as built” plans showing any deviations from the engineering plan sheets upon completion of the project.

#### 4.25 EXCAVATION AND EARTHWORK

- a. Excavation for this project is **unclassified**, and includes excavation to subgrade and/or subsoil elevations indicated, **regardless of character of materials and obstructions encountered**. Allowance items will be employed (if applicable) only after subgrade and/or subsoil elevations have been achieved.
- b. Unauthorized Excavation consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of the Engineer and/or the Inspector. Unauthorized excavation, as well as remedial work directed by the Engineer, shall be at the Contractor's expense.
- c. "Excavation" consists of removal of material encountered to required subgrade and/or subsoil elevations indicated, and the subsequent disposal of materials removed. "Subgrade" is defined as the undisturbed earth, or the compacted soil layer, immediately below granular subbase, drainage fill, or topsoil materials. "Subsoil" is defined as the undisturbed earth immediately below the existing topsoil layer.
- d. "Proofrolling" is defined to be the act whereby the subgrade shall be proofrolled with a standard loaded tandem dump truck. The Contractor's Geotechnical Engineer, the Inspector and the VDOT Inspector, as applicable, will monitor the proofrolling and determine areas of unsuitable bearing material, with inspection report/results given to Engineer and Owner.
- e. Suitability of Materials: The Contractor shall be responsible for the disposal of excess material (including but not limited to undercut, root mat and excess topsoil, fill material, and all other soil determined to be unsuitable), obtaining borrow material and the providing suitable material above subgrade. No extra payment will be made, regardless of the suitability or unsuitability of on-site soils for the disposal or importing of soils to the project site.

#### 4.26 CG-12 CURB RAMPS

All as-built grade shall be verified to be in strict conformance with the maximum allowable grades and/or slopes shown in the latest edition of the VDOT Road and Bridge Standards. Any subsequent unapproved deviations from the VDOT Standard requiring reconstruction of any ramp element, as requested by the City, Engineer, Inspector or VDOT, shall be promptly performed by the Contractor at no additional expense to the City. Minor adjustment may be required by the Contractor to fully meet minimum VDOT standards for grade and slope of various ramp elements.

#### **4.27 TIES TO EXISTING CONCRETE**

When tying into existing concrete curb & gutter, sidewalks, etc., the Contractor is required to tie into the existing feature in a manner that provides for all concrete joints (existing and proposed) to meet or exceed current VDOT minimum and maximum joint spacing criteria. It is understood that any additional tie in lengths that may be required are included in the lump sum bid.

#### **4.28 WORKING IN VICINITY OF EXISTING WATERLINE**

Contractor shall verify the existing waterline (via potholes) at all locations where the existing waterline is within two feet horizontal distance of the extents of the proposed curb and gutter placement. In the event that the trench excavation for the placement of the proposed curb and gutter would result in less than two feet of temporary cover over the existing waterline during construction, the contractor shall limit the areas of exposure (based on exposure being defined as any locations with less than two feet of cover left in place at any period of time) to 20' lengths so as not to run the risk of the exiting waterline blowing out. It is understood that any additional work involved in meeting this requirement is included in the lump sum bid.

#### **4.29 ENGINEER'S ESTIMATED QUANTITIES:**

Estimated quantities contained in the CHANGE ORDER PRICES above are provided for informational purposes only. The Contractor is responsible for conducting its own take off from which the lump sum bid is to be based upon. Differences in estimated quantities between the Engineer's quantities, the Contractor's quantities, and the actual quantities shall not serve as the basis for any type of change order. The Contractor's lump sum bid shall include all items necessary (or reasonably inferred) to construct the project as depicted in the bid documents and addenda (if applicable).

## 5.0 VDOT FORMS

Blank copies of the required forms for bidding this project are included in this section. Copies of all current VDOT Forms may be found at the following website:  
<http://vdotforms.vdot.virginia.gov/>

The following VDOT Forms will be required, as applicable, for bidding on this project:

1. C-48
2. C-49
3. C-104
4. C-105
5. C-110
6. C-111
7. C-112
8. C-76
9. C-76A

The following VDOT Forms will be required, as applicable, during the construction of this project:

10. C-25
11. C-28
12. C-56
13. C-57
14. C-63
15. C-64
16. WH-347
17. C-65
18. C-67

## 6.0 SPECIFICATIONS

The following Specifications will be required on this project:

1. CN100-000051-05 – VDOT SUPPLEMENTAL SPECS (SSs), SPECIAL PROV. (SPs) AND SPECIAL PROV. COPIED NOTES (SPCNs) (Local Assistance)
2. SP0F0-000100-00 – PREDETERMINED MINIMUM WAGE RATES (Wage Rates)
3. SP0F0-000130-02 – Required Contract Provisions Federal-Aid Construction Contracts - FHWA-1273\_Revised Oct 23, 2023
4. SP0F0-000150-01 – NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (Federal Executive Orders 11246 & 13672)
5. SP100-000051-00 – CHANGED CONDITIONS FOR LOCAL ASSISTANCE PROJECTS
6. SP102-000510-02 – USE OF DOMESTIC MATERIAL (Buy America)
7. CN103-000100-00 – AWARD OF CONTRACT Federal Funded
8. SQ105-000611-01 – SECTION 105.06—SUBCONTRACTING (FEDERAL FUNDED PROJECTS)
9. CQ107-000130-00 – DRUG-FREE WORKPLACE
10. SP107-000120-00 – Electronic Submission of Payrolls and DBE Payments
11. SP107-001510-04 – DBE Requirements
12. SP107-003000-01 – BABA Construction Materials
13. SQ107-001300-00 – SP for Prevailing Wage Rate (Fed Funded)
14. SQ107-001310-00 – SP for Prevailing Wage Rate for On Call Contracts (Fed Funded)
15. SP109-000100-05 – ASPHALT MATERIAL PRICE ADJUSTMENT
16. SS109-002020-01 – SECTION 109 – Measurement and Payment
17. SS211-002020-03 – Asphalt Concrete
18. SS220-002020-01 – Concrete Curing Materials
19. SS223-002020-02 – Steel Reinforcement
20. SS234-002020-01 – SECTION 234 Supplemental Specification
21. SS235-002020-01 – Section 235 – Retroreflectors
22. SS236-002020-01 – Wood Products
23. SS246-002020-02 – Section 246 – Pavement Markings
24. SS248-002020-02 – Stone Matrix Asphalt Concrete
25. SS305-002020-02 – Subgrade and Shoulders
26. SS308-002020-01 – Subbase Course
27. SS309-002020-01 – Aggregate Base Course
28. SS315-002020-04 – Asphalt Concrete Pavement
29. SS317-002020-01 – STONE MATRIX ASPHALT CONCRETE PLACEMENT
30. SS318-002020-01 – PAVEMENT INTERLAYERS
31. SS319-002020-02 – Thin Hot Mix Asphalt Concrete Overlay
32. SS321-002020-02 – Trench Widening
33. SS407-002020-02 – STEEL AND OTHER METAL STRUCTURES
34. SS411-002020-01 – PROTECTIVE COATING OF METAL IN STRUCTURES
35. SS512-002020-03 – SECTION 512 – MAINTAINING TRAFFIC
36. SS704-002020-02 – SECTION 704 - PAVEMENT MARKINGS AND MARKERS

**ORDER NO.:**  
**CONTRACT ID. NO.:**

**COMMONWEALTH OF VIRGINIA**  
**DEPARTMENT OF TRANSPORTATION**

Form C-48  
Rev. 07-31-24  
Page 1 of 2

**SUBCONTRACTOR/SUPPLIER SOLICITATION AND UTILIZATION,  
AND VENDOR SURVEY FORM (ALL VENDORS)**

**PROJECT NO.** \_\_\_\_\_ **CONTRACT I.D. NO.** \_\_\_\_\_

**FHWA NO.** \_\_\_\_\_ **DATE SUBMITTED** \_\_\_\_\_

All vendors submitting a bid as a Prime Contractor shall complete and submit with their bids the following information as requested for (1) Subcontractor/Supplier Solicitation, and Utilization, and (2) for Vendor Survey.

The vendor certifies this form accurately represents its solicitation and utilization or non-utilization, as indicated, of the firms listed below for performance of work on this contract. The vendor also certifies he/she has had direct contact with the named firms regarding participation on this project.

**Vendor** \_\_\_\_\_ **Signature:** \_\_\_\_\_

**Vendor ID No.** \_\_\_\_\_ **Title:** \_\_\_\_\_

**Vendor's Address:** \_\_\_\_\_

**City:** \_\_\_\_\_

**State:** \_\_\_\_\_ **Zip Code:** \_\_\_\_\_

**SUBCONTRACTOR/SUPPLIER SOLICITATION AND UTILIZATION (ALL)**

VENDOR NUMBER	NAME OF SUBCONTRACTOR/SUPPLIER	TELEPHONE NUMBER	DBE OR NON-DBE	UTILIZED (Y/N)

**NOTE:** ATTACH ADDITIONAL PAGES, IF NECESSARY.

BIDDER MUST SIGN EACH ADDITIONAL SHEET TO CERTIFY ITS CONTENT AND COMPLETION OF FORM.

**FEDERAL LAW REQUIRES ALL VENDORS SUBMITTING BIDS OR OFFERS PROVIDE THE INFORMATION REQUESTED IN THIS FORM.**

**ORDER NO.:**  
**CONTRACT ID. NO.:**

**COMMONWEALTH OF VIRGINIA**  
**DEPARTMENT OF TRANSPORTATION**

Form C-48  
Rev. 07-31-24  
Page 2 of 2

**VENDOR SURVEY**

**WHEN SUBMITTING A BID OR OFFER AS A PRIME CONTRACTOR, THE BIDDER MUST SUBMIT A VENDOR SURVEY FOR THEMSELVES AND A VENDOR SURVEY FOR EACH SUBCONTRACTOR AND SUPPLIER WHO SUBMITTED A BID OR QUOTE TO THE BIDDER.**

VENDOR'S FULL LEGAL NAME: \_\_\_\_\_

VENDOR ID NO.: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

CITY: \_\_\_\_\_

STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

VENDOR'S YEARS IN BUSINESS: \_\_\_\_\_

VENDOR'S STATUS: \_\_\_\_\_ DBE \_\_\_\_\_ NON-DBE

*[DBE means a small business that is certified as a Disadvantaged Business Enterprise by the Virginia Department of Small Business & Supplier Diversity or the Metropolitan Washington Airports Authority.]*

GENDER OF VENDOR'S MAJORITY OWNER: \_\_\_\_\_ MALE \_\_\_\_\_ FEMALE \_\_\_\_\_ OTHER

ETHNICITY OF VENDOR'S MAJORITY OWNER: \_\_\_\_\_ White  
(Defined in 49 CFR 26.5) \_\_\_\_\_ Black or African American  
\_\_\_\_\_ Hispanic American  
\_\_\_\_\_ Asian-Pacific American  
\_\_\_\_\_ Subcontinent Asian American  
\_\_\_\_\_ Native American, incl. Alaskan or Hawaiian  
\_\_\_\_\_ Other: \_\_\_\_\_

VENDOR'S ANNUAL GROSS RECEIPTS: \_\_\_\_\_ \$ 0 - 25 million  
\_\_\_\_\_ \$ 25 - 50 million  
\_\_\_\_\_ \$ 50 - 75 million  
\_\_\_\_\_ More than \$75 million

**THE UNDERSIGNED, ON BEHALF OF VENDOR IDENTIFIED ABOVE, ACKNOWLEDGES AND CERTIFIES THAT THIS FORM ACCURATELY STATES THE INFORMATION CONTAINED HEREIN TO THE BEST OF VENDOR'S KNOWLEDGE.**

\_\_\_\_\_  
Printed Full Legal Name of Person Signing for Vendor

**Signature:** \_\_\_\_\_

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 \_\_\_\_\_

PROJECT NUMBER \_\_\_\_\_

FHWA NUMBER \_\_\_\_\_

DISTRICT \_\_\_\_\_

DATE BID SUBMITTED \_\_\_\_\_

BIDDER'S NAME \_\_\_\_\_

SIGNATURE \_\_\_\_\_

TITLE \_\_\_\_\_

VENDOR NUMBER \_\_\_\_\_

DBE GOAL FROM BID PROPOSAL \_\_\_\_\_

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 \_\_\_\_\_

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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 \_\_\_\_\_

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**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 \_\_\_\_\_

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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 \_\_\_\_\_

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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 \_\_\_\_\_

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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. \_\_\_\_\_ DATE SUBMITTED \_\_\_\_\_

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BIDDER \_\_\_\_\_ SIGNATURE \_\_\_\_\_

TITLE \_\_\_\_\_

**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

**NOTE:** ATTACH ADDITIONAL PAGES IF NECESSARY.

COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION  
**DBE GOOD FAITH EFFORTS DOCUMENTATION**

CONTRACT I.D. NO. \_\_\_\_\_ DATE SUBMITTED \_\_\_\_\_

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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. \_\_\_\_\_ DATE SUBMITTED \_\_\_\_\_

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BIDDER \_\_\_\_\_ SIGNATURE \_\_\_\_\_

TITLE \_\_\_\_\_

**ADDITIONAL DATA TO SUPPORT DEMONSTRATION OF GOOD FAITH EFFORTS**

ADDITIONAL DATA TO SUPPORT DEMONSTRATION OF GOOD FAITH EFFORTS

**NOTE: ATTACH ADDITIONAL PAGES, IF NECESSARY**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

PROJECT:

FHWA:

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: \_\_\_\_\_ Title (print)  
(Signature)

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: \_\_\_\_\_ Title (print)  
(Signature)

**ORDER NO.:**  
**CONTRACT ID. NO.:**

Form C-105  
Rev. 7-13-05

**COMMONWEALTH OF VIRGINIA**  
**DEPARTMENT OF TRANSPORTATION**  
**AFFIDAVIT**

PROJECT:

FHWA:

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

**ORDER NO.:**  
**CONTRACT ID. NO.:**

**COMMONWEALTH OF VIRGINIA**  
**DEPARTMENT OF TRANSPORTATION**  
**DBE REGULAR DEALER/DISTRIBUTOR AFFIRMATION FORM**

Form C-110  
Rev. 07-31-24  
Page 1 of 2

Bidder / Contractor Name:	
Project No.	
FHWA No.:	
Contract ID:	
Date Submitted:	

\*\*\* INSTRUCTIONS \*\*\*

Submit this DBE Regular Dealer / Distributor Affirmation Form for each DBE listed as a regular dealer or distributor, on the Bidder's Form C-111 within 5 days after the bid opening, along with Form C-112 - Certification of Binding Agreement. In the questions below, "you and "your" refer to the DBE.

Section 26.53(c)(1) of Title 49 Code of Federal Regulations requires the Virginia Department of Transportation to make a preliminary counting determination for each DBE listed as a regular dealer or distributor to assess its eligibility for 60 or 40 percent credit, respectively, of the cost of materials and supplies based on its demonstrated capacity and intent to perform as a regular dealer or distributor, as defined in 49 CFR § 26.55(e)(2)(iv)(A),(B),(C), and (3) under the contract at issue. The preliminary determination will be based on the DBE's written responses to relevant questions and its affirmation that its subsequent performance of a commercially useful function will be consistent with the preliminary counting of such participation.

DBE Name:	
DBE Authorized Representative:	
Total Amount of DBE Subcontract / Purchase Order:	
NAICS Codes Applicable to Items Sold / Leased:	

- I. Will all items sold or leased be provided from the on-hand inventory at your establishment?
- YES (If "YES," you have indicated that your performance will satisfy the regular dealer requirements and may be counted at 60%. STOP here. Read and sign the affirmation below.)
  - NO (If "NO" Continue.)
- (a) Are you selling bulk items (e.g., petroleum products, steel, concrete, concrete products, sand, gravel, asphalt, etc.) or items not typically stocked due to their unique characteristics (aka specialty items)?
- YES (If "YES," Go to Question 2.)
  - NO (If "NO" Continue.)
- (b) Will at least 51% of the items you are selling be provided from the inventory maintained at your establishment, and will the minor quantities of items delivered from and by other sources be of the general character as those provided from your inventory?
- YES (If "YES," you have indicated that your performance will satisfy the regular dealer requirements and may be counted at 60%. STOP here. Read and sign the affirmation below.)
  - NO \* (\*If 1,1(a), and 1(b) above are "NO," your performance on the whole will not satisfy the regular dealer requirements; therefore, only the value of items to be sold or leased from inventory can be counted at 60%. Go to Question 3, below, to determine if the items delivered from and by other sources are eligible for Distributor credit.)

**ORDER NO.:**  
**CONTRACT ID. NO.:**

Form C-110  
Rev. 07-31-24  
Page 2 of 2

2. Will you deliver all bulk or specialty items using distribution equipment you own (or under a long-term lease) and operate?
- YES (If "YES," you have indicated that your performance will satisfy the requirements for a regular dealer of bulk items and may be counted at 60%. STOP here. Read and sign the affirmation below.)
- NO (If "NO," your performance will not satisfy the requirements for a regular dealer of bulk items; the value of items to be sold or leased cannot be counted at 60%. Go to Question 3.)
3. Will the written terms of your purchase order or bill of lading from a third party transfer responsibility, including risk for loss or damage, to your company at the point of origin (e.g. a manufacture's facility)?
- YES       NO
- (a) Will you be using sources other than the manufacturer (or other seller) to deliver or arrange delivery of the items sold or leased?
- YES       NO

(If you responded "YES" to both 3 and 3(a), you have indicated that your performance will satisfy the requirements of a Distributor; therefore, the value of items sold or leased may be counted at 40%.)

(If you responded "NO" to either 3 or 3(a), your performance will not satisfy the requirements for a regular dealer and counting of your participation is limited to the reasonable cost of fees or commissions charged, including transportation charges for the delivery of materials or supplies; the cost of materials or supplies may not be counted.)

\*      \*      \*

**For DBE:**

I affirm that the information that I provided above is true and correct and that my company's subsequent performance of a commercially useful function will be consistent with the above responses. I further affirm that my company will independently negotiate price, order specified quantities, and pay for the items listed in the Bidder's Forms C-111 and C-112. This includes my company's responsibility for the quality of such items in terms of necessary repairs, exchanges, or processing of any warranty claims for damaged or defective materials.

\_\_\_\_\_  
Printed Name of DBE Owner/Authorized Representative

\_\_\_\_\_  
Signature

**For Bidder:**

The Bidder acknowledges its responsibility for verifying the information provided by the DBE named above and ensuring that the counting of the DBE's participation is accurate. Any shortfall in DBE participation caused by errors in counting are the responsibility of the Bidder.

\_\_\_\_\_  
Printed Name of Bidder Owner/Authorized Representative

\_\_\_\_\_  
Signature

**ORDER NO.:**  
**CONTRACT ID. NO.:**

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION**

Form C-111  
Rev. 07-31-24  
Page 1 of 2

**MINIMUM DBE REQUIREMENTS**

PROJECT NO: \_\_\_\_\_  
FHWA NO: \_\_\_\_\_

Contract ID No.: \_\_\_\_\_  
Order No.: \_\_\_\_\_

**\*\*\* INSTRUCTIONS \*\*\***

LIST THE DBE(S) WHO WILL PARTICIPATE IN THE CONTRACT, INDICATE THE WORK THEY WILL PERFORM, THEIR VENDOR ID AND DBE CERTIFICATION NUMBERS, AND THE DOLLAR AMOUNT OF PARTICIPATION, REDUCED AS NEEDED FOR REGULAR DEALERS (60%), DISTRIBUTORS (40%), AND BROKERS (FEES/COMMISSIONS). COUNT 100% FOR SUBCONTRACTORS AND MANUFACTURERS, AND FOR HAULERS THAT DELIVER MATERIALS AND SUPPLIES TO THE PROJECT SITE (EXCLUDING COST OF THE MATERIALS AND SUPPLIES).

$$\frac{\text{DBE GOAL}}{\text{TOTAL CONTRACT VALUE}} \times \$ = \$ \text{MINIMUM DBE PARTICIPATION}$$

**DBE SUMMARY**

NAME OF DBE SUBCONTRACTOR	VENDOR ID NO.	DBE CERTIFICATION NO.	SUBCONTRACT VALUE	DBE USED AS		DOLLAR AMT DBE CREDIT
			\$		%	\$
			\$		%	\$
			\$		%	\$
			\$		%	\$
			\$		%	\$
			\$		%	\$
			\$		%	\$
			\$		%	\$

**DBE PARTICIPATION ATTAINED TOTAL: \$ \_\_\_\_\_**

**DBE PARTICIPATION ATTAINED PERCENTAGE: \_\_\_\_\_%**

**I/WE CERTIFY THAT THE LISTED DBES WILL BE USED ON THIS CONTRACT AS STATED HEREIN AND THAT IN THE PERFORMANCE OF THE CONTRACT I/WE WILL MAKE GOOD FAITH EFFORTS TO MEET OR EXCEED THE DBE GOAL ESTABLISHED FOR THE CONTRACT.**

\_\_\_\_\_ BY: \_\_\_\_\_ DATE \_\_\_\_\_  
BIDDER'S NAME SIGNATURE  
Title: \_\_\_\_\_

**ORDER NO.:**  
**CONTRACT ID. NO.:**

Form C-111  
Rev. 07-31-24  
Page 2 of 2

**DBE ITEMS ENTRY**

Instructions: For each DBE listed in the Summary on page 1, complete a DBE Item Entry form.

NOTE: To count toward the DBE goal, DBEs must be certified in NAICS codes applicable to kind of work they perform. A DBE's Certification number and NAICS Codes are shown in the DBE's listing in the DSBD DBE Directory at: <https://directory.sbsd.virginia.gov/#/executiveExport>

Full DBE Name: \_\_\_\_\_

DBE Vendor ID No.: \_\_\_\_\_ (DBE's number can be found on VDOT's List of Prequalified Vendors)

DBE Certification. No.: \_\_\_\_\_

DBE NAICS Code(s): \_\_\_\_\_

DBE Used As:

- \_\_\_\_\_ Subcontractor (S) Eligible for 100% of Subcontract Value
- \_\_\_\_\_ Manufacturer (M) Eligible for 100% of Subcontract Value
- \_\_\_\_\_ Hauler (H) Eligible for 100% of Subcontract Value Excluding Materials
- \_\_\_\_\_ Regular Dealer (R) Eligible for 60% of Subcontract or PO Value
- \_\_\_\_\_ Distributor (D) Eligible for 40% of Subcontract or PO Value
- \_\_\_\_\_ Broker (B) Eligible for Fees / Commissions Only

**WORK ASSIGNED TO DBE**

Contract Bid Items	Description Of Work	QTY	Unit	DBE's Price	Applicable %	Dollar Amt DBE Credit
				\$	%	\$
				\$	%	\$
				\$	%	\$
				\$	%	\$
				\$	%	\$
				\$	%	\$
				\$	%	\$

DBE Credit Total: \$ \_\_\_\_\_

\_\_\_\_\_  
BIDDER'S NAME

BY: \_\_\_\_\_  
SIGNATURE

DATE

Title: \_\_\_\_\_

[ATTACH ADDITIONAL SHEETS AS NECESSARY, EACH OF WHICH MUST BE SIGNED AND DATED.]

**COMMONWEALTH OF VIRGINIA  
DEPARTMENT OF TRANSPORTATION  
CERTIFICATION OF BINDING AGREEMENT  
WITH  
DISADVANTAGED BUSINESS ENTERPRISE FIRMS**

Project No.:

Federal Project No.:

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

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By: \_\_\_\_\_  
Signature Title

Date: \_\_\_\_\_

Third Tier  
Subcontractor if  
Applicable

---

By: \_\_\_\_\_  
Signature Title

Date: \_\_\_\_\_

DBE Contractor

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By: \_\_\_\_\_  
Signature Title

Date: \_\_\_\_\_

# CONTRACTOR'S CERTIFICATE OF COMPLIANCE FOR STEEL & IRON ITEMS

For Compliance with "Buy America" 23 CFR 635.410

Contract ID No. \_\_\_\_\_

Page  1  of \_\_\_\_\_

VDOT Project No. \_\_\_\_\_

FHWA Project No. \_\_\_\_\_

Buy America Submittal  
Number \_\_\_\_\_

Project Location & Description \_\_\_\_\_

The \_\_\_\_\_  
(Name of Manufacturer/Supplier) (Street Address) (City, State) (Phone)

has furnished to \_\_\_\_\_  
(Name of Contractor) (Street Address) (City, State) (Phone)

the following items containing iron or steel for permanent use in the above referenced project:

Bid Item No.	Bid Item Description	Product Description (if only a portion of the Bid Item)	Quantity	Unit (LF, YD <sup>2</sup> , YD <sup>3</sup> , etc.)	Total Cost of Non-Domestic Steel and Iron in this Item

**Submit this form to VDOT at the time of delivery of any items containing steel or iron to the project. Supporting documentation to demonstrate compliance with Buy America provisions (such as mill test reports manufacturer/supplier certifications, etc.) shall be organized by Submittal Number and maintained by the contractor from the date of delivery until three years after project acceptance. (Note that documentation such as off-site test reports, etc., when also required for other material quality purposes, is still required at time of delivery.)**

### *Contractor's Statement of Certification*

**Domestic Material.** I hereby certify that all steel and iron manufacturing processes (including melting, mixing, extruding, rolling, bending, casting, forging, etc., and the application of any coating, as applicable), occurred in the United States for the above listed materials and that those materials do meet all other requirements as set forth in the plans and specifications.

**Non-Domestic Material.** Although the above listed materials do meet all other requirements as set forth in the plans and specifications, all or part of the steel or iron manufacturing process may have occurred outside the United States, so the material is considered non-domestic. The cost of the steel and iron in this material, as delivered to the project, is \$ \_\_\_\_\_ and will be tracked to ensure the total non-domestic ferrous material does not exceed the maximum allowable.

By \_\_\_\_\_ Title \_\_\_\_\_  
(Name of Prime Contractor's Project Superintendent, Typed or Printed)

\_\_\_\_\_  
(Signature of Prime Contractor's Project Superintendent) Date \_\_\_\_\_



## CONTRACTOR'S CERTIFICATE OF COMPLIANCE FOR CONSTRUCTION MATERIALS

**For Compliance with "Build America, Buy America Act" Public Law, No. 117-58, §§ 70901-70953**

Contract ID No.: \_\_\_\_\_

Page 1 of \_\_\_\_\_

VDOT Project No.: \_\_\_\_\_

FHWA Project No.: \_\_\_\_\_

Build America Buy America  
Submittal No.: \_\_\_\_\_

Project Location & Description \_\_\_\_\_

The \_\_\_\_\_  
(Name of Manufacturer/Supplier) (Street Address) (City, State) (Phone)

has furnished to \_\_\_\_\_  
(Name of Contractor) (Street Address) (City, State) (Phone)

the following Construction Materials for permanent use in the above referenced project:

Bid Item No.	Bid Item Description	Product Description (if only a portion of the Bid Item)	Quantity	Unit (LF, YD <sup>2</sup> , YD <sup>3</sup> , etc.)	

**Submit this form to VDOT at the time of delivery of any Construction Materials to the project. Supporting documentation to demonstrate compliance with Build America Buy America Act provisions (such as manufacturer/supplier certifications, etc.) shall be organized by Submittal Number and maintained by the contractor from the date of delivery until three years after project acceptance. (Note that documentation such as off-site test reports, etc., when also required for other material quality purposes, is still required at time of delivery.)**

### *Contractor's Statement of Certification*

**I hereby certify that the Construction Materials listed above and on any additional pages attached to this form were produced in the United States, and that all manufacturing processes required for the manufacture of the Construction Materials occurred in the United States, and that the Construction Materials meet all other requirements as set forth in the plans and specifications.**

By \_\_\_\_\_  
(Name of Prime Contractor's Project Superintendent, Typed or Printed)

Title \_\_\_\_\_

\_\_\_\_\_  
(Signature of Prime Contractor's Project Superintendent)

Date \_\_\_\_\_



**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)

**PREDETERMINED MINIMUM WAGE RATES**

"General Decision Number: VA20250088 01/03/2025

Superseded General Decision Number: VA20240088

State: Virginia

Construction Type: Highway

Counties: Buena Vista\*, Lexington\* and Rockbridge Counties in Virginia.

\*including the independent cities of Buena Vista and Lexington

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)(1).

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If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	Executive Order 14026 generally applies to the contract. The contractor must pay all covered workers at least \$17.75 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025.
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If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	Executive Order 13658 generally applies to the contract. The contractor must pay all covered workers at least \$13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all
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	hours spent performing on	
	that contract in 2025.	

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    Publication Date  
                                   0                    01/03/2025

SUVA2016-024 07/02/2018

	Rates	Fringes
CARPENTER, Includes Form Work....	\$ 17.73 **	1.48
CEMENT MASON/CONCRETE FINISHER...	\$ 19.35	0.00
IRONWORKER, REINFORCING.....	\$ 20.80	0.00
LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor.....	\$ 16.40 **	0.00
LABORER: Common or General.....	\$ 14.83 **	0.00
LABORER: Pipelayer.....	\$ 16.75 **	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 19.59	0.00
OPERATOR: Broom/Sweeper.....	\$ 12.25 **	0.23
OPERATOR: Bulldozer.....	\$ 19.36	0.00
OPERATOR: Crane.....	\$ 26.68	0.00
OPERATOR: Grader/Blade, Includes Finishing.....	\$ 26.13	0.00
OPERATOR: Loader.....	\$ 19.36	0.00
OPERATOR: Mechanic.....	\$ 19.13	0.00
OPERATOR: Milling Machine.....	\$ 21.13	0.00
OPERATOR: Paver (Asphalt,		

Aggregate, and Concrete).....	\$ 17.12 **	0.00
OPERATOR: Roller (Finishing)....	\$ 18.96	0.00
OPERATOR: Roller.....	\$ 18.11	0.00
OPERATOR: Asphalt Spreader and Distributor.....	\$ 18.90	0.00
TRAFFIC CONTROL: Flagger.....	\$ 11.82 **	0.00
TRUCK DRIVER : HEAVY 7CY & UNDER.....	\$ 16.69 **	0.00
TRUCK DRIVER: HEAVY OVER 7 CY.....	\$ 16.69 **	0.00
TRUCK DRIVER: Single & Multi Axle.....	\$ 18.47	0.00

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

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\*\* Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.75) or 13658 (\$13.30). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

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

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after

award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

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

#### Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate 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. The date, 07/01/2024 in the example, is the effective date of the most current negotiated rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

#### Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

#### Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by

computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the 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. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

#### State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

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#### WAGE DETERMINATION APPEALS PROCESS

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

- a) a survey underlying a wage determination
- b) an existing published wage determination
- c) an initial WHD letter setting forth a position on a wage determination matter
- d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to [davisbaconinfo@dol.gov](mailto:davisbaconinfo@dol.gov) or by mail to:

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

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail 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 an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail 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 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.

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END OF GENERAL DECISION"

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

The following Form **FHWA-1273** titled **REQUIRED CONTRACT PROVISIONS, FEDERAL-AID CONSTRUCTION CONTRACTS** shall apply to this contract:

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FHWA-1273 – Revised October 23, 2023

**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 ([40U.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](mailto: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](mailto: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 journeymen shall not be greater than permitted by the terms of the particular program.

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

**6. Subcontracts.** The contractor or subcontractor 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](#); or
- 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 working 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 though 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).

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

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

April 29, 2019

**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  
**USE OF DOMESTIC MATERIAL**

December 19, 2018

**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.

cn103-000100-00

**SECTION 103.02—AWARD OF CONTRACT** of the Specifications is replaced in its entirety with the following:

**103.02 – Award of Contract**

The Board, or the Commissioner as authorized under § 33.2-209 of the Code of Virginia, will award the Contract to the lowest responsive and responsible bidder without discrimination on the grounds of race, color, gender, or national origin, or other basis prohibited by law. In the event of a tie bid, the tie will be decided by lot.

The award date will not be later than midnight on the 60th day after the opening of bids. If the Board, or the Commissioner where authorized by law, has not awarded the Contract within this period due to any circumstances not attributable to the bidder, the bidder may withdraw his bid without penalty or prejudice unless the time limit is extended by mutual consent.

After approval for the award of contracts, the Department will provide written notice of award to the successful bidder and will post the Ballots on the Department's bidding webpage. The Ballot serves as public Notice of Award for a contract. The date of the Notice of Award is the "Approved" date appearing at the top of the Ballot that lists the Contract.

6-25-24 (SPCN)

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.

**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)

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

January 21, 2020

**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](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>.

VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION FOR  
DBE REQUIREMENTS

June 5, 2024

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

**Section 107.15 – Use of Small, Women-Owned, and Minority-Owned Businesses (SWaMs)** is replaced in its entirety with the following:

**Section 107.15 – Use of Disadvantaged Business Enterprises (DBEs)**

(a) **Disadvantaged Business Enterprise Program Requirements**

Bidders, the Contractor, and all subcontractors, suppliers, and contract sureties involved in the performance of work on this federal-aid contract shall comply with the terms and conditions of this Special Provision and the United States Department of Transportation (USDOT) DBE Program in Title 49, Part 26 of the Code of Federal Regulations, as amended, (USDOT DBE Program), which are incorporated by reference into this Special Provision. The Contractor shall physically include this same Special Provision in every subcontract that it makes or executes with a subcontractor or supplier for which it intends to claim DBE credit.

***Disadvantaged Business Enterprise (DBE)*** means a small business concern that is certified as such in accordance with this Special Provision, and includes the Contractor, subcontractors, suppliers, or manufacturers performing work, or furnishing materials, supplies, equipment, or services necessary for the Contract.

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 USDOT DBE Program and the Contract. 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 and its subcontractors and suppliers 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 USDOT DBE Program and the Contract 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, which may include, but is not limited to: (1) withholding monthly progress payments; (2) assessing sanctions; (3) assessing liquidated damages; and/or (4) disqualifying the contractor from future bidding.

All administrative remedies noted in this Special Provision will be imposed unless the Contractor exercises the right of appeal within the required timeframe(s) specified herein. Appeal requirements, processes, and procedures are stated herein. 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.

## (b) **DBE Prequalification and Certification**

To be eligible to perform work on this federal-aid contract firms must be prequalified in accordance with the requirements of Section 102.01 of the Specifications. To receive credit toward meeting the Contract DBE goal, firms must be certified as DBEs by the Virginia Department of Small Business and Supplier Diversity (DSBSD) or the Metropolitan Washington Airports Authority (MWAA) in accordance with the USDOT DBE Program and this Special Provision. Eligibility to receive credit also requires that DBEs identified as participating in the Contract to meet the goal are certified in a North American Industry Classification System (NAICS) code applicable to the specific types of work the DBE would perform. A directory listing of eligible certified DBEs and their assigned NAICS codes for the types of work they are certified to perform as DBEs can be obtained from the DSBSD [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:

[https://www.vdot.virginia.gov/media/vdotvirginiagov/doing-business/programs-for-businesses/dbe-program/VDOT\\_DB\\_E\\_Program\\_Plan.pdf](https://www.vdot.virginia.gov/media/vdotvirginiagov/doing-business/programs-for-businesses/dbe-program/VDOT_DB_E_Program_Plan.pdf)

## (d) **DBE Program-Related Certifications Made by Bidders and Contractors**

By submitting a bid, by signing this Contract, and by signing each subcontract with a subcontractor incorporating this Special Provision, the Contractor and subcontractors certify to each of the following DBE-related conditions and assurances:

1. That they have complied and will comply with the requirements of the USDOT DBE Program and the Contract in submitting the bid, that they shall comply fully with these requirements in the bidding, award, execution, performance, and administration of the Contract and subcontracts, and that failure to comply may result in disqualification or other legal sanctions.
2. That all reasonable steps were and will be taken to ensure that DBEs had and will have a full and fair opportunity to compete for and perform work on the Contract. Any agreements between a bidder and a DBE whereby the DBE promises not to provide quotations for performance of work to other bidders are prohibited.
3. That they 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 and performance of any subcontract.
4. That they made and shall make good faith efforts to seek out and consider DBEs as potential subcontractors to obtain DBE participation in the proposed contract at or above the goal for DBE participation established by VDOT by contacting DBEs to solicit their interest, capability, and prices in sufficient time to allow them to respond effectively; and, if necessary, they have submitted as a part of its bid true, accurate, complete, and detailed documentation of the good faith efforts it performed to meet the DBE goal.
5. That once awarded the Contract, the Contractor shall utilize the DBEs listed in Form C-111 to perform the work designated at or above the amount or percentage of the dollar value specified in the bidding documents, and shall not unilaterally terminate, substitute for, or replace any listed

DBE 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 Special Provision.

6. That once awarded the Contract, they 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 the USDOT DBE Program and this Special Provision. 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.
7. That once awarded the Contract, they shall comply fully with all regulatory and contractual requirements of the USDOT DBE Program and this Special Provision, and that each DBE 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.
8. That in the event a bond surety assumes responsibility for completion of work for any reason, including without limitation when the Department terminates 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 the USDOT DBE Program and this Special Provision.

Failure by the Contractor, DBE, any other subcontractor or supplier retained by the Contractor, or surety to comply with all requirements of the USDOT DBE Program and/or this Special Provision is a material breach of this Contract. The Department has the authority and discretion to determine the extent to which these 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, which may result in termination of the Contract or such other remedy as the Department deems appropriate, which may include, but is not limited to: (1) withholding monthly progress payments; (2) assessing sanctions; (3) assessing liquidated damages; and/or (4) disqualifying the Contractor from future bidding as non-responsible.

### (e) **DBE Requirements**

The Contract will only be awarded to a bidder and Contractor who makes a good faith effort to meet or exceed the DBE goal. After award of the Contract, the Contractor must comply with the requirements of this Special Provision and make a good faith effort to meet or exceed the DBE goal in the performance of the Work. DBE Forms can be obtained from the VDOT website at: <https://vdotforms.vdot.virginia.gov/>.

**Good faith efforts** means all necessary and reasonable steps that the bidder or Contractor takes to achieve the DBE goal or comply with the requirements of this Special Provision which, by their scope, intensity, and appropriateness to the objective, can reasonably be expected to obtain sufficient DBE participation, even if not fully successful.

The following requirements shall apply to the Contract for DBE compliance purposes.

1. **Contract Goal, Good Faith Efforts Specified:** Bidders and the Contractor shall evidence attainment of DBE participation equal to or greater than the DBE goal by submission of the forms specified below to the Department within the time required.
  - A. **During Bidding:** A bidder has made good faith efforts if the bidder does either of the following things:

- (1) The bidder documents that it has attained DBE participation equal to or greater than the DBE goal established for the project by submitting a 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 and Form C-48 must be received no later than 10:00 a.m. the next business day after the date and time stated in the Invitation for Bids for receipt of bids, or the bid will be rejected as non-responsive. These forms may be submitted electronically via Bid Express or by email to: [vdotcontracts@vdot.virginia.gov](mailto:vdotcontracts@vdot.virginia.gov).

- (2) If the bidder is unable to attain sufficient DBE participation to meet the DBE goal, the bidder must show the amount of DBE participation that it commits to attain in its Form C-111 submitted in accordance with subsection (A), above, then submit **Form C-49, DBE Good Faith Efforts Documentation**, to document its good faith efforts to meet the DBE goal. Form C-49 must be submitted within two (2) business days after the bid opening, or the bid will be rejected as non-responsive. The form may be submitted electronically via Bid Express or by email to: [vdotcontracts@vdot.virginia.gov](mailto:vdotcontracts@vdot.virginia.gov).

A Form C-49 shall also be required when, after review of the apparent lowest bid, VDOT determines the bidder failed to meet the DBE goal or other requirements. The form must be received by the State Contract Engineer within two (2) business days after official notification of such failure.

The bidder must attach additional pages to Form C-49, if necessary, in order to fully document specific good faith efforts made to obtain the DBE participation specified in the proposed contract work.

- B. **Post-Bid:** In addition, the apparent low bidder must submit within five (5) days after bid opening the following forms, properly executed, or the bid will be rejected as a matter of responsibility:

- (1) **Form C-112, Certification of Binding Agreement** providing confirmation from each DBE listed in the Form C-111 that it is participating in the Contract in the kind and amount of work designated. DBEs bidding as prime contractors are not required to submit Form C-112 unless they are utilizing other DBEs as subcontractors.
- (2) **Form C-110, DBE Regular Dealer/Distributor Affirmation** must be submitted when a DBE listed on Form C-111 is a regular dealer or distributor, as defined below to provide confirmation of the DBE's participation according to the requirements of this section. The Department will make a preliminary counting determination to assess the DBE's eligibility for 60 or 40 percent credit, respectively, of the cost of materials and supplies based on the DBE's demonstrated capacity and intent to perform as a regular dealer or distributor under the Contract. The Department's preliminary determination shall be made based on the DBE's written response to relevant questions and the DBE's affirmation that its subsequent performance of a commercially useful function will be consistent with the preliminary counting of such participation. Where the DBE supplier does not affirm that its participation will meet the specific requirements of either a regular dealer or distributor, the Department shall make adjustments in counting such participation toward the DBE goal. The bidder is responsible for verifying that the information provided by the DBE supplier is consistent with the counting of such participation toward the goal.

## 2. Good Faith Efforts Described

- A. The Department will determine if the bidder or Contractor made good faith efforts by considering the quality, quantity, and intensity of the different kinds of efforts that the bidder or Contractor has made and, if given all relevant circumstances, the efforts were those that

one could reasonably expect a bidder or a contractor to take if they were actively and aggressively trying to meet the DBE goal. 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 goal.

- B. The following list contains examples of good faith efforts that may be taken 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:
- (1) 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.
  - (2) 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;
  - (3) 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;
  - (4) Negotiating for participation in good faith with interested DBEs;
    - i. 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;
    - ii. 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 bidder can show the price difference to be excessive, unreasonable, or greater than would normally be expected by industry standards;

- (5) 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 versus 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;
  - (6) Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by VDOT or by the bidder or Contractor;
  - (7) Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services subject to the restrictions contained in this Special Provision;
  - (8) Effectively using the services of appropriate personnel from VDOT and from DSBSD; 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.
- C. In addition, the Department will scrutinize the bidder's documented efforts, and will review the efforts of other bidders in meeting the DBE goal. For example, if the apparent low bidder fails to meet the goal, but other bidders meet it, a question may be raised as to whether, with additional efforts, the apparent low bidder could have met the goal. Alternatively, if the apparent low bidder fails to meet the goal but meets or exceeds the average DBE participation obtained by other bidders, the Department may view this, in conjunction with other factors, as evidence of the apparent successful bidder having made good faith efforts. The Department will also require the bidder to submit copies of each DBE and non-DBE subcontractor quote submitted to the bidder when a non-DBE subcontractor was selected over a DBE for work on the contract to review whether DBE prices were substantially higher; and contact the DBEs listed on a contractor's solicitation to inquire as to whether they were contacted by the bidder. Pro forma mailings to DBEs requesting bids are not alone sufficient to satisfy good faith efforts.
- D. A bidder's promise to use DBEs after contract award is not considered to be responsive to the contract solicitation or to constitute good faith efforts.
- 3. Bid Rejection:** The failure of a bidder to submit the required documentation within the timeframes in accordance with this Special Provision will be sufficient cause for rejection of that bidder's bid as non-responsive or non-responsible, as applicable. In such event, the Department may award the contract to the next lowest bidder, cancel the award and re- advertise the proposed contract at a later date, or proceed otherwise as determined by Department. The required forms and instructions for submitting them can be obtained from the VDOT website at: <https://vdotforms.vdot.virginia.gov/>.

**4. Administrative Reconsideration of Good Faith Efforts**

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 this Special Provision, that bidder upon notification of the Department's initial determination will be offered the opportunity for administrative reconsideration before VDOT rejects that bid and awards the contract to the next lowest bidder. The bidder shall submit such request for reconsideration in writing to the State Contract Engineer within five (5) business days of receipt of notification by the Department and shall be given the opportunity to provide written documentation or argument concerning the issue of whether the bidder met the DBE goal or made adequate good faith efforts to do so to the Administrative Reconsideration Panel (Panel), either in person or by telephone or video

conference as the Panel chooses. The Panel will be made up of VDOT Division Administrators or their designees, none of whom took part in the initial determination that the bidder failed to meet the goal or make adequate good faith efforts to do so. After reconsideration, the Panel 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 Panel determines the bidder 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 after reconsideration, the Panel determines sufficient documented evidence was 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 bidder's actual commitment shown in the bidder's Form C-111 submitted at the time of its bid. 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. The Contractor is still encouraged to seek additional DBE participation during the life of the Contract.

- 5. Contract Changes:** During construction there may be changes in the Work necessary for the satisfactory completion of the Project. The DBE Contract goal applicable to the Contract includes change orders that have more than a minimal impact on the overall Contract amount or the expected DBE participation, regardless of whether the Department or the Contractor initiates the change order.

**A. Increases in Contract Amount**

To meet the DBE Contract goal as applied to a Change Order increasing the overall Contract amount, the Contractor must make good faith efforts to obtain additional DBE participation to meet the DBE Goal on the increase in the overall Contract amount. The Contractor may meet this obligation either by obtaining additional work from DBE subcontractors or suppliers or by documenting good faith efforts to do so.

For example, if a project has a 10% DBE participation goal, and during the project the Department issues a change order that will add \$500,000 to the overall Contract amount, the 10% goal applies to this additional \$500,000. To meet the DBE Contract goal as applied to the Change Order, the Contractor must make good faith efforts to obtain an additional \$50,000 in DBE participation.

If the Contractor obtains additional DBE participation from existing or additional DBEs sufficient to meet the increased DBE Contract goal, the Contractor shall submit a revised Form C-111 exhibiting the DBE participation it commits to attain. If after making good faith efforts the Contractor is unable to obtain additional DBE participation, it shall document its good faith efforts by submitting a revised Form C-111 and Form C-49. If the Department determines that these Forms demonstrate that the Contractor made reasonable good faith efforts, the Department will reduce the DBE Goal to the Contractor's actual commitment shown in the revised Form C-111. The Contractor is still encouraged to seek additional DBE participation during the life of the Contract.

The Contractor may notify the Department if it believes that a change order has such a minimal impact on the final net Contract amount or the expected DBE participation that it would not be sensible to apply the goal to the Change Order. The Department will contact the FHWA for guidance on whether it is necessary to alter DBE requirements affecting the Contract.

**B. Decreases in Amount of DBE Work**

If changes in the Work eliminate or decrease the amount of work designated to be performed by DBEs, the Contractor must follow the procedures for Termination of DBE, and must make good faith efforts to meet the Contract DBE goal by finding additional work for DBEs to perform or finding additional DBEs to perform work under the Contract to the extent needed to meet the Contract DBE goal.

## (f) **Compliance with DBE Requirements**

### 1. **Contractor Compliance**

The District Civil Rights Office (DCRO) will monitor progress being made toward meeting the DBE goal based on Forms C-63 that the Contractor submits during the designated quarterly reporting period.

If the Contractor fails to conform to the schedule of DBE participation as shown on the progress schedule, or if at any point 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 actions required when a DBE is unwilling or unable to perform, the Contractor may be disqualified from bidding as provided in the section on **Disqualification of Contractor** of this Special Provision (i) for a period up to ninety (90) days, (ii) until such time as conformance with the schedule of DBE participation is achieved, or (iii) until the Contractor has taken the required actions when a DBE is unwilling or unable to perform; whichever occurs last. Disqualification may be avoided if either of the following occurs: (1) the DBE is unable or unwilling to complete their portion of the work, and the Contractor shows reasonable good faith effort to achieve the DBE goal otherwise; or (2) the Department has eliminated or delayed work, or there have been quantitative underruns in work, which the Contractor as shown on the progress schedule had planned to sublet to a DBE firm.

2. **DBE Non-Performance:** If a DBE, through no fault of the Contractor, is unable or unwilling to fulfill their agreement with the Contractor, the Contractor shall immediately notify VDOT in writing and provide all relevant facts. If a Contractor intends to terminate, relieve a DBE subcontractor of the responsibility to perform work under their subcontract, substitute the certified DBE, or otherwise change the scope of work of the DBE, the Contractor is required to comply with the **Termination of DBE** section of this Special Provision.
3. **Project Completion:** If the Contractor fails upon completion of the project to meet the DBE goal or otherwise comply with the requirements of this Special Provision, the Contractor may be disqualified as provided in the section on **Disqualification of Contractor** of this Special Provision for a period of ninety (90) days. Disqualification may be avoided if the Contractor submits documentation to the State Contract Engineer substantiating that (1) the failure was due solely to quantitative underrun(s), elimination of items subcontracted to DBEs, or circumstances beyond their control; and (2) all feasible means have been used to obtain the required participation. The State Contract Engineer upon evaluation of such documentation shall make a determination whether or not the Contractor has met the requirements of the Contract in accordance with this Special Provision.

## (g) **Counting DBE Participation Toward Contract Goal**

A DBE's participation in the Contract will count toward meeting the Contract goal in accordance with the following.

1. **DBE Participation:** When a DBE participates in the Contract, only the value of the work, goods, or services that are performed or provided by the DBE will count toward the Contract DBE goal as provided below:

- A. Count the entire amount of that portion of the construction contract (or other contract not covered by paragraph (B) below) that is performed by the DBE's own forces, including the cost of the work, supplies, materials, equipment, or services performed or provided by the DBE and equipment leased by the DBE for the work of the contract, but excluding supplies and equipment a DBE subcontractor purchases or leases from the prime Contractor or its affiliates.
  - B. Count the entire amount of fees or commissions charged by a DBE 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 Contract toward DBE goals, provided that the fee is reasonable and not excessive as compared with fees customarily allowed for similar services.
  - C. When a DBE subcontracts part of the work of its contract to another firm, the value of that subcontracted work may be counted toward the DBE goal only if the DBE's subcontractor is itself a certified DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward the DBE goal.
  - D. **Commercially Useful Function (CUF):** The Contractor may count expenditures to a DBE toward the DBE goal only if the DBE performs a Commercially Useful Function (CUF) on that contract as provided in the section on **Performing a Commercially Useful Function (CUF)** of this Special Provision.
  - E. **Payment Required:** A DBE subcontractor's participation will not count toward the Contractor's final compliance with its DBE obligations on the Contract until the Contractor has paid the DBE the amount being counted.
  - F. **Joint Ventures:** When a DBE performs work as a member of 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 goal.
  - G. Cost-plus subcontracts will not be considered to be in accordance with normal industry practice and will not normally be allowed for DBE credit.
2. **Suppliers:** Expenditures with DBEs for materials or supplies will be counted toward DBE goals as follows:
- A. **DBE Manufacturers:** the Contractor may count one hundred (100) percent of the cost of the materials or supplies obtained from a DBE manufacturer. For the purposes of this Special Provision, a manufacturer is a firm that owns (or leases) and operates 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. Manufacturing includes blending or modifying raw materials or assembling components to meet contract specifications. When a DBE makes minor modifications to the materials, supplies, articles, or equipment, the DBE is not a manufacturer. Minor modifications are additional changes to a manufactured product that are small in scope and add minimal value to the final product.
  - B. **DBE Regular Dealers**

- (1) The Contractor may count 60 percent of the cost of materials or supplies (including transportation costs) purchased from a DBE regular dealer. For the purposes of this Special Provision, a regular dealer is defined as a firm that owns (or leases) and operates a store, warehouse, or other establishment in which the materials, supplies, articles, or equipment of the general character described by the specifications and required and used under the Contract are bought, kept in sufficient quantities, and regularly sold or leased to the public in the usual course of business. Items kept and regularly sold by the DBE are of the “general character” when they share the same material characteristics and application as the items specified by the Contract.
- (2) The Department will determine if a DBE is a regular dealer as described in this section, when the DBE over a reasonable period of time, keeps sufficient quantities and regularly sells the items in question. The Department will also ensure that a regular dealer of bulk items as described in this section owns or leases and operates the distribution equipment for the product it sells. The Department will determine whether each DBE supplier has the demonstrated capacity to perform a commercially useful function (CUF) as a regular dealer prior to its participation. The Department’s system will be maintained and used to identify all DBE suppliers with the capacity to be eligible for 60 percent credit, contingent upon performance of a CUF.
  - i. To be a regular dealer, the DBE firm shall be an established business that engages, as its principal business and under its own name, in the purchase and sale or lease of the products or equipment in question. A DBE supplier performs a CUF as a regular dealer and receives credit for 60 percent of the cost of materials or supplies (including transportation cost) when: at least 51 percent of the items under a purchase order or subcontract are provided from the DBE’s inventory; and when necessary, any of the other items under such purchase order or subcontract that are delivered from and by other sources are of the general character of those items provided from the DBE’s inventory.
  - ii. A DBE may be a regular dealer in such bulk items as petroleum products, steel, concrete or concrete products, 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 used to deliver the products; provided further that the DBE is certified with an appropriate North American Industry Classification System (NAICS) code for supply of such bulk items. Any supplementation of a regular dealer’s own distribution equipment must be by a long-term operating lease and not on an *ad hoc* or contract-by-contract basis to be eligible for credit to meet the DBE contract goal.
  - iii. A DBE supplier of items that are not typically stocked due to their unique characteristics (e.g. limited shelf life or items ordered to specification) should be considered in the same manner as a regular dealer of bulk items as described in this section. If, however, the DBE supplier of these items does not own or lease distribution equipment, as described above, it is not a regular dealer.
  - iv. Packagers, brokers, manufacturers’ representatives, or other persons who arrange, facilitate, or expedite transactions are not regular dealers within the meaning of this section.
- (3) 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.

- C. **DBE Distributors:** If materials or supplies are purchased from a DBE distributor that neither maintains sufficient inventory nor uses its own distribution equipment for the products in question, the Contractor may count forty (40) percent of the cost of the materials or supplies (including transportation costs). A DBE distributor is an established business that engages in the regular sale or lease of the items specified by the Contract. A DBE distributor assumes responsibility for the items it purchases once they leave the point of origin (e.g., a manufacturer's facility), making it liable for any loss or damage not covered by the carrier's insurance. A DBE distributor performs a CUF when it demonstrates ownership of the items in question and assumes all risk for loss or damage during transportation, evidenced by the terms of the purchase order or a bill of lading (BOL) from a third party, indicating Free on Board (FOB) at the point of origin or similar terms that transfer responsibility of the items in question to the DBE distributor. If these conditions are met, the Contractor may receive 40 percent credit for items drop-shipped by a DBE firm. Terms that transfer liability to the distributor at the delivery destination (e.g., FOB destination), or deliveries made or arranged by the manufacturer or another seller do not satisfy this requirement.
  - D. **DBE Truckers or Haulers:** 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 trucker or hauler is not the manufacturer of or a regular dealer in those materials and supplies. The DBE trucker or hauler 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 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 trucker or hauler will meet the criteria for performing a CUF on the project. See section on **Performing a Commercially Useful Function (CUF); Factors Used to Determine if a DBE Trucking Firm is Performing a CUF.**
  - E. **DBE Brokers:** If materials or supplies are purchased from a DBE who is not a manufacturer, a regular dealer, nor a distributor, as defined above, the Contractor may count the entire amount of fees or commissions charged that the Department deems to be reasonable, including transportation charges for the delivery of materials or supplies. The Contractor may not count any portion of the cost of the materials and supplies toward DBE goals. For the purposes of this Special Provision, a broker is a packager, manufacturer's representative, or other person or firm who arranges, facilitates, or expedites delivery of materials, supplies, and equipment, or regularly arranges for, expedites, or facilitates 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.
  - F. The Department will determine the amount of credit awarded to a DBE for the provision of materials and supplies (e.g., whether a firm is acting as a regular dealer, distributor, or broker) on a contract-by-contract basis.
3. **DBE Decertification:** When the DSBSD or MWAA (referred to in this section individually or together as certifier) decertifies a DBE its participation will be counted toward the DBE goal as follows:
- A. When the Contractor has made a commitment to use a decertified subcontractor, but a subcontract has not been executed, the decertified subcontractor's work does not count toward the DBE goal. The Contractor must meet the DBE goal with an eligible DBE to the extent needed to meet the DBE goal, or must demonstrate that it has made good faith efforts to do so.

- B. When the Contractor has executed a subcontract before the certifier notified the subcontractor of its decertification, the Contractor may continue to use the subcontractor and may continue to receive credit toward the DBE goal for the subcontractor's work. In such case, however, the Contractor may not extend or add work to the subcontract after the subcontractor was notified of its decertification without the Department's prior written consent.
- C. When the Department has awarded a contract to a DBE prime Contractor, but the Contract has not been executed before decertification, the decertified Contractor's work does not count toward the DBE goal. The Contractor must meet the DBE goal with an eligible DBE to the extent needed to meet the DBE goal or must demonstrate that it has made good faith efforts to do so.
- D. When VDOT has executed a prime contract with a DBE firm that is later decertified, the portion of the decertified Contractor's performance of the Contract remaining after the certifier issued the notice of decertification may continue to count toward satisfying the DBE goal.
- E. The following exceptions apply to this section on Decertification:
  - (1) When a certifier decertifies a DBE solely because it exceeds the business size standard during the performance of the Contract, the Department will continue to count the portion of the decertified DBE's performance of the Contract remaining after the firm received the notice of its decertification toward the DBE goal.
  - (2) When the DBE's decertification is because it was acquired by or merged with a non-DBE, the Department will not continue to count the portion of the decertified DBE's performance on the Contract remaining after the certifier decertified the DBE toward the Contract goal, even if the Contractor has executed a subcontract with the DBE or the Department has executed a prime contract with the DBE that was later decertified. If eliminating the credit of the decertified DBE firm will affect the Contractor's ability to meet the DBE goal, the Contractor must subcontract to an eligible DBE to the extent needed to meet the DBE goal, or must demonstrate that it has made a good faith effort to do so.

## (h) **Performing a Commercially Useful Function (CUF)**

No credit toward the DBE goal will be allowed for payments or expenditures to a DBE if that DBE does not perform a CUF on the 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 DBE'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 where applicable, and paying for those materials and supplies itself. A determination as to whether the DBE is performing a CUF will be based on the amount of work subcontracted, industry practices, whether the amount the DBE firm is to be paid is commensurate with the work the DBE actually performs and the DBE credit claimed for the DBE's performance, and other relevant factors.

1. **Monitoring CUF Performance:** It shall be the Contractor's responsibility to ensure that all DBEs selected for subcontract work on the Contract, for which the Contractor seeks to claim credit toward the DBE goal, perform a CUF. Further, the Contractor is responsible for and shall ensure that each DBE 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.

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.

2. **DBEs Must Perform a Useful and Necessary Role in Contract Completion:** A DBE does not perform a CUF 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. In determining whether a DBE is such an extra participant, the Department will examine similar transactions, particularly those in which DBEs do not participate.
3. **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. In such event, the DBE may present evidence to rebut the presumption. The Department may determine that the DBE is performing a CUF given the type of work involved and normal industry practices. If the DBE does not rebut the presumption, no DBE credit will be given for the work.
4. **Final Determination On Whether a CUF Is Performed:** The Department has the final authority to determine whether a DBE has performed a CUF on the Contract. To determine whether a DBE is performing or has performed a CUF, VDOT will evaluate the amount of work subcontracted by that DBE 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, unless the independent validity and need for such an arrangement and work is demonstrated.
5. **Factors Used to determine if a DBE Trucking Firm is performing a CUF**
  - A. To perform a CUF the DBE trucking firm must be responsible for the management and supervision of the entire trucking operation for which the DBE is responsible by subcontract on the Contract. There cannot be a contrived arrangement for the purpose of meeting the DBE goal, including, but not limited to, any arrangement that would not customarily and legally exist under regular construction project subcontracting practices;
  - 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 credit for the total value of the transportation services it provides on the Contract using trucks the DBE owns, insures, and operates using drivers that the DBE employs;
  - D. The DBE may lease trucks from another DBE firm, including from an owner- operator who is certified as a DBE. The DBE who leases trucks from another DBE receives credit for the total value of the transportation services the lessee DBE firm provides on the Contract;
  - E. The DBE may also lease trucks from a non-DBE firm, including from 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 leased trucks equipped with drivers, not to exceed the value of transportation services on the Contract provided by DBE-owned trucks

or leased trucks with DBE employee drivers. For additional participation by non-DBE owned trucks equipped with drivers, the DBE receives credit only for the fee or commission it receives as a result of the lease arrangement, and only if the Department provides written consent in advance.

**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 equipped with drivers from non-DBE Firm Z.

	<b>Source of Trucks</b>	<b>Value of Transp. Services (For Illustrative Purposes Only)</b>
<b>Firm X</b>		
Truck 1	Owned by DBE	\$100 per day
Truck 2	Owned by DBE	\$100 per day
<b>Firm Y</b>		
Truck 1	Leased from DBE	\$110 per day
Truck 2	Leased from DBE	\$110 per day
<b>Firm Z</b>		
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.

\*\* Note: 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. The DBE may lease trucks without drivers from a non-DBE truck leasing company. If the DBE leases trucks from a non-DBE truck leasing company and uses its own employees as drivers, it is entitled to credit for the total value of these hauling services.

Example: DBE Firm X uses two of its own trucks on a contract. It leases two additional trucks from non-DBE Firm Z. Firm X uses its own employees to drive the trucks leased from Firm Z. DBE credit would be awarded for the total value of the transportation services provided by all four trucks.

- G. For purposes of this section, the lease must indicate that the DBE 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 that has leased the truck at all times during the life of the lease.

## (i) **Verification of DBE Participation**

1. **Subcontracts:** Within fourteen (14) 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.
2. **Form C-63:** The Contractor shall also furnish, and shall require each subcontractor to furnish, information relative to all DBE involvement on the project for each quarter or at another time interval determined by VDOT and communicated to the Contractor 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 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 DSBSD'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: <https://vdotforms.vdot.virginia.gov/>.
3. **Project Schedule Narrative:** The Contractor shall submit to the Engineer with a copy to the DCRO, a project schedule narrative with each progress schedule submission as required by Section 108.03 of the Specifications or other such specific contract scheduling specification or VDOT-requested updates. The Contractor shall include a log 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.

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. 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 shown on the latest Form C-111 as compared with the appropriate Form C-63.

4. **Revised Form C-111:** 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 section on **Good Faith Efforts Described** 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 correctly complete and submit any of the required documentation required by this Special 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. Where such failures to provide required submittals or documentation are repeated the Department may disqualify the Contractor, the Contractor's members in the case of a joint venture, and any of the Contractor's affiliates, from bidding as a prime Contractor, or participating as a subcontractor on VDOT projects until such submissions are received in accordance with the section on **Disqualification of Contractor** of this Special Provision.

#### (j) **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. The Department will use this certification and other information available to determine applicable DBE credit allowed to date by the Department 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 Contractor and appropriate DBEs, will accompany the form, indicating the amount including retainage, if any, that remains to be paid to the DBEs.

#### (k) **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 after 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 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.

## (I) Prompt Payment Requirements

The Contractor shall promptly pay DBEs in accordance with the requirements of the USDOT DBE Program, § 2.2-4354 of the Code of Virginia, and the Contract, including but not limited to, Sections 107.01, 109.08, 109.09, and 109.10 of the Specifications, and the following.

1. Within seven (7) days after the Contractor's receipt of amounts paid by the Department for work performed by the DBE, the Contractor shall either pay the DBE for its share of the total payment received attributable to the work the DBE performed; or shall notify the Department and the DBE in writing of the Contractor's intention to withhold all or a part of the DBE's payment along with the reasons for nonpayment.
2. In the event that the Contractor has not received payment from the Department for work performed by a DBE under the Contract, the Contractor shall be liable for the entire amount owed to such DBE and shall pay such DBE within sixty (60) days of the receipt of an invoice following satisfactory completion of the work for which the DBE has invoiced. The Contractor shall not be liable for amounts otherwise reducible due to the DBE's noncompliance with the terms of the Contract. However, in the event that the Contractor withholds all or a part of the amount invoiced by the DBE under the terms of the Contract, the Contractor shall notify the DBE within fifty (50) days of the receipt of such invoice, in writing, of its intention to withhold all or a part of the DBE's payment with the reason for nonpayment, specifically identifying the contractual noncompliance, the dollar amount being withheld, and the lower-tier subcontractor (if any) responsible for the contractual noncompliance. Payment by the Department shall not be a condition precedent to the Contractor's payment to any DBE, regardless of the receipt of payment for amounts owed to the Contractor. Any provision in a subcontract to the contrary shall be unenforceable.
3. For the purposes of this Special Provision:
  - A. Payment of the DBE's portion of the work shall mean the Contractor has issued payment in full, less agreed upon retainage, if any, to the DBE for that portion of the DBE's work that VDOT paid to the Contractor on the monthly progress estimate.
  - B. A DBE'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 the Department.
  - C. When the Department has made partial acceptance of a portion of the Contract, the work of any DBE covered by that partial acceptance is deemed to be satisfactorily completed.
4. **Retainage:** Nothing contained herein shall preclude the Contractor from withholding retainage or withholding payment to the DBE 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 DBE. The Contractor shall make prompt and full payment of any retainage held by the Contractor within 30 days after the DBE's work is satisfactorily completed.
5. If the Contractor fails to make payment for the DBE's portion of the work within the time frame specified herein, the DBE shall notify the Department and the Contractor's bonding company in writing. Upon such written notice, the Contractor's bonding company and the Department will investigate the cause for nonpayment. Barring mitigating circumstances that would make the DBE ineligible for payment, the Contractor's bonding company shall be responsible for insuring payment to the DBE in accordance with the requirements of the Contract and the Contractor's payment bond.
6. The Contractor agrees to assume these prompt payment obligations, and to bind the Contractor's subcontractors contractually to these obligations.

## (m) Termination of DBE

### 1. Requirements for Termination of DBE

- A. The Contractor must utilize the specific DBEs listed on its Form C-111 to perform the work and supply the materials for which each is listed. The Contractor is prohibited from terminating a DBE or any portion of a DBE's work without the prior written consent of the Department, unless the Department is the cause of the termination or reduction in work. A termination includes any reduction or underrun in work listed for a DBE not caused by a material change to the Contract by the Department. The prohibition applies to instances that include, but are not limited to, when the Contractor seeks to perform work originally designated for a DBE with its own forces or those of an affiliate, a non-DBE, or another DBE.

Unless the Department provides consent in advance for the Contractor to use a different DBE, the Contractor shall not be entitled to any payment for work or material unless it is performed or supplied by the listed DBE.

- B. The Department will consent only if the Department determines, for reasons stated in its response to the Contractor's request, that the Contractor has good cause to terminate the listed DBE or eliminate any portion of the DBE's work.
- C. Good cause does not exist if the Contractor seeks to terminate a DBE or eliminate any portion of its work that the Contractor relied upon to obtain the Contract so that the Contractor can self-perform the work for which the DBE contractor was engaged, or so that the Contractor can substitute another DBE or non-DBE subcontractor after Contract award. Good cause includes the following circumstances:
- (1) The listed DBE subcontractor fails or refuses to execute a written subcontract;
  - (2) The listed DBE subcontractor fails or refuses to perform the work of its subcontract in a way consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE subcontractor to perform its work on the subcontract results from the bad faith or discriminatory action of the prime contractor;
  - (3) The listed DBE subcontractor fails or refuses to meet the prime contractor's reasonable, nondiscriminatory bond requirements;
  - (4) The listed DBE subcontractor becomes bankrupt, insolvent, or exhibits credit unworthiness;
  - (5) The listed DBE subcontractor is ineligible to work on public works projects because of suspension and debarment or disqualification proceedings pursuant to applicable state or federal law;
  - (6) VDOT determines that listed DBE subcontractor is not a responsible contractor;
  - (7) The listed DBE subcontractor voluntarily withdraws from the project and provides VDOT with written notice of its withdrawal;
  - (8) The listed DBE subcontractor is ineligible to receive DBE credit for the type of work required;
  - (9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the Contract;
  - (10) Other documented good cause.
- D. Prior to transmitting a request to terminate a DBE subcontractor to the Department, the Contractor must give notice in writing to the DBE subcontractor, with a concurrent copy to the

DCRO, of its intent to request termination and the reason for the proposed termination request. The written notice must give the DBE five (5) days to respond, advising the DCRO and the Contractor of the reasons, if any, why the DBE objects to the proposed termination of its subcontract and why the Department should not approve the prime Contractor's request. The Department may authorize a response period shorter than five (5) days if required for public safety. 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.

E. 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.

## **2. Substitution of DBE**

When the Contractor terminates a DBE or any portion of the DBE's work, or if work committed to a DBE is reduced due to overestimations made prior to award, the Contractor shall use good faith efforts to include additional DBE participation to the extent needed to meet the DBE goal. The Contractor shall document its good faith efforts. If the Department requests the Contractor's good faith documentation, the Contractor shall submit the documentation within seven (7) days, which may be extended for an additional seven (7) days at the Contractor's request.

When a DBE substitution is necessary, the Contractor shall submit a revised 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. In addition, the Contractor shall submit a revised Form C-48, a Form C-112, and a copy of the subcontract for the requested substitute DBE in accordance with this Special Provision. Should the Contractor fail to submit the documentation and information as required any work performed by the substitute DBE will not be counted toward the Contract goal.

Should the Contractor be unable to find another DBE to perform at least the same amount of work under the Contract as the terminated DBE, the Department will review the quality, thoroughness, and intensity of the Contractor's good faith efforts. Efforts that are viewed by the

Department 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 section on **Good Faith Efforts Described** of this Special Provision. The Department will provide a written determination to the Contractor stating whether or not good faith efforts have been demonstrated.

## (n) **Disqualification of Contractor**

Contractors may be disqualified from bidding for failure to comply with the requirements of this Special Provision. Disqualification means the suspension or revocation of the Contractor's prequalification privileges. The disqualification of the Contractor will also result in the disqualification of each member of the joint venture when the Contractor is a joint venture, and disqualification of any affiliate of the Contractor.

Prior to disqualification as provided herein, the Contractor may submit documentation to the State Contract Engineer to substantiate that the failure to meet the DBE requirement 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 Contract Engineer upon evaluation of such documentation shall make a determination whether or not the Contractor has met the requirements of the Contract. Prior to the issuance of a written determination of disqualification, the State Contract Engineer shall (i) notify the Contractor in writing of the results of the evaluation, (ii) disclose the factual support for the determination, and (iii) allow the Contractor an opportunity to inspect any documents that relate to the determination, if so requested by the Contractor within five (5) business days after receipt of the notice.

Within ten (10) business days after receipt of the notice, the Contractor may submit rebuttal information challenging the evaluation. The State Contract Engineer shall issue the written determination of disqualification or ineligibility based on all information in the possession of the Department, including any rebuttal information, within five (5) business days of the date the State Contract Engineer received such rebuttal information.

If the State Contract Engineer's evaluation reveals that the Contractor met the requirements of the Contract, the State Contract Engineer shall cancel the proposed disqualification action. If the State Contract Engineer's evaluation reveals that the Contractor should be disqualified from bidding, the State Contract Engineer shall so notify the Contractor. The decision of the State Contract Engineer to disqualify the Contractor shall state the basis for the determination, which shall be final unless the Contractor appeals the decision within ten (10) calendar days after receipt of the decision by instituting a legal action as provided in Va. Code § [2.2-4364](#).

If the decision is made to disqualify the Contractor as described herein, the disqualification period will begin upon the Contractor's failure to institute a legal action to appeal the decision within the designated time frame, or upon a court's decision upholding or affirming the disqualification decision, as applicable.

As used in this Special Provision, "all feasible means" refers to reasonable good faith efforts to obtain sufficient DBE participation to meet the DBE goal in accordance with the section on **Good Faith Efforts Described** of this Special Provision.

(o) **Criminal or Fraudulent Conduct**

1. **Criminal Conduct:** 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.
2. **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 49 CFR Part 31.

VIRGINIA DEPARTMENT OF TRANSPORTATION  
SPECIAL PROVISION FOR  
**BUILD AMERICA, BUY AMERICA ACT REQUIREMENTS FOR CONSTRUCTION MATERIALS**

June 8, 2023

**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-76A 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**

October 12, 2023

**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 and fully comply with all such applicable provisions, including, but not limited to, the following.

1.0 Federal Requirements

The Contractor and subcontractors must comply with such of the regulations in 29 C.F.R. Parts 1, 3, and 5 as may be applicable to the Contract. These requirements are considered to be effective by operation of law, whether or not they are incorporated into the Contract, as set forth 29 C.F.R. § 5.5(e).

1.1 Wage Determinations

The U.S. Department of Labor (USDOL) publishes general wage determinations applicable to specified areas on the USDOL-approved website. Wage determinations contain, among other information, a list of wage and fringe benefit rates determined to be prevailing for various classifications of laborers or mechanics for specified type(s) of construction in a given area.

The applicable wage determinations are included in the Contract. These wage determinations apply for the duration of the Contract, except as specified below.

If for any reason it is determined post-award that a wage determination and/or the correct wage determination was omitted from Contract, the omitted wage determination will be incorporated into the Contract and effective by operation of law, retroactive to the award date of the Contract.

USDOL may periodically issue revisions of the wage determinations to reflect current prevailing wage rates. Revisions to wage determinations are effective with respect to the solicitation and Contract if issued at least 10 calendar days before bid opening. If issued less than 10 calendar days before bid opening, revisions are effective to the solicitation and Contract unless the Department finds that there is not a reasonable time still available before bid opening to notify bidders of the revision.

If the Contract is not awarded within 90 days after bid opening, any revised wage determination issued prior to award is effective to the Contract unless the Department obtains an extension of the original wage determination from the Administrator of the USDOL Wage and Hour Division.

1.2 Change Orders

The wage determinations incorporated into the Contract at Contract execution apply for the duration of the Contract, subject to the following exceptions. When the Contract is changed to include additional, substantial construction, alteration, and/or repair work not within the scope of work of the original Contract, or to require the Contractor to perform work for an additional time period not originally obligated, including where an option to extend the term of a contract is exercised, the most recent revision of any applicable wage determination(s) published at the time the change order is issued or the option is exercised are incorporated in and applicable to the change order work. The Contractor and their subcontractors must comply with the revised wage determinations when pricing and performing the change order work.

The requirement to incorporate revised wage determinations does not apply where (i) the Contract is not changed as described in the preceding paragraph, (ii) the Contractor is simply given additional time to complete the original Contract work, or (iii) where the additional construction, alteration, and/or repair work in the change order is already within the scope of the Contract.

### 1.3 Certified Payrolls

Each Contractor or subcontractor engaged in the construction, prosecution, completion, or repair work on the Project each week must submit certified payrolls in accordance with the records and certified payrolls requirements of Form FHWA 1273, under section IV(3) - Records and certified payrolls (29 CFR 5.5), included in the Contract.

Each certified payroll required under this section must be delivered by the Contractor or subcontractor, within 7 days after the regular payment date of the payroll period in accordance with the Special Provision for Electronic Submission of Payrolls and DBE Subcontractor Payment for Federally Funded Projects (**SP107-000120-00**).

Each Contractor or subcontractor must preserve all regular payroll records for all laborers and mechanics working at the site of the work for a period of 6 years after all the work on the Contract is completed in accordance with Form FHWA 1273, section IV(3) - Records and certified payrolls (29 CFR 5.5), included in the Contract, and section 2.4, below.

### 1.4 Conformance

- A. Any class of laborers or mechanics, including helpers, which is not listed in the applicable wage determination, and which is to be employed under the Contract, must 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:
  - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (2) The classification is used in the area by the construction industry; and
  - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- B. The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- C. If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Engineer 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 Engineer by email to

*DBAconformance@dol.gov*. The Administrator of the USDOL Wage and Hour Division, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Engineer or will notify the Engineer within the 30–day period that additional time is necessary.

- D. In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Engineer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Engineer 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 of the USDOL Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Engineer or will notify the Engineer within the 30–day period that additional time is necessary.
- E. The Engineer must promptly notify the Contractor of the action taken by the USDOL Wage and Hour Division under paragraphs (C) and (D) of this section. The Contractor must furnish a written copy of the Administrator’s determination to each affected worker, or must be post it as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph (C) or (D) 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.

## 2.0 Virginia Requirements

- 2.1 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.
- 2.2 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](http://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](mailto: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.
- 2.3 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](http://www.doli.virginia.gov/wp-content/uploads/2021/04/PW_Posting_Compliance_Form.pdf). The form may be emailed

to [prevailingwage@doli.virginia.gov](mailto: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.

- 2.4 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 Virginia 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.
- 2.5 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  
SPECIAL PROVISION FOR  
**PREVAILING WAGE RATES FOR RENEWABLE ON CALL CONTRACTS**

October 12, 2023

**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:

- (b) **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, including, but not limited to, the following.

1.0 Federal Requirements

The Contractor and subcontractors must comply with such of the regulations in 29 C.F.R. Parts 1, 3, and 5 as may be applicable to the Contract. These requirements are considered to be effective by operation of law, whether or not they are incorporated into the Contract, as set forth 29 C.F.R. § 5.5(e).

1.1 Wage Determinations

The U.S. Department of Labor (USDOL) publishes general wage determinations applicable to specified areas on the USDOL-approved website. Wage determinations contain, among other information, a list of wage and fringe benefit rates determined to be prevailing for various classifications of laborers or mechanics for specified type(s) of construction in a given area.

The applicable wage determinations are included in the Contract. These wage determinations apply for the duration of the Contract, except as specified below.

If for any reason it is determined post-award that a wage determination and/or the correct wage determination was omitted from Contract, the omitted wage determination will be incorporated into the Contract and effective by operation of law, retroactively to the award date of the Contract.

USDOL may periodically issue revisions of the wage determinations to reflect current prevailing wage rates. Revisions to wage determinations are effective with respect to the solicitation and Contract if issued at least 10 calendar days before bid opening. If issued less than 10 calendar days before bid opening, revisions are effective to the solicitation and Contract unless the Department finds that there is not a reasonable time still available before bid opening to notify bidders of the revision.

If the Contract is not awarded within 90 days after bid opening, any revised wage determination issued prior to award is effective to the Contract unless the Department obtains an extension of the original wage determination from the Administrator of the USDOL Wage and Hour Division.

1.2 Annual Incorporation of Most Recent Revisions of Wage Determinations

The most recent revisions of the original wage determinations included in the Contract must be incorporated into the Contract so that they are applicable to any task orders issued, and incorporated into any subcontracts, annually on the anniversary date of the award of the Contract. Such revised wage determination(s) will apply to any work that begins or is obligated under the Contract during the 12 months following that anniversary date until such construction work is completed, even if the completion of that work extends beyond the 12-month period. When the most recent revised wage determinations are incorporated into a task order, those wage determinations remain applicable for the duration of such task order, unless any of the provisions in section 1.3, below, apply.

The Department will make no adjustment in the Contract or task order price, other than as provided for elsewhere in the Contract, on account of any increases or decreases in wages and benefits as a result of:

- (1) Incorporation of the most recent revisions of wage determinations applicable at the exercise of the option to extend or renew the term of the Contract;
- (2) Incorporation of the most recent revisions of wage determinations otherwise applicable to the Contract by operation of law; or
- (3) An increase in wages and benefits resulting from any other requirement of federal and state laws requiring the payment of a prevailing minimum wage rate.

### 1.3 Change Orders

The wage determinations incorporated into the Contract at Contract execution apply for the duration of the Contract, subject to the following exceptions.

When the Contract is changed to include additional, substantial construction, alteration, and/or repair work not within the scope of work of the original Contract, or to require the Contractor to perform work for an additional time period not originally obligated, including where an option to extend the term of a contract is exercised, the most recent revision of any applicable wage determination(s) published at the time the change order is issued or the option is exercised are incorporated in and applicable to the change order work. The Contractor and their subcontractors must comply with the revised wage determinations when pricing and performing the change order work.

The requirement to incorporate revised wage determinations does not apply where (i) the Contract is not changed as described in the preceding paragraph, (ii) the Contractor is simply given additional time to complete the original Contract work, or (iii) where the additional construction, alteration, and/or repair work in the change order is already within the scope of the Contract.

### 1.4 Certified Payrolls

Each Contractor or subcontractor engaged in the construction, prosecution, completion, or repair work on the Project each week must submit certified payrolls in accordance with the records and certified payrolls requirements of Form FHWA 1273, under section IV(3) - Records and certified payrolls (29 CFR 5.5), included in the Contract.

Each certified payroll required under this section must be delivered by the Contractor or subcontractor, within 7 days after the regular payment date of the payroll period in accordance with the Special Provision for Electronic Submission of Payrolls and DBE Subcontractor Payment for Federally Funded Projects (**SP107-000120-00**).

Each Contractor or subcontractor must preserve all regular payroll records for all laborers and mechanics working at the site of the work and for a period of 6 years after all the work on the Contract is completed in accordance with Form FHWA 1273, section IV(3) - Records and certified payrolls (29 CFR 5.5), included in the Contract, and section 2.4, below.

## 1.5 Conformance

- B. Any class of laborers or mechanics, including helpers, which is not listed in the applicable wage determination, and which is to be employed under the Contract, must 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:
  - (1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and
  - (2) The classification is used in the area by the construction industry; and
  - (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- B. The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.
- C. If the Contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the Engineer 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 Engineer by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov). The Administrator of the USDOL Wage and Hour Division, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Engineer or will notify the Engineer within the 30-day period that additional time is necessary.
- D. In the event the Contractor, the laborers or mechanics to be employed in the classification or their representatives, and the Engineer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Engineer will, by email to [DBAconformance@dol.gov](mailto:DBAconformance@dol.gov), refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator of the USDOL Wage and Hour Division for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Engineer or will notify the Engineer within the 30-day period that additional time is necessary.
- E. The Engineer must promptly notify the Contractor of the action taken by the USDOL Wage and Hour Division under paragraphs (C) and (D) of this section. The Contractor must furnish a written copy of the Administrator's determination to each affected worker, or must be post it as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph (C) or (D) 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.

## 2.0 Virginia Requirements

- 2.1 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.

- 2.2 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](http://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](mailto: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.
- 2.3 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](http://www.doli.virginia.gov/wp-content/uploads/2021/04/PW_Posting_Compliance_Form.pdf). The form may be emailed to [prevailingwage@doli.virginia.gov](mailto: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.
- 2.4 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.
- 2.5 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  
SPECIAL PROVISION FOR  
**ASPHALT MATERIAL PRICE ADJUSTMENT**

July 8, 2024

All asphalt material contained in the master listing on the [Construction Division website](#) of eligible bid items and designated as pay items in the Contract or added as pay items by Change Order will be price adjusted according to the provisions as set forth herein. Other items will not be price adjusted, except as otherwise specified in the Contract.

Each month, the Department will publish an average statewide price per ton for PG 64S-22 f.o.b., and an average statewide price per ton for PG 64E-22 f.o.b., developed from the average terminal prices provided to the Department from suppliers of asphalt cement to contractors doing work in Virginia. The Department will collect terminal prices from approximately 12 terminals each month. These prices will be received once each month from suppliers on or about the last weekday of the month. The high and low prices will be eliminated, and the remaining values averaged to establish the average statewide prices for the following month.

The monthly average statewide prices will be posted on the Construction Division website on or about the first weekday of the month. The posted monthly average statewide prices will be the (a) Base Index for all contracts on which bids are received during the calendar month of the Department's posting on the Construction Division website, and (b) Current Index for all eligible asphalt materials placed during the calendar month of the Department's posting under an executed contract.

The amount of adjustment applied will be based on the difference between the Contract's Base Index and the Current Index for the calendar month during which the work is performed. The quantity of asphalt cement for asphalt concrete pavement to which adjustment will be applied will be the quantity based on the percent of asphalt cement shown on the appropriate approved job mix formula.

The Base Index for application of Asphalt Adjustments will be determined in accordance with the following:

- (a) When the actual quantities of asphalt material pay item(s) change, alter, or vary from the estimated quantities with no adjustment to the Contract bid price of those pay items, then the Base Index shall be the monthly average statewide prices posted at the time of the letting.
- (b) When the Department issues a Change Order that changes or alters the quantity of asphalt material pay item(s) with a commensurate adjustment to the Contract price(s) for the pay item(s), then the Base Index for the altered quantity and altered price(s) shall be the monthly average statewide price(s) posted for the calendar month in which the altered quantity and altered price are established in the Contract (the Change Order approval date).
- (c) When the Department issues a Change Order to add new asphalt material pay item(s) eligible for price adjustment to a Contract, the Base Index for the added pay item(s) shall be the monthly average statewide price(s) posted for the calendar month the pay item(s) is (are) established in the Contract (the Change Order approval date).

In the event the monthly average statewide prices were to change by 10 percent or more of the Base Index during the middle of the month, the Contractor can submit a letter to the Department and supplier that provides evidence of the difference in price. Upon receipt of the letter, consideration will be given to extend additional adjustments as deemed necessary. In the event either Index changes radically from the apparent trend, as determined by the Engineer, the Department may establish an Index which it determines to best reflect the trend.

Adjustment of any asphalt material other than PG 64S-22 and PG 64E-22 will be based on the Indexes for PG 64S-22.

The quantity of asphalt emulsions to which adjustment will be applied will be the quantity based on 65 percent residual asphalt.

Price adjustment will be shown as a separate entry on the monthly progress estimate; however, such adjustment will not be included in the total cost of the work for progress determination or for extension of Contract time. Price adjustment will be calculated using the same units as the corresponding pay items in the Contract.

Any apparent attempt to unbalance bids in favor of items subject to price adjustment or failure to submit required cost and price data as noted hereinbefore may result in rejection of the bid proposal.

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 DEPARTEMENT 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 binder 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 <sup>1</sup>	Equivalent Single-Axle Load (ESAL) Range (millions)	Minimum Asphalt Performance Grade (PG) <sup>2</sup>	Nominal Maximum Aggregate Size <sup>3</sup>
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-25.0	All ranges	64H-16	1 in

<sup>1</sup>SM = Surface Mixture; IM = Intermediate Mixture; BM = Base Mixture

<sup>2</sup>**Minimum Asphalt Performance Grade (PG)** is defined as the minimum binder performance grade for the job mix formulas as determined by AASHTO T170 or AASHTO M332.

<sup>3</sup>**Nominal 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 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 F & E (5:1) % by weight	SE	FAA
	1 fractured face	2 fractured faces			
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. <sup>1</sup>	40% min.	40% min.
SM-9.0 D	85% min.	80% min.	10% max. <sup>1</sup>	45% min.	45% min.
SM-9.0 E	95% min.	90% min.	10% max. <sup>1</sup>	45% min.	45% min.
SM-9.5 A	85% min.	80% min.	10% max. <sup>1</sup>	45% min.	45% min.
SM-9.5 D	85% min.	80% min.	10% max. <sup>1</sup>	45% min.	45% min.
SM-9.5 E	95% min.	90% min.	10% max. <sup>1</sup>	45% min.	45% min.
SM-12.5 A	85% min.	80% min.	10% max. <sup>1</sup>	45% min.	45% min.
SM-12.5 D	85% min.	80% min.	10% max. <sup>1</sup>	45% min.	45% min.
SM-12.5 E	95% min.	90% min.	10% max. <sup>1</sup>	45% min.	45% min.
IM-19.0 A	85% min.	80% min.	10% max. <sup>1</sup>	45% min.	45% min.
IM-19.0 D	95% min.	90% min.	10% max. <sup>1</sup>	45% min.	45% min.
IM-19.0 E	95% min.	90% min.	10% max. <sup>1</sup>	45% min.	45% min.
BM-25.0	80% min.	75% min.	10% max. <sup>1</sup>	45% min.	45% min.

<sup>1</sup>10 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 <sup>1</sup>	95-100	90-100		30-55			6-13
SM-9.0 A,D,E				100 <sup>1</sup>	90-100	90	47-67				2-10
SM-9.5 A,D,E				100 <sup>1</sup>	90-100	58-80	38-67		23		2-10
SM-12.5 A,D,E			100	95-100	90	58-80	34-50		23		2-10
IM-19.0 A,D,E		100	90-100	90	--	--	28-49		max		2-8
BM-25.0	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

<sup>1</sup>A 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 Gyrations N Design
SM4.75A <sup>2,4</sup>	3.0-6.0	70-75	70-80	16.5	1.0-2.0	50
SM4.75D <sup>2,4</sup>	3.0-6.0	70-75	70-80	16.5	1.0-2.0	50
SM4.75E <sup>2,4</sup>	3.0-6.0	70-75	70-80	16.5	1.0-2.0	50
SM-9.0A <sup>1,2</sup>	2.0-5.0	75-80	70-85	17.0	0.6-1.3	50
SM-9.0D <sup>1,2</sup>	2.0-5.0	75-80	70-85	17.0	0.6-1.3	50
SM-9.0E <sup>1,2</sup>	2.0-5.0	75-80	70-85	17.0	0.6-1.3	50
SM-9.5A <sup>1,2</sup>	2.0-5.0	75-80	70-85	16.0	0.7-1.3	50
SM-9.5D <sup>1,2</sup>	2.0-5.0	75-80	70-85	16.0	0.7-1.3	50
SM-9.5E <sup>1,2</sup>	2.0-5.0	75-80	70-85	16.0	0.7-1.3	50
SM-12.5A <sup>1,2</sup>	2.0-5.0	73-79	68-84	15.0	0.7-1.3	50
SM-12.5D <sup>1,2</sup>	2.0-5.0	73-79	68-84	15.0	0.7-1.3	50
SM-12.5E <sup>1,2</sup>	2.0-5.0	73-79	68-84	15.0	0.7-1.3	50
IM-19.0A <sup>1,2</sup>	2.0-5.0	69-76	64-83	14.0	0.6-1.3	50
IM-19.0D <sup>1,2</sup>	2.0-5.0	69-76	64-83	14.0	0.6-1.3	50
IM-19.0E <sup>1,2</sup>	2.0-5.0	69-76	64-83	14.0	0.6-1.3	50
BM-25.0 <sup>2,3</sup>	0.5-3.5	67-87	67-92	12.0	0.6-1.3	50

<sup>1</sup>Binder content should be selected at 4.0% air voids for A and D mixes, 3.5% air voids for E mix.

<sup>2</sup>Fines-asphalt ratio is based on effective binder content.

<sup>3</sup>Base mix shall be designed at 2.0% air voids. BM-25.0 shall have a minimum binder content of 4.6% unless otherwise approved by the Engineer.

<sup>4</sup>Binder content shall be selected at 5.0 percent air voids.

**Table II-14A- Recommended Performance Grade of Asphalt Cement** is replaced with the following:

**TABLE II-14A  
Recommended Performance Grade of Asphalt Cement**

Mix Type	Percentage of Reclaimed Asphalt Pavement (RAP) in Mix		
	%RAP ≤ 25.0%	25.0% < %RAP ≤ 30%	25.0% < %RAP ≤ 35%
SM-4.75A, SM-9.0A, SM-9.5A, SM-12.5A	PG 64S-22	PG 64S-22	
SM-4.75D, SM-9.0D, SM-9.5D, SM-12.5D	PG 64H-22	PG 64S-22	
IM-19.0A	PG 64S-22	PG 64S-22	
IM-19.0D	PG 64H-22	PG 64S-22	
BM-25.0	PG 64H-22		PG 64S-22

**211.02—Materials (h)-** is replaced with the following

(h) An antistripping additive shall be used in all asphalt mixes. Additives may be hydrated lime or a chemical additive from the Materials Division Approved List No. 7 or a combination of both. When using an approved chemical additive, it shall be added at a rate of not less than 0.30 percent by weight of the total asphalt content of the mixture unless otherwise indicated on the Department's Approved List No. 7.

**211.02—Materials (m)-** is replaced with the following

(m) **Warm Mix Asphalt (WMA)** additives or processes shall be approved by the Department prior to use and shall be obtained from the Department's Approved List No. 66. When using an approved chemical additive, it shall be added at a rate of not less than 0.50 percent by weight of the total asphalt content of the mixture unless otherwise indicated on the Department's Approved List No. 66.

**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  $150 \times 10^{-5}$  cm/sec, or if the regression method predicts a permeability exceeding  $150 \times 10^{-5}$  cm/sec at 7.5% voids, the Contractor shall redesign the mixture to produce a permeability number less than  $150 \times 10^{-5}$  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 binder.

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 in the Contract, SM-9.0, 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-9.0, 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 Binder Content: Percent Plus and Minus													
No. Tests	Top Size <sup>1</sup>	1 1/2"	1"	3/4"	1/2"	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

<sup>1</sup>Defined as the sieve that has 100% passing as defined in Table II-13.

**Section 211.08 – Acceptance** is amended by replacing the sixth paragraph with the following:

Binder content will be measured as extractable binder or weight after ignition. The Contractor shall submit a copy of burn tickets from an ignition oven to the Engineer and all the original tickets shall be available upon Engineer's request. The Engineer shall be notified within 24 hours from testing of a report edit if the date and time on a ticket do not match information submitted in PLAID. Original tickets shall be maintained on file by the Contractor for a period of 5 years or until final acceptance of the applicable contract, whichever is greater.

**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 220 – CONCRETE CURING MATERIALS**

**SECTION 220 – CONCRETE CURING MATERIALS of the Specifications is amended as follows:**

**Section 220.02(a) – Waterproof paper** is replaced with the following:

**Waterproof paper** shall conform to ASTM C171. One side shall be composed of white, light-reflecting paper.

**Section 220.02(b) – PE film** is replaced with the following:

**PE film** shall conform to ASTM C171 except that its nominal thickness shall be 3.0 mils. The thickness at any point shall be at least 2.5 mils.

**Section 220.02(c) – Burlap and PE film** is replaced with the following:

**Burlap and PE film** may be used in combination. They shall be bonded securely so that they cannot be easily separated in a dry or saturated condition. White PE film shall conform to the reflectance requirements of ASTM C171. Burlap shall conform to Section 220.02(f). The combination product shall have a total weight of 11 ounces per square yard with 11 threads of burlap per inch.

**Section 220.02(f) – Burlap** is inserted as follows:

**Burlap** used by itself shall conform to AASHTO M 182, Class 3, except the weight of each sample may vary by 10%. Acceptance shall be based on the average weight of all samples submitted according to AASHTO M 182, Table 3. If any individual sample is outside the 10% tolerance, the lot will be rejected.

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**SECTION 223 – STEEL REINFORCEMENT**

**SECTION 223 – STEEL REINFORCEMENT** of the Specifications is amended as follows:

**SECTION 223.02(a) – Reinforcement** is replaced as follows:

1. **Deformed bars** shall conform to ASTM A615, Grade 40 or 60; or ASTM A706, Grade 60. Longitudinal bars for continuous reinforced hydraulic cement concrete pavement shall be Grade 60.
2. **Plain bars** shall conform to ASTM A615, Grade 40 or 60; or ASTM A706, Grade 60, deformation waived. When used as a dowel, material may be a plain bar conforming to the requirements of ASTM A615, Grade 40 or 60, or a plain dowel conforming to the requirements of ASTM A709, Grade 36; or ASTM A706, Grade 60.
3. **Welded wire fabric** shall conform to 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 A1064, Grade 70.
4. **Structural steel** shall conform to Section 226.
5. **Bar mats** shall conform to ASTM A184.
6. **Spiral wire** shall conform to AASHTO M32 or ASTM A1064.
7. Wire mesh for use in gabions shall be made of galvanized steel wire at least 0.105 inch, 12 gage, in diameter. The tensile strength of the wire shall be at least 60,000 pounds per square inch. Wire mesh shall be galvanized in accordance with ASTM A641, Class 3. When PVC coating is specified, it shall be at least 0.015 inch in thickness and shall be black.

Wire shall be welded to form rectangular openings or twisted to form hexagonal openings of uniform size. The linear dimension of the openings shall be not more than 4 1/2 inches. The area of the opening shall be not more than 9 square inches. The unit shall be nonraveling. Nonraveling is defined as the ability to resist pulling apart at any of the twists or connections forming the mesh when a single wire strand in a section is cut.

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:

**SECTION 234 – GLASS BEADS AND RETROREFLECTIVE OPTICS**

**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 236 – WOOD PRODUCTS*

**SECTION 236 WOOD PRODUCTS** of the Specifications is amended as follows:

**236.02 – Detail Requirements** is replaced with the following:

- (a) **Structural timber and lumber** shall conform to AASHTO M168. The species and grade of structural lumber shall be as shown on the plans. .

Except as otherwise specified, the species and grade of structural lumber, timber, and posts for the following applications shall be as follows:

1. **Bridges** shall be at least 1,550(psi) Fb (Fiber Bending) and:
  - 5 inch by 5 inch and larger: Southern Pine, No. 1 Dense.
  - 2 inch through 4 inch by 2 inch through 4 inch: Southern Pine, No. 1 Dense.
  - 2 inch through 4 inch by 5 inch and through 6 inch: Southern Pine, Non-Dense Select Structural
  - 2 inch through 4 inch by 8 inch only: Southern Pine, Non-Dense Select Structural.
  - 2 inch through 4 inch by 10 inch only: Southern Pine, Select Structural.
  - 2 inch through 4 inch by 12 inch only: Southern Pine, Select Structural.
2. **Signs** shall be at least 1,100 (psi) Fb with material being dressed on all sides and:
  - 4 inches and less in the least dimension: Southern Pine, No. 2.
  - Over 4 inches in the least dimension: Southern Pine, No. 1.
3. **Guardrail** shall be at least 1550 (psi) Fb Southern Pine, No. 1 Dense.
4. **Fence** shall be Southern Pine, No. 2, for line, corner, and brace units.
5. **Signalization and electrical service** shall conform to ANSI Class 05.1. Sawn material, both rough and dressed, shall be certified by the mill as to grade and shall be grade marked in accordance with the grading rules and basic provisions of the American Lumber Standards (PS-20-70) by a lumber grading or inspection bureau or agency approved by the Department. The grade mark shall be applied after dressing if the sawn material is dressed.

- (b) **Timber piles** shall conform to ASTM D25. Piles shall be clean peeled and have a butt circumference of at least 31 inches. The Engineer will accept piles for fender systems or other nonload bearing uses under the following criteria provided the piles can be properly driven: A straight line from the center of the butt to the center of the tip may lie partly outside the body of the pile, but the distance between the line and pile shall be not more than 1/2 percent of the length of the pile or 3 inches, whichever is smaller.

Points for timber piles shall be steel or cast iron and of a shape that will allow a secure connection to the pile and withstand driving.

Timber piles shall be branded prior to shipment with the supplier brand, year of treatment, species of timber and preservative treatment, retentions, class, and length. Brand symbols shall conform to AWPA M6.

- (c) **Wood Preservatives** - Wood preservatives shall conform to the requirements of the American Wood Protection Association (AWPA) U1 Standards. The AWPA designates the different wood exposure conditions in the following "Use Category System":

UC4A: Above ground, ground contact, fresh water contact or other conditions favorable to wood deterioration. (For Example: sign posts, fence posts and gates).

UC4B: Ground contact in severe environments, critically important components and salt water splash zones (For Example: bridge timbers, bridge decking, guardrail posts and offset blocks).

UC4C: Ground contact in very severe environments, or climates with an extremely high potential for deterioration of critical structural components.  
(For Example: foundation pilings).

UC5B: Wood exposed to salt and brackish water (For Example: piles, bracing and bulk-heads).

**Wood preservatives for Highway Construction and Hand-Contact Surfaces, listed in Tables 1 and 2 below** shall be used according to their suitability for the wood exposure condition and shall not be used interchangeably.

1. Wood used for **Highway Construction** (including but not limited to - bicycle trails, pedestrian overlooks, maintenance applications for posts (sign, fence, guardrail), bridge decking, gates, stair treads, and offset blocks, piles, timbers, and composites) shall be treated with the following preservative per **Table 1** below:

Chromated Copper Arsenate (CCA)

Creosote

Pentachlorophenol (PCP)

Dichloro Octyl Isothiazolin (DCOI)

**Table 1 – Southern Yellow Pine Treatments & Retentions for Highway Construction per AWWA**

Commodity Specifications		Use Category	Preservative Retentions			
			Waterborne (pcf)	Oil borne (pcf)		
Desig	Wood Usage		CCA	Creosote	PCP	DCOI
A	<b>Sawn Products:</b> Boards, lumber and timber	UC4A	0.40	10.0	0.50	0.15
	Lumber and Timber products for bridge structures, bridge decking, gates, and stair treds	UC4C	0.60	12.0 *	0.50	0.2
B	<b>Posts:</b> Round, 1/2 and 1/4 round, building, fence and sign posts, poles < 16 feet in length.	UC4A	0.40	N/A	N/A	0.13
	Guardrail Posts and offset blocks	UC4B	0.50	N/A	N/A	0.17
E	<b>Round Timber Pilings:</b> Pilings and foundations for land and fresh water use	UC4C	0.80	12.0	0.60	0.2
F	<b>Wood Composites:</b> Plywood	UC4A	0.40	10.0	0.50	0.2
	**Glue laminated members (glue then treat)	UC4A	N/A	10.0	0.60	0.2
	**Glue laminated members (treat then glue)	UC4A	0.40	10.0	0.60	0.2
	Laminated veneer lumber	UC4A	N/A	10.0	N/A	N/A
G	<b>Marine Applications</b> (in or above salt water, brackish water, or tidal water) Plywood & Solid Sawn	UC5B	2.5	25.0	N/A	N/A
	Piles (outer zone/inner zone)	UC5B	2.5/1.5	20.0	N/A	N/A
	Sawn - Dual treatment: CCA with CR	UC5B	1.5	20.0	N/A	N/A
	Piles - Dual treatment: CCA with CR	UC5B	1.0	20.0	N/A	N/A

**\*Creosote (CR) preservative is not allowed for bridge decks.**

**\*\*For Glue laminated members Contractor must certify glue is compatible with treatment**

- Wood used for **Hand-Contact Surfaces** (including but not limited to handrails, playground equipment, and picnic tables shall be treated with the following non-arsenical, water-borne preservatives per **Table 2** below:

Alkaline Copper Quat (ACQ)  
Copper Azole (CA)  
Micronized Copper Azole (MCA)

**Table 2 – Southern Yellow Pine Treatments & Retentions for Hand-Contact Surfaces per AWWA**

Commodity Specifications		Use Category	Preservative Retentions		
Designation	Wood Usage		Waterborne (pcf)		
			ACQ- A,B,C,D **	CA-B CA-C **	MCA, MCA-C **
A	<b>Sawn Products:</b> Boards, lumber and timber for picnic tables, handrails, playground equipment	UC4B	0.60	0.31	0.31
F	<b>Wood Composites:</b> Plywood for picnic tables, handrails, playground equipment	UC4B	0.60	0.31	0.31

**\*\* Note – ACQ, CA, MCA - Many wood treatments can be highly corrosive to metal under some conditions.** Fasteners or connectors that will be in contact with wood using ACQ, CA, MCA wood preservative treatments shall be either 304 or 316 stainless steel or hot-dipped galvanized steel that conforms to ASTM A153 or ASTM A653, Class G185. The Engineer will not permit the use of mechanically galvanized steel hardware or fasteners with ACQ, CA, MCA treated wood. Wood treated with ACQ, CA, MCA shall be separated from steel or aluminum beams or posts using a non-metallic, rubber flashing.

Treatment shall conform to these additional requirements:

1. Waterborne preservatives shall be used for timber where a clean surface is desirable. The moisture content of wood material shall be not more than 19 percent at the time of treatment.
2. Oilborne preservatives (Pentachlorophenol, Creosote, Copper Naphthenate) may be used for timber that is not to be painted. Timbers treated with Pentachlorophenol, Creosote, or Copper Naphthenate shall be free of excess preservative on the wood surface. VDOT allows oilborne preservatives for special projects.
3. Field Cuts to Treated Wood - All cuts, pile cutoffs, bolt holes, field cuts and damage which penetrates the treated zone shall be protected in accordance with AWPA Standard M4. In cases in which the originally used preservative is not available for field use, copper naphthenate with minimum 2% copper metal shall be used. In all cases 3 heavy brushed applications of any preservative shall be used, with adequate penetration time between applications.
4. For any product not listed, refer to the latest AWPA, U1 Standard.
5. Treated timber shall be supplied only from facilities on Approved List # 45.

VIRGINIA DEPARTMENT OF TRANSPORTATION  
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**SECTION 246 – PAVEMENT MARKING**

**SECTION 246 – PAVEMENT MARKING** of the Specifications is amended as follows:

**Section 246.02 – Detail Requirements** is amended to replace the fifth through seventh paragraphs with the following:

Pavement marking materials shall produce a retroreflective line, message, legend or symbol of specified thickness, width or design in accordance with the MUTCD and Contract requirements.

Pavement marking material shall have the pigment, glass beads, retroreflective optics, and filler well dispersed in the resin, and shall be free from skins, dirt, and foreign objects.

Glass beads and retroreflective optics shall conform to Section 234.

**Section 246.02(a) – Approval of Pavement Markings** is amended to replace the second paragraph of the second bullet with the following:

When pavement markings are installed on the NTPEP test deck or the VDOT facility, the material's thickness, beads/retroreflective optics, and formulation shall be documented to ensure the equivalent thickness, beads/retroreflective optics and formulation are installed on VDOT roadways following approval.

**Section 246.02(b) – Certifications** is replaced with the following:

The pavement marking material manufacturer shall certify each batch or lot of material supplied and installed is the same product (thickness, retroreflective optics package and formulation) that was tested and approved on the AASHTO/NTPEP or VDOT test facility in accordance with the Materials Division, Manual of Instructions for Certification I and II Materials. The certification shall include the NTPEP test number from the Materials Division's Approved Products List. The Contractor shall retain the manufacturer's certifications.

**Section 246.02(c) – Warranty Requirements** is amended to replace the first paragraph with the following:

Pavement marking products shall carry the warranties as supplied by the manufacturer of the individual marking types (classes) for the specific timeframes per type and class and the material requirements for retroreflectivity, durability, color, luminance (Y%), and adhesion as referenced herein. Warranties shall be those commercially supplied or those unique to the Commonwealth in the case of certain products, such as Type B, Class VI preformed pavement marking tape as detailed herein. Manufacturers' warranties shall be obtained by the Contractor and assigned to the Department in writing prior to final acceptance. Warranty periods shall begin on the date of receipt at the project as verified by delivery tickets signed by the Engineer.

**Section 246.03(a) – Paint Pavement Marking Materials (Type A)** is renamed **Section 246.03(a) – Conventional or Cold Weather Paint Marking Materials (Type A, Class I)** and amended to replace the first paragraph with the following:

Type A, Class I paint material shall be a fast-drying, waterborne, nonleaded, acrylic or modified acrylic resin paint suitable for use on both asphalt and hydraulic cement concrete pavement surfaces and shall be selected from the Materials Division's Approved Products List No. 20. Type A, Class I material shall be designed to be applied at approximately 15 mils wet film thickness in conjunction with AASHTO M 247 Type I beads as per Section 234 of the Specifications.

Type A, Class I cold weather paint shall be capable of being both applied and remaining fully adhered to the surface at temperatures below 40 °F.

**Section 246.03(a)1e – IR Scan from NTPEP** is replaced with the following:

e. **IR Scan from NTPEP.**

**Section 246.03(b) – High Build Paint Marking Materials (Type A, Class II)** is added as follows:

Type A, Class II Paint material shall be a fast-drying, waterborne, nonleaded, acrylic or modified acrylic resin paint suitable for use on both asphalt and hydraulic cement concrete pavement surfaces and shall be selected from the Materials Division’s Approved Products List No. 20. Type A, Class II material shall be designed to be applied at approximately 27 mils wet film thickness.

1. **Initial Approval** - Maintained retroreflectivity, color (including luminance), and durability shall conform to the following requirements after the material has been installed on the test deck for 1 year:

a. **Maintained Retroreflectivity:** The photometric quantity to be measured is the coefficient of retroreflected luminance ( $R_L$ ) in accordance with ASTM E1710 for 30-meter geometry.  $R_L$  shall be expressed in millicandelas per square foot per foot-candle when measured in the skipline or centerline areas:

<b>Coefficient of Retroreflected Luminance (<math>R_L</math>) (mcd/ft<sup>2</sup>/fc) Paint</b>		
<b>Color</b>	<b>Initial</b>	<b>1 Year In-Service</b>
White	300	125
Yellow	225	100

b. **Day and Nighttime Color and Luminance (Y%):** Measured according to ASTM D6628.

c. **Durability:** Paint shall have a durability rating of at least 8 when determined in the wheel path area when tested in accordance with the NTPEP Work Plan.

d. **Skid Resistance:** The initial skid resistance shall be at least 45 BPN when tested according to ASTM E303, if available.

e. **IR Scan from NTPEP.**

2. **Batch Testing**

Paint batch testing shall 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. The test results shall be compared against NTPEP lab test results and the Specifications. Testing shall be performed to determine the following physical requirements and properties:

a. **Solids, (% weight)** according to ASTM D2369: Acceptable range from NTPEP results (+/- 2%).

b. **Pigment (% weight)** according to ASTM D3723: Acceptable range from NTPEP results (+/- 2%).

c. **Density (wt/gal.)** according to ASTM D1475: Acceptable range from NTPEP results (+/-0.3 lbs/gal).

d. **Viscosity (KU)** according to ASTM D562: Acceptable range from NTPEP results (+/-5KU).

e. **Contrast Ratio** according to ASTM D2805 (2°, D 65): Paint shall show a dry hiding quality that will give a contrast ratio of at least 0.96 at (15 mil) wet film thickness.

f. **Day Color, Luminance (Y%) - (without Drop-on Beads):**

Color testing results shall conform to the chromaticity coordinate limits that follow. Color determination for paint materials will be made without drop-on beads at least 24 hours after application in accordance with ASTM D6628.

**Day Color, Chromaticity Coordinates (Without Drop-on Beads), High Build Paint**

	<b>x</b>	<b>y</b>	<b>x</b>	<b>y</b>	<b>x</b>	<b>y</b>	<b>x</b>	<b>y</b>	<b>Y%</b>
White	0.355	0.355	0.305	0.305	0.285	0.325	0.335	0.375	80.0 Min
Yellow	0.493	0.473	0.518	0.464	0.486	0.428	0.469	0.452	50.0-
w									60.0

g. **Settling properties:** Settling shall be no less than a rating of 8 when tested in accordance with the NTPEP Work Plan.

h. **Freeze-thaw and heat stability:** Paint shall show no coagulation or change in viscosity greater than +/- 5 KU when tested in accordance with the NTPEP Work Plan.

i. **Water resistance:** Paint shall show no blistering, peeling, wrinkling, softening, or loss of adhesion when tested in accordance with the NTPEP Work Plan.

j. **VOC:** The VOC content shall be no greater than 150 grams/liter when tested in accordance with EPA Method 24.

k. **Flash point:** Paint shall have a flash point of at least 201 degrees F when tested in accordance with ASTM D93, Pensky-Martens Closed Cup.

l. **Infrared (IR) Scan:** Shall match IR scan from NTPEP.

**Section 246.03(b) – Thermoplastic Marking Materials (Type B, Class I)** is renumbered as 246.03(c) and replaced as follows:

Thermoplastic material shall be suitable for use on asphalt and hydraulic cement concrete pavement surfaces and shall be selected from the Materials Division’s Approved Products List No. 43.

The binder shall be either alkyd or hydrocarbon based. If an alkyd thermoplastic is used, the binder shall consist of synthetic resins, at least one of which is solid at room temperature, and high-boiling plasticizers. At least one-half of the binder composition shall be a maleic-modified glycerol ester of resin and shall be at least 10 percent by weight of the entire material formulation.

Thermoplastic marking materials shall be capable of application at pavement surface temperatures of 50 degrees Fahrenheit and above on all asphalt and hydraulic cement concrete pavement surfaces. Thermoplastic material shall be capable of successfully fusing to itself and previously applied thermoplastic pavement markings.

1. **Initial Approval** - Maintained retroreflectivity, color, luminance (Y%), and durability shall conform to the following requirements after the material has been installed on the test deck for 1 year:

a. **Maintained Retroreflectivity:** The photometric quantity to be measured is the coefficient of retroreflected luminance (R<sub>L</sub>) in accordance with ASTM E1710 for 30-meter geometry when measured in the skip line area.

**Coefficient of Retroreflected Luminance (R<sub>L</sub>)  
(mcd/ft<sup>2</sup>/fc) Thermoplastic**

Color	Initial	1 Year In-Service
White	300	250
Yellow	250	200

- b. **Day and Nighttime Color and Luminance (Y%):** According to ASTM D6628
- c. **Durability:** Thermoplastic shall have a durability rating of at least 8 as determined in the wheel path area when tested in accordance with the NTPEP Work Plan.
- d. **Skid Resistance:** The initial skid resistance shall be at least 45 BPN when tested per ASTM E303, if available.

**2. Batch Testing:**

Thermoplastic 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. The tests results will be compared against the following specifications and requirements:

- a. **Pigment and Glass Bead (% Weight)** according to ASTM D4451 82.0% Max
- b. **Intermix Glass Bead Content (% Weight)** according to AASHTO T 250 and ASTM D4797 30.0% Min
- c. **TiO<sub>2</sub> (%) for white thermoplastic** according to ASTM D1394 or equivalent method 10.0% Min
- d. **Binder (%)** according to AASHTO T 250/ASTM D4451 18.0% Min
- e. **Calcium Carbonate and Inert Fillers** 42.0 % Max
- f. **Day Color, Luminance (Y%) (Without Drop-on Beads):** Color testing results shall conform to the chromaticity coordinate limits that follow. Color determination for thermoplastic materials will be made without drop-on beads after cooling in accordance with AASHTO T 250 and ASTM D6628.

**Day Color, Chromaticity Coordinates (Without Drop-on Beads),  
Thermoplastic**

	x	y	x	y	x	y	x	y	Y%
White	0.355	0.355	0.305	0.305	0.285	0.325	0.335	0.375	80.0 Min
Yellow	0.499	0.466	0.545	0.455	0.518	0.432	0.485	0.454	40.0-60.0

- g. **Nighttime Yellow Color (with Drop-on Beads):** The initial nighttime color of yellow thermoplastic pavement marking material shall conform to the following CIE chromaticity coordinate requirements when tested in accordance with ASTM D6628 and VTM-111:.

<b>Night Time Color, Chromaticity Coordinates (with Drop-on Beads) Thermoplastic</b>									
Color	1		2		3		4		W
	x	y	x	y	x	y	x	y	

Yellow	0.486	0.439	0.520	0.480	0.560	0.440	0.498	0.426
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- h. **Water absorption:** Materials shall not have more than 0.5 percent retained water by weight when tested in accordance with ASTM D570, Procedure A.
- i. **Softening point:** Materials shall have a softening point of at least 194 degrees F as determined in accordance with ASTM E28.
- j. **Specific gravity:** The specific gravity of the thermoplastic compound at 77 degrees F shall be from 1.7 to 2.2.
- k. **Impact resistance:** The impact resistance shall be at least 10 inch-pounds at 77 degrees F after the material has been heated for 4 hours at 400 degrees F and cast into bars of 1-inch cross-sectional area, 3 inches long, and placed with 1 inch extending above the vise in a cantilever beam, Izod-type tester conforming to ASTM D256 using the 25 inch-pound scale.
- l. **No-Track Time:** Material shall set to bear traffic in not more than 2 minutes when the road temperature is 50 degrees F or above.
- m. **Intermixed Glass beads:** Glass beads shall conform to Section 234.
- n. **Flashpoint:** The material flashpoint shall be no less than 500 degrees F when tested in accordance with ASTM D92.

**Section 246.03(c) Preformed Thermoplastic Pavement Marking Material (Type B, Class II)** is renumbered as 246.03(d).

**Section 246.03(d)1 Initial approval** is amended to replace the first paragraph with the following:

Maintained retroreflectivity, color, luminance (Y%), and durability shall conform to the following requirements after the material has been installed on the test deck for 1 year:

**Section 246.03(d) Epoxy-Resin Pavement Marking Material (Type B, Class III)** is renumbered as 246.03(e).

**Section 246.03(e)1 Initial approval** is amended to replace the first paragraph with the following:

Maintained retroreflectivity, color, luminance (Y%), and durability shall conform to the following requirements after the material has been installed on the test deck for 1 year:

**Section 246.03(e) Polyurea Pavement Marking Material (Type B, Class VII)** is renumbered as 246.03(f).

**Section 246.03(f)1 Initial approval** is amended to replace the first paragraph with the following:

Maintained retroreflectivity, color, luminance (Y%), and durability shall conform to the following requirements after the material has been installed on the test deck for 1 year:

**Section 246.03(f) Permanent, Plastic-Backed, Preformed Tapes (Type B, Class IV and Type B, Class VI)** is renumbered as 246.03(g).

**Section 246.03(g)1 Initial approval** is amended to replace the first paragraph with the following:

Maintained retroreflectivity, color, luminance (Y%), durability, and adhesion shall conform to the following requirements after the material has been installed on the test deck for 1 year:

**Section 246.03(g) – Temporary Pavement Marking Materials** is renumbered as 246.03(h) and 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, luminance (Y%), 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 ( $R_L$ ) in accordance with ASTM E1710 for 30-meter geometry when measured in the skip line or centerline areas.

**Coefficient of Retroreflected Luminance ( $R_L$ ) (mcd/ft<sup>2</sup>/fc) Dry  
Retro Removable Tape-Type D, Class III**

<b>Color</b>	<b>Initial</b>	<b>90 Days In-Service</b>
White	250	150
Yellow	200	100

(2) **Maintained Wet Retroreflectivity:** The wet photometric quantity to be measured is the coefficient of retroreflected luminance ( $R_L$ ) 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 ( $R_L$ ) (mcd/ft<sup>2</sup>/fc) Wet Retro  
Removable Tape-Type D, Class III**

<b>Color</b>	<b>Initial</b>	<b>90 Days In-Service</b>
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.

VIRGINIA DEPARTEMENT OF TRANSPORTATION  
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS  
**SECTION 248 – STONE MATRIX ASPHALT CONCRETE**

**SECTION 248 – STONE MATRIX ASPHALT CONCRETE** of the Specifications is amended as follows:

**248.02 – Materials (f) is amended by replacing the first paragraph with the following:**

**Antistripping Additive:** An antistripping additive shall be used in all stone matrix asphalt mixes. It may be hydrated lime or a chemical additive from the Materials Division’s Approved List No. 7, or a combination of both. When an approved chemical additive is used, it shall be added at a rate of not less than 0.30 percent by weight of the total asphalt content of the mixture unless otherwise indicated on the Department’s Approved List No. 7.

**248.03 – Composition of SMA Mixture** is amended as follows:

**TABLE II-24** is replaced with the following:

**TABLE II-24  
SMA Design Range**

Type No. (See Note)	Percentage by Weight Passing Square Mesh Sieves (in)							No. 200
	1	3/4	1/2	3/8	No. 4	No. 8	No. 30	
Surface Mixes								
SMA 12.5		100	83-93	80 max	22-27	16-24	14-20	9-11
SMA 9.5		100	90-100	65-75	25-32	15-25		9-11
Intermediate Mixes								
SMA 19.0	100	85-95	50-60	30-45		16-24	12-16	8-10

Note: The required PG binder will be shown in parentheses as part of the mix type on the plans or in the proposal, e.g., SMA 12.5 (64E-22).

**Section 248.04—Acceptance** is amended by replacing the third, fourth, fifth, and sixth paragraphs with the following:

The Contractor shall check and report the percentage of flat and elongated particles (F&E) in the coarse aggregates of the mix design during production. Two of eight sub-lots from the first lot of material shall be selected for F&E verification when the Contractor samples the SMA material for acceptance (gradation and AC content). F&E testing shall be performed in accordance with VTM-121, after the gradation is performed. If passing results are obtained on each sample in the first lot, then F&E testing shall be performed on a frequency of every second lot of material produced (i.e., Lots 3, 5, 7, etc.) by randomly selecting two sub-lots. If the F&E of the mix exceeds the specified limits, the Contractor shall stop production and notify the Engineer. Production shall not resume until the Contractor has taken corrective action and the Engineer has accepted the Contractor’s means of correction. Once production has resumed, the Contractor shall determine the F&E of the mix for two consecutive lots by randomly selecting two sub-lots per lot. If passing results are obtained for these two lots, then the F&E testing frequency shall return to every second lot of material produced.

The Contractor shall check and report the VCA of the mix during production for each gyratory sample. If the VCA of the mix equals the VCA of the DRC, the Contractor shall immediately notify the Engineer, document the JMF changes in the Producer Lab Analysis and Information Details (PLAID) website, and provide corrective action. If the VCA of the mix exceeds the VCA of the DRC, the Contractor shall stop

production, notify the Engineer, and remove and replace that day's production at no cost to the Department. Production shall not resume until the Contractor has taken corrective action and the Engineer has accepted the Contractor's means of correction.

If the Department determines that the mixture being produced does not conform to the approved job-mix formula or the volumetric properties in Table II-25, based on the Department or the Contractor's test results, the Contractor shall immediately make corrections to bring the mixture into conformance with the approved job-mix formula and Table II-25 or cease paving with that mixture. The Engineer will investigate and determine the acceptability of the mix placed since the previous passing sample.

The finished pavement shall be uniform, free of irregularities and smooth. If irregularities including segregation, rutting, raveling, flushing, fat spots, mat slippage, irregular color, irregular texture, roller marks, tears, gouges, streaks, uncoated aggregate particles, or broken aggregate particles are detected, the Contractor shall immediately notify the Engineer and address the determined irregularities with corrective action. When irregularities are noted, the acceptability of the finished mat shall be determined by the Engineer.

The Engineer will limit subsequent paving operations using either a revised or another job-mix formula, which has not been verified as described herein, to a test run of 300 tons maximum if such material is to be placed in Department project work. The Engineer will not allow any further paving for the Department using that revised mixture until the acceptability of that mixture has received the Engineer's approval based on the 300-ton constraint.

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**SECTION 305 – SUBGRADE AND SHOULDERS**

**Section 305.03(a)1 – Subgrade consisting of material in place** is replaced with the following:

1. **Subgrade consisting of material in place:** The subgrade area shall be scarified to a depth of 6 inches for a distance of 2 feet beyond the proposed edges of the pavement on each side. If sandy or other soil is encountered that will not compact readily, clay or other suitable material may be added or water applied in such quantity and within the allowable moisture content specified herein as will permit compaction of the subgrade. Subgrade material shall be compacted at optimum moisture, within  $\pm 20$  percent of optimum. The density of the subgrade when compared to the theoretical maximum density as determined in accordance with VTM-1 or VTM-12 shall conform to the following:

<b>% Retained on No. 4 Sieve</b>	<b>Min. % Density</b>
0-50	100
51-60	95
61-70	90

Percentages of material shall be reported to the nearest whole number.

Field density determination will be performed with a portable nuclear density gauge as specified in VTM-10, or by other approved methods as directed by the Engineer.

The Contractor shall then shape and check the subgrade to ensure a typical cross section and uniform grade prior to placement of any subsequent courses. If the subgrade becomes eroded or distorted prior to placement of material for subsequent courses, the Contractor shall scarify, reshape, and recompact it in accordance with the original requirements.

At the time of placing material for subsequent courses, the Contractor shall compact the subgrade to the required density, free from mud and frost, and to a condition that will permit compaction of subsequent courses without distortion.

The Contractor shall remove material from the unstable area and contaminated aggregate if the approved subgrade becomes unstable after placement of the subbase or base course and becomes mixed with the aggregate therein. The area shall then be backfilled and compacted, and the subsequent course thereon reconstructed.

**Section 305.03(e) – Shoulders** is replaced with the following:

**Shoulders:** Aggregate shoulder material shall be placed in accordance with the applicable specifications governing the type of material or construction being used and shall be compacted at optimum moisture, within  $\pm 2$  percentage points of optimum. Except when aggregate material No. 18 is used, the density of the aggregate shoulder material, when compared to the theoretical maximum density as determined in accordance with VTM-1, shall conform to the following:

<b>% Retained on No. 4 Sieve</b>	<b>Min. % Density</b>
0-50	100
51-60	95
61-70	90

Percentages of material will be reported to the nearest whole number. The above density requirements may be reduced by 5% per VTM-10 when using the portable nuclear density gauge in direct transmission mode.

When aggregate material No. 18 is used, the density, when compared to the theoretical maximum density, shall be not less than 90 percent or more than 95 percent.

Field density determination will be performed with a portable nuclear density gauge as specified in VTM-10, or by other approved methods as directed by the Engineer. When the total thickness of the layer for aggregate shoulder material being constructed is less than 4 inches, the minimum density requirement may not be enforced. For such cases, the aggregate shoulder should be compacted with three or more passes of a heavy-duty vibratory roller (e.g., a 10-ton smooth drum roller) or as approved by the Engineer. The aggregate shoulder should be compacted until it is apparent that no further densification can be obtained.

When it is determined by the Engineer that operating a roller/compactor on the shoulder material is a rollover hazard, the compaction requirements can be waived by the Engineer.

Aggregate in the guardrail section of fills, 1 foot from the roadway side of the guardrail face to the outside of the shoulder, shall be compacted until a density of at least 90 percent of the theoretical maximum density has been obtained. The asphalt mixture in this area shall be sealed immediately after the hot mixture is spread. Rolling of the asphalt mixture shall continue until roller marks are eliminated.

Stabilized and paved shoulders shall be constructed in accordance with the applicable specifications for pavement stabilization. If the aggregate shoulder material becomes overconsolidated prior to final finishing, it shall be scarified for the approximate depth, reshaped, and recompact to conform to the specified grade and cross section.

Shoulders shall be constructed simultaneously with nonrigid types of base or surface courses other than asphalt concrete or in advance of the base or surface course so as to prevent spreading of base or surface materials. The area of shoulders 12 inches adjacent to the pavement shall be rolled simultaneously with the course being deposited.

Where base or surface courses are being constructed under traffic and are more than 1 inch in depth, shoulder material adjacent thereto shall be placed within 72 hours after placement of the base or surface course.

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**SECTION 308 – SUBBASE COURSE**

**SECTION 308 – SUBBASE COURSE** of the Specifications is amended as follows:

**Section 308.03 – Procedures** is replaced by the following:

Prior to placement of the subbase course, the subgrade shall be constructed in accordance with Section 304 and Section 305 as applicable.

Subbase material shall be mixed in an approved central mixing plant of the pugmill or other mechanical type in accordance with Section 208.05. The Contractor shall place the mixed material on the subgrade by means of an approved aggregate spreader. The Engineer will not require the use of such spreader when the material is being applied solely for the temporary maintenance of traffic or where the width of the course shown on the plans is transitional and impracticable to place with a spreader box.

The Contractor shall spread and compact the material in two or more layers of approximately equal thickness where the required thickness is more than 6 inches. The compacted thickness of any one layer shall be not more than 6 inches, however the Engineer may approve increasing the compacted depth of a single layer of the subbase course to 10 inches when vibrating or other approved types of special compacting equipment are used.

Each layer of subbase course shall be compacted at optimum moisture, within  $\pm 2$  percentage points of optimum. The density of each layer of subbase aggregate material, when compared to the theoretical maximum density as determined in accordance with VTM-1, shall conform to the following:

<b>% Material Retained on No. 4 Sieve</b>	<b>Min. % Density</b>
0-50	100
51-60	95
61-70	90

Percentages shall be reported to the nearest whole number. The above density requirements may be reduced by 5% per VTM-10 when using the portable nuclear density gauge in direct transmission mode.

The Department will perform field density determinations with a portable nuclear density gauge using the density control strip as specified in Section 304 and VTM-10, or by other approved methods as directed by the Engineer.

The Contractor shall scarify, reshape, and recompact the surface of the subbase if it becomes uneven or distorted and sets up in that condition. If the subbase when compacted and shaped shows a deficiency in thickness or if depressions occur in the surface, the Contractor shall scarify such sections at his own expense before additional material is added.

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**SECTION 309 – AGGREGATE BASE COURSE**

**SECTION 309 – AGGREGATE BASE COURSE** of the Specifications is amended as follows:

**Section 309.05 – Density Requirements** is replaced by the following:

The Contractor shall spread and compact the material in two or more layers of approximately equal thickness where the required thickness is more than 6 inches. The compacted thickness of any one layer shall be not more than 6 inches, however the Engineer may approve increasing the compacted depth of a single layer of the base course to 10 inches when vibrating or other approved types of special compacting equipment are used.

The Contractor shall compact each layer at optimum moisture within  $\pm 2$  percentage points of optimum after mixing and shaping. The density of each layer of base aggregate material, when compared to the theoretical maximum density as determined in accordance with VTM-1, shall conform to the following:

% Material Retained on No. 4 Sieve	Min. % Density
0-50	100
51-60	95
61-70	90

Percentages shall be reported to the nearest whole number. The above density requirements may be reduced by 5% per VTM-10 when using the portable nuclear density gauge in direct transmission mode.

The base course will be tested in place for depth and density. The Department will perform field density determinations with a portable nuclear density gauge using the density control strip as specified in Section 304 and VTM-10, or by other approved methods as directed by the Engineer.

The Contractor shall maintain the surface of each layer during the compaction operations in a manner such that a uniform texture is produced and the aggregates are firmly keyed. The Contractor shall uniformly apply water over the base materials during compaction in the amount necessary to obtain proper density.

Irregularities in the surface shall be corrected by scarifying, remixing, reshaping, and recompacting until a smooth surface is secured. The surface shall thereafter be protected against the loss of fine materials by the addition of moisture, when necessary, and shall be maintained in a satisfactory and smooth condition until accepted by the Engineer.

The Engineer will base acceptance of the aggregate base course for depth on the requirements of Section 308.

VIRGINIA DEPARTMENT OF TRANSPORTATION  
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**SECTION 315 – ASPHALT CONCRETE PLACEMENT**

**SECTION 315 – ASPHALT CONCRETE PLACEMENT of the Specifications is replaced with the following:**

**315.01 – Description**

This work shall consist of constructing one or more courses of asphalt concrete on a prepared foundation in accordance with these Specifications and within the specified tolerances for the lines, grades, thicknesses, and cross sections shown on the plans or established by the Engineer. At the Contractor's option, the asphalt concrete mix may be produced using a warm-mix additive or warm-mix process approved by the Department. When used, the temperature placement limitations for Warm Mix Asphalt (WMA) shall apply.

This work shall also consist of constructing asphalt concrete curb and rumble strips in accordance with these Specifications, plan details, and the Standard Drawings.

**315.02 – Materials**

- (a) **Asphalt concrete** shall conform to Section 211. The Contractor shall alter the design if SUPERPAVE design densities begin to exceed 98 percent of the Theoretical Maximum Density (TMD) during construction.
- (b) **Asphalt for Tack Coat** shall conform to Section 210 and shall be applied according to Section 310.
- (c) **Asphalt for prime coat** shall conform to Section 210 and shall be applied according to Section 311.
- (d) **Curb backup material** shall be asphalt concrete conforming to any surface or intermediate mixture listed in Table II-13 and Table II-14.
- (e) **Liquid asphalt coating (emulsion) for rumble strips** shall conform to Section 210. The Contractor shall use CSS-1h or CQS-1h asphalt emulsions for centerline rumble strips. The CSS-1h or CQS-1h liquid asphalt may be diluted by up to 30 percent at the emulsion manufacturer's facility.

**315.03 – Equipment**

- (a) **Hauling Equipment:** Trucks used for hauling asphalt mixtures shall have structurally sound, tight, clean, smooth metal or other non-absorptive, inert material bodies equipped with a positive locking metal tailgate. Surfaces in contact with asphalt mixtures shall be given a thin coat of aliphatic hydrocarbon invert emulsion release agent (nonpuddling), a lime solution, or other release agent materials on the Materials Division's Approved List No. 8. The beds of dump trucks shall be raised to remove excess release agent prior to loading except when a nonpuddling release agent is used. Only a nonpuddling agent shall be used in truck beds that do not dump. Each Contractor truck used for hauling asphalt shall be equipped with a tarpaulin or other type of cover acceptable to the Engineer that shall protect the mixture from moisture and foreign matter and prevent the rapid loss of heat during transportation.

- (b) **Asphalt Pavers:** The asphalt paver shall be designed and recommended by the Manufacturer for the type of asphalt to be placed and shall be operated in accordance with the Manufacturer's recommendations. The Contractor shall readily have and maintain on the project site any written recommendations from the Manufacturer of the mix relative to handling and placing of the mixture. In the absence of the Manufacturer's recommendations, the recommendations of the National Asphalt Pavement Association shall be followed. The paver shall be capable of producing a smooth uniform texture, dense joints, and a smooth riding surface even when screed extensions are used.
- (c) **Rollers:** Rollers shall be steel wheel, static or vibratory, or pneumatic tire rollers and shall be capable of reversing without backlash. The Contractor shall operate rollers at speeds slow enough to avoid displacement of the mixture. The number and weight of rollers shall be sufficient to compact the mixture to the required density while it is still in a workable condition. The Engineer will not allow the use of equipment that results in excessive crushing of aggregate or marring of the pavement surface. If the Contractor's equipment mars the surface of the pavement during construction to the extent that imperfections cannot satisfactorily be corrected or produces permanent blemishes, the Engineer will require the Contractor to discontinue the use of that particular equipment and replace that equipment with satisfactory units.
- (d) **Rotary Saw:** The Contractor shall supply a gasoline-powered rotary saw with a carbide blade for cutting test samples from the pavement. The Contractor shall provide gasoline, oil, additional carbide blades, and maintenance for the rotary saw. The Contractor shall cool the pavement prior to sawing the sample. As an alternative, the Contractor may furnish the necessary equipment for coring and testing 4-inch core samples in accordance with VTM-22.
- (e) **Material Transfer Vehicle (MTV):** When required in the Contract, the Contractor shall furnish a self-propelled MTV storage unit capable of receiving material from trucks, storing the material, and transferring the material from the unit to a paver hopper insert via a conveyor system. The paver hopper insert and unit shall have a combined minimum storage capacity of 15 tons. The storage unit or paver hopper insert must be able to remix the material in order to produce a uniform, non-segregated mix having a uniform temperature prior to placing the asphalt material on the roadway surface.

#### **315.04 – Placement Limitations**

The Contractor shall not place asphalt concrete mixtures when weather or surface conditions are such that the material cannot be properly handled, finished, or compacted. The surface upon which asphalt mixtures is to be placed shall be free of standing water, dirt, and mud and the base temperature shall conform to the following:

##### **(a) Asphalt Concrete Produced with Warm Mix Asphalt Additives or Processes:**

The Contractor shall note on the delivery ticket that the load is Warm Mix Asphalt.

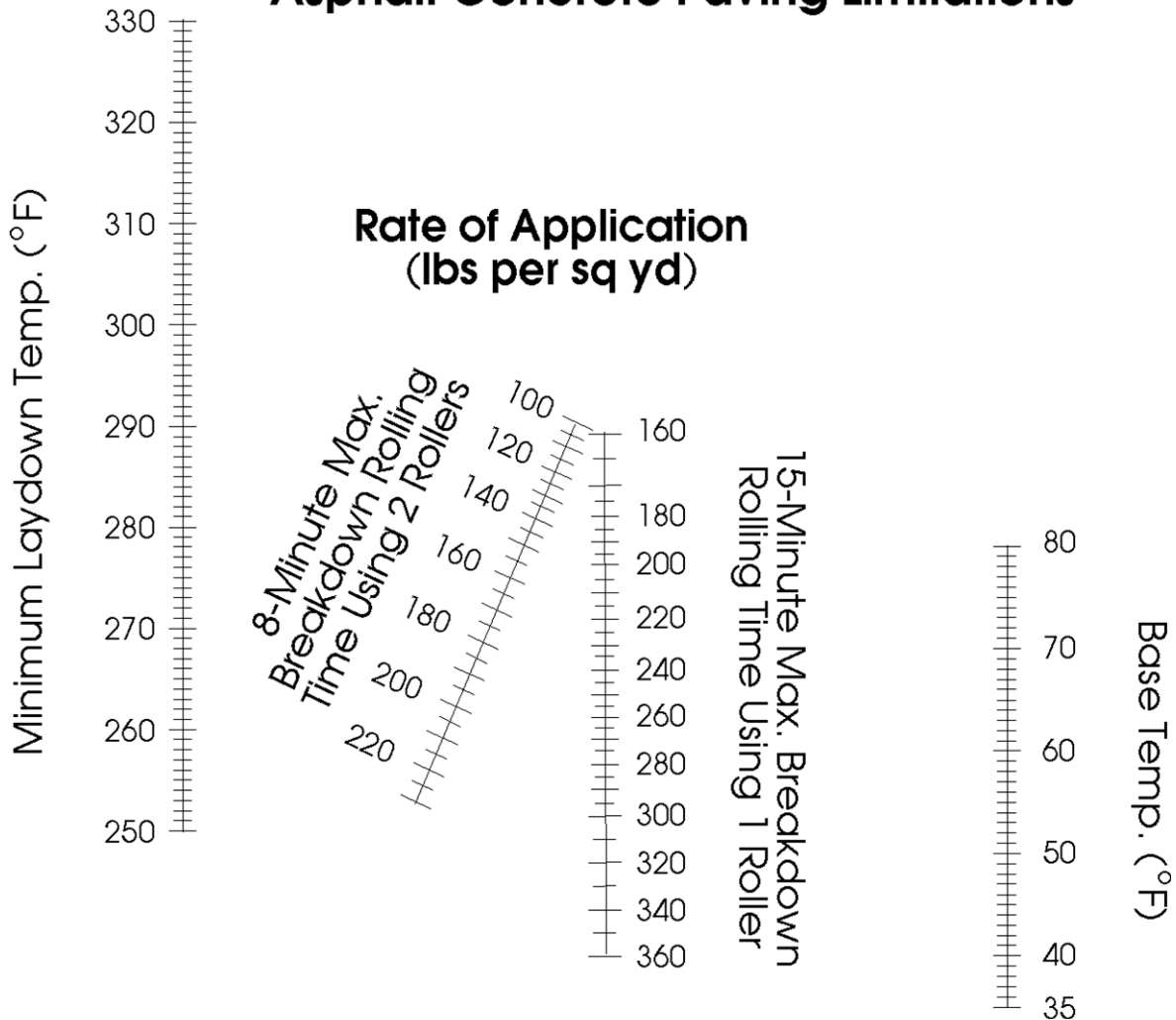
1. **When the base temperature is 40 degrees F and above:** The Engineer will permit lay-down at any temperature below the maximum limits given in Section 211.08.
2. **When the mixture temperature is below 200 degrees F:** The Contractor will not be allowed to place the material.

##### **(b) Asphalt Concrete Produced without Warm Mix Asphalt Additives or Processes:**

1. **When the base temperature is above 80 degrees F:** The Engineer will allow laydown of the mixture at any temperature conforming to the limits specified in Section 211.
2. **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 BM and IM mixes be less than 250°F.

**TABLE III-2  
Cold Weather Paving Limitations**

### Asphalt Concrete Paving Limitations



The minimum base and laydown temperatures for surface mixes (SM) shall never be less than the following:

<b>PG Binder/Mix Designation</b>	<b>Percentage of Reclaimed Asphalt Pavement (RAP) Added to Mix</b>	<b>Minimum Base Temperature</b>	<b>Minimum Placement Temperature</b>
PG 64S-22 (A)	<=25%	40°F	250°F
PG 64S-22 (A)	>25%	50°F <sup>2</sup>	270°F <sup>2</sup>
PG 64H-22 (D)	<=30%	50°F <sup>2</sup>	270°F <sup>2</sup>
PG 64E-22 (E)	<=15%	50°F <sup>2</sup>	290°F <sup>2</sup>
PG 64S-22 (S)	<=30%	50°F <sup>2</sup>	290°F <sup>2</sup>

3. **When the laydown temperature is between 301 degrees F and 325 degrees F:** The number of compaction rollers shall be the same number as those required for 300 degrees F.

Intermediate and base courses that are placed at rates of application that exceed the application rates shown in Table III-2 shall conform to the requirements for the maximum application rate shown for 8-minute and 15-minute compaction rolling as per number of rollers used.

If the Contractor is unable to complete the compaction rolling within the applicable 8-minute or 15-minute period, the Engineer will either require the placing of the asphalt mixture to cease until sufficient rollers are used or other corrective action be taken to complete the compaction rolling within the specified time period.

The Contractor shall complete compaction rolling prior to the mat cooling down to 175 degrees F. Finish rolling may be performed at a lower mat temperature.

The Contractor shall not place the final asphalt pavement finish course until temporary pavement markings will no longer be required.

(c) **SM-4.75 Mixtures Placement:**

1. The minimum placement temperature shall be 290°F regardless of WMA use.
2. The minimum ambient and base temperature shall be 50°F. The Contractor shall employ a MTV during the placement of SM-4.75 mixtures when either the ambient or base temperature is between 50°F and 60°F.

**315.05 – Procedures**

- (a) **Base Course:** The Contractor shall prepare the subgrade or subbase as specified in Section 305. The Contractor shall grade and compact the course to the required profile upon which the pavement is to be placed, including the area that will support the paving equipment.
- (b) **Conditioning Existing Surface:** The surface on which the asphalt concrete is to be placed shall be prepared in accordance with the applicable specifications and shall be graded and compacted to the required profile and cross section.

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.

1. **Priming and Tacking:** The Contractor shall paint contact surfaces of curbing, gutters, manholes, and other structures projecting into or abutting the pavement and cold joints of asphalt with a thick, uniform coating of asphalt prior to placing the asphalt mixture.

The Contractor shall apply a tack or prime coat of asphalt conforming to the applicable requirements of Section 311 or Section 310 and as specified below. Liquid asphalt classified as cutbacks or emulsions shall be applied ahead of the paving operations, and the time interval between applying and placing the paving mixture shall be sufficient to ensure a tacky residue has formed to provide maximum adhesion of the paving mixture to the base. The Contractor shall not place the mixture on tack or prime coats that have been damaged by traffic or contaminated by foreign material. Traffic shall be excluded from such sections.

- a. **Priming aggregate base or subbase:** The Engineer will not require priming with asphalt material on aggregate subbase or base material prior to the placement of asphalt base, intermediate or surface layers unless otherwise specified in the Contract.
- b. **Tacking:** Tack at joints, adjacent to curbs, gutters, or other appurtenances shall be applied with a hand wand or with spray bar at the rate of 0.2 gallon per square yard. At joints, the tack applied by the hand wand or a spray bar shall be 2 feet in width with 4 to 6 inches protruding beyond the joint for the first pass. Tack for the adjacent pass shall completely cover the vertical face of the pavement mat edge so that slight puddling of asphalt occurs at the joint, and extend a minimum of 1 foot into the lane to be paved. Milled faces that are to remain in place shall be tacked in the same way for the adjacent pass. Use of tack at the vertical faces of longitudinal joints will not be required when paving is performed in echelon.

The tack coat shall be eliminated on asphalt saturated (rich) sections or those that have been repaired by the extensive use of asphalt patching mixtures when directed by the Engineer.

Tack shall not be required atop asphalt stabilized open-graded material drainage layers.

Tack shall be applied between the existing asphalt surface and each asphalt course placed thereafter.

2. **Removing depressions and elevating curves:** Where irregularities in the existing surface will result in a course more than 3 inches in thickness after compaction, the Contractor shall bring the surface to a uniform profile by patching with asphalt concrete and thoroughly tamping or rolling the patched area until it conforms with the surrounding surface. The mixture used shall be the same as that specified for the course to be placed.

When the Contractor elects to conduct operations to eliminate depressions, elevate curves, and place the surface course simultaneously, the Contractor shall furnish such additional spreading and compacting equipment as required to maintain the proper interval between the operations.

- (c) **Placing and Finishing:** The Contractor shall not place asphalt concrete until the Engineer approves the surface upon which it is to be placed.

The Contractor's equipment and placement operations shall properly control the pavement width and horizontal alignment. The Contractor shall use an asphalt paver sized to distribute asphalt concrete over the widest pavement width practicable. Wherever practicable, and when the capacity of sustained production and delivery is such that more than one paver can be successfully and continuously operated, pavers shall be used in echelon to place the wearing course in adjacent lanes. Crossovers, as well as areas containing manholes or other obstacles that prohibit the practical use of mechanical

spreading and finishing equipment may be constructed using hand tools. However, the Contractor shall exercise care to obtain the required thickness, jointing, compaction, and surface smoothness in such areas.

The longitudinal joint in one layer shall offset that in the layer immediately below by approximately 6 inches or more. The joint in the wearing surface shall be offset 6 inches to 12 inches from the centerline of the pavement if the roadway comprises two traffic lanes. The joint shall be offset approximately 6 inches from the lane lines if the roadway is more than two lanes in width. The longitudinal joint shall be uniform in appearance. If the offset for the longitudinal joint varies from a straight line more than 2 inches in 50 feet on tangent alignment, or from a true arc more than 2 inches in 50 feet on curved alignment, the Contractor shall seal the joint using a water-proof sealer at no cost to the Department. The Contractor shall recommend a sealant and installation procedure to the Engineer for approval before proceeding. If the offset for the longitudinal joint varies from a straight line more than 3 inches in 50 feet on tangent alignment, or from a true arc more than 3 inches in 50 feet on curved alignment, the Engineer may reject the paving. The Engineer will not require offsetting layers when adjoining lanes are paved in echelon and the rolling of both lanes occurs within 15 minutes after laydown.

The Contractor shall have a certified Asphalt Field Level II Technician present during all paving operations. Immediately after placement and screeding, the surface and edges of each layer shall be inspected by the Asphalt Field Level II Technician to ensure compliance with the asphalt placement requirements and be straightedged to verify uniformity and smoothness. The Asphalt Field Level II Technician shall make any corrections to the placement operations, if necessary, prior to compaction.. The finished pavement shall be uniform and free of irregularities. If irregularities, including but not limited to segregation or flushing, are identified during the paving operation, the Contractor shall immediately notify the Engineer and address the irregularities with corrective action. If the irregularities continue, the Contractor shall cease the paving operation and not resume until corrective measures have been approved by the Department. When irregularities are noted, the limits of the finished mat shall be determined by the Engineer. The limits of the deficient area of the finished mat shall be removed and replaced at no cost to the Department.

The Contractor's Asphalt Field Level II Technician shall be present during all density testing.

Asphalt concrete placement shall be as continuous as possible and shall be scheduled such that the interruption occurring at the completion of each day's work shall not detrimentally affect the partially completed work. Material that cannot be spread and finished in daylight shall not be dispatched from the plant unless the Engineer approves the use of artificial lighting. When paving is performed at night, the Contractor shall provide sufficient light to properly perform and thoroughly inspect every phase of the operation. Such phases include cleaning planed surfaces, applying tack, paving, compacting, and testing. Lighting shall be provided and positioned so as to not create a blinding hazard to the traveling public.

The Contractor shall ensure that the roller does not pass over the end of freshly placed material during the compaction of asphalt concrete except when a transverse construction joint is to be formed. Edges of pavement shall be finished true and uniform.

Asphalt concrete SUPERPAVE pavement courses shall be placed in layers not exceeding five times the Nominal Maximum Aggregate Size (NMAS) in the asphalt concrete. The maximum thickness may be reduced if the mixture cannot be adequately placed in a single lift and compacted to the required uniform density and smoothness. The minimum thickness for a pavement course shall be no less than 2.5 times the NMAS of the asphalt concrete. The NMAS for each mix shall be defined as one sieve size larger than the first sieve to retain more than 10 percent aggregate as shown in the design range specified in Section 211.03, Table II-13. The Contractor may place base courses in irregularly shaped areas of pavement such as transitions, turn lanes, crossovers, and entrances in a single lift.

The Contractor shall square up overlays in excess of 220 pounds per square yard or lanes with a milled depth greater than 2 inches prior to opening to traffic.

The Contractor shall cut drainage outlets through the shoulder at locations the Engineer designates, excluding curb and gutter sections, on the milled roadway areas that are to be opened to traffic. Plan and prosecute the milling operation to avoid trapping water on the roadway and restore drainage outlets to original grade once paving operations are completed, unless otherwise directed by the Engineer. The cost for cutting and restoring the drainage slots in the roadway shoulder shall be included in the price bid for other items of work.

The Contractor shall plan and prosecute a schedule of operations so that milled roadways shall be overlaid with asphalt concrete as soon as possible. In no instance shall the time lapse exceed 14 days after the milling operations, unless otherwise specified in Section 515 or other provisions in the contract. The Contractor shall keep milled areas of the roadway free of irregularities and obstructions that may create a hazard or annoyance to traffic in accordance with Section 104.

The Contractor shall use a short ski or shoe to match the grade of the newly overlaid adjacent travel lane on primary, interstate, and designated secondary routes. Unless otherwise directed by the Engineer, a 24-foot minimum automatic grade control ski shall be used on asphalt mixtures on divided highways, with the exception of overlays that are less than full width and the first course of asphalt base mixtures over aggregate subbases. Care shall be exercised when working along curb and gutter sections to provide a uniform grade and joint.

The Contractor shall construct the final riding surface to tie into the existing surface by an approved method, which shall include the cutting of a notch into the existing pavement. In addition to notching, the Contractor may use an asphalt mix design containing a fine-graded mix to achieve a smooth transition from the new asphalt concrete overlay to the existing pavement, with the approval of the Engineer. The material shall be of a type to ensure that raveling will not occur. The cost for constructing tie-ins in the asphalt concrete overlay shall be included in the asphalt concrete contract unit price.

Prior to application of tack coat and commencement of paving operations if, in the opinion of the Engineer, the existing pavement surface condition may detrimentally affect or prevent the bond of the new overlay, the Contractor shall clean the existing pavement surface of all accumulated dust, mud, or other debris. At no point shall soil, aggregate, or other potential bond breaker material be stored on the pavement surface, unless otherwise approved by the Engineer. If the Contractor wishes to stockpile materials on the pavement surface, the Contractor shall provide documentation to the Engineer for approval on the means and methods that will be used to ensure it will not detrimentally affect or prevent the bond of the next pavement layer. This includes all base, intermediate and surface asphalt layers.

The Contractor shall ensure the surface remains clean until commencement of, and during, paving operations. The cost for cleaning and surface preparation shall be included in the asphalt concrete contract unit price.

The Contractor shall employ a Material Transfer Vehicle (MTV) during the placement of surface mixes (SM) on all Interstate routes. If equipment within the paving train breaks down, paving shall be discontinued once the material on-site has been placed and no more material shall be shipped from the asphalt plant.

When required in the Contract, a MTV shall be used during the placement of designated asphalt mixes on full lane width applications.

- (d) **Compacting:** Immediately after the asphalt mixture is placed, struck off, and surface irregularities are corrected, the mixture shall be thoroughly and uniformly compacted by rolling. Rolling shall be a continuous process, insofar as practicable, and all parts of the pavement shall receive uniform compaction.

The asphalt surface shall be rolled when the mixture is in the proper condition. Rolling shall not cause undue displacement, cracking, or shoving of the placed mixture.

The Contractor shall use the number, weight, and type of rollers sufficient to obtain the required compaction while the mixture is in a workable condition. The sequence of rolling operations and the selection of roller types shall provide the specified pavement density.

Rolling shall begin at the sides of the placement and proceed longitudinally parallel with the center of the pavement, each pass overlapping at least 6 inches, gradually progressing to the crown of the pavement. When abutting a previously placed lane, rolling shall begin at the outside unconfined side and proceed toward the previously placed lane. On superelevated curves, rolling shall begin at the low side and proceed to the high side by overlapping longitudinal passes parallel with the centerline.

The Contractor shall correct displacements occurring as a result of reversing the direction of a roller or other causes at once by the use of rakes or lutes and the addition of fresh mixture when required. Care shall be taken in rolling not to displace or distort the line and grade of the edges of the asphalt mixture. Edges of finished asphalt pavement surfaces shall be true curves or tangents. The Contractor shall correct irregularities in such areas.

The Contractor shall keep the wheels/drums of the rollers properly moistened with water, water mixed with a very small quantity of detergent or other Engineer approved material to prevent adhesion of the mixture to the rollers. The Engineer will not allow the use or presence of excess liquid on the rollers.

The Contractor shall thoroughly compact the mixture along forms, curbs, headers, walls, and other places not accessible to rollers with hot hand tampers, smoothing irons, or mechanical tampers,. On depressed areas, a trench roller or cleated compression strips may be used under the roller to ensure proper compression.

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.

The Contractor shall protect the surface of the compacted course until the material has cooled sufficiently to support normal traffic without marring.

- (e) **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 feet 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 VTM-81 or from the testing of plugs/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 density of 92.5 of TMD 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 these 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 action(s). 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 of 92.5% of TMD for surface, intermediate and base mix, 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 of 92.5% of TMD for surface, intermediate and base mix 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 of 92.5% of TMD for surface, intermediate and base mix, the tonnage placed in the control strip and any subsequent paving prior to construction of another control strip will be paid for in accordance with Table III-3. If the control strip density is below 88% TMD, then that tonnage shall be removed from the roadway at no cost to the Department. At the discretion of the Engineer, the material may be accepted at 75% of the contract unit price. The Contractor shall take corrective action(s) to comply with the density requirement of a minimum of 92.5% of TMD.

**TABLE III-3  
Control Strip Requirement and Payment Schedule for SM, IM and BM  
mixes**

% TMD	% of Payment
Greater than 96.5 <sup>1</sup>	95
<b>92.5– 96.5<sup>1</sup></b>	<b>100</b>
90.0-92.4	90
88.0-89.9	80
Less than 88.0	Removal

<sup>1</sup> For Base Mix only, the range for 100% pay shall be 92.5-97.0% of TMD.

- b. **Test section (lot):** For the purposes of both Contractor quality control and determining acceptance, the Engineer will consider each day's production as a lot unless the paving length is less than 3,000 linear feet or more than 7,500 linear 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 linear 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 linear foot lots 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 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 and 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 sublot 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 during the paving shift 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.). Asphalt concrete 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.

**TABLE III-4A**  
**Payment Schedule for Method A Lot Densities for SM, IM and BM mixes**

% TMD	% of Payment
Greater than 96.5 <sup>1</sup>	95
92.5 – 96.5 <sup>1</sup>	100
90.0–92.4	90
88.0 – 89.9	80
Less than 88.0	Removal

<sup>1</sup>For Base Mix only, the range for 100% pay shall be 92.5-97.0% TMD.

If a minimum of 80% of each test section lot's core/plug samples is no lower than 92.5% of TMD 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. No increase will be applied if core/plug samples are cut outside of the paving shift unless otherwise approved by the Engineer; any applicable density pay reduction from Table III-4A may still apply.

If any subplot(s) are lower than 88.0% of TMD then those sublots shall be removed from the roadway at no cost to the Department. If the lot average is below 88.0% of TMD then that test section shall be removed from the roadway at no cost to the Department.

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.

**TABLE III-4B**

**Payment Schedule for Method B Lot Densities**

<b>% of Target Control Strip Density</b>	<b>% of Payment</b>
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, but (% of Target Control Strip Density x %TMD control strip cores) > 88%	75
Less than 96.0, and (% of Target Control Strip Density x %TMD control strip cores) ≤ 88%	Removal <sup>1</sup>

1. If any lot produces density results less than 96.0% of Target, and (% of Target Control Strip Density x % TMD control strip cores) ≤ 88%, then that lot shall be removed from the roadway at no cost to the Department.

**(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 3500 feet or less and at least 6 feet in width shall be compacted to a minimum density of 92.5 percent 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.

**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 92.5	100
90.0-92.4	90
88.0-89.9	80
Less than 88.0	Removal <sup>1</sup>

1. Removal shall be at no cost to the Department.

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 or paving widths narrower than 6 feet in width, the minimum density of 91.5 percent 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 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 percent, payment will be made on the tonnage within the 20 or 100 ton lot in accordance with Table III-6.

**TABLE III-6**  
**Payment Schedule for Surface, Intermediate and Base Courses (Asphalt Patching)**

% TMD	% of Payment
Greater than or equal to 91.5	100
90.0-91.4	95
88. 1-89.9	90
Less than or equal to 88.0	Removal <sup>1</sup>

1. Removal shall be at no cost to the Department.

- (f) **Joints:** Transverse joints shall be formed by cutting back on the previous run to expose the full depth of the course. A coat of asphalt shall be applied to contact surfaces of transverse joints just before additional mixture is placed against the previously rolled material.

Joints adjacent to curbs, gutters, or adjoining pavement shall be formed by hand placing sufficient mixture to fill any space left uncovered by the paver. The joint shall then be set up with rakes or lutes to a height sufficient to receive full compression under the rollers.

- (g) **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.

- (h) **Saw-Cut Asphalt Pavement:** This work shall consist of saw-cutting the existing asphalt pavement to a depth as shown on the plans or as directed by the Engineer.
- (i) **Coating designed surface cuts:** 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.

**315.06 – Pavement Samples**

The Contractor shall cut samples from the compacted pavement for depth and density testing. Samples shall be taken for the full depth of the course at the locations selected by the Engineer. The removed pavement shall be replaced with new mixture and refinished. No additional compensation will be allowed for furnishing test samples and reconstructing areas from which they were taken.

**315.07—Pavement Tolerances**

- (a) **Surface Tolerance:** The Engineer will test the pavement surface by using a 10-foot straight-edge. The variation of the surface from the testing edge of the straightedge between any two contacts with the surface shall not be more than 1/4 inch. The Contractor shall correct humps and depressions exceeding the specified tolerance or the defective work shall be removed and replaced with new material.
- (b) **Finished Grade Tolerance:** Finished grade elevations shall be within +/-0.04 foot of the elevations indicated in the plans after placement of the final pavement layer unless otherwise specified, provided the actual cross slope does not vary more than 0.20 percent from the design cross slope indicated in the plans, and the plan depth thickness conforms to the thickness tolerances specified herein.

If the Engineer determines either the finished grade elevations or cross slope exceed the specified tolerances, the Contractor shall submit a corrective action plan to the Engineer for approval.

- (c) **Thickness Tolerance:** The thickness of the base course will be determined by the measurement of cores as described in VTM-32.

Acceptance of asphalt concrete base course for depth will be based on the mean result of measurements of samples taken from each lot of material placed. A lot of material is defined as the quantity being tested for acceptance except that the maximum lot size will be 1 mile of 24-foot-width base course.

A lot will be considered acceptable for depth if the mean result of the tests is within the following tolerance of the plan depth for the number of tests taken:

<b>Plan Depth</b>	<b>1 test</b>	<b>2 tests</b>	<b>3 tests</b>	<b>4 tests</b>
≤4"	0.6"	0.5"	0.4"	0.3"
>4" ≤8"	0.9"	0.7"	0.5"	0.4"
>8" ≤12"	1"	0.9"	0.7"	0.5"
>12"	1.2"	1"	0.8"	0.6"

If an individual depth test exceeds the one test tolerance for the specified plan depth, the Engineer will exclude that portion of the lot represented by the test from the lot. If an individual test result indicates that the depth of material represented by the test is more than the tolerance for one test, the Contractor will not be paid for that material in excess of the tolerance throughout the length and width represented by the test. If an individual test result indicates that the depth of the material represented by the test is deficient by more than the one test tolerance for the plan depth, the Contractor shall correct the base course represented by the test as specified hereinafter.

If the mean depth, based on two or more tests, of a lot of material is excessive (more than the plan depth specified in the contract), the Engineer will not pay the Contractor for any material in excess of the tolerance throughout the length and width of the lots represented by the tests.

If the mean depth, based on two or more tests, of a lot of material is deficient (less than the plan depth specified in the contract) by more than the allowable tolerance, the Contractor will be paid for the quantity of material that has been placed in the lot. Any required corrective action will be determined by the Engineer.

For excessive depth base courses, the rate of deduction from the tonnage allowed for payment as base course will be calculated at a weight of 115 pounds per square yard per inch of depth in excess of the tolerance. For sections of base course that are deficient in depth by more than the one test tolerance and less than two and half times the one test tolerance, the Contractor shall furnish and place material specified for the subsequent course to bring the base course depth within the tolerance. This material will be measured on the basis of tonnage actually placed, determined from weigh tickets, and will be paid for at the contract unit price for the base course material. Such material shall be placed in a separate course. If the deficiency is more than two and half times the one test tolerance, the Contractor shall furnish and place base course material to bring the base course thickness within the tolerance. Corrections for deficient base course depth shall be made in a manner to provide a finished pavement that is smooth and uniform. Sections requiring significant grade adjustments which have been previously identified and documented by the Engineer as being outside of the control of the Contractor will be exempt from deduction or corrective action.

When the Contract provides for the construction or reconstruction of the entire pavement structure, the surface and intermediate courses shall be placed at the rate of application shown on the plans within an allowable tolerance of  $\pm 5$  percent of the specified application rate for application rates of 100 pounds per square yard or greater and within 5 pounds per square yard for application rates of less than 100 pounds per square yard. The Engineer will deduct the amount of material exceeding the allowable tolerance from the quantities eligible for payment.

When the Contract provides for the placement of surface or intermediate courses over existing pavement, over pavements constructed between combination curb and gutter, or in the construction or reconstruction of shoulders, such courses shall be placed at the approximate rate of application as shown on the plans. However, the specified rate of application shall be altered where necessary to produce the required riding quality.

### **315.08 – Measurement and Payment**

**Asphalt concrete base** will be measured in tons and will be paid for at the contract unit price per ton. This price shall include preparing and shaping the subgrade or subbase, constructing and finishing shoulders and ditches, and removing and replacing unstable subgrade or subbase.

**Asphalt concrete** will be measured in tons and will be paid for at the contract unit price per ton. Net weight information shall be furnished with each load of material delivered in accordance with Section 211. Batch weights will not be permitted as a method of measurement unless the Contractor's plant is equipped in accordance with Section 211, in which case the cumulative weight of the batches will be used for payment.

**Asphalt used in the mixtures**, when a pay item, will be measured in tons in accordance with Section 109.01 except that transporting vehicles shall be tare weighed prior to each load. The weight will be adjusted in accordance with the percentage of asphalt indicated by laboratory extractions.

**Tack coat**, when a pay item, will be measured and paid for in accordance with Section 310 of the Specifications. When not a pay item, it shall be included in the price for other appropriate pay items.

**Asphalt curb backup material** will be measured in tons and will be paid for at the contract unit price per ton. This price shall include placing, tamping, and compacting.

**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.

**Warm Mix Asphalt (WMA)** additive or process will not be measured for separate payment, the cost of which, shall be included in the contract unit prices of other appropriate items.

**Rumble strips** will be measured in linear feet and will be paid for at the contract unit price per linear foot of mainline pavement or shoulder where the rumble strips are actually placed and accepted, excluding the test site. This distance will be measured longitudinally along the center line of pavement (mainline) or edge of pavement (shoulders) with deductions for bridge decks, acceleration/deceleration lanes, surface drainage structures, and other sections where the rumble strips were not installed. This price shall include installing, cleaning up debris and disposing of waste material. The test site will not be measured for payment but shall be included in the unit price for rumble strip.

**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.

**Saw-cut asphalt concrete pavement** will be measured in linear feet for the depth specified and will be paid for at the contract unit price per linear foot, which price shall be full compensation for saw-cutting the asphalt pavement to the depth specified, cleaning up debris and disposal of waste material.

These prices for asphalt shall also include heat stabilization additive(s), furnishing samples, and maintaining traffic.

Patching will be paid for at the contract unit price for the various items used unless a reconditioning item is included in the Contract.

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Asphalt concrete base course (Type)	Ton
Asphalt concrete (Type)	Ton
Asphalt concrete curb backup material	Ton
Liquid asphalt cement	Ton
Liquid asphalt coating	Square yard
Rumble Strip Standard)	Linear foot
Saw-cut asphalt concrete (depth)	Linear foot

VIRGINIA DEPARTMENT OF TRANSPORTATION  
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**SECTION 317 – STONE MATRIX ASPHALT CONCRETE PLACEMENT**

**SECTION 317 – STONE MATRIX ASPHALT CONCRETE PLACEMENT** of the Specifications is amended as follows:

**Section 317.08– Compaction** is replaced by the following:

Immediately after the mixture has been spread and struck off, it shall be thoroughly and uniformly compacted by rolling. Rolling shall be accomplished with steel wheel roller(s) with a minimum weight of 10 tons. A minimum of three rollers shall be available at all times for compaction and/or finish rolling.

The Contractor shall approach the use of vibratory rollers on SMA with caution to minimize coarse aggregate fracture/breakage in the aggregate skeleton of SMA mixes. If the Contractor elects to use a vibratory roller, the mat shall receive not more than three vibratory passes. The Contractor shall use the roller only on the highest frequency and lowest amplitude setting.

It shall be the Contractor's responsibility to adjust the rolling procedures to provide the specified pavement density. Rollers shall move at a uniform speed. Rolling shall be continued until all roller marks are eliminated and the minimum density has been obtained. The Contractor shall monitor density during the compaction process by use of nuclear density gages to ensure that the minimum required compaction is being obtained. During the trial section, the Department will randomly select 3 plug or core locations to determine the in-place density according to VTM-22.

The Contractor shall keep the wheels of the rollers properly moistened with water that has been mixed with very small quantities of detergent or other approved additives to prevent adhesion of the mixture to the rollers.

For the purposes of evaluating and determining acceptance, each day's production shall be considered a lot unless the paving length is less than 3,000 linear feet or greater than 7,500 linear feet. When paving is less than 3,000 feet, that day's production amount shall 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 shall be 5,000 linear feet, with 1,000 foot sublots, of any pass 6 feet or greater for the specified thickness of the course. The Engineer may approve an increase in the lot size to 7,500 linear foot lots with 1,500 foot sublots when the normal daily production is in excess of 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 shall 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 perform acceptance testing for density for each subplot by obtaining one sawed 4 inch by 4 inch specimen, or one 4-inch-diameter cores, at a single random test site specified by the Engineer. Test sites shall not be located within 12 inches of the edge of any application width for surface and intermediate mixes.

- The sub-lot site shall be marked as described in VTM-76.
- The bulk specific gravity of the cores shall be determined in accordance with VTM-6.
- The density of the cores shall be determined in accordance with VTM-22.

The Contractor shall bulk the cores or plugs in the presence of the Engineer. The cores or plugs may be bulked on the project site. Sublot test sites shall be numbered sequentially per lot, marked on the pavement, filled with the paving mixture, and compacted prior to completion of each day's production.

If any sublots are lower than 90.0% of TMD, those sublots shall be removed from the roadway and replaced at no additional cost to the Department.

The payment for lot density will be in accordance with the following schedule:

<b>Payment Schedule</b>	
<b>% Density Achieved</b>	<b>% of Payment</b>
More than 98.0	97
94.0 to 98.0	100
92.0 to 93.9	85
90.0 to 91.9	65
Less than 90.0	Remove and replace

VIRGINIA DEPARTMENT OF TRANSPORTATION  
2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS  
**SECTION 318 – PAVEMENT INTERLAYERS**

**SECTION 318 – PAVEMENT INTERLAYERS** of the Specifications is amended as follows:

**Section 318.03(c) – Overlapping of Adjacent Interlayer Rolls** is replaced by the following:

**Overlapping of Adjacent Interlayer Rolls:** Adjacent interlayer rolls shall be overlapped, seamed, or fastened per the manufacturer's instructions; however, those instructions shall not supersede the requirements below.

1. When selecting roll sizes of interlayer products, and particularly when selecting the roll width, the lane width and any additional width needed for longitudinal overlap shall be considered.
2. When the size of the roll is less than that of the installation, then overlapping of the material will be required and the following will apply:
  - a. Overlaps are not allowed in the wheel path and/or under the construction joint;
  - b. Minimum overlaps shall not be less than 2 inches (50 mm), and
  - c. All longitudinal and transverse overlaps shall receive a second tack coat between the fabric overlaps.

Each of the requirements applies unless otherwise approved by the Engineer.

**Section 318.03(e) – Bond Strength** is inserted as follows:

**Bond Strength:** The Contractor shall ensure an adequate bond is made between the existing surface, interlayer, and the new overlay. The referee system for bond strength according to Section 310.03(c) is applicable for pavement interlayer placement.

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**SECTION 319 – THIN HOT MIX ASPHALT CONCRETE OVERLAY**

**SECTION 319 – THIN HOT MIX ASPHALT CONCRETE OVERLAY** of the Specifications is amended 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** binder 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 not exceed 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 and shall be hydrated lime, a chemical additive from the Department’s Approved List No. 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 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 binder prior to the introduction of the asphalt binder into the mix. Any chemical additive or particular concentration of chemical additive found to be harmful to the asphalt concrete 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  $\pm 10$  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	$\pm 5$
No.4	25-40	$\pm 4$
No.8	19-32	$\pm 4$
No.16	15-23	$\pm 3$
No. 30	10-18	$\pm 3$
No.50	8-13	$\pm 3$
No.100	6-10	$\pm 2$
No. 200	4-7	$\pm 1$

Asphalt Content, %	Production Tolerance (Single Test)
5.0 – 5.5 <sup>1</sup>	$\pm 0.2$

<sup>1</sup>Target 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 210.04 (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 prior to 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 asphalt emulsion shall be applied at a temperature recommended by the supplier at a starting rate of 0.20 gallons per square yard  $\pm 0.02$  unless otherwise approved by the Engineer.
- (b) **Option 2:** A Hot-Applied Non-Tracking tack coat conforming to Section 310 and listed on Approved List No. 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 0.12 gallons per square yard  $\pm 0.02$  unless otherwise approved by the Engineer.

### **319.06 – Placement of Hot Mix Asphalt**

The horizontal alignment of the longitudinal joint in the THMACO shall align overtop the longitudinal joint in the existing pavement as follows:

- when placed over an existing asphalt pavement, the THMACO joint shall be within 1 inch of either side of the existing joint (2 inch allowable variation, total);
- when placed over an existing concrete pavement, the THMACO joint shall be within 1/4 inch of either side of the existing joint (1/2 inch allowable variation, total).

The application rate of the THMACO shall be a minimum of 80 pounds per square yard and shall have a thickness of between 3/4-inch and 1-inch compacted lift thickness.

THMACO shall be placed by a paver designed for the placement of thin lifts as designated in the Contract. The THMACO shall be delivered to the paver hopper at a temperature of 315°F  $\pm 15^\circ\text{F}$  measured in the paver hopper. The paver shall be capable of placing the THMACO 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 THMACO. No less than two passes shall be completed before the surface temperature of the THMACO has reached 185°F.

### **319.08 – Acceptance**

The Contractor shall perform gradation and asphalt binder 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 binder 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 binder, 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 either: the loss of adhesion of the material to the underlying layer resulting in a pothole greater than 1 square foot of area (delamination); or being flushed with asphalt binder in greater than 1 square yard of area, either from within the mix or from the underlying tack (flushing). 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:

<b>Pay Item</b>	<b>Pay Unit</b>
Thin Hot Mix Asphalt Concrete	Ton

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**SECTION 321 – TRENCH WIDENING**

**SECTION 321 – TRENCH WIDENING** of the Specifications is amended as follows:

**321.01 – Description**

This work shall consist of installing asphalt concrete mixtures into a constructed trench to widen shoulders and travel lanes up to but not including the surface mix in accordance with the Plans and Specifications and as directed by the Engineer.

**321.02 – Material**

- (f) **Materials** shall conform to Section 211.02 and 315.02.
- (g) **Trench widening material** IM-19.0A shall be used for IM-19.0A(T) and IM-19.0D shall be used for IM-19.0D(T). Where BM-25.0(T) is designated, either BM-25.0A or BM-25.0D shall be used by the Contractor.

**321.03 – Placement Limitations**

The Contractor shall not place asphalt concrete mixtures when weather or surface conditions are such that the material cannot be properly handled, finished, or compacted. The surface upon which asphalt concrete mixtures is to be placed shall be free of standing water, dirt, and mud and the base temperature shall conform to Section 315.04.

**321.04 – Procedure**

- (a) **Trench Widening Route Types:** The minimum lift density as determined according to VTM-22 is based on the type of trench widening as defined below and specified in the Contract. Where trench widening is 2 feet in width, compaction may be performed with small single drum walk-behind rollers or other mechanical means acceptable to the Engineer.
  1. **Type 1: Paved Shoulder Only** shall be installed on routes where the widening will serve as a paved shoulder and will not be subjected to constant traffic. The painted edge line will not be on the trench widening. The minimum density requirement will not be enforced and plugs/cores are not required for this type of trench widening. Steel double drum rollers weighing at least 8 tons shall perform compaction of the asphalt concrete. At least five passes shall be completed.
  2. **Type 2: Widened Travel Lane and Paved Shoulder** shall be installed on routes where the widening will serve as a wider travel lane and paved shoulder that will be subjected to traffic. The widening will not include removal of existing travel lane pavement, i.e., inside the edge line marking. The painted edge line will be on the trench widening. The minimum density applies to this type of trench widening.
  3. **Type 3: Repaired Travel Lane and Paved Shoulder** shall be used on routes where the widening will include a portion of the existing travel lane, serve as a paved shoulder and will be subjected to traffic as a part of the travel lane. The widening will include removal of existing pavement, i.e., inside the edge line marking. The painted edge line will be on the trench widening. The minimum density applies to this type of trench widening.

(b) Trench widening routes shall be widened by trenching on one or both sides of the existing roadway and placing Trench Widening Material in accordance with the width and depth specified for that route.

The depth of the base course will be determined by the measurement of cores as described in VTM-32 and 315.07(c), unless otherwise approved by the Engineer. Any remaining material, after final grading, shall be classified as excess material, and will be disposed of according to Section 106.04 of the Specifications or as directed by the Engineer.

The trench shall be shaped to have vertical sides with the width, depth and type specified in the Contract (2-foot minimum to 6-foot maximum width); be free of excess material; and shall be tacked against the existing pavement side before Trench Widening Material is placed.

The Contractor shall ensure that disruption to driveways, entrances, mailboxes, and intersections are minimized and that precautions are taken to ensure that roadway drainage does not pond on the roadway surface.

### **321.05 - Acceptance**

Where density requirements apply, the Contractor is responsible for cutting cores or sawing plugs for density testing. One plug or core per course of material shall be obtained within the first 500 feet and every 2,500 feet thereafter of the trench widening route for testing by the Contractor or the Department. Core and plug locations shall be randomly selected within each section. If the density achieved is less than 91.5% of the maximum theoretical density for the Type 2 or 3 trench widening routes, payment adjustment will be made on the actual tonnage within the 500- or 2,500-foot lot according to Table III-6 in Section 315.

### **321.06- Measurement and Payment**

**Asphalt Concrete Type BM-25.0(T), IM-19.0A(T) or IM-19.0D(T)** will be measured in tons and will be paid for at the Contract ton price. This price shall include furnishing and placing the Trench Widening Material, trenching, tack, grading and disposing of excess material.

Payment will be made under:

<b>Pay Item</b>	<b>Pay Unit</b>
Asphalt Concrete Type BM-25.0(T)	Ton
Asphalt Concrete Type IM-19.0A(T)	Ton
Asphalt Concrete Type IM-19.0D(T)	Ton

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**SECTION 407 – STEEL AND OTHER METAL STRUCTURES**

**SECTION 407 – STEEL AND OTHER METAL STRUCTURES** of the Specifications is amended as follows:

**Section 407.04 – Fabrication Procedures** is amended by replacing the seventh, eighth, and ninth paragraphs with the following:

The Contractor shall furnish a complete mill analysis showing chemical and physical results from each heat of steel for all units prior to fabrication. Before cutting, pieces of steel other than steel conforming to ASTM A709, Grade 36, that are to be cut to smaller-sized pieces shall be legibly marked with the ASTM A6 specification identification color code or the material specification designation. The identification color code of the latest system adopted under ASTM A6 shall be used to identify material. Any markings that indicate direction of roll shall be transferred to each new piece before cutting the new piece from the larger plate.

If requested by the Engineer, the Contractor shall furnish an affidavit from the fabricator certifying that the fabricator has marked and maintained the identification of steel in accordance with these specifications throughout the fabrication operation.

**Section 407.06(c) – Assembly of Structural Connections Using High-Strength Bolts** is amended by replacing the first paragraph with the following:

**Assembly of Structural Connections Using High-Strength Bolts:** Field connections shall be made with high-strength bolts 7/8-inch in diameter fabricated in accordance with ASTM F3125, Grade A325 unless otherwise specified. The Engineer will give consideration to the substitution of adequately designed welded connections if requested in writing by the Contractor.

**Section 407.06(c)1 – Bolts, nuts, and washers** is replaced with the following:

**Bolts, nuts, and washers:** Bolts, nuts, and washers shall conform to Section 226 and shall each be from one manufacturer on any one structure unless otherwise approved by the Engineer. In addition, each bolt, nut, and washer combination, when installed, shall be from the same rotational-capacity lot. Prior to installation, the Contractor shall perform a field rotational-capacity test on two nut, bolt, and washer assemblies for each diameter and length in accordance with VTM 135. Bolts fabricated in accordance with ASTM F3125, Grade A490 and galvanized bolts fabricated in accordance with ASTM F3125, Grade A325 shall not be reused. Retightening previously tightened bolts, which may have been loosened by the tightening of adjacent bolts, shall not be considered a reuse. Other bolts may be reused only if approved by the Engineer. Threads of plain (uncoated) bolts shall be oily to the touch when installed. Galvanized nuts shall be lubricated by lubricant containing a visible dye. Threads of weathered or rusted bolts shall be cleaned of loose rust, scale, and debris and relubricated. Lubricant shall be as recommended by the fastener manufacturer.

**Section 407.06(c)3 – Installation** is amended by replacing the second paragraph with the following:

When bolts fabricated in accordance with ASTM F3125, Grade A490 are used with steel having yield points less than 40 kips per square inch, hardened washers shall be installed under the nut and bolt head.

**Section 407.06(c)3 – Installation** is amended by replacing the eighth paragraph with the following:

The required minimum bolt tension is equal to 70% of specified minimum tensile strengths of bolts rounded to the nearest kip as specified in ASTM F3125 for Grades A325 and A490. *Snug tight* is

defined as the tightness attained when a power wrench begins to impact solidly or when the bolts are firmly hand tightened with a spud wrench such that the complete area of the connecting surfaces are brought into firm contact with each other. Snug tightening shall progress systematically from the most rigid part of the connection to the free edges, and then the bolts of the connection shall be retightened in a similar systematic manner as necessary until all bolts are simultaneously snug tight and the connection is fully compacted.

**Section 407.06(c)3b – Direct Tension Indicators (DTI)** is amended by replacing the first paragraph with the following:

**Direct Tension Indicators (DTI):** Direct tension indicator washers shall be used for all high strength bolts, and installation shall be in accordance with Section 407.06(c)3; however, the indicator washer shall not be considered a substitute for the required hardened washer under the turned element. The indicator washer may be considered a substitute for the hardened washer required under the unturned element when bolts conforming to ASTM F3125, Grade A490 are used with steel conforming to ASTM A709, Grade 36. Direct tension-indicator washers shall not be painted or coated with any epoxy or similar material prior to installation. The normal installation shall consist of the load indicator washer being placed under the unturned bolt head or unturned nut. However, if conditions require installation under the turned bolt portion, a hardened flat washer or nut face washer shall be fitted against the tension-indicating protrusions. Tension-indicating washers shall not be substituted for the hardened washers required with short-slotted or oversized holes but may be used in conjunction with them.

**Table IV-3 – Bolt Tension** is replaced with the following:

<b>TABLE IV-3</b>		
<b>Bolt Tension</b>		
<b>Bolt Size</b>	<b>Required Min. Bolt Tension (lb.)</b>	
	<b>Grade A325 Bolts</b>	<b>Grade A490 Bolts</b>
1/2	12,000	15,000
5/8	19,000	24,000
3/4	28,000	35,000
7/8	39,000	49,000
1	51,000	64,000
1 1/8	56,000	80,000
1 1/4	71,000	102,000
1 3/8	85,000	121,000
1 1/2	103,000	148,000

**Section 407.06(i) – Finishing** is amended by replacing the third paragraph with the following:

Areas of weathering steel that are designated to be painted shall be cleaned and coated in accordance with Section 411.

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**SECTION 411 – PROTECTIVE COATING OF METAL IN STRUCTURES**

**SECTION 411 – PROTECTIVE COATING OF METAL IN STRUCTURES** of the Specifications is amended as follows:

**Section 411.06(a) – Shop Coating** is amended by inserting the following after the fourth paragraph:

Areas of weathering steel that are designated to be painted shall be thoroughly cleaned to no less than 6 inches outside the designated area and coated with an approved System B, Group I coating system.

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**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**

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Rollup sign

0.4 inch thick corrugated polypropylene or polyethylene plastic

0.079 inch thick aluminum/plastic laminate

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**Sign Substrates for Drums**

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0.4 inch thick corrugated polypropylene or polyethylene plastic

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**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 Signs** is replaced with the following:

**Temporary Signs:** The Contractor shall furnish, install, remove, relocate, and maintain temporary signs and sign panels necessary for prosecution of the work which shall include but not be limited

to, maintenance of traffic, off project detour signs, and begin and end of road work signs for construction, maintenance, permit, utility, and incident management activities. Installation shall be in accordance with Section 701. The Contractor shall also furnish and install those signs not listed in the *VWAPM*, the *MUTCD*, or the Contract (such as “Turn Lane Open with arrow” and “Grooved Pavement Ahead”) that may be required by the Engineer.

Signs shall be fabricated in accordance with the *MUTCD*, *VWAPM*, the FHWA Standard Highway Signs and Markings book (including its Supplement), and the Virginia Standard Highway Signs book. 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 sign fabrication detail shall include sign size, legend, font, legend dimensions, radius, border, margins, sheeting type, and colors.

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 sequencing and positioning 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 Traffic Control Device Pre-Approval list. 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 support a 20 square foot sign in sustained winds of 50 mph or wind gusts of passing vehicles without tipping over, walking, or rotating more than  $\pm 5$  degrees about its vertical axis.

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.

The Contractor shall furnish and install signs (Stop, Chevron, keep Right, etc.) for drums when directed by Engineer. Signs used on drums shall be tested for conformance with NCHRP 350, Test Level 3, and/or MASH requirements and shall be made of the same material used in the test. The Contractor may use other materials allowed by the FHWA acceptance letter when approved by the Engineer.

**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.

At ingress openings, the exposed end of the barrier service shall be provided with a temporary impact attenuator approved by the Engineer. At egress openings, the exposed end shall be transitioned at a rate that complies with the VWAPM. For speeds below 30 mph, the transition flare rate shall be the same as that indicated for 30 mph. An impact attenuator will not be required at the exposed end of egress openings in barrier service provided the deflection angle between the pavement edge and the ends of the barrier service openings is 20 degrees or more.

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), Type E (non-reflective black removable tape), and Flexible Temporary Pavement Markers (FTPMs).

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/ftc, 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 200 feet in length.
  - The temporary markings are planned for at least 30 days of use.

Type D, Class III contrast markings are not required for any markings that are parallel to and within one foot of existing guardrail or other longitudinal barrier.

4. **Type E pavement markings** shall be used to cover existing markings in accordance with paragraph (I) herein.
5. **Flexible Temporary Pavement Markers (FTPMS)** may be used to simulate a temporary pavement marking line on the final surface, as an interim measure until the permanent pavement marking can be installed. FTPMS shall not be used in substitution for lines slated to be in place for more than 30 days.

FTPMS shall conform to Section 235 and shall consist of products from the Department's Approved List 22. All FTPM's shall be new product. FTPMS are suitable for use up to one year after the date of manufacture when stored in accordance with the manufacturer's recommendations.

FTPMS shall include a removable material covering the reflective lens to protect the lens from being obscured or damaged during the paving operation.

FTPMP spacing shall be as follows:

- When simulating solid lines, the FTPMPs shall be placed every 20 feet.
- When simulating double lines, pairs of side-by-side FTPMPs shall be placed every 20 feet.
- When simulating broken lines with a 10-foot-skip/30-foot-gap pattern, 3 FTPMPs shall be used per skip (5 feet between each FTPMP), with a 30-foot gap between simulated skips.
- When simulating dotted lines with a 3-foot skip/9-foot-gap pattern, 2 FTPMPs shall be used per skip (3 feet between the two FTPMPs), with a 9-foot gap between simulated skips.

FTPMPs shall not be used to simulate transverse lines, symbol/message markings, or dotted lines with 2-foot dot/6-foot-gap pattern.

The color of FTPMP units and their reflective surfaces shall be the same color (white or yellow) as the temporary pavement markings they are being used in substitution for.

FTPMPs shall be installed at the same locations that permanent pavement markings will be installed.

For surface treatment, slurry seal or latex emulsion treatment operations, the appropriate FTPMPs with protective covering shall be installed before placing the new treatment. The lens protective covering shall be kept in place during the final surface placement to protect the lens from being obscured or damaged by the paving operation. Upon completion of surface treatment, slurry seal or latex emulsion treatment placement, the Contractor shall remove the protective covering from the reflective lens of the FTPMPs before leaving the work site. Failure to remove such covering shall result in the non-payment for that portion type (skip or solid) of temporary pavement marking.

For plant mix operations, the appropriate FTPMPs shall be installed on the newly-placed pavement after the pavement is thoroughly compacted and has cooled to the FTPMP manufacturer's recommended temperature for installation.

The Contractor shall maintain the FTPMPs until the permanent pavement markings are installed. Damaged or missing FTPMPs shall be replaced within 24 hours of discovery at the Contractor's expense with new FTPMPs of the same manufacturing type, color and model. No more than one FTPMP may be damaged or missing out of every skip line or dotted line simulated segment. No two consecutive FTPMPs may be damaged or missing on a simulated solid line or double line application, and no more than 30% of the FTPMPs may be damaged or missing on any measured 100-foot segment of simulated solid line.

Once applied, FTPMPs will be considered for a single use. If a FTPMP requires replacement before installation of permanent pavement markings, it shall be properly disposed of and replaced with a new FTPMP at no additional cost to the Department.

FTPMPs shall be removed and properly disposed of when permanent pavement markings are installed. Used FTPMPs removed from the pavement, including all containers, packaging, damaged FTPMP's and all other miscellaneous items of waste, shall be appropriately disposed of in accordance with Section 106.04.

**Section 512.03(I) – 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 Pavement Markers** is renamed **Temporary Raised Pavement Markers** 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) –Temporary Pavement Message and Symbol Markings** is replaced with the following:

**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 Traffic Control Device Pre-Approval List. The Contractor shall provide a certification letter stating the brands and models of Type 3 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 Test Level 3 of NCHRP Report 350 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.

**Limitations:** Traffic control devices shall not be installed from or removed to the Truck/Trailer-mounted attenuator support vehicle. When the Truck/Trailer-mounted attenuator is deployed there shall be no unsecured material in the bed of the support vehicle except the additional secured weight or truck-mounted devices such as an arrow board, a changeable message sign, or truck mounted signs. There shall also 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.

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 13th 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 16th paragraph with the following:

**Temporary pavement markings** will be measured in linear feet and will be paid for at the contract linear foot price for the type, class and width specified. This price shall include marking materials, glass beads, adhesive, preparing the surface, maintaining, removing removable markings when no longer required, inspections, and testing.

If the Contractor uses FTPMs to simulate the temporary pavement marking, they will be measured in linear feet and paid for at the linear foot price for the temporary marking material being simulated. That measurement shall represent all FTPMs required for that simulated line marking. No additional payment will be made if the Contractor elects to remove FTPMs and install other temporary pavement markings. This cost shall include furnishing, installing and maintaining the FTPMs, removable covers, surface preparation, quality control tests, daily log, guarding devices, removal, and disposal.

**Section 512.04 – Measurement and Payment** is amended to replace the 21st 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 30th 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:

<b>Pay Item</b>	<b>Pay Unit</b>
Portable temporary rumble strip	Each

The following pay items are inserted:

<b>Pay Item</b>	<b>Pay Unit</b>
Portable temporary rumble strip array	Day

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 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.
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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 <sup>1</sup> 65 min <sup>2</sup>	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

<sup>1</sup>Thinnest portion of the tape's cross section.

<sup>2</sup>Thickest portion of the tape's cross section.

<sup>3</sup>In accordance with manufacturer's installation instructions.

<sup>4</sup>In 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:

<b>Pay Item</b>	<b>Pay Unit</b>
Pavement message marking (Message)	Each or Linear Foot

The following pay items are inserted:

<b>Pay Item</b>	<b>Pay Unit</b>
Pavement message marking (Message, Type or class material)	Each or Linear Foot

100% DESIGN PLANS  
NOT FOR CONSTRUCTION

SEPTEMBER 2024



# PLAN OF PROPOSED STATE HIGHWAY

## 21st STREET CORRIDOR CDBG & HSIP IMPROVEMENTS

CITY OF BUENA VISTA, VA

UPC# 121167

PROJ. EN22-103-245 P101, R201, C501

21st STREET

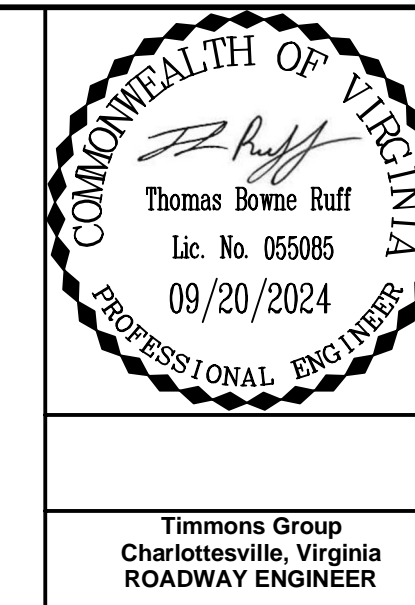
FROM: SYCAMORE AVE

TO: FOREST AVE

CDBG HUD PROJECT  
SYCAMORE AVENUE

FROM: 20th STREET

TO: 22nd STREET



STATE	FEDERAL AID	ROUTE	STATE	SHEET NO.
	PROJECT		PROJECT	
VA.	N/A	EN22	EN22-103-245	1

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

### INDEX OF SHEETS

COVER SHEET	1
ALIGNMENT DATA, SURVEY DATA, & ROW DATA	1A
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ESTIMATED QUANTITIES	2A
LIGHTING DETAILS	2B
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21ST STREET ROW PLAN SHEETS	3RW - 5RW
CURB RAMP DETAIL SHEETS	3A, 5A
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LEGEND & GENERAL NOTES	7(1)
21st STREET & SYCAMORE AVE	7(2)
21st STREET & MAGNOLIA AVE	7(3)
<b>TOTAL NUMBER OF SHEETS</b>	<b>17</b>

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
ROADWAY SEGMENT	SYCAMORE AVENUE (US 501) URBAN MINOR ARTERIAL STREET SYSTEM (GS-6) 25 MPH DESIGN SPEED
FR: 22nd STREET TO: 18th STREET	ADT (2022) 5,600

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
ROADWAY SEGMENT	MAGNOLIA AVENUE (US 501 BUS.) URBAN MINOR ARTERIAL STREET SYSTEM (GS-6) 25 MPH DESIGN SPEED
FR: 25th STREET TO: 15th STREET	ADT (2022) 2,500

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
ROADWAY SEGMENT	W. 21st STREET URBAN MINOR COLLECTOR STREET SYSTEM (GS-7) 25 MPH DESIGN SPEED
FR: MAGNOLIA AVENUE TO: CEDAR AVENUE	ADT (2022) 520

PROJECT MANAGER: THOMAS B. RUFF, P.E.  
SURVEYED BY: DATE: DRAPER ADEN, 03/2022  
DESIGN BY: TIMMONS GROUP  
SUBSURFACE UTILITY BY: DATE: DRAPER ADEN, 03-2022

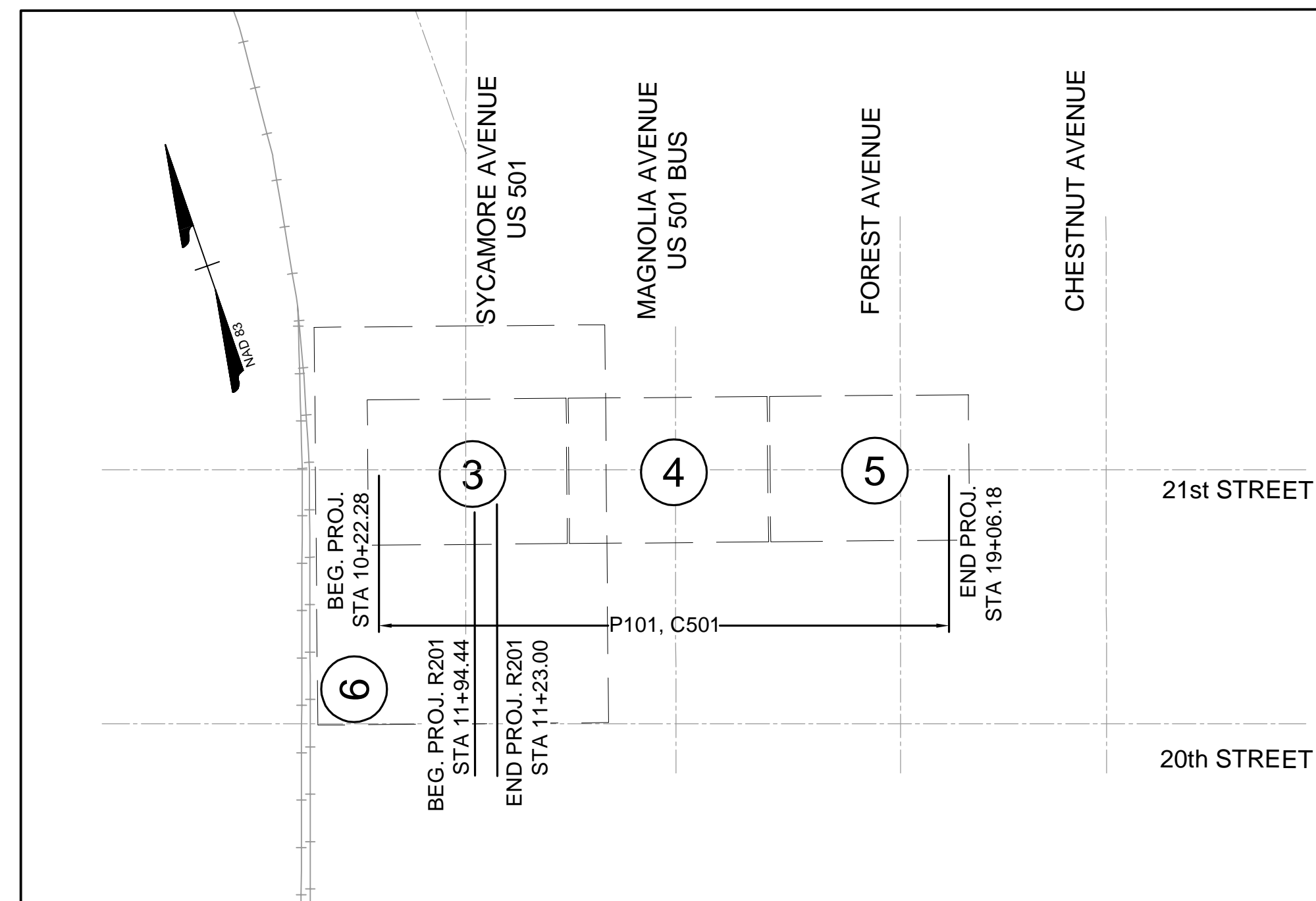
THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S 2020 ROAD AND BRIDGE SPECIFICATIONS, 2016 ROAD AND BRIDGE STANDARDS, 2023 MUTCD, 2011 VIRGINIA WORK AREA PROTECTION MANUAL - REVISION 2.1 (2021) AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY.

UPC # 121167  
FUNDING SOURCE: STP

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#### SITE LOCATION INFORMATION

FEMA PANEL NUMBER & EFFECTIVE DATE:  
51165C0411D & 51165C0412D - CITY OF HARRISONBURG - FEBRUARY 6, 2008  
PROJECT HUC CODE (VAHU6 & HUC12): PS22 & 020700050602  
RECEIVING WATER BODY: SOUTH FORK SHENANDOAH RIVER - BLACKS RUN  
LATITUDE: 38°25'48.29"N  
LONGITUDE: 78°50'54.19"W



VICINITY MAP

Population 6,641 (2020 Census)

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	UPC NO.	LENGTH INCLUDING BRIDGE(S)		LENGTH EXCLUDING BRIDGE(S)		TYPE PROJECT	DESCRIPTION
					FEET	MILES	FEET	MILES		
EN22-103-245	P101	N/A	PENG	121167	885.00	0.168	885.00	0.168	PREL. ENGR.	Fr: 0.03 MILES WEST OF INTERSECTION OF SYCAMORE AVENUE To: 0.14 MILES EAST OF INTERSECTION OF SYCAMORE AVENUE
	R201	N/A	ROW	121167	28.56	0.005	28.56	0.005	RIGHT OF WAY	Fr: 0.00 MILES EAST OF INTERSECTION OF SYCAMORE AVENUE To: 0.005 MILES EAST OF INTERSECTION OF SYCAMORE AVENUE
	C501	N/A	1000	121167	885.00	0.168	885.00	0.168	CONSTRUCTION	Fr: 0.03 MILES WEST OF INTERSECTION OF SYCAMORE AVENUE To: 0.14 MILES EAST OF INTERSECTION OF SYCAMORE AVENUE

Project Lengths are based on Construction Baseline.

Description Reference Location: 37°44'05.10"N, 79°21'19.30"W

**ALIGNMENT DATA**

\*\*\*\*\*  
 ALIGNMENT NAME: 21ST STREET  
 STATION RANGE: START: 10+00.00, END: 19+20.70  
 \*\*\*\*\*

BEGIN 21ST STREET  
 N 3,792,253.2840 E 11,235,406.8890  
 10+00.00

LINE (1)  
 S70° 47' 03.93"E 920.700'  
 N 3,791,950.2603 E 11,236,276.2936  
 19+20.70

LINE (1)  
 N 3,791,950.2603 E 11,236,276.2936  
 19+20.70  
 END 21ST STREET

\*\*\*\*\*  
 ALIGNMENT LENGTH: 920.700'  
 \*\*\*\*\*

\*\*\*\*\*  
 ALIGNMENT NAME: SYCAMORE AVE (US 501)  
 STATION RANGE: START: 20+00.00, END: 27+81.00  
 \*\*\*\*\*

BEGIN SYCAMORE AVE (US 501)  
 N 3,791,764.9466 E 11,235,412.1268  
 20+00.00

LINE (1)  
 N18° 59' 35.50"E 780.998'  
 N 3,792,503.4250 E 11,235,666.3072  
 27+81.00

LINE (1)  
 N 3,792,503.4250 E 11,235,666.3072  
 27+81.00  
 END SYCAMORE AVE (US 501)

\*\*\*\*\*  
 ALIGNMENT LENGTH: 780.998'  
 \*\*\*\*\*

**RIGHT OF WAY DATA**

PARCEL NO.	LANDOWNER	TAX PARCEL ID	SHEET NO.	AREA							PROFFERS
				TOTAL	FEE TAKING	PRESCRIPTIVE EASEMENTS	FEE REMAINDER	RESIDUE (Parcel Acquisition)	EASEMENTS		
									TEMPORARY	CONSTR.	
ACRE	SQ. FT.	SQ. FT.	ACRE	SQ. FT.	SQ. FT.	SQ. FT.	YES/NO				
001	CITY NATIONAL BANK	34-1-2-16-13	03	0.143			0.143			11.3	NO
002	149 WEST 21ST STREET HOLDING COMPANY	34-1-2-15-1A	03	2.386			2.386			50.0	NO

**SURVEY DATA**

SURVEY CONTROL MONUMENTS							
CP NUMBER	NORTHING	EASTING	ELEVATION	ALIGNMENT	STATION	OFFSET	DESCRIPTION
01	3792149.71	11235804.81	826.17	21st STREET	267+72.03	28.40	TBM REBAR & CAP
02	3791930.28	11236130.71	838.27	21st STREET	267+72.03	28.40	CHISELED SQUARE ON CONCRETE STEP WALL

**100% PLANS**

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DATE	REVISION DESCRIPTION
09/20/2024	1st Revision

DRAWN BY  
 EWR  
 DESIGNED BY  
 EWR  
 CHECKED BY  
 TBR  
 SCALE  
 N.T.S.



**TIMMONS GROUP**  
 BUENA VISTA CDBG & HSIP IMPROVEMENTS  
 CITY OF BUENA VISTA, VIRGINIA  
 ALIGNMENT DATA, SURVEY DATA, AND ROW DATA

JOB NO.  
 60526  
 SHEET NO.  
 01A



**ESTIMATED QUANTITIES <sup>①</sup>**  
**(TAP - UPC 121167)**

	③	④	②																													
	MOBILIZATION	NS MAINTENANCE OF TRAFFIC	CLEARING AND GRUBBING	REGULAR EXCAVATION	FLEXIBLE PAVEMENT PLANING 0'-2"	FLEXIBLE PAVEMENT PLANING ABOVE 2'-4"	NS SAW-CUT ASPH CONC	NS SAW CUT H.C.C. ITEMS	REMOVE SIDEWALK AND ENTRANCE	REMOVE COMB. CURB AND GUTTER	DEMOLITION OF PAVEMENT FLEXIBLE	DROP INLET DI-2A	NS MODIFY EXST DROP INLET	NS REMOVE EXIST. FRAME & COVER	ADJUST EXIST FRAME & COVER	FLOWABLE BACKFILL	NS REMOVE EXIST. DROP INLET	ASPHALT CONC. TY. SM-9.5D	ASPHALT CONCRETE TY. BM-25.0A	AGGR. BASE MATL. TY. I. NO. 21B	STD. CURB CG-2	RADIAL CURB CG-2	STD. COMB. CURB & GUTTER CG-6	RADIAL COMB. CURB & GUTTER CG-6	CG-12 DETECTABLE WARNING SURFACE	NS CONCRETE VALLEY GUTTER	HYDRAULIC CEMENT CONC. SIDEWALK #4	SIGN PANEL	RELOCATE EXISTING 1 POST GROUND MOUNTED SIGN PANEL	REMOVE EXISTING 1 POST SIGN STRUCTURE	SIGN POST STP-1, 2 1/2", 12 GAUGE	CONCRETE SIGN FOUNDATION STP-1, TYPE D
ITEM NO.	513SD20-0001	512SP20-0002	301SD20-0001	303SD20-0001	515SD20-0004	515SD20-0005	315SX20-0011	502SX20-0010	510SX20-0001	510SX20-0002	508SD20-0004	302SD20-0239	302SX20-0026	510SX20-0040	510SD20-0050	509SD20-0001	510SX20-0026	315SD20-0008	315SD20-0010	308SD20-0012	502SD20-0011	502SD20-0012	502SD20-0022	502SD20-0023	504SD20-0002	502SX20-0003	504SD20-0003	701SD20-0001	700SD20-0012	700SD20-0003	700SD20-0037	700SD20-0041
UNIT	LS	LS	LS	CY	SY	SY	LF	LF	SY	LF	SY	EA	EA	EA	EA	CY	EA	TON	TON	TON	LF	LF	LF	LF	SY	LF	SY	SF	EA	EA	LF	EA
QUANTITY	1	1	1	85	1172	71	505	285	375	360	315	2	2	4	3	1	2	150	35	200	145	20	225	190	145	40	375	12	6	2	30	2
TOTAL UPC 121167	1	1	1	85	1172	71	505	285	375	360	315	2	2	4	3	1	2	150	35	200	145	20	225	190	145	40	375	12	6	2	30	2

	TOPSOIL CLASS A 2"	TEMPORARY SEED	REGULAR SEED	OVERSEEDING	FERTILIZER NITROGEN - N	FERTILIZER PHOSPHOROUS - P	FERTILIZER POTASSIUM - K	LIME	INLET PROTECTION TYPE A	INLET PROTECTION TYPE B	HIGH VISIBILITY FENCE, 4'	PEDESTRIAN ACTUATION PA-2 (AP5)	NS PEDESTAL POLE PF-2, 15'	CONCRETE FOUNDATION PF-2	14/7 CONDUCTOR CABLE	14/3 CONDUCTOR CABLE	14/2 CONDUCTOR CABLE SHIELDED	TRAFFIC SIGNAL HEAD SECTION 12" HVS BACKPLATE	NS REMOVE EXIST. SIGNAL CABLE	HANGER ASSEMBLY SMB-2, TWO WAY	HANGER ASSEMBLY SMB-3, TWO WAY	PEDESTRIAN SIGNAL HEAD SP-8	JUNCTION BOX JB-S2	NS MODIFY EXIST. JUNCTION BOX FOR CONDUIT ENTRY	2" PVC CONDUIT	TRENCH EXCAVATION EC-2	REMOVE EXISTING POLE	REMOVE EXISTING FOUNDATION	NS FURNISH & INSTALL POLE-TOP GLOBE LIGHT	8 CONDUCTOR CABLE
ITEM NO.	602SD20-0001	603SD20-0002	603SD20-0003	603SD20-0004	603SD20-0014	603SD20-0015	603SD20-0016	603SD20-0017	303SD20-0030	303SD20-0031	507SD20-0027	703SD20-0011	700SX20-0024	700SD20-0069	700SD20-0114	700SD20-0111	700SD20-0120	700SD20-0007	510SX20-0039	703SD20-0038	703SD20-0040	703SD20-0060	700SD20-0178	510SX20-0031	700SD20-0194	700SD20-0198	703SD20-0044	703SD20-0045	705SX20-0001	700SD20-0144
UNIT	ACRE	LB	LB	LB	LB	LB	LB	TON	EA	EA	LF	EA	EA	EA	LF	LF	LF	EA	LF	EA	EA	EA	EA	EA	LF	LF	EA	EA	EA	LF
QUANTITY	0.04	4	6	5	4	5	3	0.155	3	8	500	16	8	8	1055	990	960	48	1000	16	16	16	5	3	30	30	8	8	8	735
TOTAL UPC 121167	0.04	4	6	5	4	5	3	0.155	3	8	500	16	8	8	1055	990	960	48	1000	16	16	16	5	3	30	30	8	8	8	735

**ESTIMATED QUANTITIES <sup>①</sup>**  
**(CDBG)**

	③	④	⑤	⑥	⑦	⑧	⑨	⑩	⑪	⑫	⑬	⑭	⑮	⑯	⑰	⑱	⑲	⑳	㉑	㉒	㉓	㉔	㉕	㉖	㉗	㉘	㉙	㉚	㉛	㉜	㉝	㉞	㉟
	MOBILIZATION	NS MAINTENANCE OF TRAFFIC	CLEARING AND GRUBBING	NS SAW CUT H.C.C. ITEMS	REMOVE SIDEWALK AND ENTRANCE	AGGR. BASE MATL. TY. I. NO. 21B	HYDRAULIC CEMENT CONC. SIDEWALK 4"	NS LP-2 TYPE A STREET LIGHT POLE	CONCRETE FOUNDATION LF-1 TY. A	2" PVC CONDUIT	BORED ITS CONDUIT HDPE 2"	TRENCH EXCAVATION EC-1	TRENCH EXCAVATION EC-2	8 CONDUCTOR CABLE	JUNCTION BOX JB-S2	NS MODIFY EXIST. CABINET FOR 2" PVC CONDUIT ENTRY	REMOVE EXISTING POLE	NS FURNISH & INSTALL POLE-TOP GLOBE LIGHT															
ITEM NO.	513SD20-0001	512SP20-0002	301SD20-0001	315SX20-0011	502SX20-0010	308SD20-0012	504SD20-0003	705SX20-0001	700SD20-0149	700SD20-0194	812SD20-0002	700SD20-0197	700SD20-0198	700SD20-0144	700SD20-0178	510SX20-0031	703SD20-0044	705SX20-0001															
UNIT	LS	LS	LS	LF	SY	TON	SY	EA	EA	LF	LF	LF	LF	LF	EA	EA	EA																
QUANTITY	1	1	1	80	50	7	50	15	15	40	155	25	15	1760	4	1	2	15															
TOTAL CDBG	1	1	1	80	50	7	50	15	15	40	155	25	15	1760	4	1	2	15															

- NOTES:
- QUANTITIES AS SHOWN ARE APPROXIMATE ONLY. CONTRACTORS ARE RESPONSIBLE FOR MAKING THEIR OWN QUANTITY TAKE-OFFS AND COMPLETING THE PROJECT TO THE FULL INTENT OF THE PLANS.
  - INCLUDES ALL TYPES OF CURB, CURB & GUTTER, AND REMOVAL OF GRANITE CURBS.
  - PAY ITEM COVERS THE ENTIRE PROJECT.
  - PAY ITEM SHALL INCLUDE PAVEMENT RESTORATION ASSOCIATED WITH ANY UTILITY CROSSING TEST BORES IN ACCORDANCE WITH VDOT PAVEMENT RESTORATION DETAILS.
  - PAY ITEM SHALL INCLUDE BACKFILL REQUIRED TO RESTORE TRENCH TEMPORARILY (IF NECESSARY) PRIOR TO PERMANENT TRENCH RESTORATION. ASPHALT RESTORATION IS NOT INCLUDED IN THIS PAY ITEM.

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DATE: 09/20/2024  
DRAWN BY: EWR  
DESIGNED BY: EWR  
CHECKED BY: TBR  
SCALE: 1"=10'

**TIMMONS GROUP**

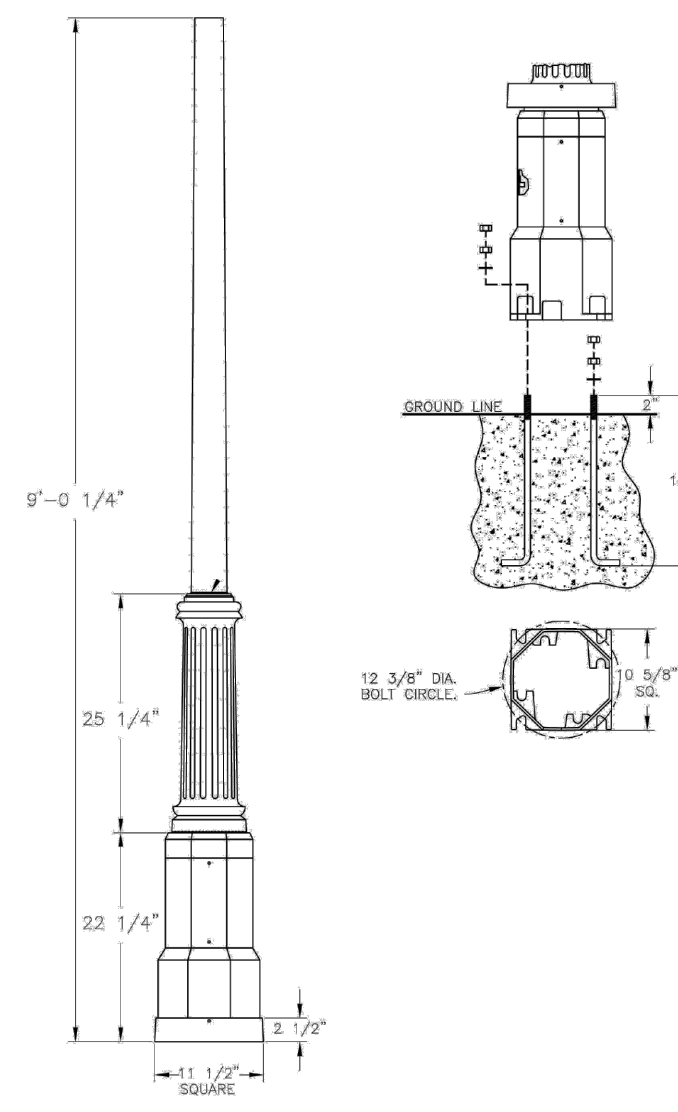
21st STREET CDBG & HSIP IMPROVEMENTS  
CITY OF BUENA VISTA, VIRGINIA  
ESTIMATED QUANTITIES

JOB NO. 60526  
SHEET NO. 02A

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**Anchor Base Post (316-) Specification Sheet**

Project Name:	Location:	MFG: Philips Lighting
Fixture Type:	Catalog No.:	Qty:



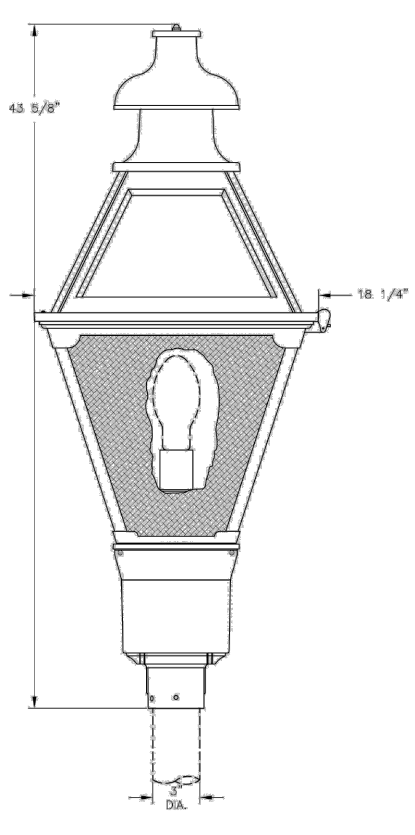
**Ordering Guide**  
Example: 316-12 FGN B B D

Product Code	316-12	Anchor Base Post
Height(s)	10 12 14 (14 ft.)	
Finish	ABS ACP ARD ASL BLK BRN BRZ FCN GRA IRN RBL RBT RSD VBL VCP VON VTC WBZ WHT	Antique Brass Antique Copper Antique Red Antique Silver Black Brown Bronze Forest Green Granite Ironstone Rustic Bronze Shadow Rust Verde Bronze Verde Copper Verde Vintage Copper Weathered Bronze White
Photoeye (Optional)	B C	120V 208V - 277V
Outlet Location (Optional)	B T	4" from Top of Base 12" from Top of Pole
Outlet Options (Optional)	D G	Standard Duplex GF1 Duplex

**Specifications**  
**OUTLET:**  
 GFI Duplex Outlet has dual-function indicator light, universal metal weatherproof cover. Weatherproof while in use. Heavy-duty all metal construction. Lockable security cover. Meets NEC 406.9 (B). Weather resistant. Standard Duplex Outlet has universal metal weatherproof cover. Weatherproof while in use. Heavy-duty all metal construction. Lockable security cover. Meets NEC 406.9 (B). Weather resistant.  
**CONSTRUCTION:**  
 Cast aluminum octagonal anchor base. Cast aluminum removable access door. Cast aluminum upper base welded to base and post. Tapered post welded to base. Cast aluminum square cover included with post.  
**FINISH:**  
 Resilient TGIC thermostat polyester powdercoat paint is electrostatically applied to every fixture. Specially formulated for Philips Outdoor Lighting, it provides UV protection, and

**Charleston (1237) Specification Sheet**

Project Name:	Location:	MFG: Philips Lighting
Fixture Type:	Catalog No.:	Qty:



**Ordering Guide**  
Example: 1237 FGN P S G C

Product Code	1237	Charleston
Finish	ABS ACP ARD ASL BLK BRN BRZ FCN GRA IRN RBL RBT RSD VBL VCP VON VTC WBZ WHT	Antique Brass Antique Copper Antique Red Antique Silver Black Brown Bronze Forest Green Granite Ironstone Rustic Bronze Shadow Rust Verde Bronze Verde Copper Verde Vintage Copper Weathered Bronze White
Panel/Globe	A B C D E M P Q	Clear Acrylic Opal Acrylic Clear Seeded Acrylic Bronze Tone Acrylic Clear Textured Acrylic Opal Polycarbonate Clear Polycarbonate Prismatic Polycarbonate
Socket	D G L R	Medium Mogul LED Induction
Wattage/Source	H S I R LED	Metal Halide 100W High Pressure Sodium Induction Induction LED
Voltage	F G H	120V 208V 277V
Distribution	B C D E M W N	8" Type V Distrib. 8" Type III Distrib. 8" Type V Distrib. 8" Type II Distrib. Type III - Cutoff Optic Frosted Cherry - No Internal Optics None
Photoeye	B	Button Eye

**Anchor Base Post (316-) Specification Sheet**

Project Name:	Location:	MFG: Philips Lighting
Fixture Type:	Catalog No.:	Qty:

the highest temperature rating in the industry. In addition to the standard color choices shown, a spectrum of custom colors is available.  
**WARRANTY:**  
 Three-year limited warranty.  
**Tenon/Top:**  
 3" O.D.  
**Bolt Circle:**  
 12 3/8" dia.  
**Anchor Rods:**  
 (4) 1/2" dia. x 18" long zinc plated steel  
**Base Dimensions:**  
 11 1/2" sq. x 12 1/4"  
**Shaft:**  
 4" to 3" Tapered  
**Wall Thickness:**  
 .125"  
**Height:**  
 8', 10', 12', 14'

**Pole EPA Values**

Windspeed(mph)	Height			
	8'	10'	12'	14'
80	30.0200	19.7300	14.3100	10.9600
110	15.9500	9.9600	6.9300	4.9700
130	10.1300	7.2600	5.2000	3.5900

**Charleston (1237) Specification Sheet**

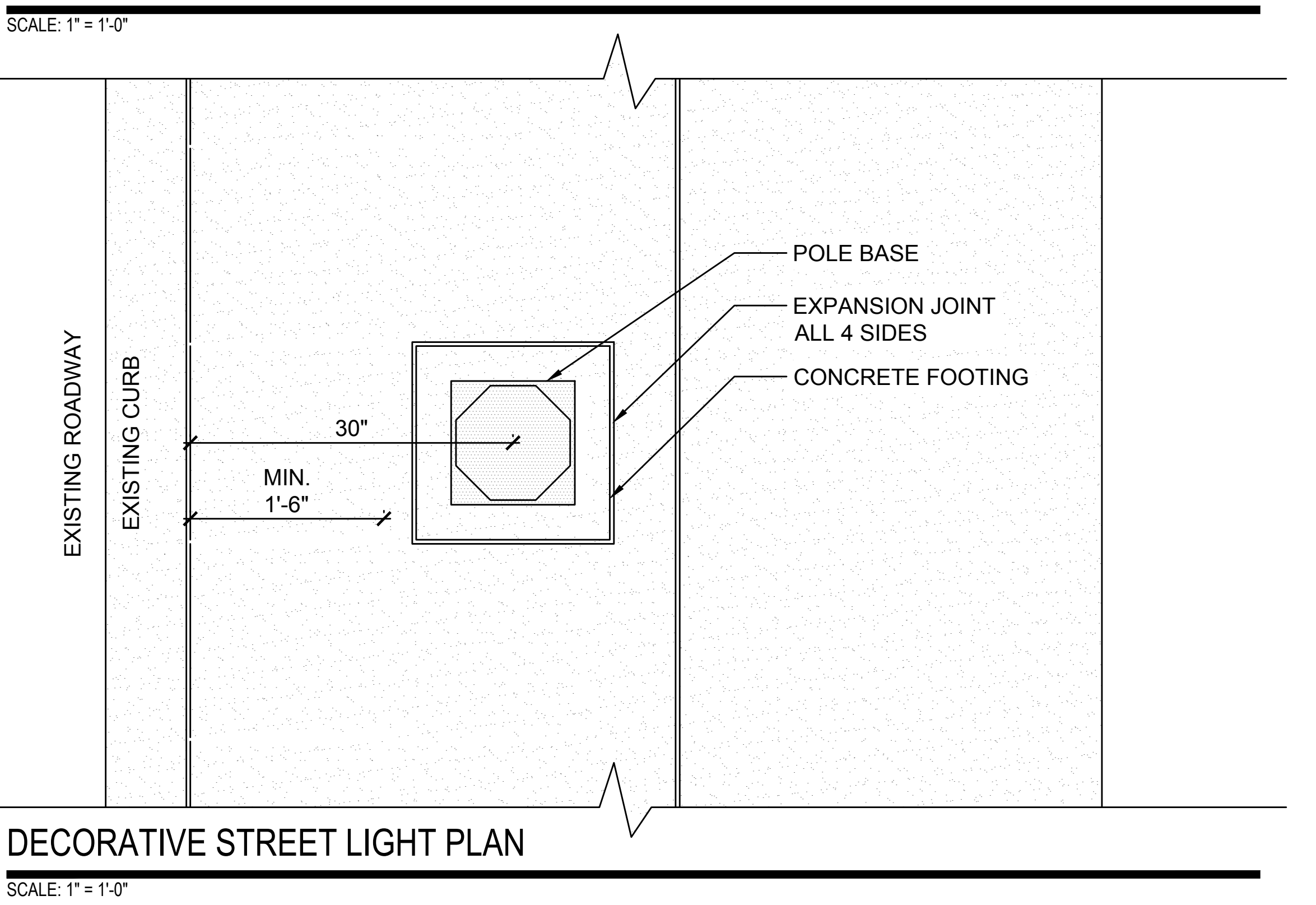
Project Name:	Location:	MFG: Philips Lighting
Fixture Type:	Catalog No.:	Qty:

**Specifications**  
**CONSTRUCTION:**  
 Three (3) piece cast aluminum vent cap assembly. Cast aluminum solid hinged roof for easy re-lamping. Cast aluminum top & bottom cage frame. 4 Extruded aluminum cage legs welded to top and bottom cage frames. Cast aluminum post filter slips over 3" O.D. post or tenon.  
**FINISH:**  
 Resilient TGIC thermostat polyester powdercoat paint is electrostatically applied to every fixture. Specially formulated for Philips Outdoor Lighting, it provides UV protection, and the highest temperature rating in the industry. In addition to the standard color choices shown, a spectrum of custom colors is available.  
**PANEL/LENS/GLOBE:**  
 See lenses for available options.  
**LAMPING:**  
 Lamps is not included.  
**ELECTRICAL ASSEMBLY:**  
 Lantern will be pre-wired and tested. All electrical components are ETL listed.  
**BALLAST:**  
 Ballast and component parts mounted inside 3-piece cast aluminum moisture proof ballast compartment with hinged access door and slide-out ballast tray. (Customer must specify wattage and voltage.)  
**MOUNTING:**  
 Fixture mounts to 3" dia. post or tenon.  
**WARRANTY:**  
 Three-year limited warranty.  
**CERTIFICATIONS:**  
 ETL Listed to U.S. safety standards for wet locations. cETL Listed to Canadian safety standards for wet locations.  
**Height:**  
 43 5/8"  
**Width:**  
 18 1/4"  
**EPA:**  
 3.28  
**Max. Weight:**  
 46 lbs.

**NOTES**

1. THE ACTUAL BOLT CIRCLE SHALL BE FURNISHED BY THE CONTRACTOR. A BOLT CIRCLE TEMPLATE SHALL BE FURNISHED BY THE LIGHTING POLE OR THE POLE BASE MANUFACTURER.
2. THE NUMBER, ORIENTATION AND SIZE OF THE CONDUITS, ENTERING AND EXITING FOUNDATION SHALL BE AS SHOWN ON THE PLANS.
3. CONCRETE PLACEMENT SHALL BE A CONTINUOUS POUR WITH 5000 PSI (MIN) CONCRETE. NO COLD JOINTS WILL BE ALLOWED. INTERNAL CONCRETE VIBRATION REQUIRED DURING PLACEMENT.
4. NO MORTAR, GROUT, OR CEMENT SHALL BE PLACED, FOR LEVELING, BETWEEN BOTTOM OF BASE PLATE AND TOP OF THE FINISHED FOUNDATION PEDESTAL.
5. THE ANCHOR BOLTS SHALL BE 1/2" X 15" X 3" "L" TYPE, HOT DIPPED GALVANIZED, AND SHALL BE INSTALLED WITH THEIR "L" ORIENTED TOWARDS THE CENTER OF THE FOUNDATION.
6. THE ANCHOR BOLTS WILL PROJECT A MINIMUM 2", AS SHOWN AND NOT EXCEED 3".
7. THE HORIZONTAL REBARS SHALL BE INSTALLED 4" ABOVE THE BOTTOM OF THE CONCRETE AND 4" BELOW TOP OF FINISHED CONCRETE.
8. THE VERTICAL REINFORCING BARS SHALL HAVE A MINIMUM OF 4" OF CONCRETE COVER.
9. THE CENTERLINE OF THE POLE FOUNDATION SHALL BE A MINIMUM OF 18" FROM THE BACK OF CURB.
10. AN ALTERNATE GROUND INSTALLATION METHOD MAY BE USED ONLY WITH APPROVAL OF THE DEPARTMENT OF PUBLIC UTILITY'S ENGINEER, AND ONLY IF THE GROUND ROD CANNOT BE INSTALLED WITHIN THE FOUNDATION AS SHOWN.

**LIGHT BASE W/ CONCRETE WALKWAY**



**DECORATIVE STREET LIGHT PLAN**

SCALE: 1" = 1'-0"

**100% PLANS**

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REVISION DESCRIPTION

DATE	DESCRIPTION
09/20/2024	

DRAWN BY: EWR  
 DESIGNED BY: EWR  
 CHECKED BY: TBR  
 SCALE: 1" = 10'

**TIMMONS GROUP**

21st STREET CDBG & HSIP IMPROVEMENTS  
 CITY OF BUENA VISTA, VIRGINIA  
 LIGHTING DETAILS

JOB NO. 60526  
 SHEET NO. 02B

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 EWR

L:\2017\60526-Buena\_Vista\_Streetcape\DWG\Sheet\CD\60526-2017C-2B.dwg | Printed on 9/20/2024 3:44 PM | by Ewan Reiborn

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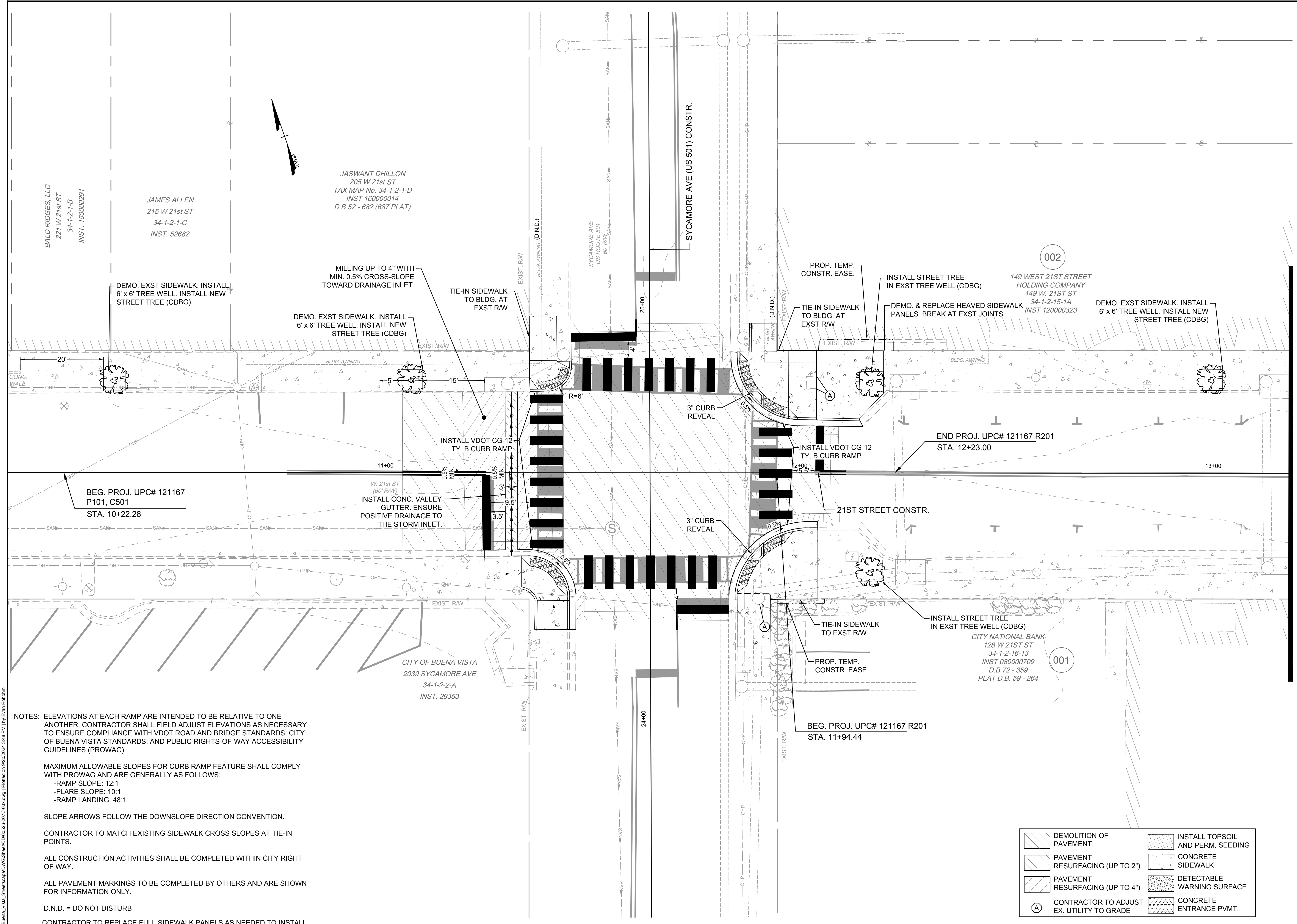
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BUENA VISTA CDBG & HSIP IMPROVEMENTS  
CITY OF BUENA VISTA, VIRGINIA  
21st STREET PLAN SHEET

JOB NO. 60526  
SHEET NO. 03



**NOTES:** ELEVATIONS AT EACH RAMP ARE INTENDED TO BE RELATIVE TO ONE ANOTHER. CONTRACTOR SHALL FIELD ADJUST ELEVATIONS AS NECESSARY TO ENSURE COMPLIANCE WITH VDOT ROAD AND BRIDGE STANDARDS, CITY OF BUENA VISTA STANDARDS, AND PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES (PROWAG).

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-FLARE SLOPE: 10:1  
-RAMP LANDING: 48:1

SLOPE ARROWS FOLLOW THE DOWNSLOPE DIRECTION CONVENTION.

CONTRACTOR TO MATCH EXISTING SIDEWALK CROSS SLOPES AT TIE-IN POINTS.

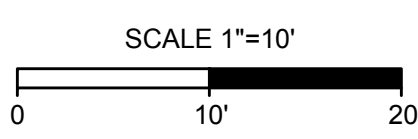
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ALL PAVEMENT MARKINGS TO BE COMPLETED BY OTHERS AND ARE SHOWN FOR INFORMATION ONLY.

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CONTRACTOR TO REPLACE FULL SIDEWALK PANELS AS NEEDED TO INSTALL JUNCTION BOX AND SIGNAL POLE. BREAK SIDEWALK AT EXST JOINTS.

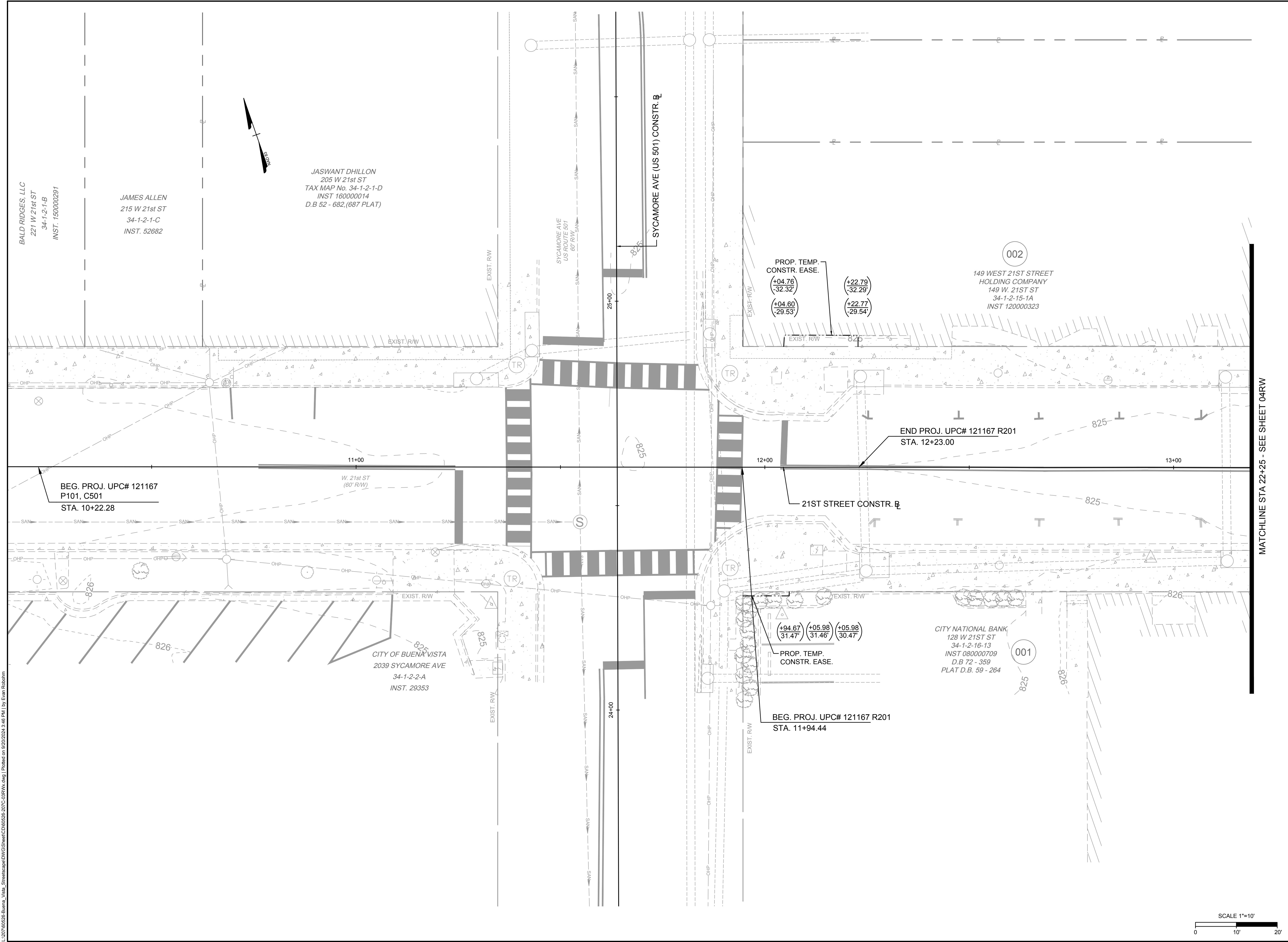
	DEMOLITION OF PAVEMENT		INSTALL TOPSOIL AND PERM. SEEDING
	PAVEMENT RESURFACING (UP TO 2")		CONCRETE SIDEWALK
	PAVEMENT RESURFACING (UP TO 4")		DETECTABLE WARNING SURFACE
	CONTRACTOR TO ADJUST EX. UTILITY TO GRADE		CONCRETE ENTRANCE PVMT.



MATCHLINE STA 22+25 - SEE SHEET 04

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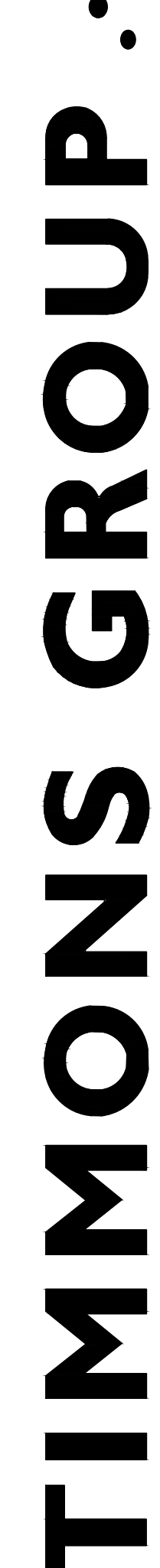


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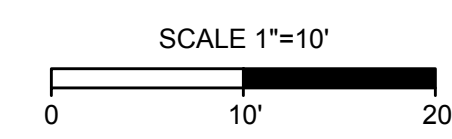
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 CITY OF BUENA VISTA, VIRGINIA  
 21st STREET ROW PLAN SHEET

JOB NO.	60526
SHEET NO.	03RW

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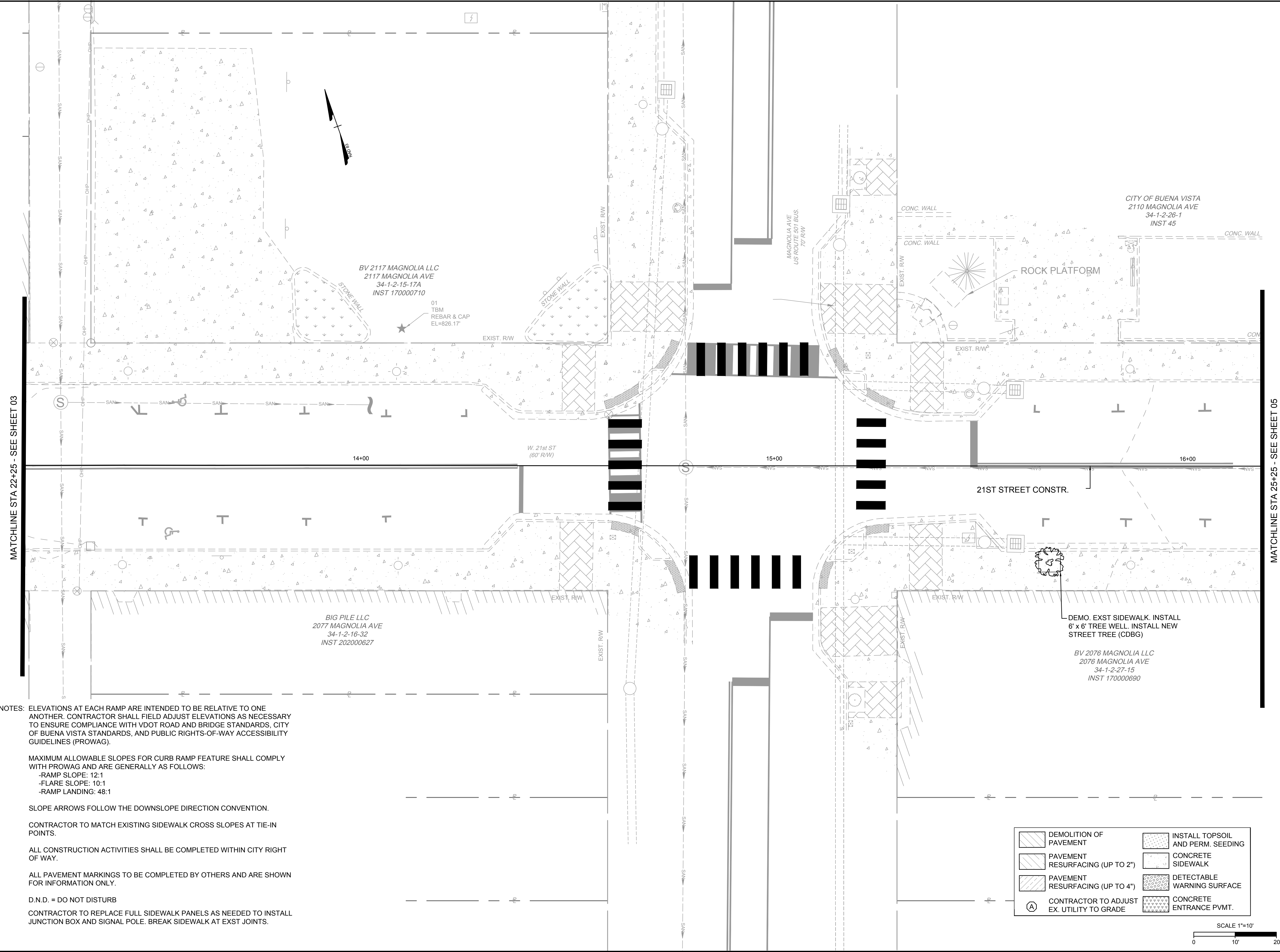
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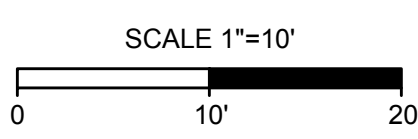
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	DEMOLITION OF PAVEMENT		INSTALL TOPSOIL AND PERM. SEEDING
	PAVEMENT RESURFACING (UP TO 2")		CONCRETE SIDEWALK
	PAVEMENT RESURFACING (UP TO 4")		DETECTABLE WARNING SURFACE
	CONTRACTOR TO ADJUST EX. UTILITY TO GRADE		CONCRETE ENTRANCE PVMT.



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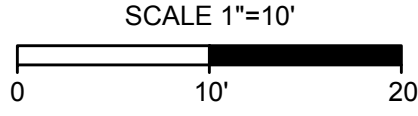
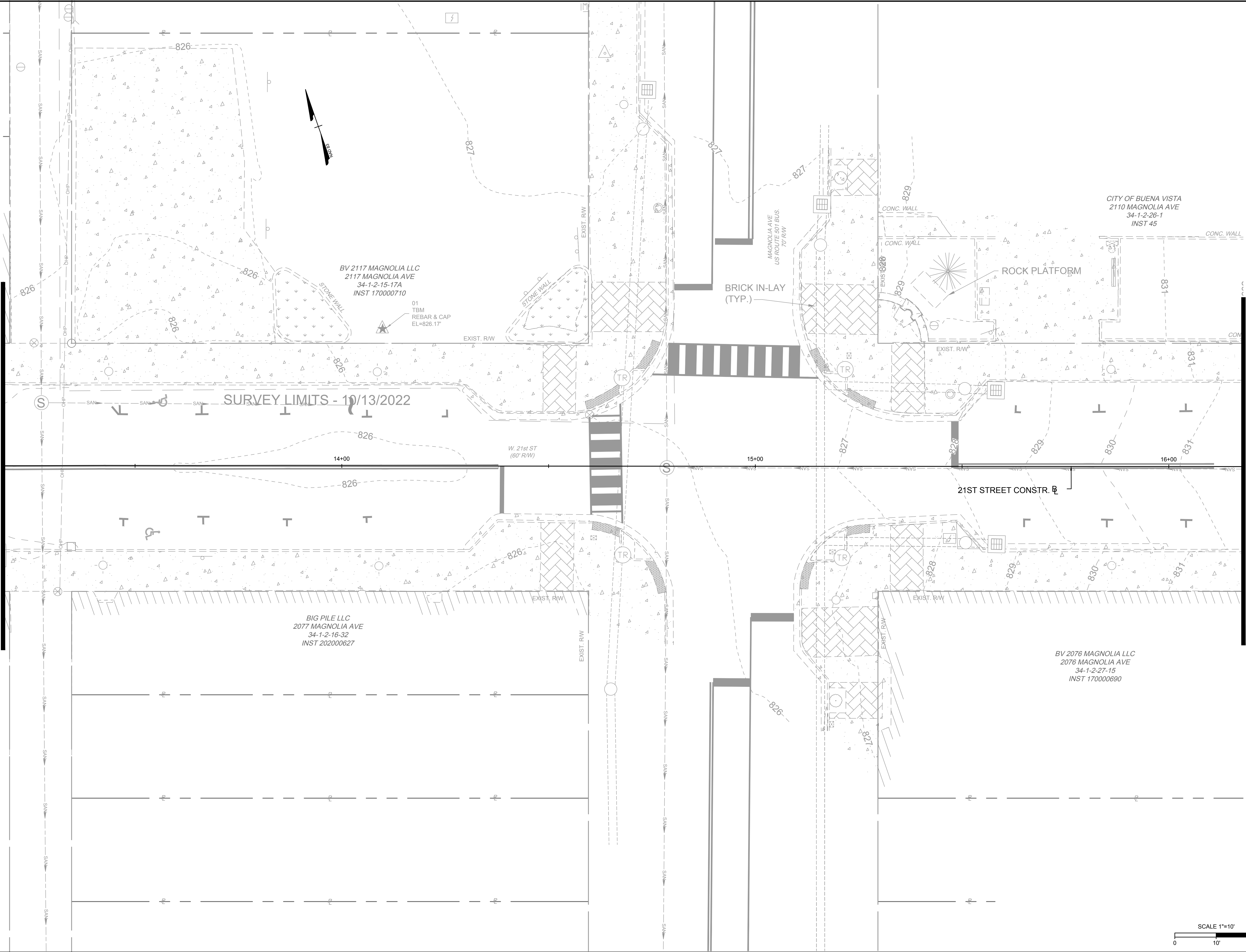
MATCHLINE STA 22+25 - SEE SHEET 03

MATCHLINE STA 25+25 - SEE SHEET 05

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MATCHLINE STA 22+25 - SEE SHEET 03RW

MATCHLINE STA 25+25 - SEE SHEET 05RW



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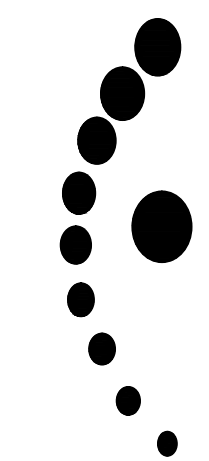
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**EWR**

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SCALE  
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**21st STREET ROW PLAN SHEET**

JOB NO.  
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SHEET NO.  
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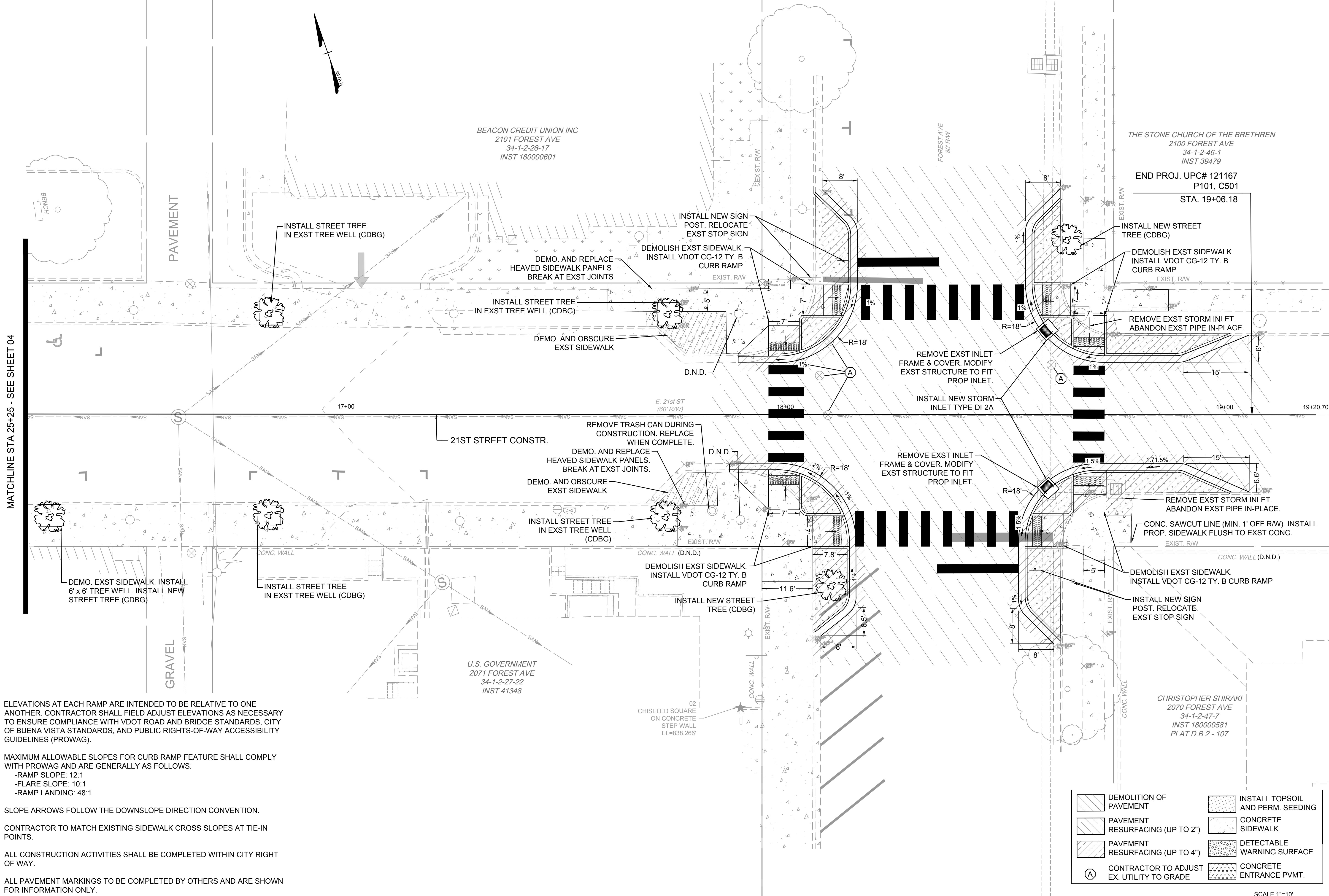
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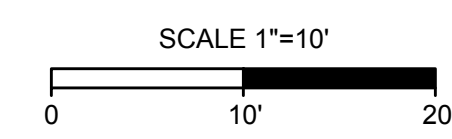
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**21st STREET PLAN SHEET**

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SHEET NO. 05



	DEMOLITION OF PAVEMENT		INSTALL TOPSOIL AND PERM. SEEDING
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	PAVEMENT RESURFACING (UP TO 4")		DETECTABLE WARNING SURFACE
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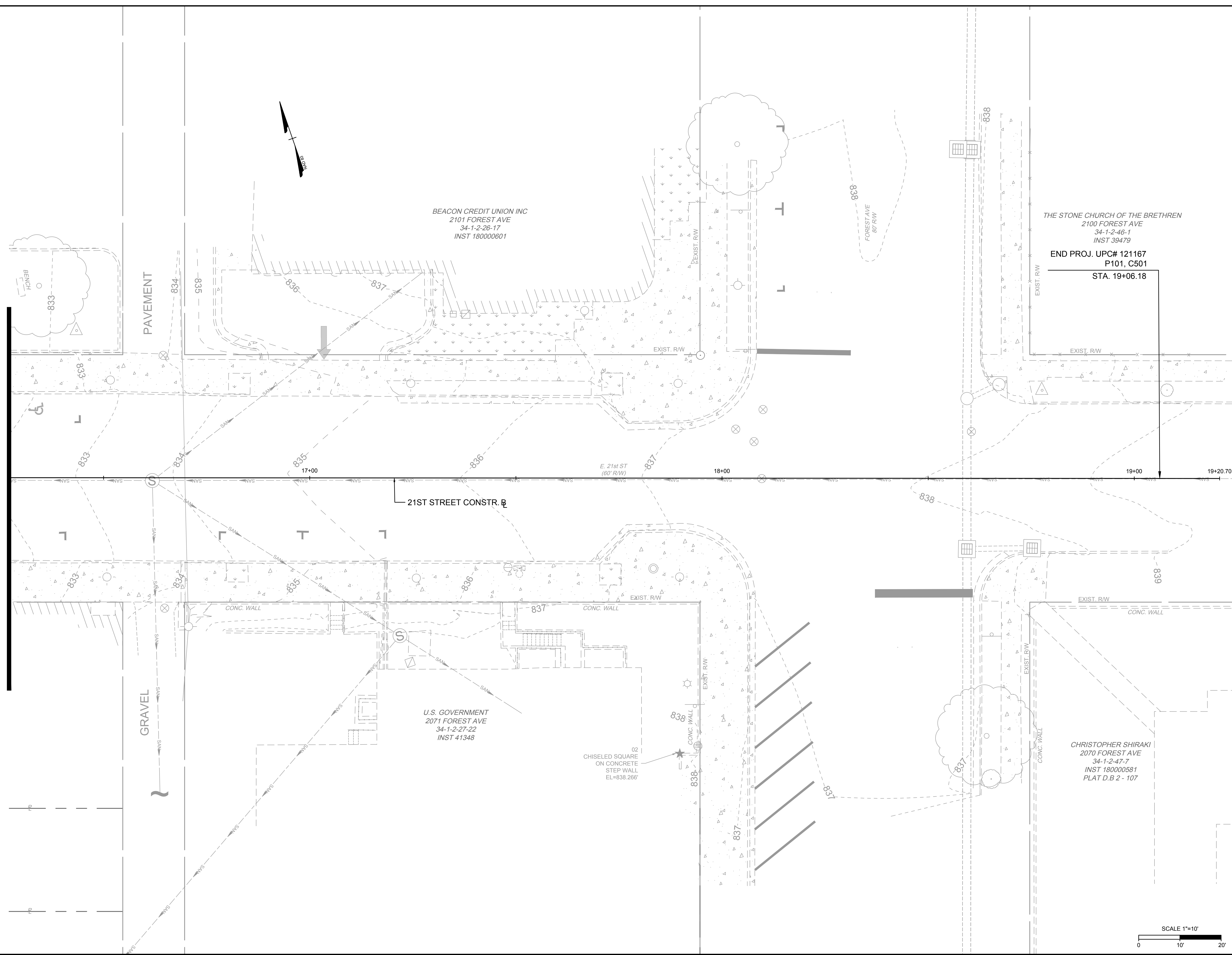
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MATCHLINE STA 25+25 - SEE SHEET 04RW



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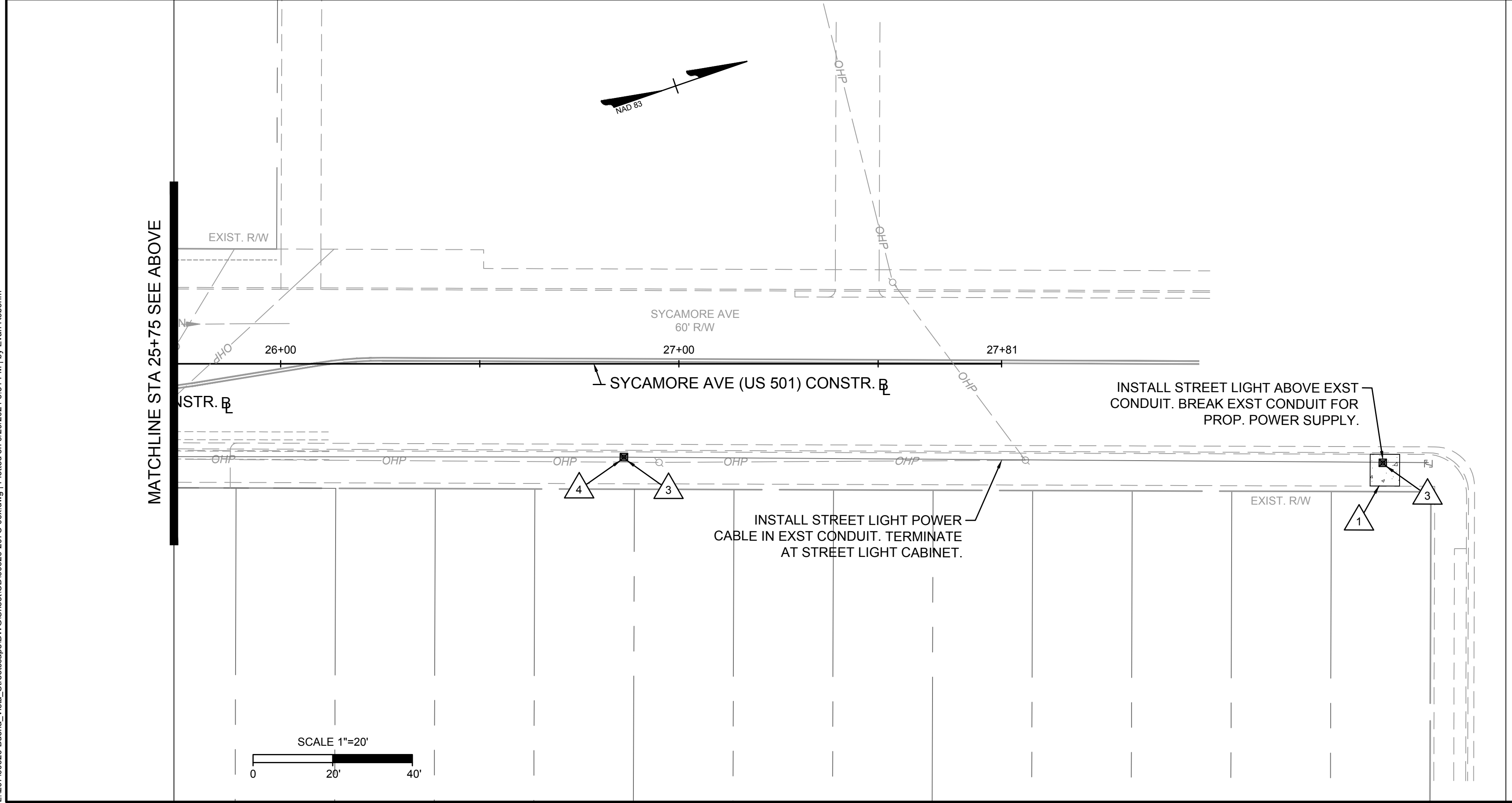
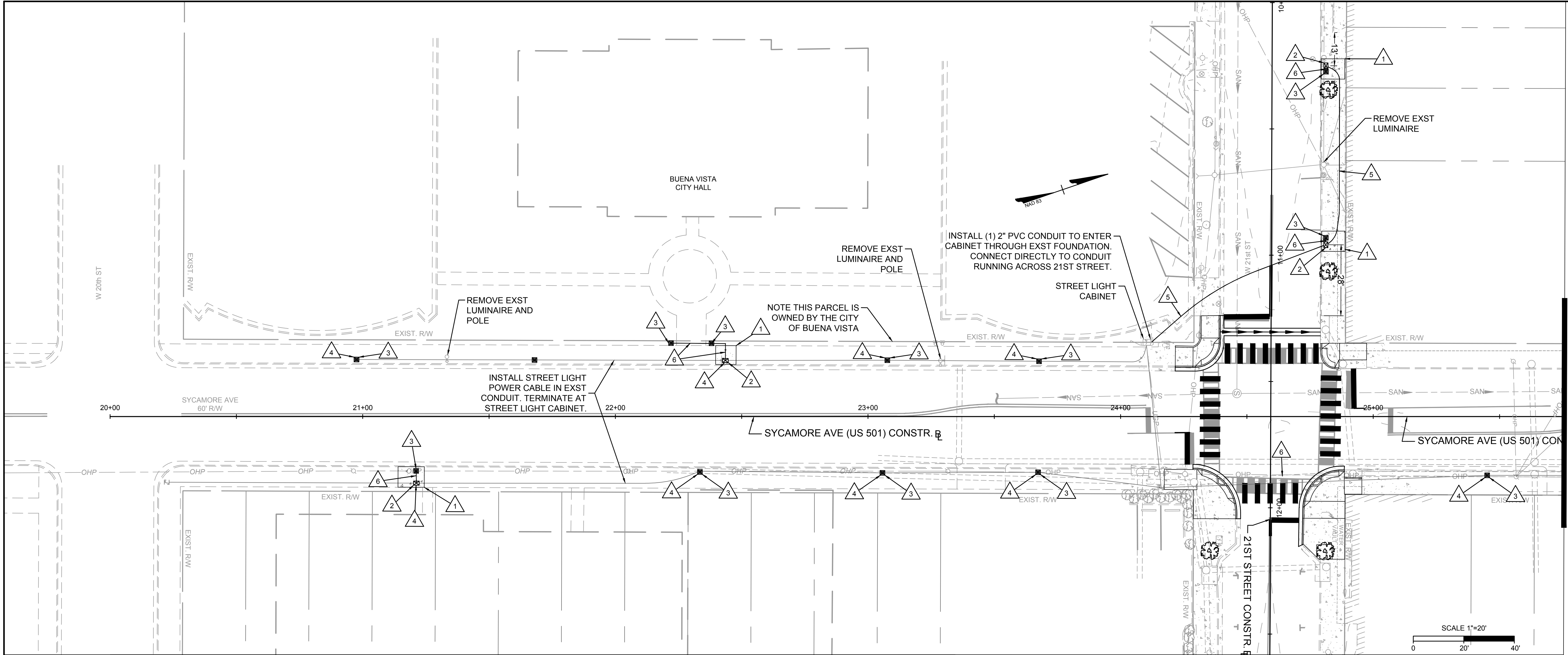
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**21st STREET ROW PLAN SHEET**

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 SHEET NO. 05RW

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- NOTES:
1. ALL PROPOSED STREET LIGHTS SHALL TERMINATE AT THE CABINET AT THE SW CORNER OF 21ST STREET/SYCAMORE AVE INTERSECTION.
  2. STREET LIGHTS MOUNTED ON TRAFFIC SIGNAL POLES SHALL TERMINATE AT THE TRAFFIC SIGNAL CABINET, WITH DEDICATED BREAKER SWITCH.
  3. SEE SHEET 02B FOR DESCRIPTION AND INSTALLATION DETAILS OF PROPOSED STREET LIGHTS.
  4. CHIP AWAY SMALL CONCRETE SQUARE TO ACCESS EXST CONDUIT.
  5. DIRECTIONAL DRILL. INSTALL (1) 2" HDPE CONDUIT WITH POWER CABLE INSIDE.
  6. TRENCH. INSTALL (1) 2" PVC CONDUIT WITH POWER CABLE INSIDE.

KEY LEGEND	
	CONCRETE SIDEWALK
	CONTRACTOR TO ADJUST EX. UTILITY TO GRADE

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**SYCAMORE AVENUE LIGHTING PLAN**

JOB NO. 60526  
 SHEET NO. 06

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MATCHLINE STA 25+75 SEE BELOW

MATCHLINE STA 25+75 SEE ABOVE



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21st STREET & SYCAMORE AVENUE TRAFFIC SIGNAL PLAN

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SHEET NO.  
07(2)

Site Development | Residential | Infrastructure | Technology

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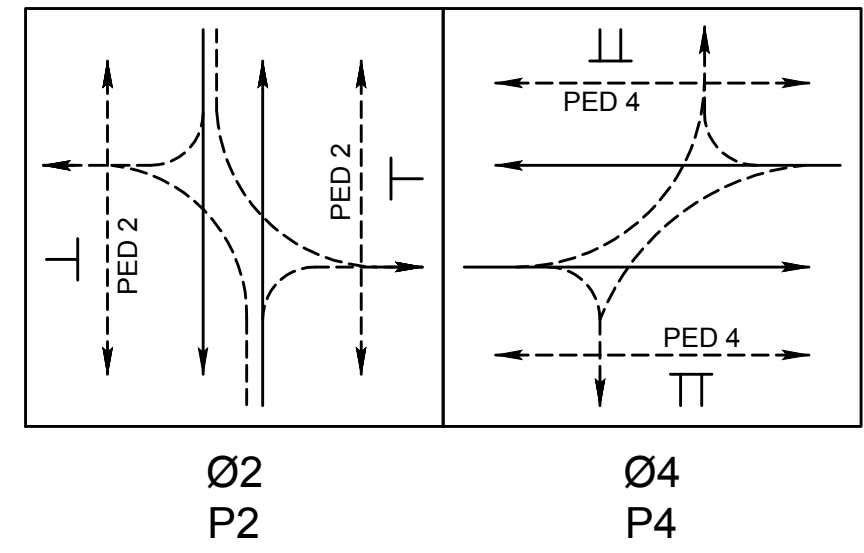
**SIGNAL POLE & CONTORLLER LEGEND**

- Ⓐ EXISTING CONTROLLER CABINET & FOUNDATION
- Ⓐ PEDESTAL POLE, H=15' (PF-2)  
INSTALL (1) TOP-MOUNTED GLOBE LIGHT (SEE DETAIL)  
INSTALL (2) NEW VEHICLE SIGNAL HEADS ON PEDESTAL POLE (SMB-3)  
INSTALL (2) NEW PEDESTRIAN SIGNAL HEADS, SP-8 ON PEDESTAL POLE (SMB-3)  
INSTALL (2) NEW ACCESSIBLE PED. PUSH BUTTONS ON PEDESTAL POLE (PA-2)
- Ⓑ PEDESTAL POLE, H=15' (PF-2)  
INSTALL (1) TOP-MOUNTED GLOBE LIGHT (SEE DETAIL)  
INSTALL (2) NEW VEHICLE SIGNAL HEADS ON PEDESTAL POLE (SMB-3)  
INSTALL (2) NEW PEDESTRIAN SIGNAL HEADS, SP-8 ON PEDESTAL POLE (SMB-3)  
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INSTALL (2) NEW VEHICLE SIGNAL HEADS ON PEDESTAL POLE (SMB-3)  
INSTALL (2) NEW PEDESTRIAN SIGNAL HEADS, SP-8 ON PEDESTAL POLE (SMB-3)  
INSTALL (2) NEW ACCESSIBLE PED. PUSH BUTTONS ON PEDESTAL POLE (PA-2)

**SIGNAL NOTES**

1. ALL PROPOSED SIGNAL HEADS SHALL USE 12" LENSES WITH LED INDICATIONS.
2. HVSB BACKPLATES AND TUNNEL VISORS REQUIRED ON ALL HEADS.
3. ALL SIGNAL HEADS AND VISORS SHALL BE YELLOW POLYCARBONATE.
4. NEW WIRING FOR ALL SIGNAL HEADS AND PUSH BUTTONS TO BE INSTALLED IN EXISTING CONDUIT.
5. CONTRACTOR TO REPLACE FULL SIDEWALK PANELS AS NEEDED TO INSTALL JUNCTION BOX AND SIGNAL POLE. BREAK SIDEWALK AT EXSTING JOINTS.
6. ALL EXISTING POLES, SIGNAL HEADS, AND STREETLIGHTS SHALL BE REMOVED. THE EXISTING CONTROLLER CABINET SHALL REMAIN.
7. PROPOSED STREET LIGHTS MOUNTED ON THE SIGNAL POLE SHALL TERMINATE AT THE TRAFFIC SIGNAL CABINET, WITH DEDICATED BREAKER SWITCH.
8. PROPOSED ACCESSIBLE PEDESTRIAN PUSH BUTTONS SHALL HAVE LOCATOR TONES AND SPEECH MESSAGES THAT SOUND WITH THE WALK SIGNAL.

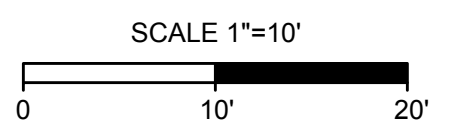
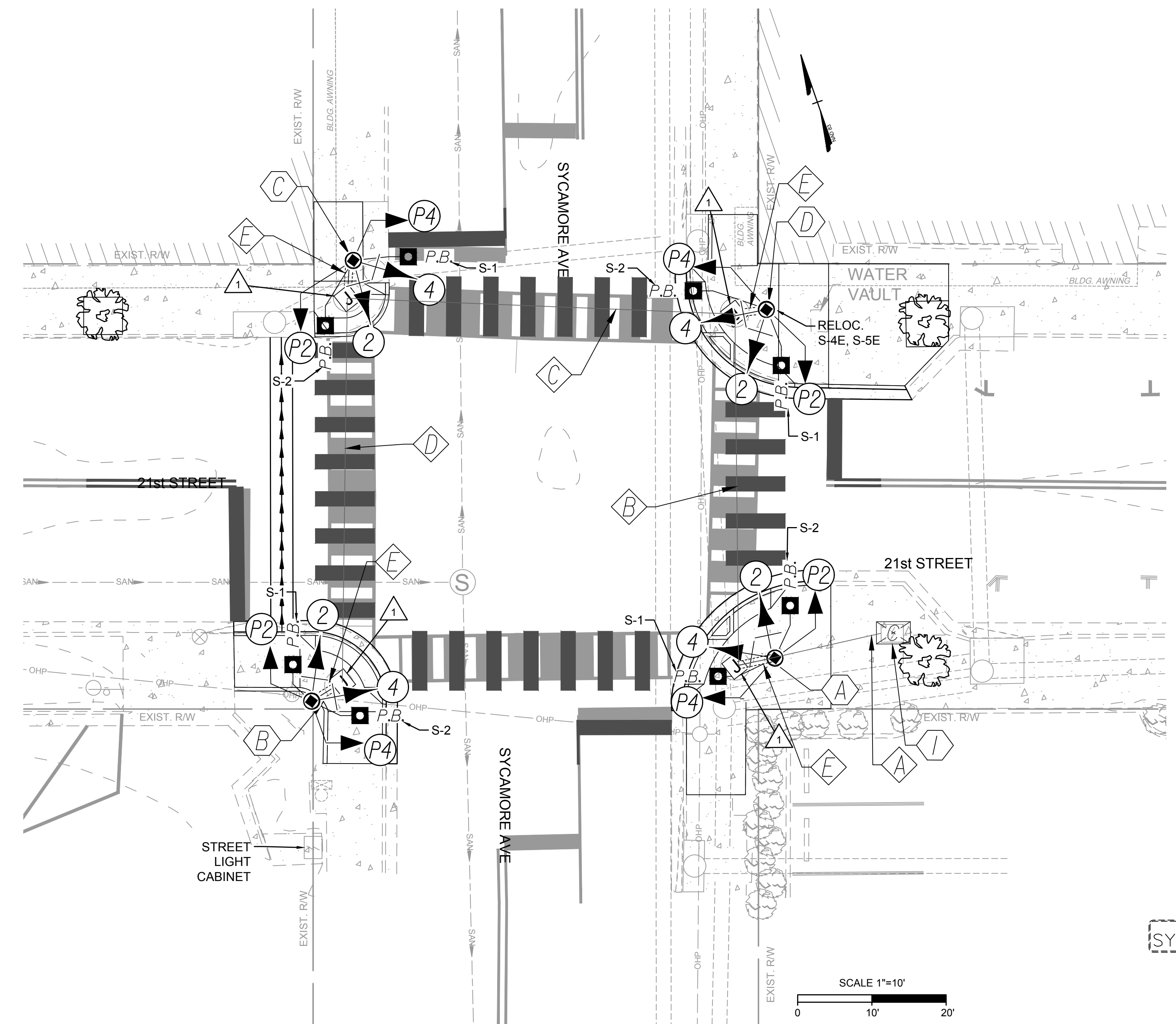
**PHASING DIAGRAM**



**COLOR SEQUENCE CHART**

SIGNALS	SIGNAL	PHASES		FLASH
		2	4	
	2	G		Y
	4		G	R
	P2	W	DW	BLANK
	P4	DW	W	BLANK

EMPTY BOX DENOTES RED INDICATION

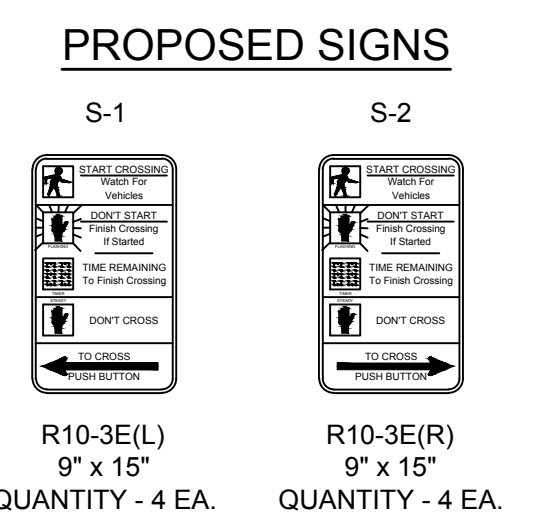
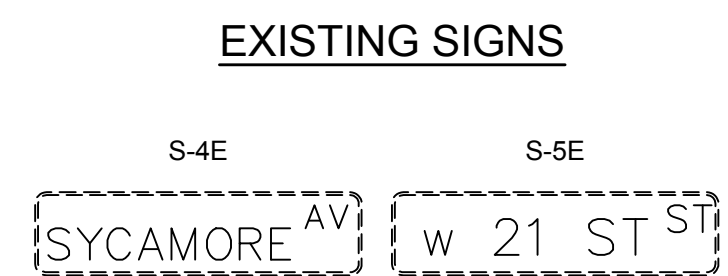


**CONDUIT & WIRING LEGEND**

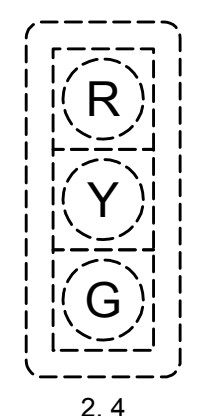
- ⬠ EXISTING CONDUIT
  - 4 - 14/7c
  - 8 - 14/3c (PH)
  - 8 - 14/2c (S) (PB)
  - 1 - EGC
- ⬠ EXISTING CONDUIT
  - 3 - 14/7c
  - 6 - 14/3c (PH)
  - 6 - 14/2c (S) (PB)
  - 1 - EGC
- ⬠ EXISTING CONDUIT
  - 2 - 14/7c
  - 4 - 14/3c (PH)
  - 4 - 14/2c (S) (PB)
  - 1 - EGC
- ⬠ EXISTING CONDUIT
  - 1 - 14/7c
  - 2 - 14/3c (PH)
  - 2 - 14/2c (S) (PB)
  - 1 - EGC
- ⬠ 2" TRENCHED CONDUIT (NEW)
  - 1 - 14/7c
  - 2 - 14/3c (PH)
  - 2 - 14/2c (S) (PB)
  - 1 - EGC

**CONDUIT & WIRING NOTES**

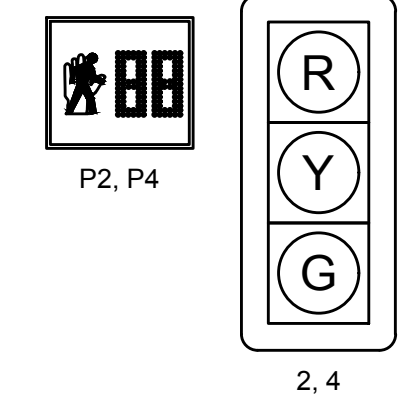
EGC - DENOTES EQUIPMENT GROUNDING CONDUCTOR  
(S) - DENOTES SHIELDED  
(PB) - PUSH BUTTON  
(PH) - PEDESTRIAN SIGNAL HEAD  
  
FIELD SURVEY FOR EXISTING TRAFFIC SIGNAL CONDUITS NOT PERFORMED. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING CONDUITS AND ROUTING CABLE FROM THE PROPOSED SIGNALS AND PUSH BUTTONS TO THE CONTROLLER CABINET.



**EXISTING SIGNAL HEADS**



**PROPOSED SIGNAL HEADS**



**KEY LEGEND**

1. INSTALL NEW JB-S2 IN PLACE OF EXST PEDESTAL POLE. TERMINATE EXST CONDUITS INSIDE NEW JB.
2. TIE-IN EXST AND PROP CONDUITS WITHIN EXST JB.

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BUENA VISTA CDBG & HSIP IMPROVEMENTS  
CITY OF BUENA VISTA - VIRGINIA  
21st STREET & MAGNOLIA AVENUE TRAFFIC SIGNAL PLAN

JOB NO. 60526  
SHEET NO. 07(3)

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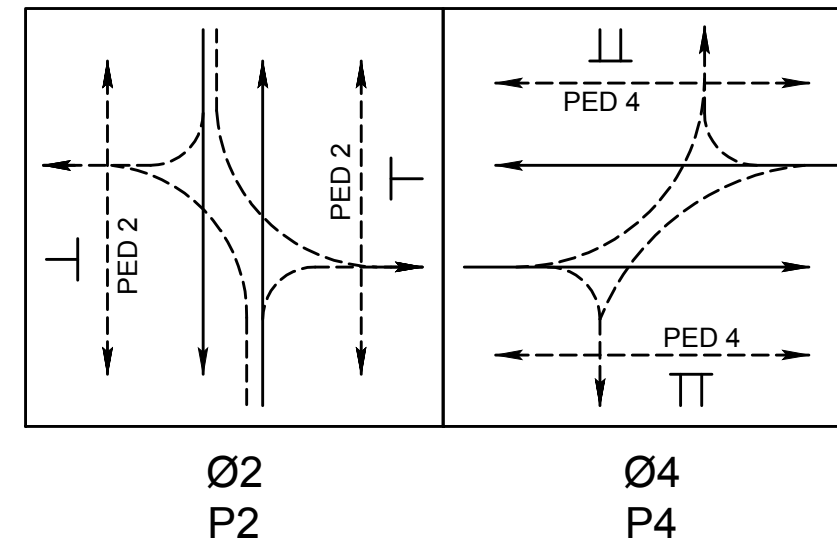
**SIGNAL POLE & CONTORLLER LEGEND**

- ① EXISTING CONTROLLER CABINET & FOUNDATION
- Ⓐ PEDESTAL POLE, H=15' (PF-2)  
INSTALL (1) TOP-MOUNTED GLOBE LIGHT (SEE DETAIL)  
INSTALL (2) NEW VEHICLE SIGNAL HEADS ON PEDESTAL POLE (SMB-3)  
INSTALL (2) NEW PEDESTRIAN SIGNAL HEADS, SP-8 ON PEDESTAL POLE (SMB-3)  
INSTALL (2) NEW ACCESSIBLE PED. PUSH BUTTONS ON PEDESTAL POLE (PA-2)
- Ⓑ PEDESTAL POLE, H=15' (PF-2)  
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**SIGNAL NOTES**

1. ALL PROPOSED SIGNAL HEADS SHALL USE 12" LENSES WITH LED INDICATIONS.
2. HVSB BACKPLATES AND TUNNEL VISORS REQUIRED ON ALL HEADS.
3. ALL SIGNAL HEADS AND VISORS SHALL BE YELLOW POLYCARBONATE.
4. NEW WIRING FOR ALL SIGNAL HEADS AND PUSH BUTTONS TO BE INSTALLED IN EXISTING CONDUIT.
5. CONTRACTOR TO REPLACE FULL SIDEWALK PANELS AS NEEDED TO INSTALL JUNCTION BOX AND SIGNAL POLE. BREAK SIDEWALK AT EXSTING JOINTS.
6. ALL EXISTING POLES, SIGNAL HEADS, AND STREETLIGHTS SHALL BE REMOVED. THE EXISTING CONTROLLER CABINET SHALL REMAIN.
7. PROPOSED STREET LIGHTS MOUNTED ON THE SIGNAL POLE SHALL TERMINATE AT THE TRAFFIC SIGNAL CABINET, WITH DEDICATED BREAKER SWITCH.
8. PROPOSED ACCESSIBLE PEDESTRIAN PUSH BUTTONS SHALL HAVE LOCATOR TONES AND SPEECH MESSAGES THAT SOUND WITH THE WALK SIGNAL.

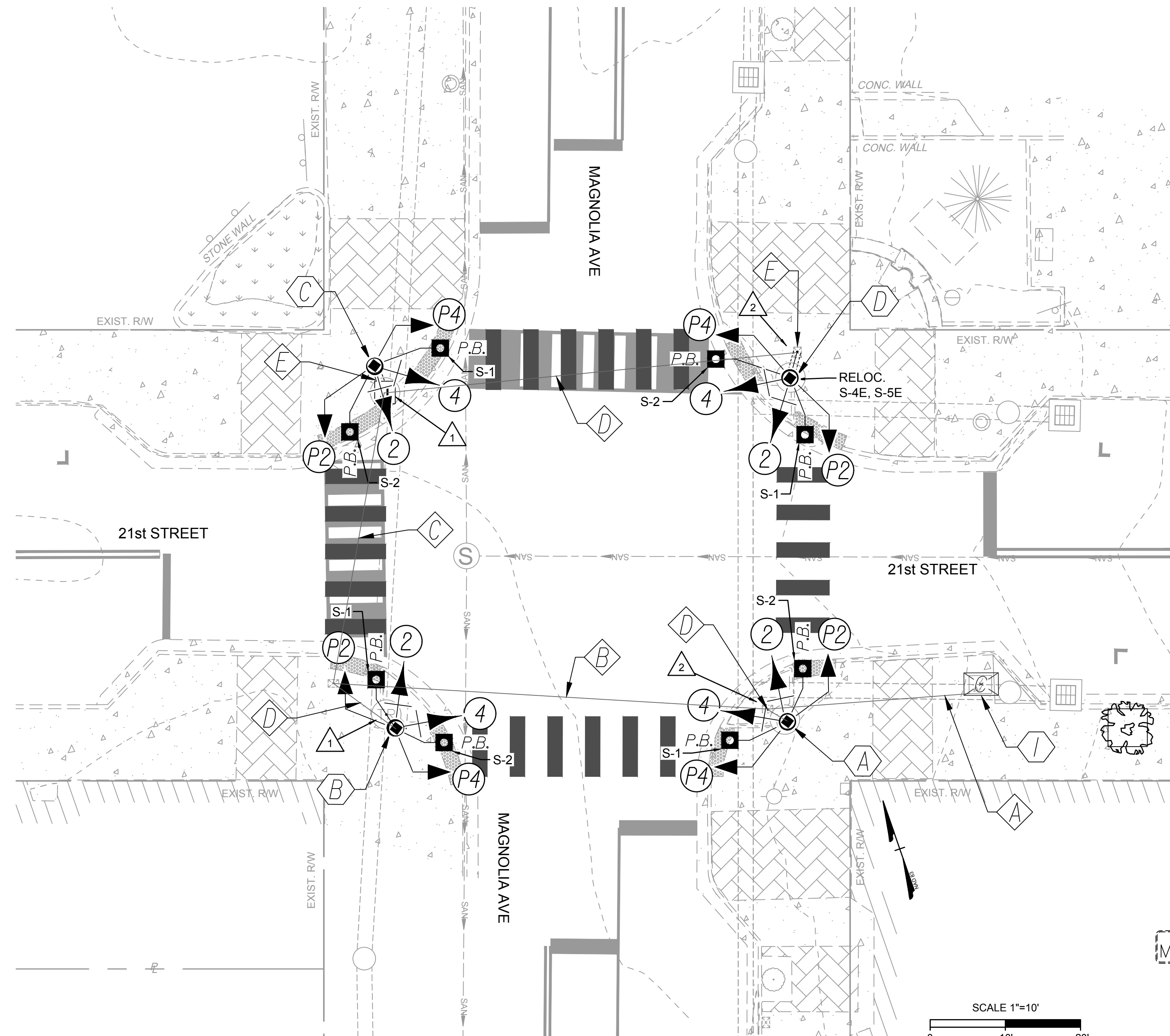
**PHASING DIAGRAM**



**COLOR SEQUENCE CHART**

SIGNALS	SIGNAL	PHASES		FLASH
		2	4	
	2	G		Y
	4		G	R
	P2	W	DW	BLANK
	P4	DW	W	BLANK

EMPTY BOX DENOTES RED INDICATION



**KEY LEGEND**

1. INSTALL NEW JB-S2 IN PLACE OF EXST PEDESTAL POLE. TERMINATE EXST CONDUITS INSIDE NEW JB.
2. TIE-IN EXST AND PROP CONDUITS WITHIN EXST JB.

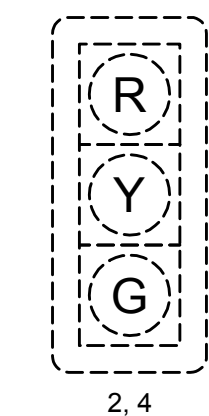
**CONDUIT & WIRING LEGEND**

- ⊠ EXISTING CONDUIT  
4 - 14/7c  
8 - 14/3c (PH)  
8 - 14/2c (S) (PB)  
1 - EGC
- ⊡ EXISTING CONDUIT  
3 - 14/7c  
6 - 14/3c (PH)  
6 - 14/2c (S) (PB)  
1 - EGC
- ⊢ EXISTING CONDUIT  
2 - 14/7c  
4 - 14/3c (PH)  
4 - 14/2c (S) (PB)  
1 - EGC
- ⊣ EXISTING CONDUIT  
1 - 14/7c  
2 - 14/3c (PH)  
2 - 14/2c (S) (PB)  
1 - EGC
- ⊤ 2" TRENCHED CONDUIT (NEW)  
1 - 14/7c  
2 - 14/3c (PH)  
2 - 14/2c (S) (PB)  
1 - EGC

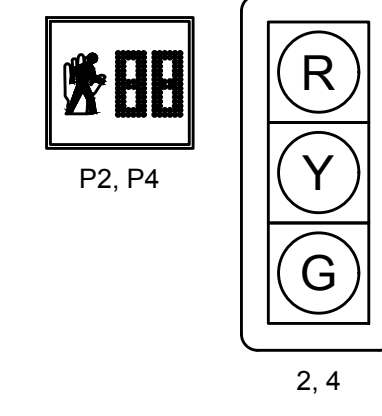
**CONDUIT & WIRING NOTES**

EGC - DENOTES EQUIPMENT GROUNDING CONDUCTOR  
(S) - DENOTES SHIELDED  
(PB) - PUSH BUTTON  
(PH) - PEDESTRIAN SIGNAL HEAD  
  
FIELD SURVEY FOR EXISTING TRAFFIC SIGNAL CONDUITS NOT PERFORMED. CONTRACTOR IS RESPONSIBLE FOR LOCATING EXISTING CONDUITS AND ROUTING CABLE FROM THE PROPOSED SIGNALS AND PUSH BUTTONS TO THE CONTROLLER CABINET.

**EXISTING SIGNAL HEADS**



**PROPOSED SIGNAL HEADS**



**EXISTING SIGNS**



**PROPOSED SIGNS**

