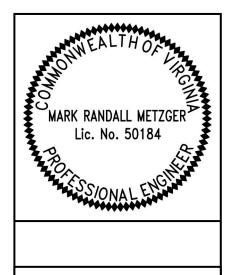


PROJECT MANUAL FOR PROPOSED BRIDGE SUPERSTRUCTURE REPLACEMENT WEST COMMERCE STREET OVER PEAK CREEK

TOWN OF PULASKI, VIRGINIA



Schwartz & Associates, Inc Lynchburg, Virginia Structural Engineers

COMMISSION NO. 19100

PREPARED BY

SCHWARTZ & ASSOCIATES, INC. CONSULTING ENGINEERS HERITAGE BUSINESS CENTER 7331 TIMBERLAKE ROAD LYNCHBURG, VIRGINIA 24502

TABLE OF CONTENTS

I. COVER

Description	Page Number
Advertisement for Bids	$\overline{\text{ADV-1}}$ - $\overline{\text{ADV-2}}$
Instructions to Bidders	00100-1 - 00100-4
Bid Form	00310-1 - 00310-14
Agreement	00500-1 - 00500-4
Notice of Award	00600-1
Notice to Proceed	00600-2
Federal Requirements	00700-1-00700-33
FORM C-111	
FORM C-112	
FORM C-48	
FORM C-49	
CIVIL RIGHTS REQUIREMENTS FOR LOCALLY	
ADMINISTERED PROJECTS	
DBE POLICY STATEMENT	
FORM WH-347	
FORM C-56	
FORM C-57	
FORM C-58	
FORM C-59	
FORM C-63	
FORM C-64	00000 1 00000 12
Supplementary Conditions (Includes Application for Payment)	00800-1 - 00800-12

II. DIVISION I - GENERAL REQUIREMENTS

Section	<u>Title</u>	Page Number
01010	Summary of Work	01010-1 - 01010-3
01050	Field Engineering	01050-1 - 01050-2
01153	Change Order Procedure & Conflict Resolution	01153-1 - 01153-4
01200	Project Coordination & Progress Meetings	01200-1 - 01200-3
01310	Construction Schedules	01310-1 - 01310-3
01340	Shop Drawings & Project Data	01340-1 - 01340-4
01510	Temporary Facilities	01510-1 - 01510-2
01551	Site, Access, Staging, Parking & Traffic Regulations	01551-1
01630	Product Delivery, Storage & Protection	01630-1 - 01630-3
01700	Contract Closeout	01700-1 - 01700-3
01710	Cleaning	01710-1 - 01710-2
01720	Contractor's Record Drawings	01720-1 - 01720-3
01730	Project Signs	01730-1

TABLE OF CONTENTS (Cont.)

III. DIVISION II - SITE WORK

Section
02703TitlePage Number
02703-1 - 02703-2

IV. DIVISION III - CONCRETE

Section	<u>Title</u>	<u>Page Number</u>
03037	Shotcrete – Type A	03037-1
03038	Pipe Abandonment (Storm Sewer)	03038-1

V. DIVISION IV - STEEL

Section	<u>Title</u>	<u>Page Number</u>
04060	Adhesive Anchors	$04\overline{060-1} - 04060-3$
04061	Powder Coating Bridge Rail	04061 - 1 - 04061 - 7

VI. DIVISION V – SPECIAL PROVISIONS & REVISIONS TO VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS, 2020

VII. DIVISION VI – TECHNICAL SPECIAL PROVISIONS

Section	<u>Title</u>	Page Number
1	Mobilization	07010-1
2	Quality Control (QC) Contractor Responsibility	07010-2-07010-24
3	Jacked and Bored Pipe (18")	07010-25 -07010-28

ATTACHMENTS:

Appendix 1: Asbestos and Lead Paint Report

Appendix 2: Environmental Permit

ADVERTISEMENT FOR BIDS

PROPOSED BRIDGE SUPERSTRUCTURE REPLACEMENT WEST COMMERCE STREET OVER PEAK CREEK STATE: 4602-125-124, FEDERAL: STP-5125 (127)

The Town of Pulaski (Town, Owner), Virginia, is seeking sealed bids from qualified construction firms for the above captioned project in accordance with the following project schedule.

CALENDAR OF EVENT	TS .
Solicitation Issue Date	February 19, 2024
Obtain copies of solicitation/contract documents from:	Schwartz & Associates, Inc.
(A .pdf of Project Manual and Plans will be emailed)	Consulting Engineers
Project Manual and Plans will be posted on Town of Pulaski	7331 Timberlake Road, Suite 305
website at https://www.pulaskitown.org/bids-and-rfps	Lynchburg, VA 24502
MANDATORY Pre-Bid Conference	March 6, 2024 at 11:00 am
	Town of Pulaski Engineering
	42 First Street, NW
	Pulaski, VA 24301
Deadline for Questions to be submitted VIA E-MAIL to Nathan	March 15, 2024 at 12:00 pm
Smythers at nsmythers@Pulaskitown.org	
Answers e-mailed to Pre-Bid Conference Attendees and posted	March 20, 2024 at 12:00 pm
to Town of Pulaski Website at	
https://www.pulaskitown.org/bids-and-rfps	
Sealed Bids Due	April 3, 2024 at 2:00 pm
	Town of Pulaski Engineering
	Attn: Scott Aust, Engineering Manager
	42 First Street, NW
	Pulaski, VA 24301
Bids Opened	April 3, 2024 at 2:05 pm
	Town of Pulaski Engineering
	42 First Street, NW
	Pulaski, VA 24301
Notice of Award	On or about April 23, 2024
Fixed Completion Date of Project	On or before January 10, 2025

The Project scope involves the superstructure replacement of West Commerce Street Bridge over Peak Creek. The repairs also include water main replacement and approach work.

All bids must be submitted in a sealed envelope plainly marked, "PROPOSED SUPERSTRUCTURE REPLACEMENT WEST COMMERCE STREET OVER PEAK CREEK", with the name and address of the bidder in the upper left-hand corner and accompanied by the required documentation as set out in the Invitation For Bid. E-Mail and facsimile responses are not acceptable. No responsibility will attach the Town or any official or employee thereof for the pre-opening of, post-opening of, or the failure to open a bid not properly addressed and identified. The Town of Pulaski assumes no responsibility for postmark or error in delivery to an incorrect address. It is the responsibility of the bidder to ensure timely and correct delivery of the bid. BIDS RECEIVED AFTER THE DATE AND TIME SPECIFIED WILL BE REJECTED.

Withdrawal of bids shall be according to procedure of the Virginia Public Procurement Act and to the Code of Virginia (§ 2.2-4330). Any Bidder must give notice in writing of his claim of right to withdraw his Bid within two business days after the conclusion of the Bid Opening Procedure and shall submit original work papers with such notice. If a Bid is withdrawn, the next higher Bidder shall be deemed to be the Low Bidder. No Bid may be withdrawn unless said withdrawal is permitted by law.

Each bidder must furnish with his bid a certified check or an acceptable Bid Bond in the amount of 5% of his Base Bid plus Alternates.

The contract awardee will be required to furnish and pay for satisfactory performance and payment bonds in amounts equal to the full contract amount.

The Bidder's attention is directed to the requirements of Chapter 11, Title 54.1, Code of Virginia, pertaining to Contractor registration.

All bidders shall complete a certification that they are not currently barred from bidding on Contracts by any agency of the Commonwealth of Virginia.

The Owner reserves the right to (1) reject any and all bids and to waive any irregularities or informalities in the bidding, and (2) to change or revise the work, with proper compensation to the contract.

MBE/WBE firms are encouraged to submit bids.

The Town of Pulaski will not discriminate against a bidder because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by the laws of the Commonwealth of Virginia relating to discrimination in employment. Further, the Town of Pulaski will not discriminate against small and minority businesses or faith-based organizations.

Attendance at the Pre-Bid Conference is <u>MANDATORY</u>. Bids <u>will not</u> be accepted from Bidders who do not attend and sign the register at the Pre-Bid Conference.

INSTRUCTIONS TO BIDDERS

1. THE WORK

The project involves demolition of the existing superstructure, substructure repair, reconstructing the superstructure with prestressed Bulb Tee's, approach work and water main replacement.

2. SECURING DOCUMENTS

Copies of the proposed Contract Documents may be obtained from:

Schwartz & Associates, Inc. 7331 Timberlake Road, Suite 305 Lynchburg, Virginia 24502

upon the conditions set forth in the Advertisement to Bid.

3. BID FORM

In order to receive consideration, make bids in strict accordance with the following.

- A. Make bids upon the forms provided therefor, properly signed and with all items filled out. Do not change the wording of the bid form, and do not add words to the bid form. Unauthorized conditions, limitations, or provisions attached to the bid will be cause for rejection of the bid. If alterations by erasure or interlineation are made for any reason, explain over such erasure or interlineation with a signed statement from the bidder.
- B. No telegraphic bid or telegraphic modification of a bid will be considered. No bids received after the time fixed for receiving them will be considered. Late bids will be returned to the bidder unopened.
- C. Address bids to the Owner, and deliver to the address given in the advertisement to bid or before the day and hour set for opening the bids. Enclose each bid in a sealed envelope bearing the title of the Work, the name of the bidder, in the upper left-hand corner and accompanied by the required documentation as set out in the Invitation for Bid. Submit only the original signed copy of the bid. It is the sole responsibility of the bidder to see that his bid is received on time.

4. BONDS

- A. Bid security in the amount stated in the Advertisement to Bid must accompany each bid. The successful bidder's security will not be returned until he has signed the Contract and has furnished the required Certificates of Insurance.
- B. The Owner reserves the right to retain the security of all bidders until the successful bidder enters into the Contract or until 60 days after bid opening, whichever is sooner. Other bid security will be returned as soon as practicable. If any bidder refuses to enter into a Contract, the Owner may retain his bid security as liquidated damages but not as a penalty.
- C. Prior to signing the Contract, the Owner will require the successful bidder to secure and post a Labor and Materials Payment Bond and a Performance Bond, each in the amount of 100% of the Contract Sum, and each on the form provided therefore in the Project Manual. Such bonds shall be issued by the Surety acceptable to the Owner.

5. EXAMINATION OF DOCUMENTS AND SITE OF WORK

Before submitting a bid, each bidder shall examine the Drawings carefully, shall read the Specifications and all other proposed Contract Documents, and shall visit the site of the Work. Each bidder shall fully inform himself prior to bidding as to existing conditions and limitations under which the Work is to be performed, and shall include in his bid a sum to cover the cost of items necessary to perform the Work as set forth in the proposed Contract Documents. No allowance will be made to a bidder because of lack of such examination and knowledge. The submission of a bid will be considered as conclusive evidence that the bidder has made such examination.

6. BIDDER ELIGIBILITY

Bids will only be accepted from Contractors who are actively engaged in the type of construction of the item(s) called for in the bid. No proposal will be accepted from or contract awarded to any person, firm or corporation that is in arrears or is in default to the Town upon any debt or contract, or that is a defaulter, as surety or otherwise, upon any obligation to said Town or had failed to perform faithfully any previous contract with the Town. Where an installation or assembly is to be performed by a subcontractor, the bidder must name the subcontractor, and the Town reserves the right to determine whether the named subcontractor is fit and capable to perform the required work. Bidders must be pre-qualified with VDOT (as bridge contractors) to be considered responsive bidders on this project. A copy of the bidders VDOT Certificate of Qualifications must be submitted with the bid documents. All subcontractors shall be pre-qualified with VDOT for all pre-qualifiable trades.

Bidders are required under Chapter 11, Title 54.1, Code of Virginia, to show evidence of certificate of registration before bid may be received and considered (1) on a general or subcontract of \$40,000 or more, or (2) if the total value of all contracts undertaken by the bidder during any twelve- month period is \$300,000 or more.

All bidders shall complete a Certification that they are not currently barred from bidding on Contracts by any agency of the Commonwealth of Virginia.

7. MODIFICATION AND WITHDRAWAL OF BIDS

- A. A bidder may modify or withdraw his bid, either personally or by written request, at any time prior to the scheduled time for opening bids.
- B. Except as provided in Section 2.2-4330 of the Code of Virginia, no bidder may withdraw his bid for a period of sixty calendar days after the date set for opening thereof, and bids shall be subject to acceptance by the Owner during this period.

8. AWARD OF CONTRACT

- A. The contract will be awarded on the basis of the sum of the Base Bid and the accepted Alternates.
- B. The Contract, if awarded, will be awarded to the responsible bidder who has proposed the lowest Contract Sum, subject to the Owner's right to reject any or all bids and to waive informality and irregularity in the bids and in the bidding.
- C. The Owner reserves the right to reject any and all bids and to waive informalities and minor irregularities in the bid forms received.
- D. Prior to award, Contractor must provide a "Registered Virginia Contractor No.".

9. EXECUTION OF AGREEMENT

- A. The form of Agreement which the successful bidder will be required to execute is included in the Project Manual.
- B. The bidder to whom the Contract is awarded shall, within ten calendar days after notice of award and receipt of Agreement forms from the Owner, sign and deliver required copies to the Owner.
- C. At or prior to delivery of the signed Agreement, the bidder to whom the Contract is awarded shall deliver to the Owner those Certificates of Insurance required by the Contract Documents and such Labor and Materials Payment Bonds and Performance Bonds as are required by the Owner.
- D. Bonds and Certificates of Insurance shall be approved by the Owner before the successful bidder may proceed with the Work. Failure or refusal to provide Bonds or Certificates of Insurance in a form satisfactory to the Owner shall subject the successful bidder to loss of time from the allowable construction period equal to the time of delay in furnishing the required material.

10. INTERPRETATION OF CONTRACT DOCUMENTS PRIOR TO BIDDING

A. If any person contemplating submitting a bid for construction of the Work is in doubt as to the true meaning of any part of the proposed Contract Documents, or finds discrepancies on or omissions from any part of the proposed Contract Documents, he may submit to the Engineer a written request for interpretation thereof not later than ten days before bids will be opened. The person submitting the request shall be responsible for any other explanations or interpretations of the proposed Contract Documents.

11. PRE-BID CONFERENCE

Approximately three weeks prior to the scheduled bid opening, a Mandatory Pre-Bid Conference will be held for the purpose of considering questions posed by bidders. The conference will be open to general contract and subcontract bidders. The Mandatory Pre-Bid Conference will be held at 11:00 a.m. on March 6, 2024 at Town of Pulaski Engineering, 42 First Street, NW, Pulaski, VA 24301.

12. CONSTRUCTION TIME AND LIQUIDATED DAMAGES

The Contractor agrees to commence work and complete the project in accordance with the time period set forth in the written "Notice to Proceed". The project shall be completed in its entirety on or before January 10, 2025. The Agreement shall stipulate that the Contractor shall complete the work no later than January 10, 2025. This is a "Fixed Completion Date" (222 days) Contract with the "Fixed Completion Date" being January 10, 2025 and the Contractor shall begin work on or before June 3, 2024. A Notice of "Award" will be issued by the Owner around April 23, 2024.

All work for this Contract shall be completed and accepted on or before the time limit established in the Contract. In the event the Contractor fails to complete the work by the time limit, liquidated damages, representing the estimated additional cost of administration, engineering, supervision, inspection and other expenses will be assessed in the amount of \$1,500.00 for each calendar day beyond the time limit, including Sundays and Holidays, that the project is not completed.

The Contract time specified in the Bid Form shall be on the basis of "Fixed Completion Date" as defined in Section 108.04 of the Virginia Department of Transportation Road & Bridge Specifications, 2020 and current revisions.

13. TOWN BUSINESS LICENSE

The successful Bidder shall obtain a Town of Pulaski Business License before beginning work on this project.

END OF INSTRUCTIONS TO BIDDERS

BID FORM

Mr. Scott Aust Town Engineer Manager 42 First Street, NW Pulaski, Virginia 24301

Dear Mr. Aust:

Contractors will indicate Unit Price and Total Price for each item listed below and the Base Bid (the sum of the Total Prices). The listed bid items are to contain all necessary costs required for completion of the Work in accordance with the Contract Documents. Base quantities for each of the items below to be included in bid are shown on construction documents and should be included in the Base Bid.

It is understood and agreed that the Owner, in protecting its best interests, reserves the right to reject any or all bids or waive any defects. Any changes, erasures, modifications, deletions in the bid form, or alternate proposals not specified in the Advertisement for Bids may make the bid irregular and subject to rejection.

If the Construction Agreement is for unit prices and not for a lump sum price, it is understood that all quantities listed on the following pages are estimated quantities, and the Owner reserves the right to raise, lower, or eliminate any quantity or item, and in any case, the unit prices shall be used in determining partial and final payment. It is further understood that costs to cover all components of the Work as described in the Contract Documents are included in this bid, even in cases where specific line items are not identified.

BID PROPOSAL FORM

"PROPOSED BRIDGE SUPERSTRUCTURE REPLACEMENT WEST COMMERCE STREET OVER PEAK CREEK"

TOWN OF PULASKI, VIRGINIA

VDOT #4602-125-124 B608 (UPC - 110931)

NO MAJOR ITEMS & NO PRICE ADJUSTMENTS

Section	Item <u>No.</u>	<u>Description</u>	Estimated Quantities	Unit <u>Price</u>	Total <u>Amount</u>
513	1	MOBILIZATION	LUMP SUM	LUMP SUM	_ \$
512 & SP	2	MAINTENANCE OF TRAFFIC	LUMP SUM	LUMP SUM	_ \$
517 & SP	3	CONSTRUCTION SURVEYING	LUMP SUM	LUMP SUM	_ \$
413	4	DISMANTLE & REMOVE PRRTION OF EXISTING STRUCTURE – STR. NO. 8008	LUMP SUM	LUMP SUM	_ \$
404	5	CONCRETE CLASS A3	60.4 CY	\$	\$
406	6	CORROSION RESISTANT REINFORCING STEEL, CLASS I	23,470 LBS	\$	\$
404	7	CONCRETE LOW SHRINKAGE CLASS A4 MODIFIED	102.9 CY	\$	\$
401	8	STRUCTURE EXCAVATION	272 CY	\$	\$
401	9	SELECT BACKFILL (ABUTMENT ZONE)	180 CY	\$	\$
401	10	COFFERDAM	2 EACH	\$	\$
303	11	DEWATERING BASIN	2 EACH	\$	\$
410	12	RAILING, CPSR 2-RAIL	155 LF	\$	\$

<u>Section</u>	Item <u>No.</u>	<u>Description</u>	Estimated Quantities	Unit <u>Price</u>	Total <u>Amount</u>
405	13	PRESTRESSED CONC. BEAM BULB - T 37" DEPTH +70'-80'	4 EACH	\$	\$
404	14	BRIDGE DECK GROOVING	213 SY	\$	\$
402	15	TEMPORARY SHEET PILING	274 SF	\$	\$
413	16	MATERIAL DISPOSAL (STR. NO. 8008), TYPE B	LUMP SUM	LUMP SUM	\$
413	17	ENVIRONMENTAL & WORKER PROTECTION (STR. NO. 8008)	LUMP SUM	LUMP SUM	\$
414	18	DRY RIPRAP, CLASS II (38')	30 TONS	\$	\$
404	19	COVER DEPTH SURVEY	213 SY	\$	\$
412	20	SHOTCRETE, CLASS A	50 SF	\$	\$
302 & SP	21	JACKED & BORED PIPE (18")	LUMP SUM	LUMP SUM	\$
520	22	WATER LINE SYSTEM – 8" DIAMETER	LUMP SUM	LUMP SUM	\$
508	23	DEMOLITION OF PAVEMENT	90 SY	\$	\$
303	24	REGULAR EXCAVATION	32 CY	\$	\$
308 & 309	25	AGGREGATE BASE MATERIAL, SIZE 21-A	95 TONS	\$	\$
515	26	FLEXIBLE PAVEMENT PLANING, 0"-2"	265 SY	\$	\$
315	27	ASPHALT CONCRETE TYPE BM-25.0A	121 TONS	\$	\$

<u>Section</u>	Item <u>No.</u>	<u>Description</u>	Estimated Quantities	Unit <u>Price</u>	Total <u>Amount</u>
315	28	ASPHALT CONCRETE TYPE SM-9.5D	52 TONS	\$	\$
505	29	FIXED OBJECT ATTACHMENT, GR-FOA-5	4 EACH	\$	\$
505	30	REMOVAL OF EXISTING GUARDRAIL	70 LF	\$	\$
512	31	CRUSHER RUN AGGREGATE NO. 25 OR NO. 26	25 TONS	\$	\$
505	32	GUARDRAIL TERMINAL SITE PREPARATION	1 EACH	\$	\$
505	33	GUARDRAIL TERMINAL GR-MGS2 (50')	2 EACH	\$	\$
505	34	GUARDRAIL HEIGHT TRANSITION GR-MGS4	2 EACH	\$	\$
505	35	GUARDRAIL TERMINAL, GR-6	12.5 LF	\$	\$
505	36	RAD. GUARDRAIL, ST'D. MGS1	25 LF	\$	\$
505	37	GUARDRAIL, ST'D. MGS1	12.5 LF	\$	\$
502	38	ST'D CG-3 CURB	109 LF	\$	\$
520	39	12" DIMJ WATER LINE	51 LF	\$	\$
520	40	16" DIMJ WATER LINE	5 LF	\$	\$
520	41	18" DIMJ WATER LINE	78 LF	\$	\$
520	42	8" DIMJ WATER LINE	69 LF	\$	\$

<u>Section</u>	Item <u>No.</u>	<u>Description</u>	Estimated Quantities	Unit <u>Price</u>	Total <u>Amount</u>
520	43	8" GATE VALVE & BOX	2 EACH	\$	\$
520	44	12" GATE VALVE & BOX	3 EACH	\$	\$
520	45	16" GATE VALVE & BOX	1 EACH	\$	\$
SP	46	REMOVE EXIST. WATER LINE (8")	39 LF	\$	\$
NS	47	REMOVE EXIST. WATER LINE (12")	76 LF	\$	\$
SP	48	PIPE ABANDONMENT (WATER LINE)	2 EACH	\$	\$
303 & 305	49	BORROW EXCAVATION	26 CY	\$	\$
414	50	GROUTED RIPRAP CLASS A1 (12" DEPTH)	8 TONS	\$	\$
303	51	CHECK DAM ROCK, TYPE II, ST'D. EC-4	4 EACH	\$	\$
303	52	TEMPORARY SILT FENCE, ST'D. EC-5	350 LF	\$	\$
303	53	SILTATION CONTROL EXCAVATION	60 CY	\$	\$
301	54	CLEARING & GRUBBING	LUMP SUM	LUMP SUM	\$
603	55	SEEDING	LUMP SUM	LUMP SUM	\$
512	56	PORTABLE TRAFFIC CONTROL SIGNAL	LUMP SUM	LUMP SUM	\$

<u>Section</u>	Item <u>No.</u>	<u>Description</u>	Estimated Quantities	Unit <u>Price</u>	Total <u>Amount</u>
512	57	TEMPORARY PAVEMENT MARKING (TYPE D, CLASS III – 4")	1,006 LF	\$	\$
512	58	TEMPORARY PAVEMENT MARKING (TYPE D, CLASS III – 8")	547 LF	\$	\$
512	59	TYPE III BARRICADE, 4'	6 EACH	\$	\$
512	60	TYPE III BARRICADE, 8'	2 EACH	\$	\$
512	61	GROUP II CHANNELIZING DEVICES	4,620 DAYS	\$	\$
512	62	CONSTRUCTION SIGNS	495 SF	\$	\$
512	63	TRAFFIC BARRIER SERVICE CONCRETE, DOUBLE FACE, MB-11A	192 LF	\$	\$
512	64	TRAFFIC BARRIER SERVICE CONCRETE, MB-7D	30 LF	\$	\$
512	65	TRAFFIC BARRIER SERVICE CONCRETE, (SINGLE FACE), MB-10A	144 LF	\$	\$
512	66	TRAFFIC BARRIER SERVICE CONCRETE, LATERAL SUPPORT	4 EACH	\$	\$
512	67	IMPACT ATTENUATOR SERVICE, TYPE 1, TL-2	3 EACH	\$	\$
512	68	PORTABLE CHANGEABLE MESSAGE SIGN	960 HOURS	\$	\$

<u>Section</u>	Item <u>No.</u>	<u>Description</u>	Estimated Quantities	Unit <u>Price</u>	Total <u>Amount</u>
704	69	TYPE B, CLASS VI CONTRAST PAVEMENT LINE MARKING – 4"	296 LF	\$	\$
704	70	TYPE A PAVEMENT LINE MARKING – 4"	912 LF	\$	\$
514	71	FIELD OFFICE, TYPE III	8 MONTHS	\$	\$
				TOTAL	\$

We are properly equipped to execute all work of the character and extent of the agreement as so covered by this bid and will enter into an agreement for the execution and completion of the work in accordance with the drawings and specifications and this bid. We further agree that if awarded the contract, we will maintain a work force large enough to execute the work and all obligations and complete the work by January 10, 2025. This is a "Fixed Completion Date" contract with the "Fixed Completion Date" being January 10, 2025."

Enclosed herewith is the following Security, offered as evidence that the undersigned will enter into agreement for the execution and completion of the work in accordance with the Drawings, Specifications, and Contract Documents.

Bidder's Bond or Certified Check in the amount of \$_____

Bond issued by or name of bank	
the ten (10) consecutive calendar days after written monies payable by the securities accompanying	are on his part to execute the said agreement within notice being given on the "Notice of Award", the this bid, shall be paid to the Town of Pulaski, therwise the Securities accompanying this bid shall
This bid is subject to acceptance within a period of	of 60 days from this date.
	Respectfully submitted,
	CONTRACTOR
	ADDRESS
BY: TITLE:	
DATE:	

Proof Of Authority To Transact Business In Virginia

THIS FORM MUST BE SUBMITTED WITH YOUR PROPOSAL/BID. FAILURE TO INCLUDE THIS FORM MAY RESULT IN REJECTION OF YOUR PROPOSAL/BID

Pursuant to Virginia Code §2.2-4311.2, an Offeror/Bidder organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 of the Code of Virginia shall include in its proposal/bid the identification number issued to it by the State Corporation Commission ("SCC"). Any Offeror/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 attach to this form a statement describing why the Offeror/Bidder is not required to be so authorized. Any Offeror/Bidder described herein that fails to provide the required information shall not receive an award unless a waiver of this requirement is granted by the SCC.

If this quote for goods or services is accepted by the Town of Pulaski, Virginia, the undersigned agrees that the requirements of the Code of Virginia Section 2.2-4311.2 have been met.

Please complete the following by checking the appropriate line that applied	es and providing the requested information.
A Offeror/Bidder is a Virginia business entity organized and author SCC and such vendor's Identification Number issued to it by the SCC is:	
B Offeror/Bidder is an out-of-state (foreign) business entity that is by the SCC and such vendor's Identification Number issued to it by the S	
C Offeror/Bidder has applied for, but has not yet received, an Ider requests that it be granted an extension of five calendar days to provide it Purchasing Division.	
D Offeror/Bidder does not have an Identification Number issued t authorized to transact business in Virginia in accordance with Section(s) stated on the attached document(s).	
Please attach additional sheets if you need to explain why such Offer authorized to transact business in Virginia.	or/Bidder is not required to be
Legal Name of Company (as registered to do business and in agreement with IRS FEIN/TIN designation letter)	
Legal Name of Authorized Representative for Offeror/Bidder	
Title of Authorized Representative for Offeror/Bidder	
Signature of Authorized Representative for Offeror/Bidder	Date

CONTRACTOR'S CERTIFICATION

This is to certify that I (we) are not currently barred from bidding on contracts by any agency of The Commonwealth of Virginia, nor am I (we) a part of any firm/corporation that is currently barred from bidding on contracts by any agency of The Commonwealth of Virginia.

	(Contractor)	
	(Address)	
(Seal)		
	By:	
(Attest)	•	
	Title:	
	Date:	

TOWN OF PULASKI, VIRGINIA

AFFIDAVIT AND INFORMATION REQUIRED OF BIDDERS

Affidavit of non-collusion:

Under oath, I hereby affirm under penalty of perjury:

- (1) That I am the bidder or a partner of the bidder, or an officer or employee of the bidding corporation with authority to sign on its behalf;
- (2) That the attached bid or bids have been arrived at by the bidder and have been arrived at and submitted without collusion or any design to limit bidding or competition;
- (3) That the contents of the bid or bids have not been communicated to any person not an employee or agent of the bidder on any bid furnished with the bid or bids, and will not be communicated to any such person prior to the official opening of the bid or bids; and
- (4) That I have fully informed myself regarding the accuracy of the statements made in this affidavit.

Signe	ed
Firm	Name
TOWN OF PULASKI COMMONWEALTH OF VIRGINIA, to wit:	
I	, a Notary Public, do certify that
	whose name is signed to the
foregoing, has this date acknowledged the same	before me in my Town
foresaid.	
Given under my hand thisday of	,20 My
Commission expires	
	Notary Public

ORDER NO.: CONTRACT ID. NO.:

Form C-104 Rev. 7-13-05

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION

PROJECT: 4602-125-124

FHWA: **STP-5125(127)**

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 <u>EITHER</u> BY SIGNING THE AFFIDAVIT AND HAVING IT NOTARIZED <u>OR</u> 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 atCounty (City), STATE	, this	_ day of	, 20
	By:(Signa COUNTY (CIT To-wit:	ture) (TY) of	Title (print)
I		Notary Public in	and for the State and
County(City) aforesaid, hereby certify that this day	/		
personally appeared before me and made oath the and that such statements are true and correct.	at he is duly author	rized to make the	e above statements
Subscribed and sworn to before me this	day of		, 20
	My Commi	ission expires	
Notary Public UNSWOF	OR RN DECLARATION		
The undersigned is duly authorized by the bidd submitted on behalf of the bidder for contracts to l			
Signed atCounty (City), STATE		day of	, 20
	By:		
(Name of Firm)	(Signat	:uге)	Title (print)

ORDER NO.: CONTRACT ID. NO.:

Form C-105 Rev. 7-13-05

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION AFFIDAVIT

PROJECT: 4602-125-124

FHWA: **STP-5125(127)**

NAME

or their implementing regulations.

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.

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 33.1-336 of the Code of Virginia (1970). (If none, so state).

Location of Principal Office

2.	subject to the equal opportunity claus 11246, and that I/We have, have the Director of the Office of Feder contracting or administering agency	, participated in a previous contract or subcontract e, as required by Executive Orders 10925, 11114, or we not, filed with the joint Reporting Committee, eral Contract Compliance, a Federal Government we, or the former President's Committee on Equal ue under the applicable filing requirements.	
	Regulations of the Secretary of Labo bidders and proposed subcontractors which are subject to the equal oppor	required by the Equal Employment Opportunity or [41 CFR 60-1.7(b)(1)], and must be submitted by sonly in connection with contracts and subcontracts tunity clause. Contracts and subcontracts which are ause are set forth in 41 CFR 60-1.5. (Generally only under are exempt.)	
	Currently, Standard Form 100 (EEO-	1) is the only report required by the Executive Orders	

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			
	Ву:		
(Name of Firm)	(Sigr	nature)	Title (print)
STATE of	COUNTY (C	CITY) of	
	To-wit:		
1		a Notary Public i	in and for the State and
County(City) aforesaid, hereby certify that this day			
personally appeared before me and made oath tha and that such statements are true and correct.	t he is duly auth	orized to make t	ne above statements
Subscribed and sworn to before me this	day of _		, 20
	My Comi	mission expires	
Notary Public			

AGREEMENT

	the y		ENT is dated as of the day of nd between the Town of Pulaski, Virginia (ER) and
(herein	nafter	called CON	TRACTOR)
forth,		NER and CC as follows:	ONTRACTOR, in consideration of the mutual covenants hereinafter set
	Artic	ele 1.	WORK
	Docu the e exist	uments. The existing supering substruction	shall complete all Work as specified or indicated in the Contract work is generally described as follows: The project involves demolition of enstructure and portions of the existing substructure, repairing portions of ture and reconstructing the superstructure with single prestressed concrete dge and concrete deck.
	Artic	ele 2	ENGINEER
	They and Docu	are hereina shall have	been designed by Schwartz and Associates, Inc., Consulting Engineers. fter called ENGINEER and will assume all duties and responsibilities the rights and authority assigned to ENGINEER in the Contract nnection with completion of the Work in accordance with the Contract
	Artic	ele 3.	CONTRACT TIME
	3.1	Contract T	Fime shall be a fixed completion date as shown below:
	A.	This projec	et has a "Fixed Completion Date" of
	3.2		d Damages. OWNER and CONTRACTOR recognize that time is of this Agreement and that OWNER will suffer financial loss if the

Terms and Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER one thousand five hundred dollars (\$1,500.00) for each day that expires after the time specified in paragraph 3.1 for completion until the Work is complete.

Work is not complete within the time specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with the Town of Pulaski General

Article 4. CONTRACT PRICE

4.1 OWNER shall pay CONTRACTOR for performance of the Work in accordance with the Contract Documents such amounts as required by the Contract Documents.

Article 5. PAYMENT PROCEDURES

CONTRACTOR shall submit Applications for Payment in accordance with the Supplementary Conditions. Applications for Payment shall be processed by ENGINEER as provided in the General Conditions.

- 5.1 Progress Payments. OWNER shall make progress payments on account of the Contract Price on the basis of CONTRACTOR'S Applications for Payment as recommended by ENGINEER, on or about the 25th day of each month during construction as provided below. All progress payments will be on the basis of the progress of the Work in accordance with the Supplementary Conditions and General Conditions.
- 5.1.1 Prior to completion Progress Payments will be made in an amount equal to:

Work completed, and materials and equipment not incorporated in the Work but delivered and suitably stored, less in each case the aggregate of payment previously made.

5.2 Final Payment. Upon final completion and acceptance of the Work in accordance with the VDOT Specifications, OWNER shall pay the remainder of the Contract Price as recommended by ENGINEER as provided in said VDOT Specifications.

Article 6. INTEREST

All moneys not paid when due hereunder shall bear interest at a rate of 1/2% per month 6% per annum.

Article 7. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement, CONTRACTOR makes the following representations:

- 7.1 CONTRACTOR has familiarized himself with the nature and extent of the Contract Documents, Work, locality, and with all local conditions, state and local laws, ordinances, rules and regulations that in any manner may affect cost, progress or performance of the Work.
- 7.2 CONTRACTOR has studied carefully all reports of investigations and tests of subsurface and latent physical conditions at the site or otherwise affecting cost, progress or performance of the Work which were relied upon by ENGINEER in the preparation of the Drawings and Specifications.

- 7.3 CONTRACTOR has made or caused to be made examinations, investigations and tests and studies of such reports and related data in addition to those referred to in paragraph 7.2 as he deems necessary for the performance of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents; and no additional examination, investigations, tests, reports or similar data are or will be required by CONTRACTOR for such purpose.
- 7.4 CONTRACTOR has correlated the results of all such observations, examinations, investigations, tests, reports and data with the terms and conditions of the Contract Documents.
- 7.5 CONTRACTOR has given ENGINEER written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by ENGINEER is acceptable to CONTRACTOR.

Article 9 MISCELLANEOUS

- 9.1 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, monies that may become due and monies that are now due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 9.2 OWNER and CONTRACTOR each binds himself, his partners, successors, assigns and legal representatives to the party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.

Article 10. OTHER PROVISIONS

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

This Agreement will be ef	ffective on,	20
OWNERC	CONTRACTOR	
by	_ By	
(CORPORATE SEAL)) (CORPORATE SEAL)	
Attest	Attest	
	Address for giving notices	
(Attach evidence of author to sign and resolution or oth	ity License No ner ution Agent for service of process	

END OF AGREEMENT

NOTICE OF AWARD

To:		
PROJECT Description:		
The TOWN has considered described WORK in response 20, and Information	to its Advertisement f	
You are hereby notified in the amount of \$	ed that your BID has be	
You are required by the Agreement and furnish the respond, and Certificate of Iredate of this Notice to you.	nsurance within ten (10	Performance Bond, Payment
within ten (10) days from tentitled to consider all you	our rights arising out as a forfeiture of your	e, said OWNER will be of the OWNER'S acceptance of Bid Bond. The OWNER will be
You are required to re AWARD to the TOWN.	eturn an acknowledged c	opy of this NOTICE OF
Dated this	day of	,20
	Town o	of Pulaski
	DV	
	Title	
ACCEPTANCE OF NOTICE		
Receipt of the NOTICE OF AWARD is hereby acknowledge	ed	
by		
this the	 _ day	
of,	20	
DV		
BY	_	
11010		

NOTICE TO PROCEED

You are hereby notified to commence work dated, 20, on a 20, and you are to complete the WOI The date of completion of all WORK is therefore 20	
dated, 20, on a 20, and you are to complete the WOM. The date of completion of all WORK is therefore	:
dated, 20, on a 20, and you are to complete the WON. The date of completion of all WORK is therefore	
dated, 20, on a 20, and you are to complete the WOI The date of completion of all WORK is therefore	
dated, 20, on a 20, and you are to complete the WON. The date of completion of all WORK is therefore	
20, and you are to complete the WOI The date of completion of all WORK is therefore	in accordance with the Agreemen
The date of completion of all WORK is therefor	or before,
	RK
20	ce,
	TOWN OF PULASKI
	TOWN OF FOLASKI
BY	
Title	
ACCEPTANCE OF NOTICE	
Receipt of the above NOTICE TO PROCEED	
is hereby acknowledged by	
this theday	
of, 20	
ву	
Title	

FEDERAL REQUIREMENTS

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION MINIMUM DBE REQUIREMENTS

PROJECT NO.	4602-125-124			
FHWA NO.	STP-5125(127)			
		* * * INSTRUCTI	ONS * * *	
CONTRACTOR SHAI PERFORM AND THE ATTACHED IF NECE OF THE MATERIALS A CONTRACTOR MA	L INDICATE THE DESCRIPT ALLOWABLE CREDIT PER SSARY. PLEASE NOTE: TH OR SUPPLIES OBTAINED A	TION OF THE CATEGORY ITEM(S). ADDITIONAL S E AMOUNT OF ALLOWAR AND 100% FOR A DBE M. ES PAID TO A DBE HAUL	MES OF DBE FIRMS TO BE UTILIZED (S, M, SP or H) AND THE TYPE OF WO HEETS TO SHOW THE ALLOWABLE OF BLE CREDIT FOR A DBE SUPPLIER IS ANUFACTURER OF THE MATERIALS OF ER FOR THE DELIVERY OF MATERIA PLIES THEMSELVES.	ORK THAT EACH DBE WILL CREDIT PER ITEM MAY BE 60% OF THE TOTAL COST AND SUPPLIES OBTAINED.
DBE REQUIREME	ENT	5 %		
PERCENT ATTAI	NED BY BIDDER	%		
	ERTIFICATION NO. TO BE USED	USED AS SUBCONTR. (S) MFG. (M) SUPPLIER (SP) HAULER (H)	TYPE OF WORK AND ITEM NO(S)	\$ AMOUNT OF ALLOWABLE CREDIT PER ITEM
			тотл	AL \$
TOTAL CO	DNTRACT VALUE _\$_	X	REQUIRED DBE	% = \$
			ON THIS CONTRACT AS STATED HEI E PARTICIPATION ESTABLISHED HEF	
		BY		
	BIDDER		SIGNATU	JRE
	TITLE	BY	DATE	
	· · · · ——		2, (1	

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

Project No.: 4602-125-124

Federal Project No. STP-5125(127)

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				
	Ву:	Signature		Title
First Tier Subcontractor if Applicable				
	Ву:	Signature	Date:	Title

Second Her Subcontractor if Applicable				
	Ву:	Signature		Title
Third Tier Subcontractor if Applicable				
	Ву:	Signature	Date:	Title
DBE Contractor				
	Ву:	Signature	Date:	Title

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION SUBCONTRACTOR/SUPPLIER SOLICITATION AND UTILIZATION FORM (ALL BIDDERS)

PROJECT NO.	4602-125-124	CONTRACT I.D. NO.	
FHWA NO.	STP-5125(127)	DATE SUBMITTED	
		me Contractors, shall complete and submit the following	information as
the firms listed		epresents its solicitation and utilization or non-utilization, work on this contract. The bidder also certifies he/she ticipation on this project.	
BIDDER		SIGNATURE	
TITLE			

SUBCONTRACTOR/SUPPLIER SOLICITATION AND UTILIZATION (ALL)

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

NOTE: ATTACH ADDITIONAL PAGES, IF NECESSARY.

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

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 4602-125-124
FHWA NUMBER_ STP-5125(127)
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		DAI	E 20RMILLED	
	MITTAL THERE	R THIS CONTRACT HA DF, THE BIDDER IS RE S DOCUMENT.		
THE BIDDER ACKN	OWLEDGES AN	D CERTIFIES THAT	THIS FORM	ACCURATELY
REPRESENTS THE IN	FORMATION CO	NTAINED HEREIN.		
BIDDER	SIGNATUR	E		
TITLE				
ON THIS PROJECT INCLUDE THE ITEMS FOLLOWING UP INITI. INTERESTED.	OF WORK OFFE	ERED AND THE DATES	AND METHO	OS USED FOR
NAMES AND VENDOR NUMBERS OF DBES SOLICITED	DATE OF INITIAL SOLICITATION	ITEM(S) OF WORK	FOLLOW-UP AND DA	

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY

ATTACH COPIES OF SOLICITATIONS, TELEPHONE RECORDS, FAX CONFIRMATIONS, ELECTRONIC INFORMATION, ETC.

CONTRACT I.D. NO	DATE SUBMITTED	
	ISHED FOR THIS CONTRACT HAS AL THEREOF, THE BIDDER IS REQ IED IN THIS DOCUMENT.	
	DGES AND CERTIFIES THAT TI ATION CONTAINED HEREIN.	HIS FORM ACCURATELY
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

CONTRACT	I.D. NO	<u> </u>	DATE SUBMI	TTED_	-791-467	300		<u> </u>
REQUESTS T	GOAL ESTABL THE SUBMITTA RTS AS OUTLIN	L THEREOF	, THE BIDD	ER IS R				
	R ACKNOWLE S THE INFORM				THIS	FORM	ACCURA*	ΓELY
BIDDER		SIGNATURE						_
TITLE	22							2

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

CONT	RACT I.	D. NO	181 IV 10 10		DATE SUBMI	TTED_		29 - 20 3	
REQU	ESTS TH	HE SUBN	MITTAL THE	REOF		ER IS R			MET OR VDC SUBMIT GOO
					CERTIFIES AINED HERI		THIS	FORM	ACCURATEL
BIDDE	R		SIGN	ATURE_					
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.

CONTRACT I.D. NO	DATE SUBM	MITTED
REQUESTS THE SU		RACT HAS NOT BEEN MET OR VDOT DER IS REQUIRED TO SUBMIT GOOD
	NOWLEDGES AND CERTIFIES NFORMATION CONTAINED HER	S THAT THIS FORM ACCURATELY REIN.
BIDDER	SIGNATURE	
TITLE		
NAMES AND DATE		IN WHCH A REQUEST FOR DBE BY THE BIDDER. ATTACH COPIES OF
PUBLISHED ADVERT	PUBLICATIONS	DATES OF ADVERTISEMENT

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY

CONTRACTIL	D. NO	<u> </u>	DATE SUBM	ITTED		(A) (A)		
IF THE DBE G REQUESTS TI FAITH EFFOR	HE SUBMITTA	L THEREO	F, THE BIDD	ER IS R				
THE BIDDER REPRESENTS					THIS	FORM	ACCURA	TELY
BIDDER		SIGNATURI	<u> </u>					-
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.

CONTRACT I.D. NO	DATE SUBMITT	ED
	AL THEREOF, THE BIDDER	OT HAS NOT BEEN MET OR VDOT IS REQUIRED TO SUBMIT GOOD
	EDGES AND CERTIFIES T MATION CONTAINED HEREIN	HAT THIS FORM ACCURATELY
BIDDER	SIGNATURE	
TITLE		
ABOUT THE PLANS, SPECTO ASSIST THE DBES IN RIDENTIFY THE DBES ASSIDENTACT. ATTACH COPIE	EIFICATIONS, AND REQUIRE ESPONDING TO A SOLICITATE INFORMATION ES OF SUPPORTING DOCUM	PROVIDED, AND THE DATE OF ENTS.
DBEs ASSISTED	INFORMATION PROVIDED	DATE OF CONTACT

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY.

CONTRACT I.D. NO	DATE SUBMITT	ED
	AL THEREOF, THE BIDDER	OT HAS NOT BEEN MET OR VDOT IS REQUIRED TO SUBMIT GOOD
	GES AND CERTIFIES THAT T MATION CONTAINED HEREIN	
BIDDER	SIGNATURE	
TITLE		
EFFORTS MADE TO PROV CREDIT, INSURANCE, NEO	INSURANCE, ETC. VIDE INTERESTED DBEs IN CESSARY EQUIPMENT, SUPP	ONDING, LINES OF CREDIT, OBTAINING BONDING, LINES OF PLIES, MATERIALS, OR RELATED PLIES AND EQUIPMENT THE
		HE PRIME CONTRACTOR OR ITS
	이 사람들은 아이들은 아이를 하는데 하는데 아이들이 되었다면 하는데 아이들이 되었다면 하는데 되었다.	OFFERED, AND THE DATES OF SUPPORTING DOCUMENTS.
DBEs ASSISTED	ASSISTANCE OFFERED	DATES SERVICES OFFERED AND/OR PROVIDED

DBEs ASSISTED	ASSISTANCE OFFERED	DATES SERVICES OFFERED AND/OR PROVIDED

NOTE: ATTACH ADDITIONAL PAGES IF NECESSARY.

CONTRACT I.D. NODATE 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 FOR REPRESENTS THE INFORMATION CONTAINED HEREIN.	M ACCURATELY							
BIDDERSIGNATURE								
TITLE								
ADDITIONAL DATA TO SUPPORT DEMONSTRATION OF GOOD FAIT								
ADDITIONAL DATA TO SUPPORT DEMONSTRATION OF GOOD FAITH EFF	ORTS							

NOTE: ATTACH ADDITIONAL PAGES, IF NECESSARY

CIVIL RIGHTS DIVISION REQUIREMENTS FOR LOCALLY ADMINISTERED PROJECTS (FEDERALLY FUNDED)

The LOCALITY, its agents, employees, assigns or successors, and any person, firm, or agency of whatever nature with whom it may contract or make an agreement, shall comply with the provisions of the Virginia Fair Employment Contracting Act, Sections 2.1-374 through 2.1-376.1 of the Code of Virginia, as amended. During the performance of this Agreement, the LOCALITY agrees as follows:

- a. The LOCALITY will not discriminate against any employee or applicant for employment because of race, religion, color, sex, or national origin, except where religion, sex, or national origin is a bona fide occupational qualification reasonably necessary to the normal operation of the LOCALITY. The LOCALITY agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause, including the names of all contracting agencies with which the LOCALITY has agreements of over ten thousand dollars.
- b. The LOCALITY will, in all solicitations or advertisements for employees placed by or on behalf of the LOCALITY, state that the LOCALITY is an equal opportunity employer; provided, however, that 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.

The LOCALITY will include the provisions of the foregoing paragraphs "a" and "b" in every subcontract or purchase order of over ten thousand dollars, so that such provisions will be binding upon each subcontractor or vendor. Nothing contained in this section shall be deemed to empower any agency to require any LOCALITY to grant preferential treatment to, or discriminate against, any individual or any group because of race, color, religion, sex or national origin on account of an imbalance which may exist with respect to the total number or percentage of persons of any race, color, religion, sex or national origin employed by such LOCALITY in comparison with the total number or percentage of persons of such race, color, religion, sex or national origin in any community or in the Commonwealth.

NON-DISCRIMINATION PROVISION: The LOCALITY agrees to abide by the provisions of Title VI and Title VII of the Civil Rights Act of 1964 (42 USC 2000e), which prohibits discrimination against any employee or applicant for employment, or any applicant or recipient of services, on the basis of race, religion, color, sex or national origin; and further agrees to abide by Executive Order No. 11246 entitled "Equal Employment Opportunity," as amended by Executive Order No. 11375 and as supplemented in the Department of Labor Regulations (41 CFR Part 60), which prohibit discrimination on the basis of age. Sections 49 CFR 21 and 26 CFR 710.405(b) are incorporated by reference in all contracts and subcontracts funded in whole or in part with federal funds. The LOCALITY shall comply with the Americans with Disabilities Act (ADA), and with the provisions of the Virginians with Disabilities Act, Sections 51.5-40 through 51.5-46 of the Code of Virginia, as amended, the terms of which are incorporated herein by reference.

In the event of the LOCALITY'S noncompliance with the nondiscrimination provisions of this Agreement, the DEPARTMENT shall impose such contract sanctions as it or the FHWA may determine to be appropriate, including but not limited to:

- a. withholding of payments to the LOCALITY under this Agreement until the LOCALITY complies; and/or
- b. cancellation, termination or suspension of this Agreement, in whole or in part.

TITLE VI OF THE CIVIL RIGHTS ACT OF 1964: During the performance of this Agreement, the LOCALITY, for itself, its assignees and successors in interest (herein referred to as "the RECIPIENT"), agrees as follows:

- a. Compliance with Regulations: The RECIPIENT will comply with the Regulations of the United States Department of Transportation relative to nondiscrimination in Federally-assisted programs of the United States Department of Transportation (Title 49), Code of Federal Regulations, Part 21, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Agreement.
- b. Nondiscrimination: The RECIPIENT with regard to the services provided by it after award and prior to completion of this Agreement, will not discriminate on the grounds of race, color, sex, national origin, age or handicap in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The RECIPIENT will not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the services covers a program set forth in Appendix B of the Regulations.
- c. Solicitations for Subcontractors: In all solicitations, either by competitive bidding or negotiation made by the RECIPIENT for work to be performed under a subcontract, including procurements of materials or equipment, each potential subcontractor or supplier shall be notified by the RECIPIENT of the RECIPIENT'S obligations under this Agreement.
- d. Information and Reports: The RECIPIENT will provide all information and reports required by the Regulations, or orders and instructions issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the DEPARTMENT or the FHWA to be pertinent to ascertain compliance with such Regulations, orders and instructions. Where any information required of the RECIPIENT is in the exclusive possession of another who fails or refuses to furnish this information, the RECIPIENT shall so certify to the DEPARTMENT, or the FHWA as appropriate, and shall set forth what efforts it has made to obtain the information.
- e. Incorporation of Provisions: The RECIPIENT will include the provisions of paragraphs "a" through "e" in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, order or instructions issued pursuant thereto. The RECIPIENT will take such action with respect to any subcontractor or procurement as the DEPARTMENT or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, in the event the RECIPIENT becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the RECIPIENT may request the DEPARTMENT to enter into such litigation to protect the interests of the DEPARTMENT and, in addition, the RECIPIENT may request the United States to enter into such litigation to protect the interests of the United States.

CERTIFICATION REGARDING NON-SEGREGATED FACILITIES: By the execution of this Agreement, the RECIPIENT certifies that it does not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. It certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it will not permit its employees to perform their services at any location under its control, where segregated facilities are maintained. The RECIPIENT further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color, national origin, age or handicap, because of habit, local custom or otherwise. It agrees that, except where it has obtained identical certification from proposed subcontractors and material suppliers for specific time periods, it will obtain identical certification from proposed subcontractors or material suppliers prior to the award of subcontracts or the consummation of material supply agreements exceeding ten thousand dollars, and that it will retain such certifications in its files.

TDD/TTY EQUIPMENT FOR THE DEAF: When seeking public participation through the maintenance of a toll free hot line number and/or publishing project-related materials, the RECIPIENT agrees to ensure that all citizens have equally effective communication. The RECIPIENT agrees to provide or identify a telecommunications device for the deaf/teletypewriter (TDD/TTY) or acceptable means of telephone access for individuals with impaired speech or hearing. The RECIPIENT will provide notice of a TDD/TTY number whenever a standard telephone number is provided.

<u>DISADVANTAGED BUSINESS ENTERPRISES</u>: The RECIPIENT, its agents, employee, assigns, or successors, and any person, firm or agency of whatever nature with whom it may contract or make an agreement, shall comply with the provisions of 49 CFR, Part 26, as amended, which is hereby made part of this Agreement by reference. The RECIPIENT shall take all necessary and reasonable steps in accordance with 49 CFR, Part 26, as amended, to ensure that DBE's have the maximum opportunity to compete for and perform on contracts and subcontracts under this Agreement.

A Disadvantaged Business Enterprise ("DBE") is a business certified in accordance with the guidelines of 49 CFR, Part 26, as amended, by a United Stated Department of Transportation designated and approved agency. A listing of certified firms can be located at http://virginiadot.org/business/const/listpage.asp under certified contractors list.

The Civil Rights District Office (CRDO) establishes the individual project DBE goals in accordance with the methodology indicated in the DEPARTMENTS' DBE Program Plan, as amended, which was approved by FHWA in 1999. Copies of the Plan and the Guidelines for DBE Requirements for Federal-Aid Projects Administered by Local Governments can be obtained from the CRDO.

CONSTRUCTION:

The RECIPIENT will submit the detail estimate for the proposed project, which includes work activities and their associated costs, and the final total cost assigned to the project, to the CRDO

no later than two months prior to advertisement, in order that DBE goals can be established. Once the project has been advertised and bids received by the RECIPIENT, the RECIPIENT will forward the DBE information regarding DBE participation commitment from the two lowest responsive and responsible bidders to the CRDO for review and recommendations regarding award of the project. The award of all bids must adhere to federal regulations, as promulgated in 49 CFR, Part 26 and the DEPARTMENTs' Special Provision for Section 110.04 of the Specifications relative to 'good faith efforts' by contractors in making the required DBE participation. After the contract is awarded, the RECIPIENT will submit the DBE information to the CRDO on form C-111/112.

All contractors that fail to meet the DBE goal are subject to review by the DEPARTMENT to determine whether a 'good faith effort' was made as outlined in 49 CFR, Parts 26.53 and Special Provision 110.04.

COMPLIANCE MONITORING

The RECIPIENT must ensure that the contractor take steps to ensure that those DBEs committed to perform work under contract perform a commercially useful function ("CUF"). It is the DEPARTMENTs' responsibility to determine compliance with the commercially useful function requirement. The requirements are described in 49 CFR, Part 26.55. The CRDO will monitor construction activity to ensure that DBE firms are performing work in accordance with federal regulations. The CRDO will conduct DBE Compliance Reviews on each DBE firm performing work for participation credit/goal attainment on each project.

The RECIPIENT will ensure that the CRDO receives copies of all contracts awarded and DBE subcontracts, which will initiate the monitoring process. Compliance monitoring includes: site visits, review of documents such as material tickets, subcontracts, lease agreements, etc. and any other information needed to render a compliance determination.

MONITORING PAYMENTS TO DBE FIRMS

VDOT requires that the RECIPIENT maintain records and documents of payments to DBE firms for the performance of their contract or subcontract. At a minimum, these records must consist of type of work DBE firm performed, dates of work, dollar amount paid for work, and on what date payment was made. These records must be submitted on a MONTHLY basis to the CRDO for each locality. Documentation should be submitted on form C-63/A.

RECIPIENTS will ensure that all DBE firms are paid promptly in accordance with 49 CFR, Part 26.29. The DEPARTMENT's prompt pay guidelines are indicated in the DBE Program Plan.

The RECIPIENT will maintain records and documents verifying DBE firms awarded contracts and subcontracts to include: name of DBE firm, indicating if firm is a certified minority or woman owned firm, type of work; and dollar value of contract or subcontract and dates work was performed.

ON THE JOB TRAINING ("OJT") PROGRAM: The RECIPIENT, its agents, employees, assigns, or successors, and any person, firm or agency of whatever nature with whom it may contract or make an agreement, shall comply with the special training provisions in accordance with 23 CFR, Part 230.107(b), as amended, which is hereby made part of this Agreement by reference. The RECIPIENT shall take all necessary and reasonable steps to ensure training and upgrading of minorities, women, veterans, and other disadvantaged persons toward achieving journeymen status within a given construction trade. The program seeks to reduce overhead costs associated with training through a stipend reimbursement to the contractor while offering the opportunity to enhance short and long-term workforce needs. The current OJT reimbursement rate is three dollars per trainee hour.

The OJT program requires full utilization of all available training and skill-improvement opportunities to assure the increased participation of minority groups and disadvantaged persons and women in all phases of the highway construction industry. It is the intent that each contractor's workforce and construction site should reflect the same diversity as the community.

TRAINEE GOALS

The CRDO will set a trainee goal on all federally assisted contracts in accordance with guidelines outlined in 23 CFR, Part 230, Parts 111, 113 and 117. The RECIPIENT will contact the CRDO prior to the advertisement of the contract to obtain the trainee goal. The CRDO will approve all trainee enrollments to ensure that disadvantaged persons are given opportunities for training utilizing form C-65. Trainee work classifications and the requirements of each will follow those already developed by the DEPARTMENT and the Virginia Road and Transportation Builders Association ("VRTBA"). Copies of the OJT Trainee Classification Handbook can be obtained by contacting the CRDO.

MONITORING OF OJT PROGRAM

VDOT requires that the RECIPIENT maintain records and documents of trainee enrollments to include: name of trainee, sex, gender, trainee work classification, hourly wage rates, start date, completion date and wage increments as training progressed. This information will include reason(s) trainees do not complete the training program and number of drop-outs and terminations prior to completion of the training program. Monthly trainee records will be submitted to the CRDO on form C-67.

The RECIPIENT will compile OJT records and submit them on a quarterly basis to the appropriate CRDO for each locality. Documentation will be submitted no later than the first day of the first month following the federal fiscal year quarter, which commences October 1st. The RECIPIENT will submit an annual report to the appropriate CRDO no later than the third of each January for the preceding calendar year.

The RECIPIENT will maintain records and documents supporting the reimbursements to contractors for each trainee hour achieved via the OJT program. These records will include: contractor's name, project number, location of project, trainee goal for the contract, name of trainee(s), trainee(s) work classifications, number of hours completed by each trainee(s), and dollar amount paid to the contractor. Civil Rights Division Trainee Certificates will be presented to each trainee completing the OJT program. It is recommended that copies of these certificates be part of the OJT trainee records.

CONTRACTOR COMPLIANCE: The RECIPIENT will ensure that all contractors and subcontractors awarded work will meet contractual Equal Opportunity ("EO") requirements under Executive Order 11246, as amended, 23 U.S. C., FHWA-1273 (23 CFR, Parts 633), Section 110.03 (Equal Employment Opportunity) of Roads and Bridges Specifications and Title VI of the Civil Rights Act of 1964, as amended. All contractors and subcontractors will submit to the CRDO the required information such as EO Policy, EO Liaison Officer, company employment (C-64) and monthly project site employment reports (C-57) as indicated in Section 110.03 of Roads and Bridges Specifications.

The CRDO will monitor for adherence to Contractor Compliance as outlined in 23 CFR, Part 230.409,411, and 413.

The RECIPIENT will forward copies of all awarded contracts to the appropriate CRDO to initiate the monitoring process. The monitoring process includes: project site visits, employee interviews, and review of documentation (subcontracts, lease agreements, material tickets, etc.). Formal Contractor Compliance EO Reviews will be conducted by the CRDO as needed. Guidance for conducting compliance reviews is provided in the Contract Compliance Plan (Part I of Affirmative Action Plan) approved by Federal Highway Administration in 2002. Copies of the Plan can be obtained from the CRDO.

REPORTING: The RECIPIENT, its contractors and subcontractors having a contract or subcontract of at least \$10,000 or more is required to submit an annual employment report to the CRDO in accordance with 23 CFR, Part 230.21. The report reflects all employees on site during the third week of each month of July during which work is performed. This information will be submitted to the CRDO on form C-57 indicating number of employees in each work classification, their race and sex. All employees on site must be accounted for to include men and women, both journeymen level, trainees and apprentices.

The annual employment report will be submitted to each CRDO for each federally assisted project no later than the second week of each August.

<u>RECORD KEEPING:</u> The RECIPIENT will maintain all records pertaining to the individual projects for five years after completion of each project. Records shall include but not be limited to contracts, subcontractors, purchase orders, material delivery tickets, lease agreements, joint check agreements, payments made to contractors, inspections and permits. This is in accordance with federal guidelines.

The RECIPIENT shall provide all information and reports required by the regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, and other sources of information, and its facilities as may be determined by the DEPARTMENT or the FHWA to be pertinent to ascertain compliance with such regulations, orders and requirements.

The DEPARTMENT's Civil Rights Division or Office of Inspector General Auditing Division and FHWA will perform audits as needed to ensure compliance with all Guidelines.

DBE Policy Statement

It is the policy of the Virginia Department of Transportation that Disadvantaged Business Enterprises (DBE) as defined in 49 CFR Part 26 must have the maximum opportunity to participate in the performance of federally funded contracts. A list of DBE firms certified by the SBSD and MWAA is maintained on SBSD's website (http://www.SBSD.virginia.gov) under the DBE Directory of Certified Vendors. Contractors are encouraged to take all necessary and reasonable steps to ensure that DBE firms have the maximum opportunity to compete for and perform services on contract, including participation in any subsequent supplement contracts. If the contractor intends to subcontract a portion of the services on the project, the contractor is encouraged to seek out and consider DBEs as potential subcontractors. The contractor is encouraged to contact DBEs to solicit their interest, capability and qualifications. Any agreement between a contractor and a DBE whereby the DBE promises not to provide services to other contractors is prohibited. [Include the following wording on federally funded projects with DBE goals:

The DBE contract goal for this procurement is 5%.

If portions of the services are subcontracted to a DBE, the following needs to be submitted with the bid:

- Written documents of the prime's commitment to the DBE to subcontract a portion of the services, a description of the services to be performed and the percent of participation.
- Written confirmation from the DBE that is participating, including a
 description of the services to be performed and the percent of
 participation.

U.S. Wage and Bour Division

U.S. Department of Labor Wage and Hour Division

(For Contractor's Optional Use; See Instructions at www.dol.gov/whd/forms/wh347instr.htm) PAYROLL

PAYROLL NO.						ADDIRESS					ÕÄ	OMB No.:1235-0008 Expires: 07/31/2024	1/2024
		FOR WEEK ENDING				PROJECT	PROJECT AND LOCATION	NC.		PROJECT OR CONTRACT NO.	ONTRACT NO.		
										4602-125-124	24		
(4)	G 980	(3)	18	(4) DAY AND DATE	DATE	(S)	(9)	0		(A) DEDUCTIONS		Ħ	(6)
NAME AND INDIVIDUAL IDENTIFYING NUMBER (#:B., LAST FOUR DIGHTS OF SOCIAL SECURITY NUMBER) OF WORKER.	MICHENIO MICHEOLE MICHEOLE MICHEOLE MICHENIO	WDRK	80 40	HOURS WORKED EACH DAY	EACH DAY	TOTAL	RATE	GROSS AMOUNT EARNED	WITH- HOLDING FICA. TAX		OTHER DEDU	WAGES TOTAL PAID DEDUCTIONS FOR WEEK	NET VAGES PAID R WEEK
			٥					1					
			iq					/			=		
	İ		0					1			-	H	
						1		/			-		
	j		क					1				1	
			0					1					
			(20)								=		
			io.					/			F		
			in								=		
			10					1					
			99										
			0					1					
			90									_	
		1	9					1					
			-10	71							+		
			0					/			-		
			w					1					

While completion of Form WH-347 is applicable, it is manifelatory for covered contractors and subcontractors performing work on Federary Entired or assisted construction contractors to respond to the information relations contractors performed which is a selection contractor performed which is a selection of the Contractor of the Contractor performed which is a selection of the Contractor of the Contracto

Public Burden Statement

We estimate that is will take an average of 15 menules to comparin the secondarity including time for reviewing instructions, asarching existing data accross, gainering and menules to comparing the constitution for the formation of the secondaries of any other separated finite collection, enturing suggestors for reducing the student, send them to the Administration, Ways and Hoar Denaition U.S. Department of Lature, Room \$3502.200 Gonatulator Avenue, N.W. Westington, D.C. 20210.

10009

Date	(b) WHERE FRINGE BENEFITS ARE PAID IN CASH	N CASH
1, (Name of Signatory Party) (Title) do hereby state:	 Each laborer or mechanic listed in the above reference as indicated on the payroll, an amount not less than it basic hourly wage rate plus the amount of the requires in the contract, except as noted in section 4(c) below. 	Each laborer or mechanic listed in the above referenced payroll has been paid, as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the contract, except as noted in section 4(c) below.
(1) That I pay or supervise the payment of the persons employed by	(c) EXCEPTIONS	
(Contractor or Subcontractor) on the	EXCEPTION (CRAFT)	EXPLANATION
Building or Work)		
all persons employed on said project have been paid the full weekly wages eamed, that no rebates have been or will be made either directly or indirectly to or on behalf of said		
from the full		
Veckly wages earned by any person and that no deductions have been made either directly or indirectly from the that in deductions have been made either directly or indirectly		
3 (29 C.F.R. Subtitle A), issued by the Secretary of Labor under the Copeland Act, as amended (48 Stat. 948, 63 Stat. 108, 72 Stat. 967; 76 Stat. 357; 40 U.S.C. § 3145), and described below:		
	REMARKS:	
(2) That any payrolls otherwise under this contract required to be submitted for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in any wage determination incorporated into the contract; that the classifications set forth therein for each laborer or mechanic conform with the work he performed.		
(3) That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with a State apprenticeship agency recognized by the Bureau of Apprenticeship and Training, United States Department of Labor, or if no such recognized agency exists in a State, are registered with the Bureau of Apprenticeship and Training. United States Department of Labor.		
(4) That: (a) WHERE FRINGE BENEFITS ARE PAID TO APPROVED PLANS, FUNDS, OR PROGRAMS	NAME AND TITLE	SIGNATURE
in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of finge benefits as listed in the contract have been or will be made to announced for the benefit of each announced.	THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR SUBJECTATHE CONTRACTOR OR SUBJECTATHE 18 AND SECTION 3729 OF	ATERMENTS MAY SUBJECT THE CONTRACTOR OR SPEE SECTION 1001 OF TITLE 18 AND SECTION 3729 OF
except as noted in section 4(c) below.	TITLE 31 OF THE UNITED STATES CODE.	

U.S. DEPARTMENTOF LABOR Wage and Hour and Public Contracts Division

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION STATEMENT OF COMPLIANCE

Form Approved Budget Bureau No. 44-R1093

Date	e			
Ι,				do hereby state:
· –		(Name of signatory party)	(Title)	_ ′
(l)	That I p	pay or supervise the payment of the persor		on
			(Contractor or subco	ontractor)
the .		; that during the p	ayroll period commencing on the	day of
	(E	Building or work)		
20 .	an	nd ending the day of , 20	, all persons employed on said project have	been paid the full weekly
wage	s earned	l, that no rebates have been or will be mad	e directly or indirectly to or on behalf of said	
			reekly wages earned by any person and that no de	ductions have been made
eithei Part 3	r directly 3 (29 CFI		any person, other than permissible deductions as abor under the Copeland Act as amended (48 Stat.	
	507,700			
			ired to be submitted for the above period are correin are not less than the applicable wage rates	
deter		incorporated into the contract; that the cla	assifications set forth therein for each laborer or n	
a Sta	te appre	nticeship agency recognized by the Burea gnized agency exists in a State, are re	od are duly registered in a bona fide apprenticeshi au of Apprenticeship and Training, United States I egistered with the Bureau of Apprenticeship and	Department of Labor, or if
(4) That: (a)	WHERE FRINGE BENEFITS ARE PAID	TO APPROVED PLANS, FUNDS, OR PROGRAM	IS
or			es paid to each laborer or mechanic listed in the the contract have been or will be made to app led in Section 4(c) below.	
or	(b)	WHERE FRINGE BENEFITS ARE PAID	IN CASH	
			e above referenced payroll has been paid as inc licable basic hourly wage rate plus the amount of the in section 4(c) below.	
	(c)	EXCEPTIONS		
		EXCEPTION (CRAFT)	EXPLANATION	
			+	
Rema	arke			
rem.	211.5			
Name	e and Titl	е	Signature	
		sification of any of the above statements 001 of Title 18 and Section 231 of Title 31	I may subject the contractor or subcontractor to civ of the United States code.	ril or criminal prosecution.

Form WH-348 (1/68)

INSTRUCTIONS FOR PREPARATION OF STATEMENT OF COMPLIANCE

This statement of compliance meets needs resulting from the amendment of the Davis-Bacon Act to include fringe benefits provisions. Under this amended law, the contractor is required to pay fringe benefits as predetermined by the Department of Labor, in addition to payment to the minimum rates. The contractor's obligation to pay fringe benefits may be met by payment of the fringes to the various plans, funds, or programs or by making these payments to the employees as cash in lieu of fringes.

The contractor should <u>show on the face of his payroll all monies paid to the employees</u> whether as basic rates or as cash in lieu of fringes. The contractor shall represent in the statement of compliance that <u>he is paying to others</u> fringes required by the contract and not paid as cash in lieu of fringes. Detailed instructions follow:

Contractors who pay all required fringe benefits:

A contractor who pays fringe benefits to approved plans, funds, or programs in amounts not less than were determined in the applicable wage decision of the Secretary of Labor shall continue to show on the face of his payroll the basic cash hourly rate and overtime rate paid to his employees, just as he has always done. Such a contractor shall check paragraph 4(a) of the statement to indicate that he is also paying to approved plans, funds, or programs not less than the amount pre-determined as fringe benefits for each craft. Any exception shall be noted in Section 4(c).

Contractors who pay no fringe benefits:

A contractor who pays no fringe benefits shall pay to the employee and insert in the straight time hourly rate column of his payroll an amount not less than the predetermined rate for each classification plus the amount of fringe benefits determined for each classification in the applicable wage decision. Inasmuch as it is not necessary to pay time and a half on cash paid in lieu of fringes, the overtime rate shall not be less than the sum of the basic predetermined rate, plus the half time premium on the basic or regular rate plus the required cash in lieu of fringes at the straighttime rate. To simplify computation of overtime, it is suggested that the straight time basic rate and cash in lieu of fringes be separately stated in the hourly rate column, thus \$3.25/.40. In addition, the contractor shall check paragraph 4(b) of the statement to indicated that he is paying fringe benefits in cash directly to his employees. Any exceptions shall be noted in Section 4(c).

Use of Section 4(c), Exceptions

Any contractor who is making payment to approved plans, funds, or programs in amounts less than the wage determination requires is obliged to pay the deficiency directly to the employees as cash in lieu of fringes. Any exceptions to Section 4(a) or 4(b), whichever the contractor may check, shall be entered in Section 4(c). Enter in the Exception column the craft, and enter in the Explanation column the hourly amount paid the employees as cash in lieu of fringes, and the hourly amount paid to plans, funds or programs as fringes.

Form WH-348 (1/68)

ON THE JOB TRAINEES NO, OF EMPLOYEES (b) Σ REPORT for the MONTH & YEAR of TABLEB APPRENTICES 5. TYPE OF CONSTRUCTION Σ 9. ESTIMATED PEAK EMPLOYMENT WHITE MONTH & YEAR (a) Σ TWO OR MORE RACES Σ 4. DOLLAR AMOUNT OF CONTRACT: NATIVE HAWAIIAN OR OTHER HIGHWAY CONSTRUCTION CONTRACTORS Σ **DEPARTMENT OF TRANSPORTATION** COMMONWEALTH OF VIRGINIA TABLE C (Table B data by racial status) 8. BEGINNING CONSTRUCTION DATE PREVIOUS EDITIONS ARE OBSOLETE MONTHLY EEO REPORT MONTHLY EEO REPORT 3. FED PROJECT No.: STP 5/25(127) ASIAN 10. EMPLOYMENT DATA Σ AMERICAN INDIAN OR ALASKA Σ TABLEA HISPANIC OR LATINO 9. DATE Σ 2. COMPANY NAME, CITY, STATE: 7. PERCENT COMPLETE BLACK or AFRICAN TOTAL RACIAL/ ETHNIC MINORITY Σ OJT TRAINEES 8. PREPARED BY: (Signature and Title of Contractors Representative) TOTAL Project No. _ 4602-125-124 Σ I. MARK APPROPRIATE BLOCK Form FHWA- 1391 (Rev. 06-10) CLERICAL EQUIPMENT OPERATORS MECHANICS ABORERS-SEMI SKILLED ABORERS-UNSKILLED CARPENTERS CEMENT MASONS ELECTRICIANS PIPEFITTER/PLUMBERS PAINTERS 6. COUNTY AND STATE JOB CATEGORIES SUPERVISORS FOREMEN/WOMEN Contract ID No. TRUCK DRIVERS Subcontractor IRONWORKERS APPRENTICES Contractor OFFICIALS



NOTICE

The highway construction underway at this location is a Federal or Federal-aid project and is subject to applicable State and Federal laws, including Title 18, United States Code, Section 1020, which reads as follows:

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

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

Whoever knowingly makes any false statement or false representation as to a material fact in any statement, certificate, or report submitted pursuant to the provision of the Federal Aid Road Act approved July 11, 1916 (39 Stat. 355) as amended and supplemented,

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

Any person having reason to believe this statute is being violated should report the same to the agency representative(s) named below.

State Transportation Agency	U.S. Department of Transportation	Federal Highway Administration Division Administrator
	Hotline for Fraud, Waste, & Abuse 1-800-424-9071	

FHWA Form-1022 (Revised May2015)

EMPLOYEE RIGHTS

UNDER THE DAVIS-BACON ACT

FOR LABORERS AND MECHANICS EMPLOYED ON FEDERAL OR FEDERALLY ASSISTED CONSTRUCTION PROJECTS

PREVAILING WAGES

You must be paid not less than the wage rate listed in the Davis-Bacon Wage Decision posted with this Notice for the work you perform.

OVERTIME

You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 in a work week. There are few exceptions.

ENFORCEMENT

Contract payments can be withheld to ensure workers receive wages and overtime pay due, and liquidated damages may apply if overtime pay requirements are not met. Davis-Bacon contract clauses allow contract termination and debarment of contractors from future federal contracts for up to three years. A contractor who falsifies certified payroll records or induces wage kickbacks may be subject to civil or criminal prosecution, fines and/or imprisonment.

APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

PROPER PAY

If you do not receive proper pay, or require further information on the applicable wages, contact the Contracting Officer listed below:

To the second se			

or contact the U.S. Department of Labor's Wage and Hour Division.





WAGE AND HOUR DIVISION
UNITED STATES DEPARTMENT OF LABOR

1-866-487-9243 TTY: 1-877-889-5627 www.dol.gov/whd



WH1321 REV 10/17

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION VENDOR PAYMENT COMPLIANCE REPORT (FEDERALLY FUNDED PROJECTS)

	uler)
	Hanle
	urer
,	Ifacti
	Manufact
	3
	t. Supplier
	S
	ant
	Sult
	Consultant
	OL
	Decontractor, C
	LOC
	Sub
	SE
	r defined as Sut
	defi
	/endor det

	- Must M. or	
Table and a control of the control o	(5)Certification Type – Must Specify DBE, SWaM, or	
	(4) Tax I.D.	
(2b) Contract ID No. (2d) Date of Execution (2e) District	(3) Vendor Name	

VIRGINIA DEPARTMENT OF TRANSPORTATION INSTRUCTIONS FOR VENDOR PAYMENT COMPLIANCE REPORT C-63

The Prime Contractor is required to submit a Vendor Payment Compliance Report and document all payments made to all vendors during the designated quarterly reporting period. All amounts paid to vendors are subject to monitoring and enforcement mechanisms. It is the responsibility of the prime contractor to provide evidence of vendor payments in response to monitoring and enforcement compliance reviews.

The instructions below correspond to each item on the report. Please follow the instructions.

1a. Report No.

Indicate the number of the report you are sending in sequence. For example: If this is the second report you are submitting for the contract, enter Report No. 2.

1b. Report Period

Indicate the reporting period based on the Reporting Schedule listed in these instructions.

2a. Funding Source

Indicate the primary funding source: Federally Funded, Federally Funded Local Government.

2b. Contractor/Subcontractor

Enter your company's name

2c. Contract I.D. No.

Enter the contract identification number assigned to your project.

2d. Date of Execution

Enter the date the contract was executed.

2e. **District**

Enter the VDOT District where the project under contract is located.

3. **Vendor Name**

Enter all subcontractors utilized.

4. <u>Tax I.D. No.</u>

Indicate the Federal Employer Identification No.

Certification Type

Specify the certification type of each Vendor:

DBE - Disadvantaged Business Enterprise

SWaM - Small, Woman, and Minority-Owned Business Enterprise

Non-DBE/SWaM - Subcontractor is not certified as a DBE or SWaM business in Virginia

6. **Payments to Vendors**

Dollar amount paid to Vendors during contract.

6a. Payments to Vendors this Qtr.

Dollar amount of payment made to Vendors in reporting quarter.

6b. **Payments to Vendors to Date**

Total dollar amount paid to Vendors since contract execution.

Effective (date), All Form C-63s for each reporting period shall be submitted in an electronic format to the District Civil Rights Office in each District by the following dates of each calendar year.

REPORTING SCHEDULE

Reporting Period	Date Due To Responsible VDOT Charge
July 1 – September 30	Five (5) business days after the reporting period
October 1 – December 31	Five (5) business days after the reporting period
January 1 – March 31	Five (5) business days after the reporting period
April 1 – June 30	Five (5) business days after the reporting period

If the submittal date falls on a weekend/holiday, the forms shall be submitted to the District Civil Rights Office on the following business day.

COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION CONTRACTOR/SUBCONTRACTOR EQUAL EMPLOYMENT OPPORTUNITY INFORMATION REQUEST

This report is developed to reflect the Total Employment of each Contracting firm performing Highway Construction Work in Virginia. It is to be used as a tool in evaluating the Contractor's posture to ensure equal employment opportunity. The requested information is to be submitted to the Civil Rights Office prior to releasing the project for construction and is required of each subcontractor as part of the subletting request.

NAME OF COMPANY						_ CON I						-			
ADDRESS						_	;	SUBCO	NTRACT	OR					-
FIRMS EEO OFFICER							-				Official Title	۵ .			
TOTAL COMPANY EMPLOYM	MENT AS	OF	MONTH		YEAR FMPI		(updated	•	equired (~			
Report all permanent, temporary trainees in appropriate job catego		e emplo	yees. Ent	er the app					columns.	Include a	prentices	and on-t	he-job		
	All	Employ	/ees					Mino	ority Grou	ıp Emplo	yees				
JOB CATEGORIES						М	ale	Female							
	Total	Male	Female	Black American	American Indian/Alaskan Native	Asian	Native Hawaiian or Pacific Islander	Hispanic American	Two or More Races	Black American	American Indian/Alaskan Native	Asian	Native Hawaiian or Pacific Islander	Hispanic American	Two or More Races
Officials & Managers															
Professionals (Engr. Etc.)															
Supervisors															
Foremen															
Clerical															
Equipment Operators															
Mechanics															
Truck Drivers															
Ironworkers															
Carpenters															
Cement Masons															
Electricians															
Pipefitters, Plumbers															
Painters															
Laborers (Unskilled)															
Other															
Total															
	-	(Include all	company e	mployees	enrolled in	formal on-	the-job tra	ining prog	rams)					
ON THE Operators JOB Craftsmen		_													
TRAINEES	+	-	-						_						
I certify that the employment d	I ata showr	above	represe	nts the et	hnic com	position	of the fir	m's emp	l oloyment						

Title

Date

Signature

SUPPLEMENTARY CONDITIONS

1. DEFINITIONS

- 1.01 The following definitions and abbreviations shall apply to this Project:
 - A. Furnish: Purchase and deliver to the Work Site all items specified.
 - B. Install: Incorporate into the Work equipment and materials furnished either by others or by the Contractor.
 - C. Provide: Furnish and install as defined above all equipment as specified.
 - D. AWWA: American Water Works Association
 - E. ASTM: American Society for Testing and Materials.
 - F. ACI: American Concrete Institute
 - G. AWS: American Welding Society.
 - H. OSHA: Occupational Safety Health Act.
 - I. AREA: American Railway Engineering Association.
 - J. Standard Specifications (Std. Specs.): Virginia Department of Transportation Road and Bridge Specifications Dated January 2020 and revised July 2022.
 - K. Standard Drawings: Virginia Department of Transportation Road and Bridge Standards, Volumes I and II Dated 2016 and revised September 2022.
 - L. FS: Federal Specification.

- M. Engineer: The Engineer as defined and referred to in the Contract Documents is the Engineering Department of the Town of Pulaski
- N. Contract Documents: Add the following to the definition on Page 13 Also includes Standard Specifications and Standard Drawings.

2. BONDS

A. The CONTRACTOR shall secure and provide all bonds called for in the Instructions to Bidders. All bonds shall be written by sureties or insurance companies licensed to do business in the Commonwealth of Virginia.

3. INSURANCE

- A. The CONTRACTOR shall purchase and maintain the insurance, in at least the following amounts:
- 3.01 CONTRACTOR'S comprehensive general liability (bodily injury and property damage) shall be provided for the following limits:

A.	Bodily Injury Liability	\$ 1,000,000	dollars each occurrence
		\$ 2,000,000	dollars annual aggregate
B.	Property Damage Liability	\$ 1,000,000	dollars each occurrence
		\$ 1,000,000	dollars annual aggregate

- C. The General Liability Insurance shall include the following coverages:
 - 1. Comprehensive Form
 - 2. Premises Operations.
 - 3. Explosion and Collapse Hazard.
 - 4. Underground Hazards.
 - 5. Products/Completed Operations Hazard.

- 6. Contractual Liability Insurance.
- 7. Broad Form Property Damage, Including Completed Operations.
- 8. Independent Contractor's (Contractor's Protective Liability).
- 9. Personal Injury (All Insuring Agreements), Deleting the Employee Exclusion.
- 3.02 Contractor's Automobile Liability (Bodily injury and property damage) shall be provided for the following limits:

A.	Bodily Injury Liability -	\$ 1,000,000	dollars each person
		\$ 1,000,000	dollars each occurrence

- B. Property Damage Liability \$ 1,000,000 dollars each occurrence
 - C. The Automobile Liability Insurance shall include the following coverages:
 - 1. Comprehensive Form
 - 2. Owned
 - 3. Hired
 - 4. Non-Owner
- Excess Catastrophe coverage shall be provided by Contractor with a minimum additional limit of \$2,000,000.
- 3.04 CONTRACTOR'S Worker's Compensation Insurance as required by Federal, State, and Municipal laws for the protection of all CONTRACTOR'S employees working on or in connection with the Project, including broad form all states and voluntary compensation coverage and employers' liability coverage.

- The CONTRACTOR shall require his insurance agent to certify on an ACORD 25 (2010/05) insurance certificate that the insurance coverage specified by these supplementary conditions is fully in effect, both in scope and amount. If insurance coverage is effected with more than one company, the individual certificates shall identify the items of insurance which the individual companies cover. The insurance certificate shall contain a provision that coverage afforded under the policies will not be cancelled or materially changed unless at least thirty (30) days' prior written notice has been given to the OWNER and ENGINEER.
- 3.06 All insurance shall be written by insurance companies licensed to do business in the Commonwealth of Virginia.
- 3.07 All insurance policies shall name the "Town of Pulaski, Virginia it's officers, agents and employees" and "Schwartz & Associates, Inc., consulting engineers, it's officers, agents and employees" as additional insureds. This coverage shall be reflected on the Certificates of Insurance.
- 4. DUTIES, RESPONSIBILITIES AND LIMITATIONS OF THE AUTHORITY OF RESIDENT PROJECT REPRESENTATIVE
 - A. Resident project representative is the OWNER'S field agent, will act as directed by and under the supervision of the OWNER. Resident project representative's dealings in matters pertaining to the on-site work shall in general be only with CONTRACTOR, and dealings with subcontractors shall only be through or with the full knowledge of CONTRACTOR.
 - B. Duties and responsibilities: Resident project representative will:
 - 1. Schedules: Review the progress schedule, schedule or shop drawings submissions and schedule of values prepared by CONTRACTOR.

- 2. Conferences: Attend preconstruction conferences.

 Arrange a schedule of progress meetings and other job conferences as required and notify those expected to attend in advance. Attend meetings, and maintain and circulate copies of minutes thereof.
- 3. Liaison: Serve as OWNER'S liaison with CONTRACTOR, work principally through CONTRACTOR'S superintendent and assist him in understanding the intent of the Contract documents.
- 4. Shop Drawings and Samples: Receive and record date of receipt of shop drawings and samples, receive samples which are furnished at the site by CONTRACTOR.

Advise CONTRACTOR or its superintendent immediately of the commencement of any work requiring a shop drawing or sample submission if the submission has not been approved by the OWNER.

5. Review of Work, Rejection of Defective Work, Inspection and Tests:

Conduct on-site observations of the work in progress to assist the OWNER in determining if the work is proceeding in accordance with the Contract Documents and that completed work will conform to the Contract Documents.

Report to OWNER whenever he believes that any work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or does not meet the requirements of any inspections, tests or approval required to be made or has been damaged prior to final payment; and advise OWNER when he believes work should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.

Verify that tests, equipment and systems startups and operating and maintenance instructions are conducted as required by the Contract Documents and in presence of the required personnel, and that CONTRACTOR maintains adequate records thereof; observe, record and report to OWNER appropriate details relative to the test procedures and startups.

Accompany inspectors representing public or other agencies having jurisdiction over the project, record the outcome of these inspections and report to OWNER.

- Modifications: Consider and evaluate CONTRACTOR'S suggestions for modifications in drawings or specifications and report them with recommendations to OWNER.
- 7. Records: Maintain at the job site orderly files for correspondence, reports of job conferences, shop drawings and samples submissions, reproductions or original Contract Documents including all addenda, change orders, field orders, additional drawings issued subsequent to the execution of the Contract, OWNER'S clarifications and interpretations of the Contract Documents, progress reports, and other project related documents.

Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions, list of visiting officials and representatives of manufacturers, fabricators, suppliers and distributors, daily activities, decisions, observations in general and specific observations in more detail, as in the case of observing test procedures. Send copies to OWNER.

Record names, addresses and telephone numbers of all contractors, subcontractors, and major suppliers of materials and equipment.

8. Reports: Furnish OWNER periodic reports as required of progress of the Work and CONTRACTOR'S compliance with the approved progress schedule and schedule of shop drawing submissions.

Consult with OWNER in advance of scheduled major tests, inspections or start of important phases of work.

Report immediately to OWNER upon the occurrence of any accident.

9. Payment requisitions: Review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward them with recommendations to OWNER, noting particularly their relation to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the Work.

- 10. Certificates, maintenance and operation manuals: During the course of the work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by CONTRACTOR are applicable to the items actually installed; and deliver this material to OWNER for his review and forwarding to OWNER prior to final acceptance of the Work.
- 11. Completion: Before OWNER issues a Certificate of Substantial Completion, submit to CONTRACTOR a list of observed items requiring completion or correction.

Conduct final inspection in the company of the OWNER and CONTRACTOR and prepare a final list of items to be completed or corrected.

Verify that all items on final list have been completed or corrected and make recommendations to OWNER concerning acceptance.

- C. Limitations of Authority. Except upon written instruction of OWNER, resident project representative:
 - 1. Shall not authorize any deviation from the Contract Documents or approve any substitute materials or equipment.
 - 2. Shall not exceed limitations on OWNER'S authority set forth in the Contract Documents.
 - 3. Shall not undertake any of the responsibilities of CONTRACTOR, subcontractors or CONTRACTOR'S superintendent, or expedite the work.
 - 4. Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the Contract Documents.
 - 5. Shall not advise on or issue directions as to safety precautions and programs in connection with the work.

- Shall not authorize OWNER to occupy the project in whole or in part.
- 7. Shall not participate in specialized field or laboratory tests.

5. EMPLOYMENT DISCRIMINATION PROHIBITED

- 5.01 During the performance of this 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 or national origin, except where religion, sex or national origin is a bonafide 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.
- 5.02 The CONTRACTOR will include the provisions of the foregoing paragraphs A, B, C in every subcontract or purchase order of over \$10,000.00, so that the provisions will be binding upon each subcontractor or vendor.

6. CONSTRUCTION SCHEDULE:

- The CONTRACTOR shall submit for review, a detailed construction schedule prior to beginning the project. The Owner shall be notified in advance of any major changes in the Construction Schedule as the project progresses. In order to assist the Engineer with Project Staffing Requirements for the following week, the CONTRACTOR shall provide the Engineer (& Town Engineer's Office) on each Friday, with a detailed work schedule for the following week. The CONTRACTOR shall provide the Engineer with at least a 72-hour notice for the following items:
 - 1. All concrete placements
 - 2. All demolition
 - 3. All prestressed bulb-T beam erection
 - 4. Bridge deck grooving
 - 5. Asphalt pavement
 - 6. All reinforcing steel placement
 - 7. All shotcrete work
 - 8. All backfill operations
 - 9. All traffic control installations
 - 10. Installation and testing of water main boring and water lines
 - 11. Guardrail installation
 - 12. Erosion control items
 - 13. Riprap placements
 - 14. All approach work

- 6.02 The CONTRACTOR shall notify the Engineer AND the Town Water and Sewer Department of any planned interruption of the water service. All required retaining glands and anchor blocks shall be in place prior to such notification.
- 6.03 The CONTRACTOR may be charged for additional costs of inspection when material and workmanship are found not to be ready for inspection at the time the CONTRACTOR calls for inspection.

7. APPLICATION FOR PROGRESS PAYMENT

A. Applications for progress payment shall be made on forms identical to those shown on pages <u>00800-1</u>, <u>00800-2</u>, and <u>00800-3</u> shown in these <u>SUPPLEMENTARY CONDITIONS</u>.

APPLICATION FOR PAYMENT NO.

	VALUE TO DATE										
úi	QUANTITY TO DATE										
TION DATE											
COMPLE	QUANTITIES THIS REQ.										
-125-124	CONTRACT										
4602											
PROJECT NO.:	DESCRIPTION										
							,				,
ا ن <u>ن</u>	CONTRACT UNIT PRICE										
JECT NAM	CONTRACT										
PRO.	ITEM NO.										
	PROJECT NAME: PROJECT NO.: 4602-125-124 COMPLETION DATE:	VALUE DESCRIPTION DESCRIPTION DATE: CONTRACT CONTRACT CONTRACT AMOUNT THIS REQ. TO DATE	VTRACT DE	PROJECT NO.: 4602-125-124 COMPLETION DATE: UNIT CONTRACT CONTRACT CONTRACT CONTRACT CONTRACT CONTRACT THIS REQ. REQUISITION TO DATE THIS REQ. REQUISITION TO DATE THIS REQ. REQUISITION TO DATE	PROJECT NO.: 4602-125-124 COMPLETION DATE: STREAGT CONTRACT AMOUNT THIS REQ. TO DATE THIS PEQ. THIS PEQ. TO DATE THIS	PROJECT NO.: 4602-125-124 COMPLETION DATE: UNIT CONTRACT QUANTITIES THIS REQ. REQUISITION TO DATE AMOUNT THIS REQ. REQUISITION TO DATE PROJECT NO.: 4602-125-124 COMPLETION DATE: THIS REQ. STAILE QUANTITY AMOUNT THIS REQ. STAILS QUANTITY THIS REQ. STAILS QUANTITY TO DATE TO DAT	TRACT COMPLETION DATE: ONTRACT CONTRACT AMOUNT THIS REQ. REQUISITION TO DATE AMOUNT THIS REQ. REQUISITION TO DATE ON THIS REQ. REQUISITION TO DATE THIS REQ. REQUISITION TO DATE	TROJECT NO.: 4602-125-124 COMPLETION DATE: UTRACT UNIT DESCRIPTION CONTRACT AMOUNT THIS REQ. THIS REQ. TO DATE ADVANTITY ANOUNT THIS REQ. TO DATE	PROJECT NO.: 4602-125-124 COMPLETION DATE: THIS REQ. NALUE AMOUNT THIS REQ. THIS REAL REAL REAL REAL REAL REAL REAL REAL	PROJECT NO.: 4602-125-124 COMPLETION DATE: NATRACT NATE THIS REG. REQUISITION TO DATE THIS REG. THIS REQ. THIS REC. THIS REC. THIS REQ. THIS REC.	

APPLICATION FOR PAYMENT NO.

		VALUE	2 2 2											
CONTRACTOR: DATE:	PROJECT NO.: 4602-125-124 COMPLETION DATE:	QUANTITY						NET CHANGE BY CHANGE ORDER	DATE	TOTAL COMPLETED & STORED TO DATE		1993		
		VALUE				-								
		QUANTITIES THIS BEO				TOTALS	MOST					MENT	DUE	
	-125-124	CONTRACT					CONTRAC	SE BY CH	OT MUS.	APLETED .	NED	10US PAY	PAYMENT	
	PROJECT NO.: 4602	DESCRIPTION					ORIGINAL CONTRACT SUM	NET CHANG	CONTRACT SUM TO DATE	TOTAL CON	TOTAL EARNED_	LESS PREVIOUS PAYMENT	CURRENT PAYMENT DUE	; ; ;)
								COMPLETION DATE EXTENDED						
							SUMMARY	DEDUCTIONS						
	· Ш	CONTRACT UNIT PRICE					CHANGE ORDER	ADDITIONS						
	PROJECT NAME:	CONTRACT	CONTRACT				CHANG	DATE APPROVED						
	PROJ	TEM NO.						CHANGE ORDER NUMBER						

APPLICATION FOR PAYMENT

The undersigned Contractor hereby swears under penalty of perjury that (1) all previous progress payments received from the owner on account of Work performed under the contract referred to above have been applied by the undersigned to discharge in full all obligations of the undersigned incurred in connection with Work covered by prior Applications for Payment under said contract, being Applications for Payment numbered 1 through _ inclusive; and (2) all materials and equipment incorporated in said Project or otherwise listed in or covered by this Application for Payment are free and clear of all liens, claims, security interest, and encumbrances.

DATED	20			
	(CONTR	RACTOR)		
	BY:			
		AND TITLE		
COUNTY OF)		
COUNTY OF STATE OF) ss		
			_ personally appeared _ he is the	known
	entioned, that he		ove Application for Pay ments contained herein	
	NOTARY I	PUBLIC		
MY COMMISSION	EXPIRES:			

Application for Payment: Sheet 3 of 3

DIVISION I GENERAL REQUIREMENTS

TOWN OF PULASKI, VIRGINIA

PREPARED BY

SCHWARTZ & ASSOCIATES, INC. CONSULTING ENGINEERS HERITAGE BUSINESS CENTER 7331 TIMBERLAKE ROAD LYNCHBURG, VIRGINIA 24502

INDEX DIVISION I - GENERAL REQUIREMENTS

Section No.	<u>Title</u>	Page Number
01010	Summary of Work	01010-1 - 01010-3
01050	Field Engineering	01050-1 - 01050-2
01153	Change Order Procedure & Conflict Resolutions	01153-1 - 01153-4
01200	Project Coordination & Progress Meetings	01200-1 - 01200-3
01310	Construction Schedules	01310-1 - 01310-3
01340	Shop Drawings & Project Data	01340-1 - 01340-4
01510	Temporary Facilities	01510-1 - 01510-2
01551	Site, Access, Staging, Parking & Traffic Regulations	01551-1
01630	Product Delivery, Storage & Protection	01630-1 - 01630-3
01700	Contract Closeout	01700-1 - 01700-3
01710	Cleaning	01710-1 - 01710-2
01720	Contractor's Record Drawings	01720-1 - 01720-3
01730	Project Signs	01730-1

SUMMARY OF WORK

1.01 WORK COVERED BY CONTRACT DOCUMENTS

A. The "PROJECT," which the "WORK" of this CONTRACT constitutes, is titled, "Proposed Bridge Repair of Florence Avenue over Buckingham Branch Railroad".

The work shall be completed in strict accordance with the Contract Documents as modified herein.

- B. Related requirements specified elsewhere:
 - 1. Project Meetings: Section 01200.
 - 2. Construction Schedule: Section 01310.
 - 3. Schedule of Values: VDOT Specifications.
 - 4. Temporary Facilities: Section 01510.

C. CONTRACTOR'S Duties:

- 1. Except as especially noted, provide and pay for:
 - a. Labor, materials and equipment.
 - b. Tools, construction equipment and machinery.
 - c. Water, heat, and utilities required for construction.
 - d. Other facilities and services necessary for proper execution and completion of Work.
- 2. Secure and pay for, as necessary for proper execution and completion of Work, and as applicable at time of receipt of bids.
 - a. Permits Electrical Permit Required
 - b. Government fees None required
 - c. Licenses Town Business License, Contractor shall contact Commissioner of Revenue for more information, cost, etc.
- 3. Give required notices.
- 4. Comply with codes, ordinances, rules, regulations, orders and other legal requirements of public authorities which bear on performance of Work.

- 5. Promptly submit written notice to ENGINEER of observed variance of Contract Documents from legal requirements.
- 6. Enforce strict discipline and good order among employees. Do not employ on Work:
 - a. Unfit persons.
 - b. Persons not skilled in assigned task.

1.02 CONTRACTS:

A. Construct Work specified by the Contract Documents under prices shown in Bid Form.

1.03 CONCURRENT WORK:

A. Keep Work clear of encroachment into areas required for concurrent work.

1.04 WORK SEQUENCE:

A. Schedule Work as required in Section 01310 and coordinate all activities which will affect other contractors and the ENGINEER.

1.05 CONTRACTOR USE OF PREMISES:

- A. Confine operations at site to areas permitted by:
 - 1. Law
 - 2. Ordinances
 - 3. Permits
 - 4. Contract Documents
- B. Do not unreasonably encumber site with materials or equipment.
- C. Do not load structure with weight that will endanger structure.
- D. Assume full responsibility for protection and safekeeping of products stored on premises.
- E. Move any stored products which interfere with operations of OWNER or other contractor.
- F. Obtain and pay for use of additional storage or work areas needed for operations.

- G. Use of site: exclusive and complete, for execution of work, except:
 - 1. For OWNER'S and OWNER'S representative's unrestricted access.
 - 2. Access required for other construction at the site that may or may not be a part of these Contract Documents.

1.06 COMPLETION OF THE WORK:

A. All work described in these Contract Documents shall be completed and have passed all tests as required by the Contract Documents no later than the Date of Final Acceptance of the Project.

FIELD ENGINEERING

PART 1 - GENERAL

1.01 WORK INCLUDED

- A. Furnish all labor and materials and perform all field engineering and construction layout necessary to insure that the work conforms to the lines, grades and elevations shown on the Contract Documents.
- B. Structural design of shores, forms, and similar items provided by the CONTRACTOR as part of his means and methods of construction.

1.02 RELATED WORK

- A. Related Requirements Specified Elsewhere:
 - 1. OWNER'S Responsibilities: VDOT Specifications
 - 2. Summary of Work: Section 01010
 - 3. Construction Schedules: Section 01310
 - 4. Shop Drawings and Project Data: Section 01340
 - 5. CONTRACTOR'S Record Drawings: Section 01720

1.03 QUALITY ASSURANCE

A. Use adequate numbers of skilled workmen who are thoroughly trained and experienced in the necessary crafts and who are completely familiar with the specified requirements and the methods needed for proper performance of the work of this Section.

1.04 SUBMITTALS

- A. Comply with pertinent provisions of Section 01340.
- B. Upon request of the ENGINEER submit:
 - 1. Data demonstrating qualifications of persons proposed to be engaged for field engineering services.
 - 2. Documentation verifying accuracy of field engineering work.
 - 3. Certification, signed by the CONTRACTOR'S retained field engineer, certifying that elevations and locations of improvements are in conformance or non-conformance with requirements of the Contract Documents.

1.05 PROCEDURES

- A. In addition to procedures directed by the CONTRACTOR for proper performance of the CONTRACTOR'S responsibilities:
 - 1. Locate and protect control points before starting work on the site.
 - 2. Preserve permanent reference points during progress of the Work.
 - 3. Do not change or relocate reference points or items of the Work without specific approval from the ENGINEER.
 - 4. Promptly advise the ENGINEER when a reference point is lost or destroyed, or requires relocation because of other changes in the Work.
 - a. Upon direction of the ENGINEER require the field engineer to replace reference stakes or markers.
 - b. Locate such replacements according to the original survey control.

CHANGE ORDER PROCEDURE & CONFLICT RESOLUTIONS

PART 1 - GENERAL

1.01 DESCRIPTION

A. Work included: Make such changes in the Work, in the Contract Sum in the contract Time of Completion, or any combination thereof, as are described in written Change Orders signed by the OWNER and the ENGINEER and issued after execution of the Contract, in accordance with the provisions of this Section.

1.02 RELATED WORK SPECIFIED ELSEWHERE

1. Changes in the Work: 13.3 VDOT Lap Manual

2. Change in Contract Price: 13.3 VDOT Lap Manual

3. Construction Schedules: Section 01310

4. Shop Drawings and Project Data: Section 01340

5. CONTRACTOR'S Record Drawings: Section 01720

1.03 SUBMITTALS

- A. Make submittals directly to the ENGINEER at the address shown on the Project Directory in the Project manual.
- B. Submit the number of copies called for under the various items listed in this Section.

1.04 PRODUCT HANDLING

- A. Maintain a "Register of Bulletins and Change Orders" at the job site, accurately reflecting current status of all pertinent data.
- B. Make the Register available to the ENGINEER for review at his request.

1.05 PROCESSING CHANGES INITIATED BY THE OWNER

- A. Should the OWNER contemplate making a change in the Work or a change in the Contract Time of Completion, the ENGINEER will issue a "Bulletin" to the CONTRACTOR.
 - 1. Bulletins will be dated and will be numbered in sequence.

- 2. The Bulletin will describe the contemplated change and will carry one of the following instructions to the CONTRACTOR:
 - a. Make the described change in the Work at no change in the Contract Sum and no change in the Contract Time of Completion;
 - b. Make the described change in the Work, credit or cost for which will be determined in accordance with the General Terms and Conditions and 13.3 VDOT Lap Manual;
 - c. Promptly advise the ENGINEER as to credit or cost proposed for the described change. This is not an authorization to proceed with the change.
- B. If the CONTRACTOR has been directed by the ENGINEER to make the described change in the Work at no change in the Contract Sum and no change in the Contract Time of Completion, but the CONTRACTOR wishes to make a claim for one or both of such changes, the CONTRACTOR shall notify the ENGINEER as provided for in the General Terms and Conditions and 13.3 VDOT Lap Manual.
- C. If the CONTRACTOR has been directed by the ENGINEER to promptly advise him as to credit or cost proposed for the described change, the CONTRACTOR shall:
 - 1. Analyze the described change and its impact on costs and time;
 - 2. Secure the required information and forward it to the ENGINEER for review;
 - 3. Meet with the ENGINEER as required to explain costs and, when appropriate, determine other acceptable ways to achieve the desired objective;
 - 4. Alert pertinent personnel and subcontractors as to the impending change and, to the maximum extent possible, avoid such work as would increase the OWNER'S cost for making the change, advising the ENGINEER in writing when such avoidance no longer is practicable.

1.06 PROCESSING CHANGES INITIATED BY THE CONTRACTOR

A. Should the CONTRACTOR discover a discrepancy among the Contract Documents, concealed condition as described in the General Terms and Conditions and 13.3 VDOT Lap Manual, or other cause for suggesting a change in the Work, a change in the Contract Sum, or a change in the Contract Time of Completion, he shall notify the ENGINEER as required by pertinent provisions of the Contract Documents.

B. Upon agreement by the ENGINEER that there is reasonable cause to consider the CONTRACTOR'S proposed change, the ENGINEER will issue a Bulletin in accordance with the provisions described in Article 1.05 above.

1.07 PROCESSING BULLETINS

- A. Make written reply to the ENGINEER in response to each Bulletin:
 - 1. State proposed change in the Contract Sum, if any;
 - 2. State proposed change in the Contract Time of Completion, if any;
 - 3. Clearly describe other changes in the Work required by the proposed change, or desirable therewith, if any;
 - 4. Include full backup data such as subcontractor's letter of proposal or similar information;
 - 5. Submit this response in a single copy.
- B. When cost or credit for the change has been agreed upon by the OWNER and the CONTRACTOR, or the OWNER has directed that cost or credit be determined in accordance with provisions of the General Terms and Conditions and 13.3 VDOT Lap Manual, the ENGINEER will issue a "Change Order" to the CONTRACTOR.

1.08 PROCESSING CHANGE ORDERS

- A. Change Orders will be dated and will be numbered in sequence.
- B. The Change Order will describe the change or changes, will refer to the Bulletin or Bulletins involved, and will be signed by the OWNER and ENGINEER.
- C. The ENGINEER will issue three copies of each Change Order to the CONTRACTOR:
 - 1. The CONTRACTOR promptly shall sign all three copies and return two copies to the ENGINEER.
 - 2. The ENGINEER will retain one signed copy in his file, will forward one signed copy to the OWNER.
- D. Should the CONTRACTOR disagree with the stipulated change in Contract Sum or change in Contract Time of Completion, or both:
 - 1. The CONTRACTOR promptly shall return three copies of the Change Order, unsigned by him, to the ENGINEER with a letter signed by the CONTRACTOR and stating the reason or reasons for the CONTRACTOR'S disagreement.

2. The CONTRACTOR'S disagreement with the Change Order shall not in any way relieve the CONTRACTOR of his responsibility to proceed with the change as ordered and to seek settlement of the dispute under pertinent provisions of the Contract Documents.

1.09 CONFLICT RESOLUTIONS

Any conflicts between State, Local and Federal codes shall be resolved per VDOT Lap Manual and the 2020 Road and Bridge Specifications and current revisions.

PROJECT COORDINATION AND PROGRESS MEETINGS

1.01 GENERAL

- A. Related Requirements Specified Elsewhere:
 - 1. Summary of Work: Section 01010.
 - 2. Construction Schedules: Section 01310.
 - 3. Shop Drawings and Project Data: Section 01340.
- B. The ENGINEER will schedule and administer progress meetings.
 - 1. Prepare agenda.
 - 2. Distribute written notice and agenda of regular and called meetings 4 days in advance of meeting date.
 - 3. Make physical arrangements for meetings.
 - 4. Preside at meetings.
 - 5. Record minutes; include significant proceedings and decisions.
 - 6. Distribute copies of minutes to participants, within 7 days after the meetings.
- C. All CONTRACTORS working at the Project Site at the time of such Project meetings shall attend meetings.

1.02 PRE-CONSTRUCTION MEETING

- A. To be scheduled within 5 days after Date of Notice to Proceed.
- B. Attendance:
 - 1. OWNER.
 - 2. ENGINEER and his Consultants.
 - 3. Other CONTRACTORS working at the Project Site.
 - 4. Major subcontractors of all CONTRACTORS.
 - 5. Representative of Governmental or other Regulatory Agencies as necessary.

C. Minimum Agenda:

- 1. Distribute and discuss:
 - a. List of major subcontractors.
 - b. Tentative Construction Schedule.
- 2. Critical Work sequencing.
- 3. Relation and coordination of CONTRACTORS.
- 4. Designation of responsible personnel.
- 5. Processing of field decisions and Change Orders.
- 6. Adequacy of distribution of Contract Documents.
- 7. Submittal of shop drawings, project data and samples.
- 8. Procedures for maintaining Record Documents.
- 9. Use of premises:
 - a. Office and storage areas.
 - b. OWNER'S requirements.
- 10. Major equipment deliveries and priorities.
- 11. Safety and first-aid procedures.
- 12. Security procedures.
- 13. Housekeeping procedures.

1.03 PROGRESS MEETINGS

- A. Schedule Regular Meetings to be held monthly at a time and place mutually agreed upon between CONTRACTOR and ENGINEER and OWNER.
- B. Hold Called Meetings as progress of Work dictates.

C. Attendance:

- 1. ENGINEER and his Consultants.
- 2. All CONTRACTORS working at the Project Site.
- 3. Subcontractors as pertinent to agenda.
- 4. Safety Representatives.
- 5. Representatives of Governmental or other Regulatory Agencies, as required.

D. Minimum Agenda:

- 1. Review, approve minutes of previous meeting.
- 2. Review Work Progress since last meeting.
- 3. ENGINEER will accept and give preliminary review of all Applications for Progress Payments.
- 4. Note field observations, problems, and decisions.
- 5. Identify problems which impede planned progress.
- 6. Review off-site fabrication problems.
- 7. Develop corrective measures and procedures to regain planned schedule.
- 8. Review Construction Schedule as indicated.
- 9. Plan progress during next work period.
- 10. Coordinate projected progress with other CONTRACTORS on the Project Site.
- 11. Review submittal schedules, expedite as required to maintain schedule.
- 12. Review maintaining of quality and work standards.
- 13. Review changes proposed by OWNER for:
 - a. Effect on Construction Schedule.
 - b. Effect on completion date.
- 14. Complete other current business.

CONSTRUCTION SCHEDULES

PART 1 GENERAL

1.01 GENERAL:

- A. Related Requirements Specified Elsewhere:
 - 1. Summary of Work: Section 01010.
 - 2. Shop Drawings and Project Data: Section 01340
 - 3. Schedule: VDOT Specifications.
- B. Provide projected construction schedules for entire Work to ENGINEER revise monthly.
- C. The Construction Schedule in the form specified will be used as the "Schedule of Values" when dollar values are assigned to each activity.

1.02 FORM OF SCHEDULES:

- A. Prepare in form of horizontal bar chart.
 - 1. Provide separate horizontal bar column for each activity.
 - 2. Order: Table of Contents of Specifications.
 - 3. Identify each column:
 - a. By distinct graphic delineation.
 - b. Maximum of 100 activities will be allowed for all work.
 - c. Activity No. 1 shall be "Mobilization."
 - d. Activity No. 2 shall be "General Expense Items."
 - 4. Horizontal time scale: Identify first work day of each week.
 - 5. Scale and spacing: To allow space for updating.
- B. Sheet size: 11" x 17" on transparent reproducible material.

1.03 CONTENT OF SCHEDULES:

- A. Provide complete sequence of construction by activity.
 - 1. Shop Drawings, Project Data and Samples:
 - a. Submittal dates.
 - b. Dates reviewed copies will be required.
 - 2. Product procurement and delivery dates.
 - 3. Dates for beginning, and completion of, each element of construction, specifically:
 - a. Concrete placement.
 - b. Subcontractor work.
 - c. Material installations.
 - d. Material tests.
- B. Identify Work of separate phases, or other logically grouped activities.
- C. Provide separate subschedule, showing submittals, review times, procurement schedules, and delivery dates.
- D. Provide subschedules to define critical portions of entire schedule.

1.04 UPDATING:

- A. Show all changes occurring since previous submission of updated schedule.
- B. Indicate progress of each activity, show completion dates.
- C. Include:
 - 1. Major changes in scope.
 - 2. Corrective action taken, or proposed, and its effect.
 - 3. Revised projections due to changes.
 - 4. Other identifiable changes.
- D. Provide narrative report, including:
 - 1. Discussion of problem areas, including current and anticipated delay factors, and their impact.

- 2. Corrective action taken, or proposed, and its effect.
- 3. Effect of change in schedules of other contractors at the project site.
- 4. Description of revisions:
 - a. Effect on schedule due to change of scope.
 - b. Revisions in duration of activities.
 - c. Other changes that may affect schedule.

1.05 SUBMITTALS

- A. Submit initial schedules within 15 days after date of Notice to Proceed:
 - 1. ENGINEER will review schedules and return review copy within 10 days after receipt.
 - 2. If required, resubmit within 7 days after return of review copy.
- B. Submit monthly updated schedules accurately depicting progress.
- C. Submit 2 copies to be retained by ENGINEER.

1.06 DISTRIBUTION:

- A. Distribute copies of review schedules to:
 - 1. Job site file.
 - 2. Other contractors.
 - 3. Subcontractors.

SHOP DRAWINGS AND PROJECT DATA

1.01 GENERAL:

- A. Submit, to the ENGINEER, shop drawings, project data, warranty data, installation instructions, and samples (including hydraulic cement concrete mix designs, asphalt concrete mix designs, notarized letters of certification for all materials used) required by Specification sections.
- B. Related requirements specified elsewhere:
 - 1. Construction Schedules: Section 01310.
 - 2. CONTRACTOR'S Record Drawings: Section 01720.
- B. Prepare and submit, with Construction Schedule, a separate schedule listing dates for submission and dates for reviewing shop drawings.
- C. No separate payment will be made for any of the requirements of this Section. The cost for all shop drawing submissions shall be deemed included in the Contract Lump Sum Price for this Contract.

1.02 SHOP DRAWINGS:

- A. Drawings specifically prepared by CONTRACTOR, a subcontractor, supplier or distributor, for this Work, which illustrate some portion of the Work; showing fabrication, layout, setting or erection details. Installation instructions and any manufacturer's warranties that are required in a specific specifications section shall also be submitted with the shop drawings.
- B. Shop drawings shall be prepared by a qualified detailer.
- B. Identify details by reference to sheet and detail numbers shown on Contract Drawings and/or section number of the Specifications.
- D. Reproductions for submittals: opaque diazo prints or blueprints.

1.03 PROJECT DATA:

- A. Manufacturer's standard schematic drawings:
 - 1. Modify drawings to delete information which is not applicable to Work.
 - 2. Supplement standard information to provide additional information applicable to Work.

- B. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations and other standard descriptive data.
- 1. Clearly mark each copy to identify pertinent materials, products or models.
- 2. Show dimensions and clearances required.
- 3. Show performance characteristics and capacities.
- 4. Show schematic and physical wiring diagrams and controls.

1.04 CONTRACTOR RESPONSIBILITIES:

- A. CONTRACTOR is responsible for: dimensions which shall be confirmed and correlated at the Work site; fabricating processes and techniques of construction; coordination of his work with that of all other trades and the satisfactory performance of his Work.
- B. Review and approve Shop Drawings, Project Datum and Samples prior to submission.
- C. Verify:
 - 1. Field measurements.
 - 2. Field construction criteria.
 - 3. Catalog numbers and similar data.
- C. Coordinate each submittal with requirements of Work and of Contract Documents.
- D. CONTRACTOR'S responsibility for errors and omissions in submittals is not relieved by ENGINEER'S review of submittals.
- E. CONTRACTOR'S responsibilities of deviations in submittals from requirements of Contract Documents is not relieved by ENGINEER'S review of submittals. The CONTRACTOR may submit specific deviations to the ENGINEER for review, but such deviations will require the ENGINEER'S written approval for the specific deviation.
- F. Notify ENGINEER, in writing at time of submission, of deviations in submittals from requirements of Contract Documents.
- G. Begin no work which requires submittals until return of submittals with ENGINEER'S stamp and initials or signature indicating review.
- H. Where shop drawings prepared by one trade require cross checking with the shop drawings of some other trade or trades, the CONTRACTOR shall assemble the shop drawings of all interdependent trades, cross check and coordinate them himself, require corrections as necessary from the various trades and then present the corrected drawings in one submission. As an alternate to this procedure, the CONTRACTOR may make composite drawings showing the interrelation of the concerned trades, and subsequent shop drawings of these trades shall be required to conform to these reviewed composite drawings. Fragmentary or piecemeal transmittals of shop drawings for individual trades in violation of this requirement will be returned to the CONTRACTOR unchecked and will not be considered as a submission.

J. After ENGINEER'S review, distribute copies.

1.05 SUBMISSION REQUIREMENTS:

- A. Schedule submissions at least 30 days before dates reviewed submittals will be needed.
- B. Submit five (5) copies and one reproducible of shop drawings. Reproducible will be returned to the CONTRACTOR for his further distribution.
- C. Submit number of samples specified in each of Specification sections.
- D. Accompany submittals with transmittal letter, in duplicate, containing (Submittals without proper letter of transmittal will be returned without review):
 - 1. Date.
 - 2. Project title and OWNER'S and ENGINEER'S project numbers.
 - 3. CONTRACTOR'S name and address.
 - 4. The number of each shop drawing, project datum and sample submitted.
 - 5. Statement that the submittals meet the requirements of the Contract Documents or notification of deviations from Contract Documents and justification for such deviations.
 - 6. Other pertinent data.

E. Submittals shall include:

- 1. Date and revision dates.
- 2. Project title and number.
- 3. The names of:
 - a. ENGINEER.
 - b. CONTRACTOR.
 - c. Subcontractor.
 - d. Supplier.
 - e. Manufacturer.
 - f. Separate detailer when pertinent.
- 4. Identification of product or material.
- 5. Relation to adjacent structure or materials.
- 6. Field dimensions, clearly identified as such.

- 7. Applicable specification section number.
- 8. Applicable standards, such as ASTM number or Federal Specifications.
- 9. A blank space, 4" x 4".
- 10. Identification of deviations from Contract Documents.
- 11. CONTRACTOR'S stamp, initialed or signed, certifying the review of submittal, verification of field measurements and compliance of Contract Documents.

1.06 RESUBMISSION REQUIREMENTS:

A. Shop Drawings:

- 1. Review initial drawings as required and resubmit as specified for initial submittal.
- 2. Indicate on drawings any changes including those requested by ENGINEER.
- B. Project Data and Samples: Submit new data and samples as required for initial submittal.
- C. Each submittal, regardless of action taken, will count as one submission.

1.07 ENGINEER'S DUTIES:

- A. Review submittals within fourteen (14) days from receipt of submission.
- B. Review for general compliance with the design concept of the Project and general compliance with the information given in the Contract Documents. Any action shown is subject to the requirements of the Plans and Specifications.
- C. Review of separate item does not constitute review of an assembly in which item functions.
- D. Affix stamp and initials or signature indicating the review of submittal.
- E. Disposition will be one of the following: No Exception Taken, Make Corrections Noted, Rejected, Revise and Resubmit, or Submit Specified Item.
- F. Return required copies of submittals to CONTRACTOR for distribution.

TEMPORARY FACILITIES

PART 1 GENERAL

1.01 BY WHOM WORK TO BE DONE

A. Except as may be otherwise specifically noted herein, all work covered by this section shall be the responsibility of the CONTRACTOR.

1.02 WORK INCLUDED

- A. Furnish labor and materials to complete all temporary construction and services essential to the carrying on of the complete construction.
- B. The cost of permanently installed utilities shall be borne by the CONTRACTOR until issuance of the Certificate of Substantial Completion and occupancy of the Project by the OWNER at which time the OWNER will assume responsibility for such costs.

PART 2 FACILITIES TO BE PROVIDED

2.01 TEMPORARY ENCLOSURES

- A. Provide temporary weathertight enclosures as needed.
- C. Provide temporary field office for CONTRACTOR usage located on project site in staging area.

2.02 TEMPORARY TELEPHONE

A. Provide temporary telephone to the CONTRACTOR'S field office.

2.03 TEMPORARY HEAT

A. Provide, without extra cost to OWNER, temporary heating required for proper protection and drying of work. The system of temporary heat to be used shall be subject to the acceptance of the ENGINEER. Salamanders and similar temporary heating equipment will not be permitted. Heat shall be maintained around the clock (24 hours), seven (7) days a week, as necessary to fully meet Contract requirements.

2.04 TEMPORARY ELECTRIC POWER

- A. Provide temporary service and remove as required for construction.
- B. All power required for construction shall be furnished and cost paid by the CONTRACTOR.
- C. Cost of all lamps shall be paid by the CONTRACTOR.
- D. All electrical work shall conform to all applicable laws, rules, and regulations.

2.05 TEMPORARY SIGNS

A. Signs or advertisements: Not permitted to be displayed without OWNER'S written permission. CONTRACTOR may erect one painted sign giving project name, names and addresses of ENGINEER, CONTRACTOR, and various subcontractors. Such sign shall be subject to the OWNER'S review and acceptance. Sign shall be no larger than 24 square feet (per zoning administration) with edges sealed, painted plywood, free standing. Locate as directed.

2.06 TEMPORARY STAIRS, LADDERS, RAMPS, ETC.

A. Furnish, maintain equipment such as temporary stairs, ladders, ramps, scaffolds, runways, derricks, chutes, elevators and the like as required for proper execution of work by trades. Such apparatus, equipment, construction: as per Labor Law, other State or local laws applicable thereto.

2.07 TEMPORARY TOILET

A. Provide, maintain, sanitary temporary toilet located where directed and in close proximity to the work in progress for use by those engaged on work.

2.08 STORAGE SHEDS

A. CONTRACTOR shall provide, where directed, all storage sheds and work space as required and shall remove same when directed.

2.09 PUMPS AND DRAINAGE

A. CONTRACTOR shall do all pumping, bailing and drainage of all water which may be discharged into any portion of the project during its construction. Water accumulating in trenches must be removed.

2.10 WATER FOR REPAIRS AND TESTING

A. Water required for these repairs will be given to the Contractor at no charge. A valve will be provided for the Contractor's use in obtaining water from a Town fire hydrant. The location of the hydrant will be determined by the Engineer.

The Contractor will be required to furnish hoses, fittings, and incidentals that may be necessary.

The Town Utilities Division shall be sole operator of the water service. One week's notice shall be required from Contractor prior to providing water service.

SITE, ACCESS, STAGING, PARKING AND TRAFFIC REGULATIONS

PART 1 GENERAL

1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. General Requirements: VDOT Specifications.
- B. Summary of Work: Section 01010.
- C. Maintenance of Traffic: Section 02703

1.02 ACCESS

A. The CONTRACTOR shall provide reasonable and safe access to the Project Site at all reasonable times for the OWNER, ENGINEER, representative of other governmental agencies and his workmen.

1.03 PARKING AND STAGING AREA

A. The CONTRACTOR shall provide off-street parking for all workmen engaged on the work of the Project and shall endeavor to ensure the use thereof. The CONTRACTOR shall make appropriate arrangements with local property owners in order to provide this area.

1.04 MAINTENANCE

A. The CONTRACTOR shall provide for the prompt removal from traveled streets and roadways of all dirt and other materials that have been deposited thereon by his operations whenever the accumulation is sufficient to cause the formation of dust or mud, damage to pavements or creates a traffic hazard.

PRODUCT DELIVERY, STORAGE AND PROTECTION

PART 1 GENERAL

1.01 APPLICABILITY

A. These specifications apply to all products furnished under this contract.

1.02 DELIVERY

- A. Shipments of materials to be used by the CONTRACTOR or any subcontractor under this contract should be delivered to the job site only during the regular working hours of the CONTRACTOR or subcontractor. If a delivery is made during other than the normal working hours of the CONTRACTOR or subcontractor, his authorized agent must be on duty to receive such material. No employee of the OWNER or the ENGINEER is authorized to receive any shipment designated for the CONTRACTOR of subcontractor.
 - B. Products shall not be delivered to the OWNER or the ENGINEER.
 - C. Products shall not be delivered to project site until related shop drawings have been Reviewed by the ENGINEER.
 - D. Products shall not be delivered to the project site until required storage facilities as Specified below have been reviewed by the ENGINEER.
 - E. Products shall be delivered to site in manufacturer's original, unopened, labeled containers.
 - F. The CONTRACTOR shall not drop, roll or skid products off delivery vehicles. Hand carry or use suitable materials handling equipment.

1.03 STORAGE AND PROTECTION

A. General:

- 1. The CONTRACTOR shall store and protect products in accordance with the manufacturer's recommendations and the requirements specified herein. No on-site or existing storage facilities are available for use by the CONTRACTOR. All on-site facilities shall be furnished by the CONTRACTOR if space is available in the area defined as the "Site Limits" for the Work.
- 2. When area for storage facilities is not available within the "Site Limits," the CONTRACTOR shall provide off-site, weather- proof storage facilities reviewed by the ENGINEER at no extra charge to the OWNER in accordance with the storage requirements in the Contract Documents.

- 3. The CONTRACTOR shall provide weatherproof storage for all spare parts. This storage shall be off site in a facility reviewed by the ENGINEER when area within the "Site Limits" for provision of such facilities does not exist. Storage facilities shall provide for security of such spare parts and for the segregation of spare parts from uninstalled products that will be used by the CONTRACTOR in the performance of his work.
- 4. The CONTRACTOR shall provide all equipment, spare parts and supplies that are to be delivered to the OWNER in accordance with the Contract Documents in properly marked original packages that show the name of the item, the equipment, or system in which the item belongs, the OWNER'S requisition number, the quantity and the Specification's Section number.
- 5. The CONTRACTOR shall not store products in the structures being constructed unless consented to in writing by the ENGINEER.
- 6. The CONTRACTOR shall not block or restrict the use of access roads with stored materials.
- 7. The CONTRACTOR shall not store products where they will interfere with operations of the OWNER or other contractors or on the OWNER'S property outside the "Site Limits" of the Work.
- 8. The CONTRACTOR shall protect stored materials from damage by vandals. CONTRACTOR is fully responsible for products stored within his limits of work.
- 9. The CONTRACTOR shall protect all products from damage or deterioration by weather.
- 10. The CONTRACTOR shall not store any products directly on the ground.
- 11. The CONTRACTOR shall not store any products in drainage ditches or areas where water may stand.
- 12. The CONTRACTOR shall label containers to identify materials inside using the terminology found in these Specifications.

B. Uncovered Storage:

- 1. The following types of materials may be stored out-of-doors without cover:
 - a. Masonry units
 - b. Reinforcing steel
 - c. Structural steel
 - d. Piping
 - e. Precast concrete items
 - f. Castings
 - g. Gratings

- h. Hand railing
- 2. Store the above materials on wood blocking.

C. Covered Storage:

- 1. The following types of materials may be stored out-of-doors if covered with material impervious to water.
 - a. Rough lumber
- 2. Tie down covers with rope and slope to prevent accumulation of water on covers.
- 3. Store materials on wood blocking of sufficient height to insure no contact of materials with ground.

D. Fully Protected Storage:

- 1. Store all products not named above in buildings or trailers which have a concrete or wooden floor, a roof and fully closed walls on all sides.
- 2. Provide heated storage space for materials which would be damaged by freezing.
- 3. Protect mechanical and electrical equipment from being contaminated by dust and dirt.
- 4. Maintain temperature and humidity at levels recommended by manufacturers for electrical and electronic equipment.

CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 DESCRIPTION

A. Work included: Provide an orderly and efficient transfer of the completed work to the OWNER.

1.02 RELATED WORK SPECIFIED ELSEWHERE

A. Substantial Completion: VDOT Specifications

B. Completion: VDOT Specifications

C. Final Inspection: VDOT Specifications

D. Final Application for Payment: VDOT Specifications

E. Waiver of Claims: VDOT Specifications

F. Change Order Procedure: Section 01153

G. Cleaning: Section 01710

H. CONTRACTOR'S Record Drawings: Section 01720

1.03 PROCEDURES

A. Substantial Completion:

- 1. Prepare and submit a list of items completed or to be completed.
- 2. Within a reasonable time after receipt of the list, the ENGINEER will inspect to determine status of completion.
- 3. Should the ENGINEER determine that the work is not substantially complete:
 - a. The ENGINEER promptly will so notify the CONTRACTOR, in writing, giving the reasons therefore.
 - b. CONTRACTOR will remedy the deficiencies and notify the ENGINEER when ready for reinspection.
 - c. The ENGINEER will reinspect the work.

- 4. When the ENGINEER concurs that the work is substantially complete:
 - a. The ENGINEER will prepare a "Certificate of Substantial Completion" accompanied by the CONTRACTOR'S list of items to be completed or corrected, as verified by the ENGINEER.
 - b. The ENGINEER will submit the Certificate to the OWNER and to the CONTRACTOR for their written acceptance of the responsibilities assigned to them in the Certificate.

B. Final Completion:

- 1. Prepare and submit the notice that work is ready for final inspection and acceptance.
- 2. Verify that the work is complete including, but not necessarily limited to, payment affidavits, consent of surety, receipts, waivers, operation and maintenance manuals.

3. Certify that:

- a. Contract Documents have been reviewed;
- b. Work has been inspected for compliance with the Contract Documents.
- c. Work has been completed in accordance with the Contract Documents;
- d. Equipment and systems have been tested as required, and are operational.
- e. Work is completed and ready for final inspection.
- 4. The ENGINEER will make an inspection to verify status of completion.
- 5. Should the ENGINEER determine that the work is incomplete or defective:
 - a. The ENGINEER promptly will so notify the CONTRACTOR, in writing, listing the incomplete or defective work;
 - b. CONTRACTOR will remedy the deficiencies promptly, and notify the ENGINEER when ready for reinspection.
- 6. When the ENGINEER determines that the work is acceptable under the Contract Documents, he will request the CONTRACTOR to make closeout submittals.

- C. Closeout submittals include, but are not necessarily limited to:
 - 1. Project Record Documents.
 - 2. Operation and maintenance data for items so listed in pertinent other Sections of these Specifications, and for other items when so directed by the ENGINEER.
 - 3. Warranties and bonds.
 - 4. Spare parts and materials extra stock.
 - 5. Evidence of compliance with requirements of governmental agencies having jurisdiction including, but not necessarily limited to:
 - a. Certificates of Inspection
 - b. Certificates of Occupancy
 - 6. Certificates of Insurance for products and completed operations.
 - 7. Evidence of payment and release of liens.
 - 8. List of subcontractors, service organizations, and principal vendors, including names, addresses, and telephone numbers where they can be reached for emergency service at all times including nights, weekends, and holidays.
- D. Final adjustment of accounts:
 - 1. Submit a final statement of accounting to the ENGINEER showing all adjustments to the Contract Sum.
 - 2. If so required, the ENGINEER will prepare a final Change Order showing adjustments to the Contract Sum which were not made previously by Change Orders.

1.04 INSTRUCTION

A. Instruct the OWNER'S personnel in proper operation and maintenance of systems, equipment, and similar items which were provided as part of the work.

CLEANING

PART 1 GENERAL

1.01 DESCRIPTION

- A. Related Requirements Specified Elsewhere:
 - 1. Summary of Work: Section 01010.
 - 2. Cleaning for Specific Products of Work: Specifications Section for that work.
- B. Maintain premises and public properties free from accumulations of waste, debris, and rubbish, caused by operations.
- C. At completion of Work, remove waste materials, rubbish, tools, equipment, machinery and surplus materials, and clean all sight exposed surfaces; leave project clean and ready for occupancy.

1.02 SAFETY REQUIREMENTS:

- A. Standards: Maintain project in accordance with the following safety and insurance standards.
 - 1. Applicable State, City, Town, County and Federal Codes and Regulations.
- B. Hazards Control:
 - 1. Store volatile wastes in covered metal containers and remove from premises daily.
 - 2. Prevent accumulation of wastes which create hazardous conditions.
 - 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
 - 1. Do not burn or bury rubbish and waste materials on project site.
 - 2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
 - 3. Do not dispose of wastes into streams or waterways.

PART 2 PRODUCTS

2.01 MATERIALS:

- A. Use only cleaning materials recommended by manufacturer of surface to be cleaned.
- B. Use cleaning materials only on surfaces recommended by cleaning material manufacturer.

PART 3 EXECUTION

3.01 DURING CONSTRUCTION:

- A. Execute cleaning to ensure that Work, grounds, and public properties are maintained free from accumulations of waste materials and rubbish.
- B. Wet down dry materials and rubbish to lay dust and prevent blowing dust.
- C. At reasonable intervals during progress of work, clean site and public properties, and dispose of waste materials, debris and rubbish.
- D. Provide on-site dump containers for collection of waste materials, debris and rubbish.
- E. Dispose of waste materials, debris and rubbish in a legal manner.

3.02 FINAL CLEANING:

- A. Employ experienced workmen, or professional cleaners, for final cleaning.
- B. In preparation for substantial completion or occupancy, conduct final inspection of sight exposed interior and exterior surfaces and of concealed spaces.
- C. Broom clean paved surfaces; rake clean other surfaces of grounds.
- D. Maintain cleaning until project, or portion thereof, is occupied by OWNER.

CONTRACTOR'S RECORD DRAWINGS

1.01 GENERAL:

Contractor shall maintain, mark, record, and submit drawings as described in more detail as follows:

1.02 MAINTENANCE OF DOCUMENTS:

- A. Maintain at job site, one copy of:
 - 1. Contract Drawings.
 - 2. Contract Specifications.
 - 3. Addenda.
 - 4. Reviewed Shop Drawings.
 - 5. Change Orders.
 - 6. Other Modifications to Contract.
 - 7. Field Test Records.
- B. Provide files and racks for storage of documents.
- C. Maintain drawings in clean, dry legible condition.
- D. Do not use record drawings for construction purposes.
- E. Make drawings available at all times for inspection by ENGINEER and OWNER.

1.03 MARKING DEVICES:

Provide felt marking pen for marking, conforming to the following color codes:

- A. Blue for architectural work.
- B. Green for structural work.
- C. Yellow for piping work.
- D. Black for heating, ventilating and air conditioning work.
- E. Purple for electrical work.
- F. Red for other written notations.

1.04 RECORDING:

- A. Label each drawing "CONTRACTOR'S Record Drawings" in 2-inch high printed letters.
- B. Do not permanently conceal any work until required information has been recorded.
- C. Record Drawings: Legibly mark to record actual construction on full size prints:
 - 1. Depths of various elements of foundation.
 - 2. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
 - 3. Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - 4. Field changes of dimension and detail.
 - 5. Changes made by Change Order.
 - 6. Details not on original Contract Drawings.
- D. Specifications and Addenda: Legibly mark up each Section to record:
 - 1. Manufacturer, trade name, catalog number, and supplier of each product and item of equipment actually installed.
 - 2. Changes made by Change Order.
 - 3. Other matters not originally specified.
- E. Shop Drawings: Maintain as record documents; legibly annotate all drawings to record changes made after review.

1.05 SUBMITTAL:

- A. At completion of Work:
 - 1. CONTRACTOR'S Record Drawings: One set of reproducible drawings, furnished to the CONTRACTOR by the ENGINEER, which the CONTRACTOR has revised, at appropriate scale and suitable for tracing, to show the required information.

- B. Accompany submittal with transmittal letter, in duplicate, containing:
 - 1. Date.
 - 2. Project title and number.
 - 3. CONTRACTOR'S name and address.
 - 4. Title and number of each record document.
 - 5. Certification that each drawing as submitted is complete and accurate.
 - 6. Signature of CONTRACTOR, or his authorized representative.

SECTION 01730

PROJECT SIGNS

Two (2) clear and legible project signs shall be provided on the project at each bridge site by the Contractor as soon as he commences work and mobilizes his forces. The signs shall be erected in an appropriate place as determined by the Engineer. Each sign shall contain the following information and meet the following requirements:

- a. Dimensions shall not be less than two (2) feet by three (3) feet.
- b. Lettering shall not be less than one (1) inch tall and one-half (1/2) inch wide.
- c. It shall list Contractor's name.
- d. It shall list who work is performed for.
- e. Phone number of Contractor.
- f. Who to contact in case of emergency and phone number of such person.
- g. The sign shall be constructed of a sturdy and durable material.h. Sign or signs shall be placed in such a manner as to be clearly recognizable by the public.

Project signs and their locations shall be approved by the Engineer.

The Contractor shall maintain these signs for the duration of the contract and dispose of them after completion. If these signs become deteriorated and the Engineer decides new signs are needed, the Contractor shall furnish them also. There shall be no separate payment for this item.

DIVISION II SITE WORK

TOWN OF PULASKI, VIRGINIA

PREPARED BY

SCHWARTZ & ASSOCIATES, INC. CONSULTING ENGINEERS HERITAGE BUSINESS CENTER 7331 TIMBERLAKE ROAD LYNCHBURG, VIRGINIA 24502

INDEX

DIVISION II – SITE WORK

Section No.	<u>Title</u>	<u>Page Number</u>
02703	Maintenance of Traffic	02703-1 - 02703-2

SECTION 02703 MAINTENANCE OF TRAFFIC

1.1. DESCRIPTION

- 1.1.1. This work shall consist of maintenance and protection of pedestrian and vehicular traffic through or around areas of construction. It shall include covering and uncovering existing signs, furnishing, erecting and maintenance of temporary portable construction signs, sign posts, flags, cones, pavement line markings, group 2's, TMA's, warning lights type B, and all other items used for temporary lane closures required for construction that is not shown on contract drawings. It also includes the furnishing of flagmen and lights. At the completion of this project the construction signs and sign posts & all traffic control devices shall be removed by the Contractor and shall remain the property of the Contractor. Also included in Maintenance of Traffic is all temporary traffic control and devices needed for installation and removal of median crossovers.
- 1.1.2. All traffic control for this project shall be furnished and installed in accordance with the contract drawings, the current edition of the Virginia Work Area Protection Manual and as directed by the Engineer.
- 1.1.3. In addition, it shall include all costs associated with providing at all times safe pedestrian access to all businesses and residencies within the limits of the signs erected for the project.
- 1.1.4. All work shall be scheduled and performed in such a manner as to provide a minimum of interference and maximum protection to traffic and workmen. In no case shall traffic be stopped for more than five (5) minutes at a time unless otherwise noted.
- 1.1.5. The CONTRACTOR shall take adequate precautions to prevent material, sand or other debris from being spilled, blown or tracked onto traveled roadways throughout the duration of this project. Should any material get onto a traveled roadway, the CONTRACTOR shall immediately stop work and have it removed. The ENGINEER may stop work, if conditions warrant, due to blowing sand.

1.2. METHOD OF MEASUREMENT

1.2.1. "Maintenance of Traffic" will be paid for on a "Lump-Sum" basis wherein no measurement will be made.

1.3. BASIS OF PAYMENT

1.3.1. Maintenance of traffic will be paid for at the Contract "Lump-Sum" price,

which price shall be full compensation for covering and uncovering existing signs, furnishing, erecting and maintenance of temporary portable construction signs, sign posts, flags, cones, pavement line markings, group 2's, TMA's, warning lights type B, and all other items used for temporary lane closures required for construction that is not shown on contract drawings. It also includes the furnishing of flagmen and lights, and for all materials, labor, tools, equipment, and incidentals necessary to complete the work. Also included in Maintenance of Traffic is all temporary traffic control and devices needed for installation and removal of median crossovers.

- 1.3.2. The Contractor will be paid 30-percent of the lump sum bid price upon satisfactory installation of the required maintenance of traffic items to commence construction operations and active prosecution of the work. Contingent upon active pursuit of work, the Contractor will receive monthly payments for maintenance of traffic based on the daily dollar amount of the bid price for maintenance of traffic until 90-percent of the unit bid price is paid. The remaining 10-percent will be paid for after all maintenance of traffic items are removed at final acceptance of the Contract.
- 1.3.3. Payment will be made under the contract pay item:
- 1.3.4. "MAINTENANCE OF TRAFFIC Pay unit will be on a "Lump-Sum" basis.

DIVISION III

CONCRETE

TOWN OF PULASKI, VIRGINIA

PREPARED BY

SCHWARTZ & ASSOCIATES, INC. CONSULTING ENGINEERS HERITAGE BUSINESS CENTER 7331 TIMBERLAKE ROAD LYNCHBURG, VIRGINIA 24502

INDEX

DIVISION III – CONCRETE

Section No.	<u>Title</u>	Page Number
03037	Shotcrete – Type A	03037-1
03038	Pipe Abandonment (Water Line)	03038-1

SECTION 03037

SHOTCRETE - TYPE A

In addition to the requirements of Section 412 of the Virginia Department of Transportation Road and Bridge Specifications, the following shall apply:

- 1. Inspection. Because of the importance of workmanship effecting the quality of the shotcrete, continual inspection during placement will be maintained. After the shotcrete has obtained sufficient strength to withstand hammering, it will be sounded by the Engineer in an effort to locate sand pockets and/or other unsound areas. Any imperfections discovered shall be cut out and replaced with sound material as directed by the Engineer at the Contractor's expense.
- 2. Construction Testing. The Contractor shall make one (1) test panel with minimum dimensions of 18" x 18" x 3" gunned in the same position as the work represented for every 50 cubic yards of shotcrete placed but at least one (1) panel per shift. Panels shall be gunned during the course of the work by the Contractor's regular nozzleman. Field cure panels in the same manner as the work, except that the test specimens shall be soaked in water for a minimum of 40 hours prior to testing. An independent testing lab will cut three (3) 3" diameter cores from each panel for testing.

When the length of a core is less than twice the diameter, apply the correction factors given in the ASTM C42 to obtain the compressive strength of individual cores.

The average compressive strength of three (3) cores taken from the test panel representing a shift of 50 cubic yards of shotcrete, must equal or exceed 0.85f'c with no individual core less than 0.75f'c.

As an alternate to the usage of test panels, the Engineer may require the Contractor to make a minimum of four (per shift) acceptable 4" diameter x 8" length cylinders for testing. These cylinders shall be made at the Contractor's expense.

Final acceptance of the shotcrete will be based on the results obtained from cores or cylinders, visual inspection, and hammering with masonry hammer. Use of data obtained from impact hammers, ultra-sonic equipment, or other non-destructive testing devices will not be permitted for final acceptance of the shotcrete; however, these data may be useful for determining uniformity of the shotcrete.

Prior to shotcrete placement, Contractor shall pre-wet concrete surface and forms a minimum of 2 hours with potable water to a Saturated Surface Dry (SSD). All costs to be included in unit price bid for "Shotcrete – Type A".

SECTION 03038 PIPE ABANDONMENT (WATER LINE)

PART 1 - GENERAL

1.01 DESCRIPTION

This work shall consist of locating and exposing end of existing water line pipe, cleaning debris out of existing pipe, mechanical plugging the low end of the line that is to be abandoned, furnishing and installing a bulkhead on the upper end of the line, and pumping flowable fill into the line until the line is completely filled.

1.02 MEASUREMENT

"Pipe Abandonment (Water Line)" will be paid for on a per each basis for the line actually abandoned.

1.03 BASIS OF PAYMENT

- A. "Pipe Abandonment (Water Line)" shall be paid for at the contract per each price, which shall be full compensation for exposing and locating end of the existing water line pipe, removal and disposal of materials, cleaning out existing water line pipe, excavation, backfilling, grading, compaction, seeding, furnishing and installing upper bulkhead, mechanical plug on lower end, flowable fill, pumping, equipment, tools, labor and incidentals necessary to complete the work.
- B. "Pipe Abandonment (Water Line)" Pay unit will be on a per each basis.

DIVISION IV STEEL

TOWN OF PULASKI, VIRGINIA

PREPARED BY

SCHWARTZ & ASSOCIATES, INC. CONSULTING ENGINEERS HERITAGE BUSINESS CENTER 7331 TIMBERLAKE ROAD LYNCHBURG, VIRGINIA 24502

INDEX

DIVISION IV – STEEL

Section No.	<u>Title</u>	Page Number
04060	Adhesive Anchors	04060-1 - 04060-3
04061	Powder Coating Bridge Rail	04061-1 - 04061-7

SECTION 04060 ADHESIVE ANCHORS

PART 1 GENERAL

1.01 <u>DESCRIPTION</u>

A. This item consists of drilling holes in existing concrete, cleaning holes, placing reinforcing steel in holes and anchoring reinforcing steel with anchoring material, all in accordance with the Contract Drawings and these Special Provisions.

1.02 **QUALITY ASSURANCE**

- A. The Contractor shall provide a notarized certification stating that the material meets the specified requirements.
- B. The Contractor shall proof load a minimum of 10% of the in-place adhesive anchors at random locations as selected by the Engineer. These anchors must be proof loaded to 90% of the yield of the reinforcing steel as shown in the table in this Special Provision. At 90% of the yield of the reinforcing bar, there shall be no indication of damage to the concrete or pullout of the reinforcing bar. These pullouts can be proven by:
 - 1. Unrestrained tests (ASTM E 488) with hydraulic equipment having calibrated jacks.
 - 2. Direct tension pulls with hydraulic equipment with calibrated gages (Calibration on gages must be 1 year or less).

PART 2 PRODUCTS

2.01 <u>MATERIALS</u>

- A. The steel shall be Corrosion Resistant Reinforcing Steel Low Carbon/Chromium meeting the requirements of ASTM A1035/A1035M.
- B. The anchoring material shall be a polyester resin (made in USA) with no weakening additives or fillers.

2.02 ACCEPTABLE MANUFACTURERS

- A. Anchoring Material shall meet the material properties shown in Paragraph B and shall be approved by the Engineer prior to usage.
- B. The anchoring material shall have the following properties:

Compressive Strength	(ASTM D695)	17,000 psi
Tensile Strength	(ASTM D638)	5,510 psi
Tensile Modulus	(ASTM D638)	$1.14 \times 10^6 \text{psi}$
Flexural Modulus	(ASTM D790)	$1.06 \times 10^{6} \text{psi}$

Temperature Range During Installation - 10 degrees F. to 110 F.

2.03 PHYSICAL PROPERTIES

REINFORCING	90% OF YIELD OF
BAR DIAMETER (1/8")	REINFORCING BAR (LBS.)
4	10,800
5	16,470
6	23,760
7	32,400
8	42,660
9	54,000
10	68,580

1 ¹/₄" diameter Cont. coil threaded rod 45.000 lbs.

PART 3 EXECUTION

3.01 APPLICATION

- A. Basic steps for Adhesive Anchors are:
 - 1. Clean the area around the hole to be drilled.
 - 2. Drill hole in concrete to required depth.
 - a. Extreme caution shall be taken in order that existing reinforcing steel is not damaged. Any reinforcing steel damaged shall be corrected at Contractor's expense.
 - b. Holes shall be drilled with air drills using hollow drill bits.
 - c. The holes shall be blown clean during drilling with air blown through the hollow bits.
 - d. The holes shall be horned out by use of a stiff mechanics or metal bristle brush in order to add roughness to the sidewall.
 - e. At the completion of drilling and after drill is removed, full penetration air "blowout" shall be used to perform the final "clean-out" of hole.
 - 3. Mixing anchoring Material and Placement of Reinforcement Steel:

Pour hardening powder from its container into resin. Hand mix by stirring vigorously for 60 seconds. Then pour into the bottom half of several clean, drilled holes. The holes may be damp but may not have running or standing water present.

The anchors are pushed to the bottom of the holes and rotated to be sure of total "wetting"

- a. If horizontal hole is used, use polypropylene disposable gun that will reach to base of hole in order to insert anchoring material. For horizontal holes across cut stoppers shall also be used to prevent loss of anchoring material.
- b. They are left undisturbed until gel occurs, which happens within minutes to approximately one hour depending on the temperature at the time of installation.
- c. After the material has cooled, it will have 50 to 60 percent of its ultimate strength.

B. Make sure that all material is installed using manufacturer's recommended equipment and in strict accordance with manufacturer's recommendations.

PART 4 <u>MEASUREMENT AND PAYMENT</u>

4.01 <u>METHOD OF MEASUREMENT</u>

A. No measurement shall be required for "Adhesive Anchors" as the quantity shall be paid for in the concrete bid items in which it is used.

4.02 <u>BASIS OF PAYMENT</u>

A. "Adhesive Anchors" - shall be paid for in other bid items and shall not be measured as a pay item.

6-2-23

I. DESCRIPTION

This work consists of surface preparation and application of powder coating over galvanized metal railing, posts, rails, structural elements of bridge railing and all hardware in shop facilities as shown in plans.

II. QUALIFICATIONS

The powder coating applicator shall have a minimum of two years continuous and successful experience with powder coating of industrial metal products.

III. MATERIALS

The polyester powder shall be a super durable TGIC (Triglycidyl isocyanurate) polyester thermoset coating. Material used for touch up shall be an aliphatic polyurethane top coat selected from VDOT's approved System B, List 13.

The powder coat color and touch up coat color applied shall be Federal Standard 595-27038 (Semi-Gloss Black) or as specified on plans.

Structural steel caulking shall conform to FS TT-S-00230C, Type II, Class A and be approved for use by the coating manufacturer. The caulking color shall match the color of the top coating. Obtain the Engineer's approval of the caulking and backing material before using.

IV. SUPPLIER I APPLICATOR

The polyester powder shall be supplied by one of the manufacturers list below. Application of the polyester powder shall be performed by one of the powder coating facilities listed.

V. SURFACE PREPARATION AND APPLICATION

Prior to the galvanizing operation, the powder coating applicator shall identify to the galvanizer all surfaces receiving powder coating after galvanizing to ensure that the galvanizing method used on these assemblies is compatible with subsequent application of a powder coating. All surfaces or assemblies receiving powder coating shall not be water-quenched, nor receive a chromate conversion coating after the galvanizing process.

After galvanizing, all components shall be protected from rain or moisture during storage and shipment to the powder coating facility.

Galvanized surfaces receiving powder coating shall be cleaned and prepared for coating in accordance with SSPC SP-16 followed by SSPC SP-7 and shall be in accordance with ASTM D 6386, Section 5.4.1 Sweep Blasting. Prior to sweep blasting all surfaces shall be inspected to ensure the galvanized layer is smooth.

Should any locations be found to have excessive liquid zinc run-off, dross or zinc oxide particles they shall be smoothed until the location is level with the surrounding area using hand or power tools as described in SSPC SP 2 and 3. The resultant profile of galvanized layer produced after sweep blasting shall be 1.0 to 1.5 mils as determined by ASTM D 4417, Method C.

Thickness of the galvanized layer shall be measured before and after sweep blasting using SSPC PA-2 to ensure all components conform to ASTM A 123 or ASTM A 153 as applicable. Any locations found having insufficient thickness shall be repaired in accordance with ASTM A 780.

The Contractor shall hire an Independent Test Laboratory to perform the QA inspection of the power coating of the pedestrian fence and bridge rail items, as stated in this Special Provision. At the completion of powder coating the guardrail and bridge rails, all material certifications, reports and other pertinent documentation shall be submitted to Schwartz & Associates, Inc.

The powder coating applicator shall notify the Independent Test Laboratory of all surface cleaning and preparation activities, and shall provide the Quality Assurance Manager (QAM) an opportunity to perform quality assurance inspection at the completion of surface cleaning and preparation activities prior to beginning powder coating application.

After surface preparation, all components receiving powder coating shall be sufficiently preheated to prevent pin holes from forming in the polyester powder. The coating shall be applied at a cured film thickness of 7 +/-2 mils in accordance with the powder coating manufacturer's recommendations. The applied film thickness of the polyester powder shall be measured in accordance with ASTM D 7091.

Using a 67-1/2 volt wet sponge detector, the polyester coating shall be checked for holidays, pinholes and discontinuities. There shall be no more than one deficiency per 5 ft2.

VI. SUBMITTALS

- A. The galvanizing company shall submit the following information on standard company letterhead to the Engineer for approval:
 - 1. Statement reading "We (Company name) verify neither water quenching nor a chromate conversion coating has been used or will be on any surfaces that are to be powder coated for this VDOT Project." List Project Number.
 - 2. Report and document the coating thickness by material category and the applied coating thickness to metal railing elements, in mils, in accordance with ASTM 123 and coat weight in oz/ft2 in accordance with ASTM A 153 as applicable.
- B. The powder coating applicator shall submit the following quality control information to the Engineer for approval on standard company letterhead:
 - 1. The name, location, and contact information of the firm performing the powder coating operations.

- 2. Quality control (QC) program(s) established and routinely followed by the firm performing the powder coating operation. Company forms documenting inspection and testing of coatings as part of the QC program shall be included in the submittal.
- 3. Project specific powder coating plan This plan shall include the identification of the powder manufacturer, coating product name and number applied, specific cleaning process or processes used in surface preparation, report type and hardness of abrasive used, zinc galvanizing thickness prior to sweep blast operations, zinc galvanizing thickness after sweep blast operations, surface profile achieved, pre-heating times and temperatures used for coating applied, process of powder coating application, testing and inspection conducted to ensure proper curing, processes for shop and field coating repair, handling instructions, and storage processes taken for the assemblies being coated for projects.
- 4. Manufacturer's product data and MSDS sheets for all pre-wash solutions, solvents, powder coating and coating repair materials used.

VII. QUALITY CONTROL TESTING

The firm performing the powder coating operation shall conduct, or make arrangements for, QC testing on assemblies receiving powder coating for this Project, in accordance with the powder coating firm's QC program as documented in item B. 2. of the Submittal subsection above. Testing may be performed on coated surfaces of production fabricated items, or on representative test panels coated alongside the production fabricated items being coated.

Test panels shall be a minimum of 1 foot sections of metal railing, sign structure and posts of the same dimensions being fabricated. Test panels shall be galvanized, cleaned and powder coated in the same process along with production items being fabricated. There shall be a minimum of one set of tests representing each cycle of production fabricated items coated and cured. Additional tests shall be performed at the request of the Independent Test Laboratory, at no additional expense to the Owner.

Repair of damaged coatings on production fabricated items shall be the responsibility of the powder applicator, and shall be in accordance with the Project specific powder coating plan as approved by the Engineer. At a minimum, the QC testing shall include the following requirements:

- 1. Holiday inspection for deficiencies and visual inspection of other unacceptable surface imperfections.
- 2. Coating thickness measurement as noted above in section V. SURFACE PREPARATION AND APPLICATION.
- 3. Hardness testing in accordance with ASTM D 3363, with the finish coat providing a minimum hardness value of 2H.
- 4. Adhesion testing in accordance with ASTM D 4541 with a minimum of 1,5002,000 psi adhesion.
- 5. Powder Coating Institute (PCI) #8 recommended procedure for solvent cure test.

Film thickness will be determined after the coat is fully cured by the use of a magnetic-pull-off or electronic dry film thickness gauge. The magnetic or electronic gauge shall be calibrated in accordance with manufacturer's instructions. Film thickness shall be measured in accordance with ASTM 7091.

If a question arises about an individual coat thickness or coverage, it will be verified using a Tooke gauge, according to ASTM D 4138. If the Tooke gage shows the galvanization or powder coat to be less than the specified minimum thickness the rail or component will be rejected even if the thickness of the total system equals or exceeds the total specified thickness.

The Independent Test Laboratory shall be provided notice and access to all rails, components and test panels at the powder coating facility for the purposes of acceptance inspection, including notice and access to witness all hardness and adhesion testing performed for QC testing. Rail(s), components, assemblies and sign structures not meeting the above requirements will be subject to rejection by the Engineer. Rejected bridge rails, components and assemblies shall be repaired or re-coated by the powder coating applicator in accordance with the project specific powder coating plan as approved by the Engineer and be re-tested to confirm QC requirements at no additional expense to the Owner.

Assemblies shall not be shipped from the powder coating firm's facility to the Project site until the Contractor receives the Independent Test Laboratory's approval of the above submittal information and quality control report.

VIII. SHIPPING AND ERECTION

After curing and acceptance, the powder coating applicator shall protect the coated assemblies with multiple layers of wrapping, or other protective materials specified in the Project specific powder coating plan.

During shipping and storage, each assembly shall be separated from other assemblies by expanded polystyrene spacers and other spacing materials specified in the Project specific powder coating plan.

All assemblies, bridge rail elements and other components shall be offloaded and erected using extreme care to ensure coatings are not damaged. Upon delivery to the Project site coated assemblies and hardware shall be thoroughly inspected by the Engineer for any coating defects or damage. If damage is found the Engineer shall determine if cause for rejection.

It is strongly recommended a representative from the powder coating applicator's firm be present to witness proper handling and erection processes are being employed by the Contractor to minimize or eliminate coating damage. Wood or other suitable material shall be used to protect tops of posts when driving.

All coating damage due to shipping, storage, handling, and erection operations shall be repaired by the Contractor at no additional expense to the Department. The Contractor shall provide the QAM access to all locations of all powder coated members for verification of coating conditions prior to and following all coating repairs.

Repair damaged surfaces as follows:

- 1. Prepare surfaces in accordance with SSPC-SP 1 followed by SSPC-SP 2 or SSPC-SP 3. Use a solvent that is acceptable to the powder manufacturer and the manufacturer of the coating used for repair. Proof of acceptability shall be furnished to the Engineer. Extend the prepared area at least 2 inches into adjacent, tightly adhering, intact coating.
- 2. Feather the existing coating system surrounding each repair location. Feather the repair area for a distance of 1 inch to 2 inches to provide a smooth, tapered transition into the existing intact coating.
- 3. When the steel substrate is exposed in the repair area, the surface shall be prepared in accordance with SSPC SP11. Apply a coat of Organic Zinc primer conforming ASTM A 780 in accordance with manufacturer's instructions and feather back existing coatings as stated above before re-application of topcoat.
- 4. The coating thickness of the touch up material shall be the same thickness as the polyester and can be applied in multiple coats.

IX. WARRANTY

Powder coated bridge rail shall be warranted as specified herein for a period of three years from the date of acceptance. Should the coating system fail within three years after the Project has been accepted, the coating shall be repaired by the Contractor in conjunction with the powder applicator at no cost to the Owner. The extent and method of repair must be acceptable and agreed upon by the Owner. System failure does not include damage from external agents, such as scraping from snow removal equipment, vandalism, debris impacts, collisions, etc., or normal loss of gloss and color. Once the duplex system (galvanizing and powder coating) has been accepted, a failure shall mean any visible corrosion, blistering, checking, cracking, or delamination (peeling) of the coating.

X. MEASUREMENT AND PAYMENT

Powder coated bridge rail will be measured and paid for in accordance with Section 410 of the Specifications for the applicable, component and\or assembly except that the component and\or assembly finish shall be specified as galvanized and powder coated. This price shall include furnishing and installing, submittal information, quality control testing, Independent Test Laboratory, documentation and incidentals necessary to complete the galvanizing and powder coating work as specified herein.

POWDER COATING MANUFACTURERS

Protech, Inc. 939 Monocacy Road York, Pa. 17404 Ph: (713) 939-4000 www.protechpowder.com

Tiger Drylac USA Inc. 1100 Commons Boulevard Reading, Pa. 19605 Ph: (610) 926-8148 TCI Powder Coatings P.O. Box 13 734 Dixon Drive Ellaville, Ga. 31806 Ph: (800) 533-9067 www.tcipowder.com

FACILITIES FOR APPLICATION OF POLYESTER POWDER OVER GALVANIZED SURFACES

Applied Coating Systems, Inc. ASAP Powder Coating, Inc. 2915 Wilmarco Avenue Baltimore, Md. 21223 Ph: (410) 644-4500

ASCO - American Stripping Co. 9025 Vassau Court Manassas Park, Va. 20111 Ph: (703) 368-6573 www.ascoweb.com

Iron World 9390 Davis Avenue Laurel, Md. 20723 Ph: (866) 310-2747

www.ironworldfencing.com

Thomarios Powder Coating 1122 Jacoby Road Copley, Oh 44321 Ph: (330) 670-6400 www.thomarios.com

9724 Williamsport Pike Falling Waters, WV 25419-3538

Ph:(304) 274-3200

www.asappowdercoating.com Fortress Fusion Coatings, Inc

P.O. Box37

New York Mills, NY 13417

Ph: (315) 736-8311 www.whyrust.com Keener Coatings 2711 Board Road York, Pa. 17406 Ph: (BOO) 529-3893

Lane Enterprises 1244 Claremont Road Carlisle, Pa. 17013 Ph: (717)249-8342

www.lane-enterprises.com

DIVISION V

SPECIAL PROVISIONS AND REVISIONS TO VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS, 2020

TOWN OF PULASKI, VIRGINIA

Prepared by:

Schwartz & Associates, Inc. 7331 Timberlake Road, Suite 305 Lynchburg, VA 24502

DIVISION V

SPECIAL PROVISIONS AND REVISIONS TO VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS, 2020

		PAGE NUMBER
	Blank Page	06010-1
Cn100-00051-05	VDOT SSs, SPs and SPCNs	06010-2
SQ107-000130-00	DRUG FREE WORKPLACE	06010-3
SP0F0-000100-00	PREDETERMINED MINIMUM WAGE RATES	06010-4 – 06010-11
SP0F0-000130-02	REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS	06010-12 – 06010-33
SP0F0-000150-01	NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY	06010-34 – 06010-39
SQ105-060110-01	SECTION 105.06 - SUBCONTRACTING	06010-40
SP107-001510-02	SECTION 107 – DBE REQUIREMENTS	06010-41 – 06010-58
SP102-000510-02	USE OF DOMESTIC MATERIAL	06010-59 – 06010-60
SP100-000051-00	CHANGED CONDITIONS FOR LAP	06010-61 – 06010-62
SP107-000120-00	ELECTRONIC SUBMISSIONS OF PAYROLLS	06010-63 – 06010-64
SP107-003000-00	BUIILD AMERICA, BUY AMERICA ACT REQUIREMENTS	06010-65 – 06010-66
SQ107-001610-00	PREVAILING WAGE RATES	06010-67 - 06010-68
SS109-002020-01	SECTION 109 – MEASUREMENT AND PAYMENT	06010-69 – 06010-71
SS234-002020-01	GLASS BEADS AND RETROREFLECTIVE OPTICS	06010-72
SS235-002020-01	RETROREFLECTORS	06101-73
SS246-002020-02	PAVEMENT MARKING	06010-74 – 06010-80
SS512-002020-03	MAINTAINING TRAFFIC	06010-81 – 06101-93
SS704-002020-02	PAVEMENT MARKINGS AND MARKERS	06010-94 – 06010-98
1.01 – 1.04	COPIED NOTES	06010-99 – 06010-107
SECTION 405	PRESTRESSED CONCRETE	06010-108

PAGE INTENTIONALLY LEFT BLANK

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.

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 Contractors 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)

PREDETERMINED MINIMUM WAGE RATES

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

"General Decision Number: VA20240186 01/05/2024

Superseded General Decision Number: VA20230186

State: Virginia

Construction Type: Highway

County: Pulaski County in Virginia.

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

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

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 \$17.20 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 2024.
If the contract was awarded on lor between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	:

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

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

Modification Number Publication Date 01/05/2024

ELEC0080-011 12/01/2021

	Rates	Fringes		
ELECTRICIAN, Includes Traffic Signalization				
SUVA2016-071 07/02/2018				
	Rates	Fringes		
CARPENTER, Includes Form Work	\$ 17.65	0.00		
CEMENT MASON/CONCRETE FINISHER.	\$ 19.94	0.00		
IRONWORKER, REINFORCING	\$ 22.71	0.00		
IRONWORKER, STRUCTURAL	\$ 27.38	0.00		
LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor	\$ 15.40 **	0.00		
LABORER: Common or General	\$ 14.85 **	0.00		
LABORER: Grade Checker	\$ 15.07 **	0.00		
LABORER: Pipelayer	\$ 15.11 **	0.00		
LABORER: Power Tool Operator	\$ 15.69 **	0.00		
OPERATOR: Backhoe/Excavator/Trackhoe	\$ 20.53	0.00		
OPERATOR: Bobcat/Skid Steer/Skid Loader	\$ 19.16	4.45		
OPERATOR: Broom/Sweeper	\$ 14.32 **	0.25		
OPERATOR: Crane	\$ 25.82	0.00		
OPERATOR: Drill	\$ 24.66	0.00		
OPERATOR: Gradall	\$ 18.65	0.00		
OPERATOR: Grader/Blade	\$ 26.13	0.00		
OPERATOR: Hydroseeder	\$ 16.64 **	0.00		
OPERATOR: Loader	\$ 22.22	0.00		
OPERATOR: Mechanic	\$ 19.59	0.00		
OPERATOR: Milling Machine	\$ 23.12	3.60		
OPERATOR: Paver (Asphalt, Aggregate, and Concrete)	\$ 16.66 **	0.00		
OPERATOR: Piledriver	\$ 21.83	4.08		
OPERATOR: Roller (Finishing)	\$ 14.80 **	0.00		

OPERATOR:	Roller\$ 15.85 **	0.00
OPERATOR:	Screed\$ 22.13	4.89
OPERATOR:	TRACTOR (UTILITY)\$ 14.58 **	0.00
	sphalt Spreader utor\$ 17.25	0.00
OPERATOR: Bu	ulldozer, tility\$ 17.81	0.00
TRAFFIC CON	TROL: Flagger\$ 11.45 **	0.00
	R : HEAVY 7CY &\$ 15.36 **	0.00
	R: 1/Single Axle \$ 15.19 **	0.00
	R: Fuel and ervice\$ 18.25	0.00
	R: HEAVY OVER 7 \$ 16.69 **	0.00
TRUCK DRIVER	R: MULTI AXLE\$ 16.75 **	0.00

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

** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). 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 -----

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

Union Rate Identifiers

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

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

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULAZ012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

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

Union Average Rate Identifiers

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

for the classifications and rates under that identifier.

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

WAGE DETERMINATION APPEALS PROCESS

- 1.) Has there been an initial decision in the matter? This can be:
- * an existing published wage determination
- * a survey underlying a wage determination
- a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

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

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

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

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

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

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

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

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

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

END OF GENERAL DECISION"

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

FHWA-1273 - Revised October 23, 2023

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

1 General

Nondiscrimination 11.

111;

Non-segregated Facilities Davis-Bacon and Related Act Provisions IV.

Contract Work Hours and Safety Standards Act Provisions

Subletting or Assigning the Contract VI

Safety: Accident Prevention

VIII. False Statements Concerning Highway Projects

Implementation of Clean Air Act and Federal Water Pollution Control Act

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 half 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

1. Minimum wages (29 CFR 5.5)

- 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. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.
- (5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- d. Fringe benefits not expressed as an hourly rate. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- e. Unfunded plans. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- f. Interest. In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. Withholding requirements. The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other

Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

- b. Priority to withheld funds. The Department has priority to funds withheld or to be withheld in accordance with paragraph
- 2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:
- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its reprocurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, 31U.S.C. 3901-3907.

3. Records and certified payrolls (29 CFR 5.5)

- a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.
- (2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.
- (3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.
- (4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.
- b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts- covered work is

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

- (2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at https://www.dol.gov/sites/dolgov/files/WHD/ legacy/files/wh347/.pdf or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.
- (3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:
 - (i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete:
- (ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and
- (iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.
- (4) Use of Optional Form WH–347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.
- (5) Signature. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.
- (6) Falsification. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.
- (7) Length of certified payroll retention. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.
- c. Contracts, subcontracts, and related documents. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals.

amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

- d. Required disclosures and access (1) Required record disclosures and access to workers. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.
- (2) Sanctions for non-compliance with records and worker access requirements. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.
- (3) Required information disclosures. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

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

- a. Apprentices (1) Rate of pay. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (2) Fringe benefits. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.
- (3) Apprenticeship ratio. The allowable ratio of apprentices to journeyworkers 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 journeyworkers 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 journeyworkers 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 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.
- 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.
- 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 twoyear 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.

SP0F0-000150-01 July 17, 2017

VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR

NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goals for female and minority participation, expressed in percentage terms of the Contractor's aggregate work force in each trade on all construction works in the covered area, are as follows:

Females- 6.9%

Minorities - See Attachment "A"

The goals are applicable to all the Contractor's construction work performed in the covered area, whether or not it is Federal or federally assisted. If the Contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the Contractor also is subject to the goals for both its federally involved and non-federally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity Clause, specific affirmative action obligations required by the specifications, set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals established herein. The hours of minority and female employment and training must be substantially uniform throughout the length of the Contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the Contract, the Executives Order and the regulations in 41 CFR Part 60-4. Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 workings days the award of any construction subcontract in excess of \$10,000 at any tier for construction works under this contract. The notification shall list the name, address and telephone number of the subcontractor, employer identification number, estimated dollar amount of the subcontract, estimated starting and completion dates of the subcontract and the geographical area in which the Contract is to be performed.

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

- 1. As, used in this provision:
 - a. "Covered area" means the geographical area described in the solicitation from which this contract resulted;
 - b. "Director" means Director, Office of Federal Contract Compliance Programs, United States Department of Labor, or any person to whom the Director delegates authority;
 - c. "Employer identification number" means the Federal Social Security number used on the Employer's Quarterly Federal Tax Return, U. S. Treasury Department Form 941;
 - d. "Minority" includes:

- (i) Black (all persons having origins in any of the Black African racial groups not of Hispanic origin);
- (ii) Hispanic (all persons of Mexican, Puerto Rican, Cuban, Central or South American or other Spanish Culture or origin, regardless of race);
- (iii) Asian and Pacific Islander (all persons having origins in any of the original peoples of the Far East, Southeast Asia, the Indian Subcontinent, or the Pacific Islands); and
- (iv) American Indian or Alaskan Native (all persons having origins in any of the original peoples of North America and maintaining identifiable tribal affiliations through membership and participation or community identification).
- 2. Whenever the Contractor, or any Subcontractor at any tier, subcontracts a portion of the work involving any construction trade, it shall physically include in each subcontract in excess of \$10,000 the provisions of these specifications and the Notice which contains the applicable goals for minority and female participation.
- 3. If the Contractor is participating (pursuant to 41 CFR 60-4.5) in a Hometown Plan approved by the U. S. Department of Labor in the covered area either individually or through an association, its affirmative action obligations on all work in the Plan area (including goals and timetables) shall be in accordance with that Plan for those trades which have unions participating in the Plan. Contractors must be able to demonstrate their participation in and compliance with the provisions of any such Hometown Plan. Each Contractor or Subcontractor participating in an approved Plan is individually required to comply with its obligations under the EEO clause, and to make a good faith effort to achieve each goal under the Plan in each trade in which it has employees. The overall good faith performance by other Contractors and Subcontractors toward a goal in an approved Plan does not excuse any covered Contractor's or Subcontractor's failure to take good faith efforts to achieve the Plan goals and timetables.
- 4. The Contractor shall implement the specific affirmative action standards provided in paragraphs 7 a through p of these specifications. The goals set forth in the solicitation from which this contract resulted are expressed as percentages of the total hours of employment and training of minority and female utilization the Contractor should reasonably be able to achieve in each construction trade in which it has employees in the covered area. Covered construction Contractors performing construction work in geographical areas where they do not have a Federal or federally assisted construction contract shall apply the minority and female goals established for the geographical area where the work is being performed. Goals are published periodically in the Federal Register in notice form, and such notices may be obtained from any Office of Federal Contract Compliance Programs office or from Federal procurement contracting officers. The Contractor is expected to make substantially uniform progress in meeting its goals in each craft during the period specified.
- 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 complied 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 m 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.
- Validate all tests and other selection requirements where there is an obligation to do so under 41 CFR Part 60-3.
- 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.
- Document and maintain a record of all solicitations of offers for subcontracts from minority and female construction contractors and suppliers, including circulation of solicitations to minority and female contractor associations and other business associations.
- p. Conduct a review, at least annually, of all supervisors' adherence to and performance under the Contractor's EEO policies and affirmative action obligations.
- 8. Contractors are encouraged to participate in voluntary associations which assist in fulfilling one or more of their affirmative action obligations (7a through p). The efforts of a contractor association, joint contractor-union, contractor-community, or other similar group of which the Contractor is a member and participant, may be asserted as fulfilling any one or more of its obligations under 7a through p of these Specifications provided that the Contractor actively participates in the group, makes every effort to assure that the group has a positive impact on the employment of minorities and women in the industry, ensures that the concrete benefits of the program are reflected in the Contractor's minority and female workforce participation, makes a good faith effort to meet its individual goals and timetables and can provide access to documentation which demonstrates the effectiveness of actions taken on behalf of the Contractor. The obligation to comply, however, is the Contractor's and failure of such a group to fulfill an obligation shall not be a defense for the Contractor's noncompliance.
- 9. Goals for women have been established. However, the Contractor IS required to provide equal employment opportunity and to take affirmative action for all minority groups, both male and female and all women, both minority and non-minority. Consequently, the Contractor may be in violation of the Executive Order if a particular group is employed in a substantially disparate manner, that is even thought the Contractor has achieved its goals for women, the Contractor may be in violation of the Executive Order if a specific minority group of women is underutilized.
- 10. The Contractor shall not use the goals and timetables or affirmative action standards to discriminate against any person because of race, color, religion, sex, sexual orientation, gender identity, or national origin.
- 11. The Contractor shall not enter into any Subcontract with any person or firm debarred from Government contracts pursuant to Executive Order 11246.
- 12. The Contractor shall carry out such sanctions and penalties for violation of these specifications and the Equal Opportunity Clause, including suspension, termination and cancellation of existing subcontracts as may be imposed or ordered pursuant to Executive Order 11246, as amended, and its implementing regulations by the Office of Federal Contract Compliance Programs. Any Contractor who fails to carry out such sanctions and penalties shall be in violation of these specifications and Executive Order 11246. as amended.

- 13. The Contractor, in fulfilling its obligations under these specifications shall implement specific affirmative action steps, at least as extensive as those standards prescribed in paragraph 7 of these specifications, so as to achieve maximum results from Its efforts to ensure equal employment opportunity. If the Contractor fails to comply with the requirements of the Executive Order, the implementing regulations, or these specifications, the Director will proceed in accordance with 41 CFR 60-4.8.
- 14. The Contractor shall designate and make known to the Department a responsible official as the EEO Officer to monitor all employment related activity, to ensure that the company EEO policy is being carried out, to submit reports relating to the provisions hereof as may be required by the Government and to keep records. Records shall at least include for each employee the name, address, telephone numbers, construction trade, union affiliation if any, employee identification number when assigned, social security number, race, sex, status (e.g., mechanic, apprentice, trainee, helper, or laborer), dates of changes in status, hours worked per week in the indicated trade, rate of pay, and locations at which the work was performed. Records shall be maintained in an easily understandable and retrievable form; however, to the degree that existing records satisfy this requirement, Contractors will not be required to maintain separate records.
- 15. Nothing herein provided shall be construed as a limitation upon the application of other laws which establish different standards of compliance or upon the application of requirements for the hiring of local or other area residents (e.g., those under the Public Works Employment Act of 1977 and the Community Development Block Grant Program).

ATTACHMENT A

Economic Area Go	oal (Percent)
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 Richm	ond

VA Sussex; VA Charlottesville; VA Emporia; VA South Boston	
023 Norfolk - Virginia Beach - Newport News VA:	
SMSA Counties:	
5680 Newport News- Hampton, VA	27.1
VA Gloucester; VA James City; VA York; VA Hampton; VA Newport	
News; VA Williamsburg.	
5720 Norfolk - Virginia Beach - Portsmouth, VA - NC	26.6
NC Currituck; VA Chesapeake; VA Norfolk; VA Portsmouth; VA	
Suffolk; VA Virginia Beach.	
Non-SMSA Counties	29.7
NC Bertie; NC Camden; NC Chowan; NC Gates; NC Hertford;	
NC Pasquotank; NC Perquimans; VA Isle of Wight; VA Matthews;	
VA Middlesex; VA Southampton; VA Surry; VA Franklin.	
Washington, DC:	
020 Washington, DC.	
SMSA Counties:	
8840 Washington, DC - MD - VA	28.0
DC District of Columbia; MD Charles; MD Montgomery MD Prince	
Georges; VA Arlington; VA Fairfax; VA Loudoun; VA Prince William	
VA Alexandria; VA Fairfax City; VA Falls Church.	
Non- SMSA Counties	25.2
MD Calvert; MD Frederick; MD St. Marys: MD Washington; VA Clarke;	
VA Culpeper; VA Fauquier; VA Frederick; VA King George; VA Page; VA	
Rappahannock; VA Shenandoah; VA Spotsylvania; VA Stafford; VA	
Warren: VA Westmoreland; VA Fredericksburg; VA Winchester WV Berkeley;	
WV Grant; WV Hampshire; WV Hardy; WV Jefferson; WV Morgan.	
Tennessee:	
052 Johnson City - Kingsport - Bristol, TN - VA	
SMSA Counties:	
3630 Johnson City - Kingsport -Bristol, TN-VA	2.6
TN Carter; TN Hawkins; TN Sullivan; TN Washington; VA Scott: VA	
Washington; VA Bristol.	
Non-SMSA Counties	3.2
TN Greene; TN Johnson; VA Buchanan; VA Dickenson; VA Lee;	
VA Russell; VA Smyth; VA Tazewell; VA Wise; VA Norton; WV McDowell;	
WV Mercer.	
Maryland:	
019 Baltimore MD	
Non-SMSA Counties	23.6
MD Caroline; MD Dorchester; MD Kent; MD Queen Annes; MD Somerset;	
MD Talbot; MD Wicomico; MD Worchester; VA Accomack; VA	
Northampton.	

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.

VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR DBE REQUIREMENTS

August 18, 2017

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

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

(a) Disadvantaged Business Enterprise (DBE) Program Requirements

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

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

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

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

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

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

(b) DBE Certification

The only DBE firms eligible to perform work on a federal-aid contract for DBE contract goal credit

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

(c) Bank Services

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

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

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

- 1. That the management and bidding officers of its firm agree to comply with the bidding and project construction and administration obligations of the USDOT DBE Program requirements and regulations of 49 CFR Part 26 as amended, and VDOT's Road and Bridge Specifications and DBE Program requirements and regulations.
- 2. Under penalty of perjury and other applicable penal law that it has complied with the DBE Program requirements in submitting the bid, and shall comply fully with these requirements in the bidding, award, and execution of the Contract.
- 3. To ensure that DBE firms have been given full and fair opportunity to participate in the performance of the Contract. The bidder certifies that all reasonable steps were, and will be, taken to ensure that DBE firms had, and will have, an opportunity to compete for and perform work on the Contract. The bidder further certifies that the bidder shall not discriminate on the basis of race, color, age, sex, sexual orientation, gender identity, or national origin in the performance of the Contract or in the award of any subcontract. Any agreement between a bidder and a DBE whereby the DBE promises not to provide quotations for performance of work to other bidders is prohibited.
- 4. As a bidder, good faith efforts were made to obtain DBE participation in the proposed contract at or above the goal for DBE participation established by VDOT. It has submitted as a part of its bid true, accurate, complete, and detailed documentation of the good faith efforts it performed to meet the Contract goal for DBE participation. The bidder, by signing and submitting its bid, certifies the DBE participation information submitted within the stated time thereafter is true, correct, and complete, and that the information provided includes the names of all DBE firms that will participate in the Contract, the specific line item(s) that each listed DBE firm will perform, and the creditable dollar amounts of the participation of each listed DBE. The specific line item must reference the VDOT line number and item number contained in the proposal.
- 5. The bidder further certifies, by signing its bid, it has committed to use each DBE firm listed for the specific work item shown to meet the Contract goal for DBE participation. Award of the Contract will be conditioned upon meeting these and other listed requirements of 49 CFR Part 26.53 and the contract documents. By signing the bid, the bidder certifies on work that it proposes to sublet; it has made good faith efforts to seek out and consider DBEs as potential subcontractors. The bidder shall contact DBEs to solicit their interest, capability, and prices in sufficient time to allow them to respond effectively, and shall retain on file proper documentation

to substantiate its good faith efforts. Award of the Contract will be conditioned upon meeting these and other listed requirements of 49 CFR Part 26.53 and the contract documents.

- 6. Once awarded the Contract, the Contractor shall make good faith efforts to utilize DBE firms to perform work designated to be performed by DBEs at or above the amount or percentage of the dollar value specified in the bidding documents. Further, the Contractor understands it shall not unilaterally terminate, substitute for, or replace any DBE firm that was designated in the executed contract in whole or in part with another DBE, any non-DBE firm, or with the Contractor's own forces or those of an affiliate of the Contractor without the prior written consent of VDOT as set out within the requirements of this provision.
- 7. Once awarded the contract, the Contractor shall designate and make known to the Department a liaison officer who is assigned the responsibility of administering and promoting an active and inclusive DBE program as required by 49 CFR Part 26 for DBEs. The designation and identity of this officer need be submitted only once by the Contractor during any twelve (12) month period at the preconstruction conference for the first contract the Contractor has been awarded during that reporting period. The Department will post such information for informational and administrative purposes at VDOT's Internet Civil Rights Division website.
- 8. Once awarded the Contract, the Contractor shall comply fully with all regulatory and contractual requirements of the USDOT DBE Program, and that each DBE firm participating in the Contract shall fully perform the designated work items with the DBE's own forces and equipment under the DBE's direct supervision, control, and management. Where a contract exists and where the Contractor, DBE firm, or any other firm retained by the Contractor has failed to comply with federal or VDOT DBE Program regulations and/or their requirements on that contract, VDOT has the authority and discretion to determine the extent to which the DBE contract regulations and/or requirements have not been met, and will assess against the Contractor any remedies available at law or provided in the Contract in the event of such a contract breach.
- 9. In the event a bond surety assumes the completion of work, if for any reason VDOT has terminated the prime Contractor, the surety shall be obligated to meet the same DBE contract terms and requirements as were required of the original prime Contractor in accordance with the requirements of this specification.

(e) Disqualification of Bidder

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

(f) Bidding Procedures

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

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

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

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

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

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

Forms C-48, C-49, C-111, and C-112 can be obtained from the VDOT website at: http://vdotforms.vdot.virginia.gov/

Instructions for submitting Form C-111 can be obtained from the VDOT website at: http://www.virginiadot.org/business/resources/const/Exp_DBE_Commitments.pdf

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

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

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

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

- a. Soliciting through reasonable and available means, such as but not limited to, attendance at pre-bid meetings, advertising, and written notices to DBEs who have the capability to perform the work of the Contract. Examples include: advertising in at least one daily/weekly/monthly newspaper of general circulation, as applicable; phone contact with a completely documented telephone log, including the date and time called, contact person, or voice mail status; and internet contacts with supporting documentation, including dates advertised. The bidder shall solicit this interest no less than five (5) business days before the bids are due so that the solicited DBEs have enough time to reasonably respond to the solicitation. The bidder shall determine with certainty if the DBEs are interested by taking reasonable steps to follow up initial solicitations as evidenced by documenting such efforts as requested on Form C-49, DBE Good Faith Efforts Documentation.
- b. Selecting portions of the work to be performed by DBEs in order to increase the likelihood that the DBE goals will be achieved. This includes, where appropriate, breaking out contract work items into economically feasible units to facilitate DBE participation, even when the Contractor might otherwise prefer to completely perform all portions of this work in its entirety or use its own forces;
- c. Providing interested DBEs with adequate information about the plans, specifications, and requirements of the Contract in a timely manner, which will assist the DBEs in responding to a solicitation;
- d. Negotiating for participation in good faith with interested DBEs;
 - (1) Evidence of such negotiation shall include the names, addresses, and telephone numbers of DBEs that were considered; dates DBEs were contacted; a description of the information provided regarding the plans, specifications, and requirements of the Contract for the work selected for subcontracting; and, if insufficient DBE participation seems likely, evidence as to why additional agreements could not be reached for DBEs to perform the work;
 - (2) A bidder using good business judgment should consider a number of factors in negotiating with subcontractors, including DBE subcontractors, and should take a firm's price, qualifications, and capabilities, as well as contract goals, into consideration. However, the fact that there may be some additional costs involved in finding and using DBEs is not sufficient reason for a bidder's failure to meet the Contract goal for DBE participation, as long as such costs are reasonable and comparable to costs customarily appropriate to the type of work under consideration. Also, the ability or desire of a bidder to perform the work of a contract with its own organization does not relieve the bidder of the responsibility to make diligent good faith efforts. Bidders are not, however, required to accept higher quotes from DBEs if the price difference can be shown by the bidder to be excessive, unreasonable, or greater than would normally be expected by industry standards;
- e. A bidder cannot reject a DBE as being unqualified without sound reasons based on a thorough investigation of the DBE's capabilities. The DBE's standing within its industry, membership in specific groups, organizations, associations, and political or social affiliations, and union vs. non-union employee status are not legitimate causes for the rejection or non-solicitation of bids in the bidder's efforts to meet the project goal for DBE participation;
- f. Making efforts to assist interested DBEs in obtaining bonding, lines of credit, or insurance as required by VDOT or by the bidder/Contractor;
- g. Making efforts to assist interested DBEs in obtaining necessary equipment, supplies, materials, or related assistance or services subject to the restrictions contained in these provisions:

h. Effectively using the services of appropriate personnel from VDOT and from DMBE; available minority/women community or minority organizations; contractors' groups; local, state, and Federal minority/ women business assistance offices; and other organizations as allowed on a case-by-case basis to provide assistance in the recruitment and utilization of qualified DBEs.

(g) Documentation and Administrative Reconsideration of Good Faith Efforts

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

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

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

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

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

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

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

During the Contract: If a DBE, through no fault of the Contractor, is unable or unwilling to fulfill his agreement with the Contractor, the Contractor shall immediately notify the Department and provide all relevant facts. If a Contractor relieves a DBE subcontractor of the responsibility to perform work under their subcontract, the Contractor is encouraged to take the appropriate steps

to obtain a DBE to perform an equal dollar value of the remaining subcontracted work. In such instances, the Contractor is expected to seek DBE participation towards meeting the goal during the performance of the Contract.

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

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

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

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

(h) DBE Participation for Contract Goal Credit

- Cost-plus subcontracts will not be considered to be in accordance with normal industry practice and will not normally be allowed for credit.
- 2. The applicable percentage of the total dollar value of the Contract or Subcontract awarded to the DBE will be counted toward meeting the Contract goal for DBE participation in accordance with the DBE Program-Related Certifications Made by Bidders\Contractors section of this Special Provision for the value of the work, goods, or services that are actually performed or provided by the DBE firm itself or subcontracted by the DBE to other DBE firms.
- 3. When a DBE performs work as a participant in a joint venture with a non-DBE firm, the Contractor may count toward the DBE goal only that portion of the total dollar value of the Contract equal to the distinctly defined portion of the Contract work that the DBE has performed with the DBE's own forces or in accordance with the provisions of this Section. The Department shall be contacted in advance regarding any joint venture involving both a DBE firm and a non-DBE firm to coordinate Department review and approval of the joint venture's organizational structure and proposed operation where the Contractor seeks to claim the DBE's credit toward the DBE contract goal.
- 4. When a DBE subcontracts part of the work of the Contract to another firm, the value of that subcontracted work may be counted toward the DBE contract goal only if the DBE's subcontractor at a lower tier is a certified DBE. Work that a DBE subcontracts to either a non-DBE firm or to a non-certified DBE firm will not count toward the DBE contract goal. The cost

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

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

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

(i) Performing a Commercially Useful Function (CUF)

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

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

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

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

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

VDOT Makes Final Determination On Whether a CUF Is Performed: VDOT has the final authority to determine whether a DBE firm has performed a CUF on a federal-aid contract. To determine whether a DBE is performing or has performed a CUF, VDOT will evaluate the amount of work subcontracted by that DBE firm or performed by other firms and the extent of the involvement of other firms' forces and equipment. Any DBE work performed by the Contractor or by employees or equipment of the Contractor shall be subject to disallowance under the DBE Program, unless the independent validity and need for such an arrangement and work is demonstrated.

(j) Verification of DBE Participation and Imposed Damages

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

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

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

The Contractor shall submit to the Responsible Engineer its progress schedule with a copy to the

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

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

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

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

(k) Documentation Required for Semi-final Payment

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

(I) Documentation Required for Final Payment

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

(m) Prompt Payment Requirements

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

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

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

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

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

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

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

(n) Miscellaneous DBE Program Requirements

- 1. **Loss of DBE Eligibility:** When a DBE firm has been removed from eligibility as a certified DBE firm, the following actions will be taken:
 - a. When a Bidder/Contractor has made a commitment to use a DBE firm that is not currently certified, thereby making the Contractor ineligible to receive DBE participation credit for work performed, and a subcontract has not been executed, the ineligible DBE firm does not count toward either the Contract goal or overall goal. The Contractor shall meet the Contract goal with a DBE firm that is eligible to receive DBE credit for work performed, or must demonstrate to the Contract Engineer that it has made good faith efforts to do so.
 - b. When a Bidder/Contractor has executed a subcontract with a certified DBE firm prior to official notification of the DBE firm's loss of eligibility, the Contractor may continue to use the firm on the Contract and shall continue to receive DBE credit toward its DBE goal for the subcontractor's work.

- c. When VDOT has executed a prime contract with a DBE firm that is certified at the time of contract execution but that is later ruled ineligible, the portion of the ineligible firm's performance on the Contract before VDOT has issued the notice of its ineligibility shall count toward the Contract goal.
- Termination of DBE: If a certified DBE subcontractor is terminated, or fails, refuses, or is unable to complete the work on the Contract for any reason, the Contractor must promptly request approval to substitute or replace that firm in accordance with this section of this Special Provision.

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

- a. All Contractor requests to terminate, substitute, or replace a certified DBE shall be in writing, and shall include the following information:
 - (1) The date the Contractor determined the DBE to be unwilling, unable, or ineligible to perform.
 - (2) The projected date that the Contractor shall require a substitution or replacement DBE to commence work if consent is granted to the request.
 - (3) A brief statement of facts describing and citing specific actions or inaction by the DBE giving rise to the Contractor's assertion that the DBE is unwilling, unable, or ineligible to perform;
 - (4) A brief statement of the affected DBE's capacity and ability to perform the work as determined by the Contractor;
 - (5) A brief statement of facts regarding actions taken by the Contractor which are believed to constitute good faith efforts toward enabling the DBE to perform;
 - (6) The current percentage of work completed on each bid item by the DBE;
 - (7) The total dollar amount currently paid per bid item for work performed by the DBE;
 - (8) The total dollar amount per bid item remaining to be paid to the DBE for work completed, but for which the DBE has not received payment, and with which the Contractor has no dispute;
 - (9) The total dollar amount per bid item remaining to be paid to the DBE for work completed, but for which the DBE has not received payment, and over which the Contractor and/or the DBE have a dispute.
- b. Contractor's Written Notice to DBE of Pending Request to Terminate and Substitute with another DBE.

The Contractor shall send a copy of the "request to terminate and substitute" letter to the affected committed DBE firm, in conjunction with submitting the request to the DCRO. The affected DBE firm may submit a response letter to the Department within two (2) business days of receiving the notice to terminate from the Contractor. The affected DBE firm shall explain its position concerning performance on the committed work. The Department will consider both the Contractor's request and the DBE's response and explanation before approving the Contractor's termination and substitution request, or determining if any action should be taken against the Contractor.

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

Proposed Substitution of Another Certified DBE

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

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

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

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

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

- a. To perform a CUF the DBE trucking firm shall be completely responsible for the management and supervision of the entire trucking operation for which the DBE is responsible by subcontract on a particular contract. There shall not be a contrived arrangement, including, but not limited to, any arrangement that would not customarily and legally exist under regular construction project subcontracting practices for the purpose of meeting the DBE contract goal;
- The DBE must own and operate at least one fully licensed, insured, and operational truck used in the performance of the Contract work. This does not include a supervisor's pickup truck or a similar vehicle that is not suitable for and customarily used in hauling the necessary materials or supplies;

- c. The DBE receives full contract goal credit for the total reasonable amount the DBE is paid for the transportation services provided on the Contract using trucks the DBE owns, insures, and operates using drivers that the DBE employs and manages;
- d. The DBE may lease trucks from another certified DBE firm, including from an owner-operator who is certified as a DBE. The DBE firm that leases trucks from another DBE will receive credit for the total fair market value actually paid for transportation services the lessee DBE firm provides on the Contract;
- e. The DBE may also lease trucks from a non-DBE firm, including an owner-operator. The DBE who leases trucks from a non-DBE is entitled to credit for the total value of the transportation services provided by non-DBE lessees, not to exceed the value of transportation services provided by DBE-owned trucks on the Contract. For additional participation by non-DBE lessees, the DBE will only receive credit for the fee or commission it receives as a result of the lease arrangement.

EXAMPLE

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

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

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

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

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

- * With respect to the other two trucks provided by non-DBE Firm Z, DBE credit could be awarded only for the fees or commissions pertaining to those trucks that DBE Firm X receives as a result of the lease with non-DBE Firm Z.
- f. For purposes of this section, the lease must indicate that the DBE firm leasing the truck has exclusive use of and control over the truck. This will not preclude the leased truck from working for others during the term of the lease with the consent of the DBE, provided the lease gives the DBE absolute priority for and control over the use of the leased truck. Leased trucks must display the name and identification number of the DBE firm that has leased the truck at all times during the life of the lease.
- 4. **Data Collection:** In accordance with 49CFR Section 26.11, all firms bidding on prime contracts and bidding or quoting subcontracts on federal-aid projects shall provide the following information to the Contract Engineer annually.
 - Firm name
 - Firm address
 - Firm's status as a DBE or non-DBE
 - · The age of the firm and
 - The annual gross receipts of the firm

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

All bidders, including DBE prime Contractor bidders, shall complete and submit to the Contract Engineer the Subcontractor/Supplier Solicitation and Utilization Form C-48 for each bid submitted; to be received within ten (10) business days after the bid opening. Failure of bidders to submit this form in the time frame specified may be cause for disqualification of the bidder and rejection of their bid in accordance with the requirements of this Special Provision, the Contract specifications, and VDOT Road and Bridge specifications.

(o) Suspect Evidence of Criminal Behavior

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

Suspected DBE Fraud

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

(p) Summary of Remedies for Non-Compliance with DBE Program Requirements

Failure of any bidder\Contractor to comply with the requirements of this Special Provision for Section 107.15 of the Virginia Road and Bridge Specifications, which is deemed to be a condition of bidding, or where a contract exists, is deemed to constitute a breach of contract shall be remedied in accordance with the following:

1. Disadvantaged Business Enterprise (DBE) Program Requirements

The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award, administration, and performance of this contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which will result in the termination of this contract or other such remedy, as VDOT deems appropriate.

All administrative remedies noted in this provision are automatic unless the Contractor exercises the right of appeal within the required timeframe(s) specified herein.

2. DBE Program-Related Certifications Made by Bidders\Contractors

Once awarded the contract, the Contractor shall comply fully with all regulatory and contractual requirements of the USDOT DBE Program, and that each certified DBE firm participating in the Contract shall fully perform the designated work items with the DBE's own forces and equipment under the DBE's direct supervision, control, and management. Where a contract exists and where the Contractor, DBE firm, or any other firm retained by the Contractor has failed to comply with federal or VDOT DBE Program regulations and/or their requirements on that contract, VDOT has the authority and discretion to determine the extent to which the DBE contract requirements have not been met, and will assess against the Contractor any remedies available at law or provided in the Contract in the event of such a contract breach.

3. Disqualification of Bidder

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

4. Bidding Procedures

The failure of a bidder to submit the required documentation within the timeframes specified in the **Contract Goal, Good Faith Efforts Specified** section of this Special Provision may be cause for rejection of that bidder's bid. If the lowest bidder is rejected for failure to submit required documentation in the specified time frames, the Department may either award the work to the next lowest bidder, or re-advertise and construct the work under contract or otherwise as determined by the Commonwealth.

In order to award a contract to a bidder that has failed to meet DBE contract goal requirements, VDOT will determine if the bidder's efforts were adequate good faith efforts, and if given all relevant circumstances, those efforts were to the extent a bidder actively and aggressively seeking to meet the requirements would make. Regardless of the DBE contract goal participation level proposed by the bidder or the extent of good faith efforts shown, all bidders shall timely and separately file their completed and executed Forms C-111, C-112, C-48, and Form C-49, as aforementioned, or face potential bid rejection. If a bidder does not submit it's completed and executed C-111, or C-112, when required by this Special Provision, the bidder's bid will be considered non-responsive and may be rejected. If, after reconsideration, the Department determines the bidder has failed to meet the requirements of the Contract goal and has failed to make adequate good faith efforts to achieve the level of DBE participation as specified in the bid proposal, the bidder's bid will be rejected. If sufficient documented evidence is presented to demonstrate that the apparent low bidder made reasonable good faith efforts, the Department will award the Contract and reduce the DBE requirement to the actual commitment identified by the lowest successful bidder at the time of its bid. The Contractor is

encouraged to seek additional participation during the life of the Contract.

If the Contractor fails to conform to the schedule of DBE participation as shown on the progress schedule, or at any point at which it is clearly evident that the remaining dollar value of allowable credit for performing work is insufficient to obtain the scheduled participation, the Contractor and any aforementioned affiliates may be enjoined from bidding for 60 days or until such time as conformance with the schedule of DBE participation is achieved. In such instances, the Contractor is expected to seek DBE participation towards meeting the goal during the prosecution of the Contract.

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

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

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

5. Verification of DBE Participation and Imposed Damages

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

(q) Suspect Evidence of Criminal Behavior

In addition to the remedies described heretofore in this provision VDOT also exercises its rights with respect to the following remedies:

- Failure of a bidder, Contractor, or subcontractor to comply with the Virginia Department of Transportation Road and Bridge Specifications and these Special Provisions wherein there appears to be evidence of criminal conduct shall be referred to the Attorney General for the Commonwealth of Virginia and/or the FHWA Inspector General for criminal investigation and, if warranted prosecution.
- In appropriate cases, VDOT will bring to the attention of the U. S. Department of Transportation (USDOT) any appearance of false, fraudulent, or dishonest conduct in connection with the DBE program, so that USDOT can take the steps, e.g., referral to the Department of Justice for criminal prosecution, referral to the USDOT Inspector General, action under suspension and debarment or Program Fraud and Civil Penalties rules provided in 49CFR Part 31.

SP102-000510-02

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.

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

- 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

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.

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

BUILD AMERICA, BUY AMERICA ACT REQUIREMENTS FOR CONSTRUCTION MATERIALS

November 4, 2022

SECTION 107.03 FEDERAL AID PROVISIONS of the Specifications is amended to include the following:

In accordance with the provisions of the Build America, Buy America Act (BABA), Public Law, No. 117-58, §§ 70901-70953, and any implementing regulations or policies (hereinafter referred to together as "BABA Requirements"): except as otherwise specified, all construction materials that are to be permanently incorporated for use on federal aid projects (hereinafter be referred to as "BABA Construction Materials") shall be manufactured in the United States of America. Note that the provisions herein do not apply to iron and steel, which are addressed in another provision of the Contract.

BABA Construction Materials. Manufactured in the United States of America means that at least the final manufacturing process and the immediately preceding manufacturing stage for the construction materials, and any other stages in the manufacturing process that are specified in the BABA Requirements or FHWA guidance, all occurred in the United States.

BABA Construction Materials, as defined and designated in the BABA Requirements, include any article, material, or supply that is or consists primarily of:

- Non-ferrous metals:
- Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- Glass (including fiber optic glass);
- Lumber; or
- Drywall.

Any items that consist of at least one of the listed BABA Construction Materials combined together through a manufacturing process with another listed BABA Construction Material or with a non-listed item are considered to be "Manufactured Products" under BABA, not BABA Construction Materials. Therefore, the BABA requirements for "Manufactured Products" and FHWA guidance would apply.

The BABA Construction Materials requirements do not apply to: cement and cementitious materials; aggregates such as stone, sand, or gravel; aggregate binding agents (including asphalt cement) or additives; or any material composed of or derived from these items.

Waivers:

The process for receiving a waiver of BABA requirements for construction materials is provided at BABA § 70914(b) through (d), and any federal regulations adopted in accordance with this law. Other than any FHWA or other Federal agency waivers of general applicability that may be in effect, the Contractor shall not anticipate that any BABA provisions will be waived.

Certification of Compliance:

The Contractor is required to submit a Certificate of Compliance prior to incorporating any items into the project containing any of the above-listed BABA Construction Materials. This shall be accomplished by the Contractor submitting the appropriate Form C_76 Certificate of Compliance to the Department when the items are delivered to the project site. The Certificate of Compliance will certify that the final

manufacturing process and the immediately preceding manufacturing stage for the construction materials occurred in the United States. The certificate must be signed and dated by the Prime Contractor's Superintendent and include a BABA Requirements Submittal Number, which is simply the Contractor's project specific sequential numbering system that will allow the Contractor and Department to track the total number of certificates provided and the individual construction materials associated with each certificate.

Supporting Documentation:

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

The Department or FHWA may review the Contractor's supporting documentation to verify compliance with the BABA Requirements for construction materials at any time upon request. Supporting documentation shall be provided within five business days of the request. The burden of proof to meet the BABA Requirements for construction materials rests with the Contractor. If the supporting documentation does not undeniably demonstrate to FHWA or the Department that the BABA Construction Materials identified in the Certificate of Compliance were produced in the United States, then such construction materials will be considered unacceptable and must be replaced at no cost to the Department, and if not replaced the Department, in addition to other rights and remedies, may have them replaced and deduct the cost of removal and replacement from any moneys due or that become due the Contractor in accordance with Section 106.10 of the Specifications.

VIRGINIA DEPARTMENT OF TRANSPORTATION SPECIAL PROVISION FOR PREVAILING WAGE RATES

November 3, 2021

SECTION 107 - LEGAL RESPONSIBILITIES of the Specifications is amended as follows:

Section 107.13 – Labor and Wages is amended as follows:

Section 107.13(a) Predetermined Minimum Wages is replaced with the following:

- (a) Prevailing Wage Rates: The provisions of federal and state laws requiring the payment of a prevailing minimum wage rate are incorporated in and expressly made a part of this Contract. The Contractor and the Contractor's subcontractors shall promptly comply with all such applicable provisions, as well as the following.
 - 1. If the Contractor needs a job classification not listed in the wage determination to submit a bid or comply with this provision, the Contractor shall submit to the Department a completed Additional Classification and Wage Rate Request using Form C-51. If other or additional classifications are used, omission of classifications shall not be cause for additional compensation to the Contractor. The Contractor shall be responsible for determining local practices with regard to the application of the various labor classifications.
 - 2. Upon the award of the Contract, the Contractor shall certify, under oath, to the Commissioner of the Virginia Department of Labor and Industry (VDOLI) the pay scale for each craft or trade employed on the project to be used by the Contractor and any of the Contractor's subcontractors for work to be performed under the Contract. This certification shall, for each craft or trade employed on the project, specify the total hourly amount to be paid to employees, including wages and applicable fringe benefits, provide an itemization of the amount paid in wages and each applicable benefit, and list the names and addresses of any third party fund, plan or program to which benefit payments will be made on behalf of employees. certification form available at: www.doli.virginia.gov/wpcontent/uploads/2021/04/DOLI-Pay-Scale-Certification-for-Public-Works-Projects.pdf. The form may be emailed to prevailingwage@doli.virginia.gov, faxed to 804-371-6524, or mailed to Virginia Department of Labor and Industry, 600 East Main St., Suite 207, Richmond, VA, 23219, Attn: Prevailing Wage.
 - 3. The Contractor and the Contractor's subcontractors performing work on this Contract shall post the general prevailing wage rate for each craft and classification involved in prominent and easily accessible places accessible to all employees at the site of the work or at any such places as are used by the Contractor or subcontractors to pay workers their wages. Within 10 days of such posting, the Contractor or subcontractors shall certify to the Commissioner of VDOLI their compliance with this requirement. The certification form available at: www.doli.virginia.gov/wp-content/uploads/2021/04/PW_Posting_Compliance_Form.pdf. The form may be emailed to prevailingwage@doli.virginia.gov, faxed to 804-371-6524, or mailed to Virginia Department of Labor and Industry, 600 East Main St., Suite 207, Richmond, VA, 23219, Attn: Prevailing Wage.
 - 4. The Contractor and the Contractor's subcontractors shall keep, maintain and preserve (i) records relating to the wages paid to and hours worked by each individual performing the work of any mechanic, laborer, or worker and (ii) a schedule of the occupation or work classification at which each individual performing the work of any mechanic, laborer, or worker on the public works project is employed during each work day and week. The

employer shall preserve these records for a minimum of six years and make such records available to the Department of Labor and Industry within 10 days of a request and shall certify that records reflect the actual hours worked and the amount paid to its workers for whatever time period they request.

5. The Contractor shall insert this Special Provision into any subcontracts let to subcontractors for performance of services in connection with the Contract.

SS109-002020-01 May 1, 2023

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.
- 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) hereof 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 provision**s** 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.

SS234-002020-01 May 6, 2022

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.

SS235-002020-01 May 6, 2022

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 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.

SS246-002020-02 May 6, 2022

VIRGINIA DEPARTMENT OF TRANSPORTATION 2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS SECTION 246 – PAVEMENT MARKING

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

Section 246.02 – 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.

- 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:

 Coefficient of Retroreflected Luminance (R_L) (mcd/ft²/fc) Paint

 Color
 Initial
 1 Year In-Service

 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%).
- 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

	X	у	X	у	X	у	X	у	Y%
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	50.0-60.0

- 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.
- 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.
- I. 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_L) in accordance with ASTM E1710 for 30-meter geometry when measured in the skip line area.

Coefficient of Retroreflected Luminance (R_L)

(1110	ant no meni	Opiastic
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. TiO2 (%) 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

	Х	у	Х	у	Х	у	Х	у	Υ%
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:.

Night T	Night Time Color, Chromaticity Coordinates (with Drop-on Beads) Thermoplastic							
	•	1 2		3		4		
Color	Х	у	Х	У	Х	у	Х	у
Yellow	0.486	0.439	0.520	0.480	0.560	0.440	0.498	0.426

- 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.
- 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.
- I. **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 30meter geometry when measured in the skip line or centerline areas.

Coefficient of Retroreflected Luminance (R_L) (mcd/ft²/fc) Dry Retro Removable Tape-Type D. Class III

Color	Initial	90 Days In-Service
White	250	150
Yellow	200	100

(2) **Maintained Wet Retroreflectivity:** The wet photometric quantity to be measured is the coefficient of retroreflected luminance (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/ft²/fc) Wet Retro Removable Tape-Type D. Class III

		- 14.00 III
Color	Initial	90 Days In-Service
White	150	100
Yellow	125	75

- (3) Day and Nighttime Color and Luminance (Y%): According to ASTM D6628.
- (4) **Adhesive Bond Rating:** The average adhesive bond rating (from transverse and longitudinal lines) shall be 3 or higher according the NTPEP Work Plan.
- (5) **Skid Resistance:** The initial skid resistance shall be at least 45 BPN when tested according to ASTM E303, if available.
- (6) **Thickness:** Per the manufacturer's recommendation.
- (7) Adhesion: No line shall be displaced, torn or missing.

b. **Batch Testing**:

Wet reflective, removable tape batch testing will be performed by the Department on samples obtained from the point of manufacture or from the field in accordance with the Materials Division's Manual of Instructions. Test results shall be compared against the following specifications and requirements:

(1) Retroreflectivity: Refer to initial requirements

(2) Day and Night Color and Luminance: Refer to initial requirements

(3) **Thickness:** Refer to initial requirements

- (4) **Width:** The width shall be no less than the nominal width and no greater than 1/8" of the nominal width.
- (5) **Length:** The length shall be no less than the length stated on the manufacturer's packaging.
- (6) Skid Resistance: Refer to initial requirements.

2. Removable Black, Non-Reflective Tape (Type E):

Removable black, non-reflective tape shall be a durable, pliant material consisting of a mixture of polymeric materials, pigments and a friction material evenly distributed throughout its cross-sectional area and embedded into the surface. Removable black, non-reflective tape shall be suitable for use on asphalt concrete pavement surfaces, and shall be selected from the Department's Approved List 17.

- a. **Initial Approval** Maintained adhesive bond rating shall conform to the following requirements after the material has been installed on the test deck for 90 days:
 - (1) **Adhesive Bond Rating:** The average adhesive bond rating (from transverse and longitudinal lines) shall be 3 or higher according to the NTPEP Work Plan.
 - (2) **Skid Resistance:** The initial skid resistance shall be at least 45 BPN when tested according to ASTM E303, if available.
 - (3) Thickness: Per the manufacturer's recommendation.
 - (4) Adhesion: No line shall be displaced, be torn or missing.

b. Batch Testing

Black removable, non-reflective tape batch testing will be performed by the Department on samples obtained from the point of manufacture or from the field in accordance with the Materials Division's Manual of Instructions. Test results shall be compared against the following specifications:

- (1) Skid Resistance: Refer to initial requirements
- (2) **Thickness:** Refer to initial requirements
- (3) **Width:** The width shall be no less than the nominal width and no greater than 1/8" of the nominal width.
- (4) **Length:** The length shall be no less than the length stated on the manufacturer's packaging.

SS512-002020-03 July 1, 2022

VIRGINIA DEPARTMENT OF TRANSPORTATION 2020 ROAD AND BRIDGE SUPPLEMENTAL SPECIFICATIONS SECTION 512 – MAINTAINING TRAFFIC

SECTION 512 - MAINTAINING TRAFFIC of the Specifications is amended as follows:

Section 512.02(f) - Temporary (Construction) signs is replaced with the following:

Temporary (Construction) signs shall have retroreflective sign sheeting in accordance with Sections 247 and 701.

Sign substrates for rigid temporary signs and temporary overlay panels shall be fabricated of either aluminum at least 0.080-inches thick, conforming to Section 229.02(a); 0.4-inch-thick corrugated polypropylene; 0.4-inch-thick corrugated polyethylene plastic; or 0.079-inch-thick aluminum/plastic laminate as approved by the Engineer. Sign substrates shall be smooth, flat, and free of metal burrs or splinters.

Sign substrate materials for signs mounted on drums, Type 3 barricades, and portable sign stands shall be as specified below and shall be the same material that was used when the device was approved in accordance with National Cooperative Highway Research Program (NCHRP) Report 350 or MASH.

Sign Substrates for Type 3 Barricades and Portable Sign Stands
Rollup sign
0.4 inch thick corrugated polypropylene or polyethylene plastic
0.079 inch thick aluminum/plastic laminate
Sign Substrates for Drums
0.4 inch thick corrugated polypropylene or polyethylene plastic

Section 512.03 – Procedures is amended by replacing the sixth and seventh paragraphs with the following:

The Contractor shall correct ineffective or unacceptable work zone traffic control devices immediately unless allowed otherwise by the Contract.

The color of Automated Flagger Assistance Device trailers, arrow board trailers, portable traffic control signal trailers, ITS trailer equipment, and portable changeable message sign trailers and sign frames shall be either Virginia highway orange (DuPont Color No. LF74279 AT or color equivalent) or federal yellow. The back traffic facing trailer frame, where the signal and brake lights are located, shall be fully covered with 2 inch high retroreflective sheeting conforming to Section 247.02(c). The sheeting shall have alternating 11 inch wide vertical red stripes and 7 inch wide vertical white stripes.

The Contractor shall locate, remove, and dispose of all existing asphalt-embedded Snowplowable Raised Pavement Marker (SRPM) castings which lie within a travel lane that has been shifted during construction for three months or longer. The cavity left by the removal of the existing marker shall be cleaned of debris, filled with an approved mix design for resurfacing or material found on the Department's Approved List 78, and compacted before shifting traffic.

Section 512.03(a) - Temporary 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 06010-81

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 ±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 Contrctor 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 materilas 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 retroflectivity readings. Retroflectivity 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/fc). 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/fc, 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.

- 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.

FTPM spacing shall be as follows:

- When simulating solid lines, the FTPMs shall be placed every 20 feet.
- When simulating double lines, pairs of side-by-side FTPMs shall be placed every 20 feet.
- When simulating broken lines with a 10-foot-skip/30-foot-gap pattern, 3 FTPMs shall be used per skip (5 feet between each FTPM), with a 30-foot gap between simulated skips.

• When simulating dotted lines with a 3-foot skip/9-foot-gap pattern, 2 FTPMs shall be used per skip (3 feet between the two FTPMs), with a 9-foot gap between simulated skips.

FTPMs 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 FTPM 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. FTPMs 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 FTPMs 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 FTPMs 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 FTPMs shall be installed on the newly-placed pavement after the pavement is thoroughly compacted and has cooled to the FTPM manufacturer's recommended temperature for installation.

The Contractor shall maintain the FTPMs until the permanent pavement markings are installed. Damaged or missing FTPMs shall be replaced within 24 hours of discovery at the Contractor's expense with new FTPMs of the same manufacturing type, color and model. No more than one FTPM may be damaged or missing out of every skip line or dotted line simulated segment. No two consecutive FTPMs may be damaged or missing on a simulated solid line or double line application, and no more than 30% of the FTPMs may be damaged or missing on any measured 100-foot segment of simulated solid line.

Once applied, FTPMs will be considered for a single use. If a FTPM requires replacement before installation of permanent pavement markings, it shall be properly disposed of and replaced with a new FTPM at no additional cost to the Department.

FTPMs shall be removed and properly disposed of when permanent pavement markings are installed. Used FTPMs removed from the pavement, including all containers, packaging, damaged FTPM'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/fc.

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:

Pay Item	Pay Unit
Portable temporary rumble strip	Each
The following pay items are inserted:	
Pay Item	Pay Unit
Portable temporary rumble strip array	Day

SS704-002020-02 May 6, 2022

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 warranties 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.
Α	I	Conventional or Cold-Weather	15 ± 1 when wet	AC HCC	May be applied directly after paving operations	20

		Traffic Paint				
Α	II	High Build Traffic Paint	25 ± 2 when wet	AC HCC	May be applied directly after paving operations	20
В	I	Thermoplastic Alkyd	90 ± 5	AC HCC	May be applied directly after paving operations	43
	I	Thermoplastic Hydrocarbon	90 ± 5 when dry	AC HCC	Do not apply less than 30 days after paving operations	43
	II	Preformed Thermoplastic	120-130	AC HCC	Manufacturers installation instructions	73
	III	Epoxy resin	20 ± 1 when wet	AC HCC	Manufacturers installation instructions	75
	IV	Plastic-backed preformed Tape	60 - 120	AC HCC	Manufacturer's installation instructions	17
	VI	Patterned preformed Tape	20 min ¹ 65 min ²	AC HCC	(Note 4)	17
	VII	Polyurea	20 ± 1	AC HCC	Manufacturer's installation instructions	74
D	III	Wet Reflective Removable tape	(Note 3)	AC HCC	Temporary pavement marking	17
E		Removable black tape (Non- Reflective)	(Note 3)	AC	Temporary pavement marking for covering existing markings	17

¹Thinnest portion of the tape's cross section.

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.

²Thickest portion of the tape's cross section.

³In accordance with manufacturer's installation instructions.

⁴In accordance with the manufacturer's installation instructions, except that Type B, Class VI markings on new plant mix asphalt surfaces shall be inlaid into the freshly installed asphalt surface and not surface-applied.

Retroreflectors shall be affixed to holders, using an adhesive from the Department's Approved List 22 (Inlaid Pavement Markers) prior to installation.

Inlaid Pavement Markers shall be installed as per Standard Drawing PM-8.

Tapered grooves and plunge cuts shall be cut using diamond blades that can accurately control the groove dimensions, resulting in smooth uniform tapers and smooth groove bottoms and ensuring the pavement does not tear or ravel. The Contractor shall remove all dirt, grease, oil, loose or unsound layers, and any other material from the groove which would reduce the bond of the adhesive. Pavement surfaces shall be maintained in a clean and dry condition until the marker is placed.

Holders shall be installed in the same shift as grooving.

The epoxy adhesive shall be thoroughly mixed until it is uniform in color, and applied in accordance with the manufacturer's installation instructions. The Contractor shall partially fill the plunge cut with sufficient epoxy adhesive such that the epoxy adhesive bed area is equal to the bottom area of the holder. The Contractor shall then set the holder in the epoxy adhesive such that the breakaway tabs are resting on the road surface, the holder is centered in the cut, and then fill in additional epoxy adhesive if necessary so the entire perimeter of the holder is completely surrounded in epoxy, with the epoxy level with the edge of the holder in accordance with the manufacturer instructions.

The Contractor shall remove all adhesive and foreign matter from the face of the retroreflector or replace the retroreflector if adhesive and foreign matter cannot be removed. The marker shall be replaced if it is not properly positioned and adhered in the plunge cut.

Section 704.03(d)2 – Raised Pavement Markers is renamed Nonplowable Raised Pavement Markers and is replaced with the following:

Nonplowable raised pavement markers shall be bonded to the surface in accordance with the manufacturer's installation instructions. The bonding material shall be from the Department's Approved List 22 for the specific marker.

Section 704.04 – Measurement and Payment is amended to replace the fifth paragraph with the following:

Pavement markers will be measured in units of each for the type specified and will be paid for at the contract unit price per each. This price shall include surface preparation, furnishing, installing, prismatic retroreflectors, pavement cutting, adhesive, holders, quality control tests, and daily log.

Section 704.04—Measurement and Payment is amended by revising the Pay Item Table as follows:

The following pay items are removed:

Pay Item	Pay Unit
Pavement message marking (Message)	Each or Linear Foot

The following pay items are inserted:

Pay Item	Pay Unit
Pavement message marking (Message, Type or class material)	Each or Linear Foot
06010-98	

1.01 MISCELLANEOUS NOTES

1. <u>Section 101 Virginia Department of Transportation or Department shall be</u> deemed to mean the Town of Pulaski.

SECTION 101.02 TERMS of the Specifications is amended to add the following:

Liquidated Damages - Compensatory damages as set forth in the Contract, paid by the Contractor to the Department when the Contractor fails to complete the project within the time frame specified in the Contract. These damages include, but are not limited to, additional costs associated with administration, engineering, supervision and inspection of the project.

SECTION 102.04 REQUIRED ATTENDANCE OF PRE-BID MEETING of the Specifications is amended to include the following:

Prospective Bidders are hereby advised that attendance of the Pre-Bid Meeting is a prerequisite for submitting a bid proposal for this project. The "Notice of Advertisement for Bids" will designate the date, time and location of the Pre-Bid Meeting for interested parties. Prospective Bidders shall register in writing with the Engineer at the Pre-Bid Meeting and all attending parties will be noted in the Pre-Bid Meeting letter. Failure on the part of the Prospective Bidder to attend the Pre-Bid Meeting for this project and to register with the Engineer will be cause for the rejection of the Bidder's proposal.

105.01 PHASE INSPECTION: The Contractor is hereby advised that the work on this project will be inspected under the Phase Inspection concept at critical stages; however, all stages of the work are subject to inspection.

Prior to beginning operations, the Engineer will meet with the Contractor to establish and understanding of the critical stages of work which will require the presence of an Inspector. The Contractor shall keep the Department informed, in a timely manner, of planned of contemplated operations on a continuing basis.

When an inspection reveals that work has not been properly performed, the Contractor will be so advised and he shall immediately inform the Department of his schedule for correcting such work, as well as the time at which a reinspection of such work can be made.

SECTION 105.13 of the Specifications is replaced by the following:

Section 105.13 Construction Stakes, Lines and Grades - This work shall consist of providing all surveying and stakeout for the successful prosecution of work as indicated on the plans and as directed by the Engineer. Stakeout work shall be in accordance with the Department's current Survey Manual.

The following surveying work shall be performed by or under the direct control and personal supervision of a surveyor who is licensed in Virginia as a Land Surveyor and is experienced in highway construction stakeout: Right of way and boundaries affecting property ownership, horizontal and vertical control for bridges, horizontal and vertical control for box culverts and culverts having spans or openings larger than 48 inches, horizontal and vertical control for culverts with design grades, horizontal and vertical control for additional centerlines or baselines for roadways, ramps, loops and connections.

All other surveying work may be performed by or under the direct supervision and control of the Contractor, who is experienced in highway construction

stakeout.

The Contractor shall preserve any reference points, control data, and benchmarks that the Department may have established.

The Contractor shall provide the Engineer with a record copy of survey drawings, field notes and computations prior to the use of said stakeout information for Survey record drawings shall be prepared and certified in accordance with the requirements of the sample figure drawings as shown in the Survey Manual. Electronic data files may be submitted along with paper sketches and drawings, subject to the prior approval of the Engineer. All electronic copies submitted shall be in a format fully compatible with the Department's existing computer hardware and software. It shall be the responsibility of the Contractor to check all surveying work for correctness. Consideration will not be given for any delays to the project that are a result of inaccurate stakeout or time lost to correct elements of the defective survey work. Contractor shall bear all cost to correct all deficiencies resulting from defective survey work. Should a discrepancy arise during construction, the Contractor shall immediately provide oral and written notice to the Department, accurately describing and documenting the discrepancy. The Department will respond to the Contractor's notice and provide direction on how the work is to proceed.

Culvert construction: The Contractor shall stake box culverts and culverts having spans or openings larger than 48 inches and culverts with design grades. Stakeout work and record drawings shall be in accordance with the requirements of Sample Figure 1 as shown in the Survey Manual. Certified record drawings, field notes, and computations shall be submitted to the Engineer.

Bridge construction: The Contractor shall stake all bridges. Stakeout work and record drawings shall be in accordance with the requirements of Sample Figures 2 and 3 as shown in the Survey Manual. Certified record drawings, field notes, and computations shall be submitted to the Engineer.

Locating and setting right-of-way monuments: The Contractor shall set hub and tack points for RM-1 right-of-way monuments in accordance with the Road and Bridge Standards. The Contractor shall furnish RM-2 right-of-way monuments and locator posts. The Department will furnish the required caps for installation by the Contractor. Surveying work and drawings shall be in accordance with the requirements of Sample Figure 4 as shown in the Survey Manual. Certified record drawings, field notes, and computations shall be submitted to the Engineer.

Measurement and Payment: Construction surveying will be paid for at the contract lump sum price, which price shall be full compensation for performing the work prescribed herein and for all materials, labor, tools, equipment and incidentals necessary to complete the work.

Payment for construction surveying will be made upon written request by the Contractor. Such requests shall be submitted to the Engineer no earlier than five days, and no later than two days prior to the progress estimate date. Payment may be made in increments selected by the Contractor. However, payments will not exceed 60 percent of the contract unit price bid until the Contractor has provided the Engineer with surveying field notes, layouts, computations, sketches, and drawings in the format approved by the Engineer.

Locating and setting RM-1 and RM-2 right-of-way monuments will be measured and paid for in accordance with the requirements of Section 503 of the Specifications. No payment will be made until the Engineer has received certified documents from the Contractor.

Payment will be made under:

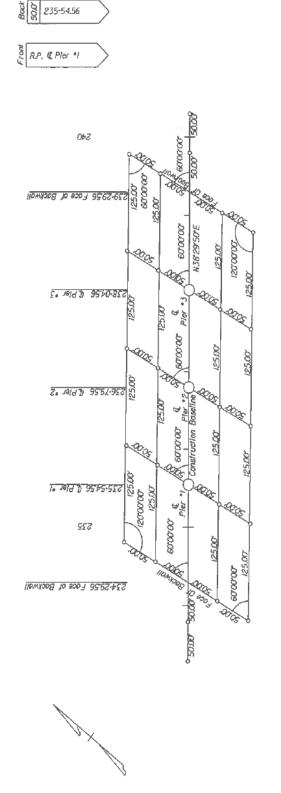
Pay Item Pay Unit

Construction Surveying Lump sum

235-54.56

Benchmark *1-3 Nails Set In The Base Of A 36" Oak, 85' Lt. Of Sta. 232-00 Construction Baseline Elevation = 433.98

A 48" Stump, 105' Rt. Sta. 240-50 Construction Baseline. Benchmark *2 + Railroad Spike Set In The Top Of Elevation = 429.22



Note:

- I. At Least Two Offset Points Shall Be Set On Each Side Of The Abuments And Plers.

 2. Offsets When Possible Will Be Set Equal Distance From Backwall And Plers.

 3. Angles And Distances Shall Be Checked At Ends Of All Offset Unes.

 4. A Minimum Of Two Baronnerts Shall Be Set in The immediate Vicinity Of The Bridge.

 The Descriptions And Station And Offset From The Construction Baseline Shall Be Shawn On The Bridge State Out Sketch.

 An Bridge State Out Sketch.

 By Analter Field Crew Prior To Submitted of This Sketch.

 By Analter Field Crew Prior To Submitted of This Sketch.

 6. All Reestablishing Of Face Of Backwall And Centerlines Of Plers Will Be By Intersection Only. Distances Are Provided For Checking Purposes Only.

Certification

I.Licensed Land Surveyor, Hereby State The Stake Out Of Bridge *, Project* Represents Was Conducted Under My Direct Control or Personal Supervision And This Sketch Correctly Represents The Location Of All Offset Points Staked in The Field.

Date Reg. Land Surveyor

3

1.02 ASPHALT CONCRETE

1. Materials - CONTRACTOR shall submit mix designs, for the ENGINEER'S review, a minimum of fifteen (15) days before placing asphalt concrete. A letter of certification shall be required stating that asphalt concrete meets all requirements of the VDOT specifications.

1.03 MATERIALS - GENERAL

The CONTRACTOR shall provide the ENGINEER certifications for all materials used in this work. These certifications shall give manufacturer's name and address, name of material, VDOT Model No., Batch Number, Federal Color Number (if paint), VDOT Paint Number, quantity contained therein and shall be delivered to the ENGINEER'S office a minimum of five (5) work days before material is to be placed. The certifications shall state that the material meets all the requirements of these Specifications and shall be signed by the CONTRACTOR and notarized. Unless otherwise approved by ENGINEER, all samples taken for testing shall be taken at the manufacturer's plant.

1.04 HYDRAULIC CEMENT CONCRETE

- 1. Testing Section 404 of 2016 Virginia Department of Transportation (VDOT)

 Road and Bridge Specifications is changed in regard to testing and all testing of concrete shall be as detailed below.
 - a. All material shall be shipped from stockpiles approved by VDOT. A notarized letter of certification from the contractor stating that all materials used in the concrete mix and the overall mix meet all requirements of the specifications and the special provisions shall be provided. All mix designs shall be submitted to the ENGINEER for his review.
 - b. Change of Supply Tests If during the course of this project, the CONTRACTOR desires to change his source of supply of fine or coarse aggregates, or both, he shall secure the services of an approved laboratory and have the tests prescribed by the VDOT specifications performed and new design mixes prepared, and submit them to the ENGINEER for review a minimum of fifteen (15) days before placing concrete. Payment for all change of supply tests shall be made by the CONTRACTOR.
 - c. Job Tests The ENGINEER may reject any shipment of concrete which in his opinion, does not meet the VDOT specifications, or these specifications.

The ENGINEER, at any time, may require the contractor to have an approved laboratory perform the prescribed tests on the materials being used. If the material meets the specifications then the OWNER shall bear all expense of the tests, otherwise such tests shall be at the CONTRACTOR'S expense, and all concrete placements shall stop until satisfactory materials are obtained. The ENGINEER shall have the CONTRACTOR'S assistance in performing all job tests deemed necessary by the ENGINEER.

- d. Cement Mill test the cement company supplying Hydraulic cement to the project shall furnish to the ENGINEER for each car of cement, two copies of the certified mill test reports.
- e. Concrete Test Cylinders During the progress of the work, the ENGINEER at his discretion, may require that concrete test cylinders be taken at various intervals.

The QC cylinders will be taken by the CONTRACTOR.

Curing and testing of cylinders will be as directed by the ENGINEER. The CONTRACTOR shall furnish the materials for concrete cylinders at his expense and the CONTRACTOR shall bear the expense of QC cylinder testing.

2. SECTION 217.07 of the Specifications is amended as follows:

All concrete shall contain a mid-range superplasticizer, such as Master Builder's Polyheed, conforming to ASTM C 494, Type F and added at the concrete plant as part of the batch procedure.

3. SECTION 217.09 of the Specifications is amended as follows:

Structural concrete (any concrete used on this project) temperature, at time of placement, shall not exceed 85 degrees F.

The concrete producer shall have on-site at the concrete plant a VDOT certified concrete technician (current) who will test every load of structural concrete (concrete to be used in the bridge structures) prior to its leaving the plant site. All tests required on the form, Page SAI-1, shall be performed by the technician and the results listed and the form signed by the technician. Each test result shall be within the specification range allowed in order for shipment to the project site to be allowed.

This completed and signed form and batch weight tickets shall be sent to the project site with each load of structural concrete shipped. Failure to provide this completed form and batch weight ticket shall be cause for rejection of the concrete shipment.

SAI-1 CONCRETE PRODUCER TESTS

Produce	rProject
Date	Load No
	Truck No.
1.	Moisture Contents:
	Fine Aggregate Date Tested
	Coarse Aggregate Date Tested
2.	Temperature at Time of Testing Concrete
	Air degrees F
	Concrete degrees F
3.	Air Content %
4.	Slump inches
5.	Gallons of Water Withheld at Plant
6.	Actual Water/Cement Ratio
Signe	ed:
	VDOT Certified Concrete Technician
(Certific	cation Expiration Date

NOTE: Aggregate moisture tests shall be performed daily, prior to batching concrete.

4. SECTION 404.02 is expanded to include the following:

The usage of arch marble for coarse aggregate in Class A3 and A4 structural concrete will not be permitted.

All aggregate used in bridge deck shall be non-polishing. Arch marble is considered to be a polishing aggregate.

5. <u>SECTION 404.03 (h)</u> of the Specifications is expanded to include the following:

Wherever called for on the Drawings, bridge structure concrete construction joints shall be bonded with a VDOT approved bonding epoxy.

6. SECTION 404.03 (k) of the Specifications is expanded to include the following:

Cure all structural concrete for a minimum of 7 days using all of the following:

- A.Curing compound.
- B.Wet, well drained burlap and white polyethylene.
- C.Use perforated garden hose to keep burlap wet.

All forms used in placement of substructure concrete shall remain in place, undisturbed, for a minimum of seven (7) full days after concrete placement.

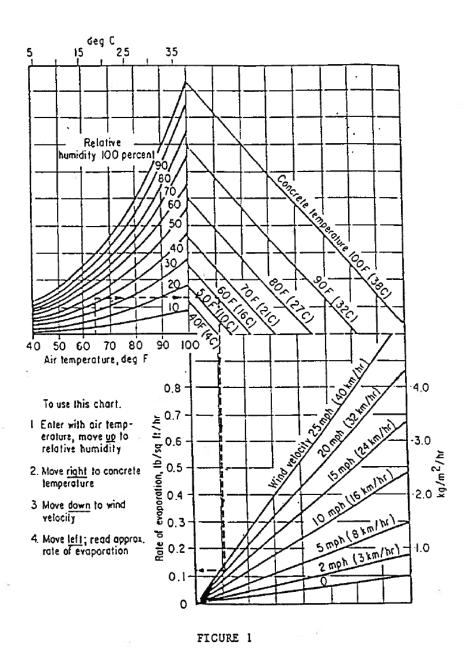
7. <u>SECTION 404.03 (1) 1. WEATHER</u> of the Specifications is amended to replace the last sentence of the fourth paragraph with the following:

The Engineer will perform evaporation rate testing for superstructure concrete or bridge overlay placements. If the maximum evaporation rate, as determined from Figure 1 of Page 06010-9 exceeds 0.1 lb/sqft/hr for A4 concrete superstructure concrete placements or 0.05 lb/sqft/hr for latex modified concrete overlays and other hydraulic cement overlays, the Contractor shall not place the superstructure concrete (for decks, sidewalks, median barriers, or parapets), latex modified concrete overlay or hydraulic cement overlay.

All concrete overlay placements shall take place between $10:00~{\rm pm}$ & $5:00~{\rm am}$.

In the event plastic shrinkage cracking occurs, the Contractor shall make repairs by epoxy injection, concrete removal and replacement, or other methods satisfactory to the Engineer and at the Contractor's expense.

CONCRETING



EFFECT OF CONCRETE AND AIR TEMPERATURES, RELATIVE HUMIDITY, AND WIND VELOCITY ON THE RATE OF EVAPORATION OF SURFACE MOISTURE FROM CONCRETE. THIS CHART PROVIDES A GRAPHIC METHIOF ESTIMATING THE LOSS OF SURFACE MOISTURE FOR VARIOUS WEATHER CONDITIONS. TO USE THE CHART, FOLLOW THE FOUR STEP OUTLINED ABOVE.

8. SECTION 405 - PRESTRESSED CONCRETE

Section 405 is amended to include the following.

The Contractor shall hire an Independent Test Laboratory to perform the shop inspection preparation of Prestressed Concrete Bulb-T.

The Independent Test Laboratory shall provide a Certified PCI Inspector to review certifications, Quality Control, mill test reports, Concrete Testing, Strand Tensioning and perform the necessary visual and dimensional checks required to insure that work by the fabricator is performed according to the contract drawings and specifications. An inspector shall be provided on a full time basis when work on this project is being performed in the fabrication shop. Inspections shall be performed in accordance with section 405 of the VDOT Road and Bridge Specifications, 2020. At the completion of fabrication, all materials certifications, mill test reports and other pertinent documentation shall be submitted to Schwartz & Associates, Inc.

DIVISION VI

TECHNICAL SPECIAL PROVISIONS

TOWN OF PULASKI, VA

Prepared by: Schwartz & Associates, Inc.

INDEX

DIVISION VI

QUALITY CONTROL (QC)

SECTION NO.	TITLE	PAGE NUMBERS
1	MOBILIZATION	07010-1
2	QUALITY CONTROL (QC) CONTRACTOR RESPONSIBILITY	07010-2 - 07010-24
3	JACKED AND BORED PIPE (18")	07010-25 - 07010-28

SECTION 1

MOBILIZATION

1.1. DESCRIPTION

- 1.1.1. Mobilization shall meet all requirements of Section 513 of the VDOT Road and Bridge Specifications.
- 1.1.2. Access to Property Off the Right-of-Way The successful Contractor shall contact all adjacent property owners of this project and obtain their permission to enter their property, if needed, in order to gain access to the work site. It will be the successful Contractor's responsibility to contact the individual property owners and work out details for constructing temporary access roads to this portion of the site and to remove these temporary access roads, at the completion of the project, to the satisfaction of the property owners. The Contractor will be required to provide the Town with copies of the written agreements, which must exist with each property owner, and a Letter of Release from each property owner upon completion of the work with the Release stating that the property owner is satisfied that their property has been restored to their requirements. The Quality Control personnel shall be VDOT certified to perform testing.

1.2. BASIS OF PAYMENT

This is not a separate pay item, therefore no measurement for payment will be made. All costs incurred from activities resulting from this item shall be included in Lump Sum price bid for "Mobilization."

SECTION 2

QUALITY CONTROL (QC) CONTRACTOR RESPONSIBILITY

PART 1 – GENERAL

1.1. DESCRIPTION

1.1.1. The Contractor will be responsible for all Quality Control (QC) testing on this project and maintaining records of test results to be turned over to the Engineer every week or when asked for them. The items that require testing and the frequency is shown on the attached sheets. Contractor will also be required to submit all VDOT required completed forms. The Quality Control personnel shall be VDOT certified to perform testing.

1.2. METHOD OF MEASUREMENT

1.2.1. No measurement of this item will be required. All costs shall be included in other bid items.

1.3. BASIS OF PAYMENT

1.3.1. Quality Control (QC) Contractors Responsibility is not a pay item. It shall be paid for in other bid items.

Ac	ceptanc	e/VST/IA	Acceptance/VST/IA Frequency - Soil & Aggregate	I & Aggree	yate
Material Type	Spec Section	Test Reference	Acceptance Testing	VST	Ā
Backfill	Contract Special Provisions				
Moisture Density Relations- Standard Proctor, Alterberg Limits & Grain Size Analysis (All Backfill Types)		VTM-1, VTM-7, & VTM-25	Done during project development	NA	Non required if performed in VDOT or AMRL accredited laboratory
One Point Proctor Check Compare to Nuclear Gauge		VTM 012	As needed.	NA	Run split sample when needed, 1 test per project to check procedure and equipment.
In Place Density Tests:					
Box Culverts, Pipes & other Drainage Structures	302.303	0F-MTV	A minimum of one (1) test shall be performed per lift on alternating sides of the structure for each 300 linear ft. or portion thereof in structure length. This test pattern shall begin after the first 4-in. compacted layer above the structure's bedding and shall continue to one (1) foot above the to one (1) foot above the to one (1) foot above the	Š	One IA shall be conducted on each compaction technician once per project regardess of the structure or material type (box culvert, pipe, Abutment, retaining wall or embankment). IA shall consist of a split density test in situ, observing technician technique, checking equipment calibrations and calculations.

LAP Manual Construction Administration

March 2022

303,401 VTM-10 be performed. NA	303,401 VTM-10 be performed. NA	etaining Walls Sections exceed 200 linear ft. shall	Sections exceed 200 linear ff shall	1	One IA shall be conducted on each compaction technician once per project regardless of the structure or material type (box culvert, pipe, Abutment, retaining wall or embankment). IA shall consist of a split density test in situ, observing technician technique, checking equipment calibrations and calculations.		from the hele no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 10 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall be performed.	VTM-10	Sections 303.401	Abutments, Retaining Walls and MSE Walls
		303.401 VTM-10 be performed. NA	303,401 VTM-10 be performed. NA	etaining Walls Sections Sections (VTM-10 be performed. NA		_				
tests every other lift not to exceed 200 linear ft. shall	Sections Sections	tests every other lift not to			observing technician		ff a minimum of two (2)			
etaining Walls Sections Control of the American Sections Control of the American Control of the Americ	Sections exceed 200 linear ft. shall	ft., a minimum of two (2) tests every other lift not to	P		embankment). IA shall con		Wells more than 100 linear			
Compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall have	Compacted. Walls more than 100 linear ft., a minimum of lift not to tests every other lift not to exceed 200 linear ft. shall	Compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	than 100 linear um of two (2)	than 100 linear	retaining wall or		have been placed and			
compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall have	Sections have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	nave been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	placed and than 100 linear um of two (2)	placed and than 100 linear im of two (2)	(box cuivert, pipe, Abutmer		two (2) lifts of reinforced fill			
wo (z) litts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall was	Neo (2) ints of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	two (2) ints of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	or reinforced fill placed and than 100 linear um of two (2)	or reintorced fill placed and than 100 linear linear linear line of two (2)	lile suluciaire or maieriai iy		Silali Degill and uro mor			
two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall man be a second 200	two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	of reinforced fill placed and than 100 linear um of two (2)	of reinforced fill placed and than 100 linear than of two (2)	the structure or material ty		shall begin after the first			
shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	after the first of reinforced fill placed and than 100 linear than of two (2)	after the first of reinforced fill placed and than 100 linear	once per project regardles		uniform coverage. Testing			
uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall have	uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	erage. Testing after the first of reinforced fill placed and than 100 linear	erage. Testing after the first of reinforced fill placed and than 100 linear	each compaction technicia		length of the wall to obtain			
length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall was	length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	- = E	- = 1	One IA shall be conducted		staggered throughout the			
staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	- = h	c = = =			Test sites shall be			
Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall was provided to the contract of the contract	Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	c =				of the reinforced fill area.			
of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall was been placed and compacted.	of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft. a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to					the back edge of the zone			
the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to					wall, to within three feet of			
wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to					away from the face of the			
away from the face of the wall, to within three feet of the back edge of the zone of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall was sections.	wall, to within three feet of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to					minimum distance of 8 ft.			
minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	away from the face of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	away from the face of 8 t. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to				_	testing shall be performed a			
testing Walls Sections Minimum distance of 8 ft. away from the face of the awal, to within three feet of the ball, to will be staggered throughout the length of the wall to obtain uniform coverage. Testing staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft, a minimum of two (2) tests every other lift not to exceed 200 linear ft, shall was provided to the ball through through the ball through the ball through the ball through the ball through through through the ball through through the ball through through the ball through through the ball through through through the ball through through through through the ball through through through the ball through throu	minimum distance of 8 f. away from the face of the awal', to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back of the back of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	o	0 = =			shall be performed. The			
testing Walls Sections Sections Sections Sections Sections Sections Sections Sections Sections Lesting shall be performed a minimum distance of 8 ft. awall, to within three feet of the awall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft, a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft. shall was a minimum of two to exceed 200 linear ft.	shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft. walls more than 100 linear ft. a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	testing shall be performed. The testing shall be performed a minimum distance of 8 ft. awall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	8	8			one (1) test every other lift			
shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall was been placed.	shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft. a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	a	е			100 linear ft. a minimum of			
one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the away from the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall and the amain that the facts of the control of the co	100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	one (1) test every other lift shall be performed. The testing shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	- L				For MSE Walls, Less than			
For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the awall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	e	a - L			neignt of the structure pius 10 ft.			
Per MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the awall, to within three feet of the awall, to within three feet of the awall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	Por MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft. a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	or.	m.			than a length equal to the			
than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall MA	height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2)	or.	m.			from the heel no farther			
from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the bank of the wall to obtain of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall Marks and the shall be the second of the secon	from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft. walls more than 100 linear ft. a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	or.	g.			structures at a distance			
from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the example, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall was exceed 200 linear ft.	structures at a distance from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	or.	6			performed behind these			
performed behind these structures at a distance from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall so exceed 200 linear ft. shall so the exceed 200 linear ft. shall so the exceed 200 linear ft. shall sha	performed behind these structures at a distance from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be performed. Testing staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	performed behind these structures at a distance from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2)	or and a second	m m			performed. Testing shall be			
performed. Testing shall be performed behind these structures at a distance from the heel no farther than a length equal to the height of the structure plus. 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the eninforced fill area. Test sites shall be testing shall be testing shall be begin after the first wo (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft. a minimum of two (2) lests every other lift not to exceed 200 linear ft. shall	performed. Testing shall be performed behind these structures at a distance from the hele no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the back edge of the zone of the wall, to within three feet of the back edge of the zone of the back edge of the zone of the wall, to within three feet of the back edge of the zone of the back edge of the zone of the wall, to within three feet of the back edge of the zone of the back edge of the zone of the back edge of the first the back edge of the first the back edge of the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	performed behind these structures at a distance from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	on the state of th				linear ft. shall be			
inear ft. shall be performed. Testing shall be performed. Testing shall be performed behind these structures at a distance from the hele no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed a minimum distance of 8 ft. away from the face of the testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be stagged the cone of the reinforced fill in the back edge of the zone of the reinforced fill area. Test sites shall be shall	linear ft. shall be performed. Testing shall be performed. Testing shall be performed behind these structures at a distance from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed a minimum distance of 8 ft. away from the face of the testing shall be performed all minimum distance of 8 ft. away from the face of the cone of the reinforced fill area. Test sites shall be estaggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to exceed 200 linear ft. shall	linear ft. shall be performed. Testing shall be performed behind these structures at a distance from the heel no farther than a length equal to the height of the structure plus 10 ft. For MSE Walls, Less than 100 linear ft. a minimum of one (1) test every other lift shall be performed. The testing shall be performed a minimum distance of 8 ft. away from the face of the wall, to within three feet of the back edge of the zone of the reinforced fill area. Test sites shall be staggered throughout the length of the wall to obtain uniform coverage. Testing shall begin after the first two (2) lifts of reinforced fill have been placed and compacted. Walls more than 100 linear ft., a minimum of two (2) tests every other lift not to	ar and the pe	ar and and are be			every other lift up to 100			

LAP Manual Construction Administration

March 2022

Moisture Density Relations- Standard Proctor, Atterberg Limits & Grain Size Analysis (Soils/Embankment)		VTM-1, VTM-7, & VTM-25	Done during project development	NA	1 test per year during production; minimally perform one (1) in first five (5) tests taken for QA
One Point Proctor Check Compare to Nuclear Gauge (Soils/Embankment)		VTM 012	As needed.	NA	1 test per year during production; minimally perform one (1) in first five (5) tests taken for QA
Embankment in Place Density (Soils/Embankment)	Sect. 303	VTM-10	The minimum number of field density tests required shall be one for each 2500 yd³ or less of fill material placed, with the following additional requirements: (a) For fill areas less than 500 ft. in length, a minimum of one (1) field density test for every other 6-in. compacted layer from the bottom to the top of fill starting with the second lift. (b) For fills 500 to 2000 ft. in length, a minimum of two (2) field density tests for each 6-in. compacted layer within the top five (5) ft. of fill. (c) For fills greater than 2000 ft. in length, break into equal sections not to exceed 2000 ft. and test each section in accordance with (b) above.	∀	One IA shall be conducted on each compaction technician once per project regardless of the structure or material type (box culvert, pipe, Abutment, retaining wall or embankment). IA shall consist of a split density test in situ, observing technician technique, checking equipment calibrations and calculations
Subgrade	Sec. 305	VTM-10	In the finished subgrade in both cut and fill sections, a minimum of one (1) test represented by the average of five nuclear density	NA	One IA shall be conducted on each compaction technician once per project regardless of the structure or material type (box culvert, pipe, Abutment,

LAP Manual 13.2 - G-5 March 2022 Construction Administration

			readings shall be performed for each 2000 linear ft. of subgrade for each roadway (full width).		retaining wall or embankment). IA shall consist of a split density test in situ, observing technician technique, checking equipment calibrations and calculations
Aggregate Base and Subbase Material	VDOT Sections 306, 307, & 309				
			For Method VTM-38A, one (1) depth test shall be conducted for each one-half (1/2) mile of stabilization per paver (mixer) application width. In other words, each separately applied width of stabilization, regardless of roadway width, shall require a series of tests.		
Denth Checks		ZW-38	For method VTM-38B, the project shall be divided into lots, with each lot stratified, and the location of each test within the stratified section determined randomly. A lot of material is defined as the quantity being tested for	d Z	Minimum of one per project, unless quantity of individual material(Base, sub-base, etc.) is less than 500 tons per project, in which case no IA test required for that material
2000 1000		200	50.500.600.600		

		acceptance, except the		
		maximum lot size shall be		
		two (2) miles for each paver		
		application width. The		
		randomization procedure		
		used shall be at the		
		direction of the Engineer.		
		(See VTM-38 for example.)		
		Samples shall be taken		
		from the lot at the following		
		rate:		
		Lot Size No. of Samples		
		Required		
		0 - 1 Mile 2		
		1 - 1 1/2 Miles 3		
		1 1/2 - 2 Miles 4		
		When the subgrade,		
		consisting of material-in-		
		place or imported material		
		other than aggregate base,		
		subbase, or select material.		
		is stabilized with cement or		
		lime one density test		
		(contract of 6 goodings)		
		(average of 5 readings)		
		shall be conducted for each		
		one-half (1/2) mile of		One test per project,
		stabilization per paver		consisting of the average of 5
		(mixer) application width. In		readings. Minimum of 5
		other words, each		readings per project, unless
		separately applied width of		total quantity of individual
		stabilization, regardless of		material(Base, sub-base, etc.)
		roadway width, shall		is less than 500 tons per
		require a separate series of		project, in which case no IA
In Place Density	VTM-10	tests.	NA	test

LAP Manual 13.2 - G-7 Construction Administration

March 2022

LAP Manual
Construction Administration

March 2022

			(See VTM-38 for example.) Samples shall be taken from the lot at the following		
			rate: Lot Size No. of Samples		
			Required 0 - 1 Mile 2		
			1 - 1 1/2 Miles 3		
			1 1/2 - 2 Miles 4		
			When the subgrade,		
			consisting of material-in-		
			place or imported material		
			other than aggregate base,		
			subbase, or select material,		
			is stabilized with cement or		
			(average of 5 readings)		
			(average of 5 readings)		
			one-half (1/2) mile of		One test ner project
			stabilization per paver		consisting of the average of 5
			(mixer) application width. In		readings. Minimum of 5
			other words, each		readings per project, unless
			separately applied width of		total quantity of individual
			stabilization, regardless of		material(Base, sub-base, etc.)
			roadway widtn, shall		Is less than 500 tons per
Visce Density		VTM-10	require a separate series of	ΔN	project, in which case no IA
Clearing and Grubbing	VDOT Section 301				
Ensure activities are confined to					
limits and seeded within 30 days		MIN	200		340000
of disturbance		WIN	Dally		weekiy

n Administration

March 2022

LAP Manual Construction Administration

Erosion and Siltation Control	VDOT Section 303.03 & Current Virginia DCR Specifications				
Monitor for correct installation and Maintenance		N/A	Daily		After rain event
Undercut	VDOT Section 303.04				
Review area to determine need for undercut		NA	Prior to start of work at each location	All reports reviewed by Locality Project Manager to verify qualified inspector and correct equipment	One (1) report reviewed per month during production to verify qualified inspector and qualified personnel
Measure undercut area		ď Ž	Prior to backfill at each location	All calculations/reports checked/reviewed by Locality Project Manager to verify qualified inspector and correct equipment	One (1) calculation/report checked/reviewed to verify qualified inspector and correct equipment
Overlay Sands					
Grade D Silica Sand	Special Provision		One bag per project tested in AMRL lab.	NA	NA

Acceptz	nce/VST	//A Freq	Acceptance/VST/IA Frequency - Hydraulic Cement Concrete	Cement C	Concrete
Material Type	Spec	Test	Acceptance Testing	VST	¥
Cast-In-Place Structures and Bridge Concrete	VDOT Section 217				
Concrete Entrained Air Content (CIP Concrete)	217.08	ASTM C231 or C173	Test every load, except for bridge decks, in which case one test per truck-load for the first 3 trucks and then one test for every third truckload thereafter, provided results remain within 1.0% of median of design range. Test also required when making compressive	Ą.	One test shall be made on the same batches of concrete from which cylinders are taken
Slump of Hydraulic Cement Concrete (CIP Concrete)	217.08	ASTM 143	Test every load and when making compressive specimens	AM	One test shall be made on the same batches of concrete from which cylinders are taken
Temperature of Concrete (CIP Concrete)	217.10	ASTM C1064	Test every load and when making compressive specimens	NA	One test shall be made on the same batches of concrete from which cylinders are taken

Compressive Strength of Concrete Cylinders (CIP Concrete)	217.08	ASTM C31 & C39	One set of three cylinders per every 100 CY and at least two sets of cylinders per structure per class of concrete.	NA	Minimum of one set per 1000 cubic yards of structural concrete. Not required for projects having less than 300 cubic yards. Cylinders should be from the same load as acceptance samples.
Chlorde Permeability Concrete Cylinders (CIP Concrete)	Check Plan sheets	VTM-112	One set of two cylinders per every 100 CY and at least two sets of cylinders per structure per class of concrete.	N	Non required if performed in VDOT or AMRL accredited laboratory
Concrete Reinforcing Steel (CIP Concrete) elongation, yield strength and ultimate strength	223	ASTM A615	Accepted based on certification provided by the fabricator. Verify manufacturer's certificates for every shipment for acceptance prior to placement.	One sample per project per manufacturer per most common size bar.	Non required if performed in VDOT or AMRL accredited laboratory
Pavement	VDOT Section 217				
Concrete Entrained Air Content (Pavement)	217.08	ASTM C231 or C173	One test per hour & when casting flexural specimens	NA	One test per four roadway miles or fraction thereof, with a minimum of one per project

Ϋ́		Non required if performed in VDOT or AMRL accredited laboratory	NA	Minimum one set per 1000 cubic yards of structural concrete, except that IA will not be required for projects having less than 300 cubic yards.	One test shall be made on the same batches of concrete from which cylinders taken.	One test shall be made on the same batches of concrete from which cylinders taken
ĄV		One sample of two pieces 24 inches long from the most prevalent bar size per structure, with no two samples being the same size	NA	NA	NA	NA
One test per day and when making compressive specimens		Accepted based on certification provided by the fabricator. Verify manufacturer's certificates for every shipment for acceptance prior to placement.	If pavement is to be used as haul road or prior to 14 days then, At least one beam cast for each days concreting operation.	If pavement is accepted based on cylinder strength. One (1) set of three (3) cylinders cast for every 100 cy and at least one for each days concreting operation	One test per hour & when casting flexural specimens	Two tests daily & when making flexural specimens
ASTM C231 & C173		ASTM A615	ASTM C293	ASTM C31 & C39	ASTM C1064	ASTM 143
217.08	VDOT Section 217	223	316.04	217.08	217.10	217.08
Concrete Entrained Air Content (Miscellaneous Concrete)	Miscellaneous Concrete	Concrete Reinforcing Steel (pavement) elongation, yield strength and ultimate strength	Flexural Strength Beams	Compressive Strength of Concrete Cylinders (Pavement)	Temperature of Concrete (Pavement)	Slump of Hydraulic Cement Concrete (Pavement)

13.2 - G-13 LAP Manual Construction Administration

Slump of Hydraulic Cement Concrete (Miscellaneous Concrete)	217.08	ASTM C143	One test per day and when making compressive specimens	NA	NA
Temperature of Concrete (Miscellaneous Concrete)	217.10	ASTM C1064	One test per day and when making compressive specimens	NA	NA
Compressive Strength of Concrete Cylinders (Miscellaneous Concrete)	217.08	ASTM C31 & C.39	One (1) set of three (3) cylinders per every 250 CY and at least one set per day	NA	One (1) set of three (3) cylinders per every 25,000 CY (cumulative) minimum 1 per project.
Concrete Reinforcing Steel (Miscellaneous Concrete)	223	ASTM A615	Accepted based on certification provided by the fabricator. Verify manufacturer's certificates for every shipment for acceptance prior to placement.	One sample of two pieces 24 inches long from the most prevalent bar size per structure, with no two samples being the same size	Non required if performed in VDOT or AMRL accredited laboratory
Concrete Curing Materials	VDOT Section 220				
Burlap		AASHTO M182, class 3	Verification of LM # and lot numbers if from QA supplier Approved list 44, if not test one sample per lot number	ĄV	Non required if performed in VDOT or AMRL accredited laboratory
White liquid membrane Curing Compound		VTM-2	Verification of LM # and batch numbers if from QA supplier Approved list 44, if not test one sample per batch number	٧٧	Non required if performed in VDOT or AMRL accredited laboratory
Fugitive Dye Liquid Membrane Curing Compound		VTM-2	Verification of LM # and batch numbers if from QA supplier Approved list 44, if not test one sample per batch number	NA	Non required if performed in VDOT or AMRL accredited laboratory

_	_				
		Verification of LM # and lot		Non required if	
		numbers if from QA supplier		performed in VDOT or	
	AASHTO	Approved list 44, if not test		AMRL accredited	
Polyethylene Film	M171	one sample per lot number	NA	laboratory	

LAP Manual 13.2 - G-15 March 2022 Construction Administration

	ð	CIVSTIIA	QC/VST/IA Frequency - Asphalt	Asphalt	
Material Type	Spec Section	Test Reference	Contractor QC Testing	VST	¥
Asphalt Concrete Pavement	VDOT Section 315				
Pavement Density by Nuclear Method with in Place Pavement Density (Asphalt Pavement)		VTM-76, VTM-6	Establish Roller pattern, control strips and test sections, 10 stratified random density test sites per test section (5,000 ft.)	VST is performed on Twenty (20) percent of QC lots. Obtain two cores in one randomly selected QC lot out of five lots to verify in place density. Minimum one VST sample per project.	IA=10%*QC Readings Locality representative observe and witness QC testing to assure gauge is calibrated and accurate. Observe and verify test sites are random and match selected siles. Verify that QC tests are done using proper procedures. Observe one control strip per density technician and obtain all cores from control strip for reweighing in laboratory (randomly select a minimum 10% of cores) to confirm field density

		000000000000000000000000000000000000000			The same of the last of the la
				VDOT	The second secon
Politico collo collo	(z) per project:	(2) colos los costs anip.	2000		Control Medica Calendaria
these cores once obtained	(2) ner project	(3) cores for test strin	VTM-006		Stone Matrix Acribalt (SMA)
and will maintain control of	contractor. Minimum two	tor test sections. Inree			Depth Checks by cores for
the taking or these cores	independentily of	for density and depth		1	In Place Pavement Density and
The second secon		the desired by the desired			
representative will observe	production obtained	dav/night's production			
production Locality	cores per one day/ night	samples per			
(1) QC core per day/night's	Two (2) stratified random	with a maximum of 5			
measure a minimum of one		sample per 1,000 feet			
Independently weign and		Minimum of one (1)			
Locality Representative		and test sections.			
		Establish trial section			
one (1) per project.	NA.	mile (4 tests)	V1M-32		Deptin Checks
thickness. A minimum of		maximum lot size 2	3574		
five (5) lots and remeasure		(1) test per roadway,			
Select one (1) QC core per		width, minimum one			
		per 1/2 mile per lane			
		application. One (1)			
		specify rate of			
		for, not when plans			
		plan depths are called			
		required only if specific			
		intermediate material			
		surface and			
		Depth checks of			
project.	contractor cores.	strip	VTM-32		Asphalt (SMA))
technician. Minimum 1 per	locations, Independent of	roller pattern/control	VTM-006:		all asphalt except Stone Matrix
locations porformed by OC	random com nor 10 OC	per location flot folig			In Diaco Deviamont Danethy Vier
determination per ten (10)	Density - One (1)	per location not long			
Observe one (1) density		Density - min. 1 core			
density.					
laboratory to confirm					
10% of these cores in					
density. Reweigh at least					
Obtain cores taken for		_	_		

Review all C-85 reports during production to verify that plan quantities match application quantities and that daily measurements are performed according to VTM 94.	Review start up calibrations. Ensure one plate sample is taken and tested for thickness, width, bead distribution and embedment. Retain sample for further testing if needed. Review all C-85 reports during production to verify that calculated quantities match application rates and that daily measurements are performed according to
Randomly select three (3) ten foot in place sections of markings per day and measure thickness and width. Skip lines and edge lines are considered separately. Inspect PM for correct placement, straightness and edges. Observe the bead embedment, color (night and day) and brightness/reflectivity linspect structure of tape to ensure patterned waffles have not been damaged by roller	Randomly select three (3) ten-foot in place sections of markings per day and measure thickness and width. Skip lines and edge lines are considered separately. Inspect PM for correct placement, straightness and edges. Observe the bead embednent, color (night and day) and brightness/reflectivity. Review application rates to ensure proper thickness has been applied.
Daily perform VTM 94 at start up with periodic checks every three hours of operation	Daily perform VTM 94 at start up with periodic checks every three hours of operation
VTM-94	VTM-94
Permanent Pavement Marking - Preformed Tape	Permanent Pavement Marking - Liquid Materials (Paint, thermoplastic and epoxy)

13.2 - G-18 LAP Manual Construction Administration

QC/V	ST/IA F	QC/VST/IA Frequency - Misc Roadway and Structure			
Material Type	Spec Section	Test Reference	QC Testing	VST	Ā
Pre-cast Structures	VDOT Section 404				
Verify bedding material is installed properly and that pre- cast materials are not chipped or cracked		NA	Daily and when shipment arrives on project	Inspect Precast structure before backfilling operations begin.	Inspect Pre-cast structures when received on job site. Inspect bedding before setting structure.
Load Bearing Piles	VDOT Section 403				
Monitor operation and document blow counts		N/A	Continuously	Review documentation weekly.	Daily
Perform Center of Gravity Calculations		N/A	For each Foundation	one out of every twenty (20) foundations	ane out of every ten (10) foundations
Structural Steel	VDOT Section 407				
Receive Bolts, sample, verify the documentation is complete and perform laboratory Skidmore, tension and galvanized coating testing	VDOT 226.02(h)		Each nut-bolt-washer (NBW) assembly lot shall be sampled at a minimum rate of 2 assemblies per NBW lot.	Ea. NBW assembly lot shall be tested, one bolt in direct tension, one assembly for galvanized coating and one nut and bolt for rotational	The documentation shall be reviewed to insure all parts are present and that the required tests have been performed by the producers and that the markings match the

LAP Manual Construction Administration

13.2 - G-19

March 2022

			The documentation shall be collected from the bolt supplier and the galvanizer for each lot and supplied along with the samples to the QAM. QC personnel shall monitor the storage and conditions of the bolts to insure they remain in good well thirrivated condition	capacity testing (Rot- Cap) as per section 226	suppliers. The results of the VST shall be reviewed to insure the material passed the tests.
Verify daily Skidmore testing is performed IAW (in accordance with) proper procedures for each lot Note: NBW assembly may be reused after Skidmore testing	VDOT 407.06(c)		Ea. Day & Ea. NBW lot (3 bolts per lot) used shall be Rot-Cap tested in the Skidmore device IAW proper procedures		
in a connection if no defects are noted in visual inspection and the nut runs freely up the bolt for the full thread length - Only new NBW assemblies may be tested each day				Minimum three (3) NBW assemblies for each lot being installed shall be observed by the IA inspector	Three NBW assemblies from each lot shall be Rot-Cap tested at the QAMs lab independently each week during erection
Verify the installation crews are using proper installation procedures IAW specs. to tension the bolts	VDOT 407.06		Monitor ea. Crew (2-3 workers) during erection to insure proper technique (TOTN – turn-of-the-nut or DTI – direct tension indicating washers) is followed	NA	Monitor ea. Crew (2-3 workers) for a half dozen NBW assemblies once at the beginning of each four hour work period
Verify the bolted connections have been tensioned properly using statistical sampling frequency and a calibrated	VDOT		For each connection, test 10% or a minimum of 2 NBW assemblies verifying the required torque. Complete testing before the deck	Test 2 NBW assemblies in 25% of the slip critical connections (minimum of 2 connections per transverse line of spilices) and 2 NBW	Monitor all the torque testing for each main member connection (slip-critical connections) and at the beginning of each period where secondary members are being
LAP Manual	407.06(c)4 13.2	3.2 - G-20	is formed.	assemblies in 10% of March 2022	checked.

13.2 - G-20 LAP Manual Construction Administration

				the secondary member connections	
Rebar Splicer (Tension Test)		ASTM A615	1 sample per manufacturer per most common size per structure (Contractor is to install pieces)	NA	Verify Machine Calibration annually
Protective Coating of Metal Structures	VDOT Section 411		Contractor QC testing	VST	ĄI
Monitor surface preparation		SSPC-PA	Three surface profile measurements per day of blasting.	Review all reports showing the preparation protocols	Two (2) surface profile measurements per week of blasting.
check coating thickness according to SSPC -PA		SSPC-PA	Five(5) spot measurements (15 Readings) per day as defined in PA-2 for coating thickness after each layer of paint at each location	Review all reports showing-painting application rates including the tests performed on profiles and thicknesses.	One spot measurement (3 readings) as defined in PA-2 for coating thickness after each layer of paint at each location
Underdrains	VDOT Section 501				
Inspect to ensure no deficiencies		VTM 108	All accessible outlet locations; Additionally a minimum of 10% of longitudinal sections	One (1) every twenty- five (25) outlet locations. A minimum of one per project independent of IA.	Observe 10% of outlet locations; Additionally a minimum of 1% of longitudinal sections
Guardrail	VDOT Section 505				

Verify that guardrail is installed per specifications and at proper height			Daily	Spot-check every 50 linear feet for proper height	Spot-check every 500 linear feet for proper height.
Fencing	VDOT Section 507				
Verify fencing type, height and location	4	N/A	Daily	Weekly	
Barbed Wire	VDOT Section 242	ASTM A121	One sample every 50 rolls or spools	NA	NA
Chainlink Fence	VDOT Section 242	AASHTO M181	One sample from 3 rolls for every 50 rolls.	NA	NA
ROW Monuments	VDOT Section 503				
Verify monument type and location		N/A	10% of ROW monuments	1% of ROW monuments	
Maintenance of Traffic	VDOT Section 512				
Monitor installation and maintenance and use Work Zone Safety Checklist		N/A.	Daily (Locality Inspector)	Weekly (Locality Project Manager)	
Sound Wall Barriers	VDOT Section 519				
Verify location and installation with shop drawings		N/A	Daily	Weekly	

Topsoil and Seeding	VDOT Section 602/603				
Verify proper material is utilized at application rates from plans		N/A	Daily	Weekly	
Traffic Signs	VDOT Section 512				
Verify that signs meeting current standards are utilized in locations per plans		N/A	Daily	Weekly	
Traffic Signals	VDOT Section 703				
Monitor installation for conformance with plans and specifications		N/A	Daily	Weekly	
Water and Sewer Facilities	VDOT Section 520				
Monitor installation for conformance with plans and specifications		N/A	Daily	Weekly	
Electrical and Signal Components	VDOT Section 238				
Tether Wire		ASTM A475	One sample per project	NA	NA
Span Wire		ASTM A475	One sample per project	ΨZ	ĄV

LAP Manual Construction Administration

Masonry	VDOT Section 202			
		one sample consisting of 10 units per 10,000		
Wall Units		units	NA	NA

- Verification testing shall be required if contractor's workforce performs QC testing that is used for Acceptance testing. If Locality or its consultant performs Acceptance testing, Verification testing shall not be required.
- IA testing shall be conducted by different personnel and different equipment than used for the QC/acceptance testing, QC/acceptance sampling or Verification testing.

13.2 - G-24

SECTION 3

JACKED AND BORED PIPE (18")

PART 1 - GENERAL

- 1.0 In addition to requirements of the VDOT Road and Bridge Specifications, 2020, Section 302.03(a), 1 Jack and Bore Method, below special provision shall also apply.
- 1.1 Reference specifications are referred to by abbreviation as follows:
 - A. American Society for Testing and Materials ASTM
 - B. American Water Works Association AWWA
 - C. American Association of State Highway and Transportation Officials
 AASHTO
 - D. Virginia Department of Transportation VDOT
- 1.2 SUBMITTALS: Provide the following in a timely manner in accordance with the approved submittals schedule.
 - A. Submittal: Complete details of the entire bore and jack operation to the Owner for review at the preconstruction conference. If the Contractor determines prior to beginning construction that an alternative method of casing installation should be considered, the Contractor shall submit the alternative for review in accordance with approved submittals procedure. Owner has the option to reject any proposed alternate in which case the Contractor shall be required to complete the operation under the original contract agreement.
- 1.3 Notify the Owner two (2) weeks prior to beginning work.
- 1.4 Perform all work in a manner approved by the Owner.
- 1.5 If "Mixed face" conditions are encountered during the bore and jack operation. In the event of a "mixed face" condition, and/or if the Contractor is unable to use a conventional bore and jack operation, the Contractor shall submit for review an alternative method of installation for the casing and carrier pipe. The Contractor shall be responsible for any additional cost due to the change. No extra payment will be made for change in installation methods. Owner has the option to reject any proposed

- alternate in which case the Contractor shall be required to complete the operation under the original contract agreement.
- 1.6 The Contractor shall determine the existing conditions both above and below ground. The Contractor shall be responsible for completing the installation of the casing pipe and carrier pipe to the required line and grade.

PART 2 - PRODUCTS

- 2.1 18" water line pipe shall be ductile iron restrained joint pipe.
- 2.2 Raw Water Main Casing Pipe. Steel casing pipe for boring or jacking under highways and streams shall meet requirements of ASTM A 139, Grade B. Nominal pipe diameter and wall thickness shall be as indicated on drawings. No protective coating or lining will be required. Steel casing pipe shall be spiral welded.
- 2.3 Pipe Support Spacers. Pipe support spacers for use in casing pipe shall be stainless steel as manufactured by Spider Manufacturing, Inc., PSI, or approved equal and shall be furnished in accordance with Standard Details. Spacers shall be minimum 12-inch in width with 3 spacers supplied per segment of pipe.

PART 3 - EXECUTION

3.1 INSTALLATION OF STEEL CASING PIPE

- A. Commence boring and jacking operation from a pit, with the bottom excavated to grade, and sheeted or shored if necessary. Boring and jacking through soil or rock shall have a steel pipe jacked in place with the progress of the bore.
- B. Pipe shall have a design strength and wall thickness so as to withstand the jacking operation. Minimum casing pipe thickness shall meet requirements of VDOT drawings and this special provision.
- C. Construction shall be performed in such a manner that the ground surface above the pipeline will not settle or rise. Installation of the pipeline shall immediately follow heading or tunneling excavation. Voids occurring behind the pipe during installation shall be filled with hydraulic cement grout and placed under pressure upon completion of the jacking operation.
- D. At his own expense, the Contractor shall replace or repair, as directed by the Owner, pipe that is damaged during jacking operations. Joints of steel pipe shall be butt welded and watertight, as installation progresses.

- E. The carrier pipe shall be supported by casing spacers as indicated on the Standard Details.
- F. Do not grout the annular space between the casing pipe and the carrier pipe.
- G. Brick and mortar casing ends to protect against foreign matter. Brick and mortar end seal will be capable of withstanding earth forces at depth of installation or Engineer approved equal.
- H. Bored, jacked, or tunneled installations shall have a bore hole essentially the same as the outside diameter of the casing pipe.
- I. The use of water or other liquids to facilitate casing emplacement and spoil removal is prohibited.
- J. The Contractor shall be prepared to progress the boring operation on a 24-hour basis without stoppage (except for adding lengths of pipe) until the leading edge of the pipe has reached the receiving pit.
- K. The front of the pipe shall be provided with mechanical arrangements or devices that will positively prevent the auger from leading the pipe so that no unsupported excavation is ahead of the pipe.
- L. The auger and cutting head arrangement shall be removable from within the pipe in the event an obstruction is encountered. If the obstruction cannot be removed without excavation in advance of the pipe, procedures as outlined above must be implemented immediately.
- M. The over-cut by the cutting head shall not exceed the outside diameter of the pipe by more than 1/2 inch. If voids should develop or if the bored hole diameter is greater than the outside diameter of the pipe (plus coating) by more than approximately 1 inch, grouting or other approved methods shall be employed to fill such voids.
- N. The face of the cutting head shall be arranged to provide a reasonable obstruction to the free flow of soft or poor material.

PART 4 - METHOD OF MEASUREMENT

4.1 "Jacked & Bored Pipe (18") will be measured on a "Lump Sum" basis wherein no measurement will be made.

PART 5 - BASIS OF PAYMENT

"Jacked & Bored Pipe (18") shall include all cost for completed 5.1 jacked and bored pipe for the size indicated. This price includes all submittals, excavating and backfilling jacking and receiving pits, sheeting, shoring, bracing, jacking equipment, casing pipe, pipe support spacers, furnishing and installing 18" ductile iron restrained joint water line pipe, grout to install carrier pipe, drainage and safety equipment. In addition to the above, all costs for material disposal, sealing ends of casing pipe, removal and disposal of 15'+ existing water line, temporarily plugging ends of existing pipe, prior to backfilling receiving pit, furnishing and installing new ductile iron mechanical joint pipe (size to match existing), finish grading, disinfecting 18" water line, pressure testing water line, furnishing of all materials, labor, tools, equipment and incidentals necessary to complete this work. Payment will be made under the contract pay item of:

"Jacked and Bored Pipe (18")" - Pay unit will be on a "Lump Sum" basis.

END OF SECTION

APPENDIX 1

ASBESTOS AND LEAD PAINT REPORT

WEST COMMERCE STREET OVER PEAK CREEK TOWN OF PULASKI, VIRGINIA

REPORT DATED: MARCH 8, 2021

Randy Saunders

From: Chris Nixon <cnixon@handp.com>
Sent: Monday, March 08, 2021 2:37 PM

To: Randy Saunders

Subject: FW: Analysis Report for Job 21009281 is complete.

Attachments: 21009281_Commerce St. Bridge_202138143138.pdf; 21009278_Commerce St. Bridge_

202138131544.pdf

Randy:

You have lead and asbestos associated with the bridge on Commerce Street. See attached results for your review and use. If you need anything from me, please email me at any time.

Thanks,

W. Chris Nixon Vice President / Director Of Environmental & Industrial Hygiene Services

HURT & PROFFITT
INSPIRED | RESPONSIVE | TRUSTED

2524 Langhorne Road, Lynchburg, VA 24501 Phone: 434-847-7796 x691 - Fax: 434-847-0047

Cell: 434-841-3893

Email: cnixon@handp.com - Web: www.handp.com

----Original Message-----

From: SanAir Technologies Laboratory < iaq@sanair.com>

Sent: Monday, March 8, 2021 2:32 PM

To: Brian J. Trent < btrent@handp.com; Chris Nixon < cnixon@handp.com>

Subject: Analysis Report for Job 21009281 is complete.

[EXTERNAL EMAIL] DO NOT CLICK links or attachments unless you recognize the sender and know the content is safe.

Your Analysis is complete. Your report in PDF format is attached. Information is periodically added to our additional information and disclaimer pages so please check them for updates.

Thank you for your continued business, SanAir

The information in this message may contain confidential information intended for use by the recipient only. If this information was received in error, please reply to the message and delete it.

This email has been scanned by EveryCloud, for more information visit: http://www.everycloudtech.com/mail



Analysis Report prepared for Hurt & Proffitt, Inc.

Report Date: 3/8/2021

Project Name: Commerce St. Bridge

Project #: 20210309 SanAir ID#: 21009278

NVLAP

NVLAP LAB CODE 200870-0

1551 Oakbridge Dr. Suite B | Powhatan, Virginia 23139-8061 888.895.1177 | 804.897.1177 | fax: 804.897.0070 | IAQ@SanAir.com | SanAir.com



Name: Hurt & Proffitt, Inc. Address: 2524 Langhorne Road

Lynchburg, VA 24501

Phone: 434-841-3893 (c)

SanAir ID Number 21009278 FINAL REPORT 3/8/2021 1:15:44 PM

Project Number: 20210309 P.O. Number: 20210309

Project Name: Commerce St. Bridge

Collected Date: 2/15/2021

Received Date: 3/1/2021 9:00:00 AM

Dear Brian Trent.

We at SanAir would like to thank you for the work you recently submitted. The 1 sample(s) were received on Monday, March 01, 2021 via FedEx. The final report(s) is enclosed for the following sample(s): 001-EXC-A.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Sandra Sobrino

Asbestos & Materials Laboratory Manager SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter

- Analysis Pages

- Disclaimers and Additional Information

Sample conditions:

- 1 samples in Good condition.



SanAir ID Number 21009278 FINAL REPORT 3/8/2021 1:15:44 PM

Name: Hurt & Proffitt, Inc. Address: 2524 Langhorne Road

Lynchburg, VA 24501

Phone: 434-841-3893 (c)

Project Number: 20210309 P.O. Number: 20210309

Project Name: Commerce St. Bridge

Collected Date: 2/15/2021

Received Date: 3/1/2021 9:00:00 AM

Analyst: Roseblock, Mary

Asbestos Bulk PLM EPA 600/R-93/116

	Stereoscopic	Com	ponents	
SanAir ID / Description	Appearance	% Fibrous	% Non-fibrous	Asbestos Fibers
001-EXC-A / 21009278-001 Expansion Joint Material/Abutment B Joint	Black Non-Fibrous Heterogeneous	35% Cellulose	65% Other	< 1% Chrysotile

Analyst:

Mary E Poseblook

Approved Signatory:

Analysis Date:

3/8/2021

Date: 3/8/2021

Disclaimer

This report is the sole property of the client named on the SanAir Technologies Laboratory chainof-custody (COC). Results in the report are confidential information intended only for the use by the customer listed on the COC. Neither results nor reports will be discussed with or released to any third party without our client's written permission. The final report shall not be reproduced except in full without written approval of the laboratory to assure that parts of the report are not taken out of context. The information provided in this report applies only to the samples submitted and is relevant only for the date, time, and location of sampling. The accuracy of the results is dependent upon the client's sampling procedure and information provided to the laboratory by the client. SanAir assumes no responsibility for the sampling procedure and will provide evaluation reports based solely on the sample(s) in the condition in which they arrived at the laboratory and information provided by the client on the COC, such as; project number, project name, collection dates, po number, special instructions, samples collected by, sample numbers, sample identifications, sample type, selected analysis type, flow rate, total volume or area, and start stop times that may affect the validity of the results in this report. Samples were received in good condition unless otherwise noted on the report. SanAir assumes no responsibility or liability for the manner in which the results are used or interpreted. This report does not constitute and shall not be used to claim product certification, approval, or endorsement by NVLAP, NIST, or any other U.S. governmental agencies and may not be certified by every local, state, and federal regulatory agencies.

Samples are held for a period of 60 days. Fibers smaller than 5 microns cannot be seen with this method due to scope limitations.

For NY state samples, method EPA 600/M4-82-020 is performed.

NYELAP Disclaimer:

Polarized- light microscopy is not consistently reliable in detecting asbestos in floor covering and similar non-friable organically bound materials. Quantitative transmission electron microscopy is currently the only method that can be used to determine if this material can be considered or treated as non-asbestos containing.

Asbestos Certifications NVLAP lab code 200870-0

City of Philadelphia: ALL-460

PA Department of Environmental Protection Number: 68-05397

California License Number: 2915 Colorado License Number: AL-23143 Connecticut License Number: PH-0105 Massachusetts License Number: AA000222 Maine License Number: LB-0075, LA-0084

New York ELAP lab ID: 11983

Rhode Island License Number: PCM00126, PLM00126, TEM00126 Texas Department of State Health Services License Number: 300440

Commonwealth of Virginia 3333000323 Washington State License Number: C989 West Virginia License Number: LT000616

Vermont License: AL166318

Louisiana Department of Environmental Quality: 212253, Cert 05088

Revision Date: 8/14/2020



1551 Oakbridge Dr. STE B Powhatan, VA 23139 804.897.1177 / 888.895.1177 Fax 804.897.0070

Asbestos Chain of Custody Form 140, Rev 1, 1/20/2017 SanAir ID Number

Fax 804.897.0070 Form 140, Rev 1, 1/20/2017 21009278 sanair.com Hurt & Proffitt Inc. Collect by: CLIENT Company: Project #: 20210309 434-841-3893 (c) 2524 Langhorne Road Phone #: Project Name: COMNERCE ST. BETDGE Address: 434-847-0047 Lynchburg, VA 24501 Date Collected: 02/15/2021 City, St., Zip: 2099 P.O. Number: 20210309 Email: btrent@handp.com State of Collection: Bulk Soil PLM EPA 600/R-93/116 (Qual.) ABB PLM EPA 600/R-93/116 PCM NIOSH 7400 ABSE ABA M OSHA w/ TWA= ABA-2 Positive Stop Vermiculite & Soil TEM AHERA ABSP PLM CARB 435 (LOD <1%) PLM EPA 400 Point Count ABTEM ABEPA PLM CARB 435 (LOD 0.25%) ABB1K PLM EPA 1000 Point Count ABATN TEM NIOSH 7402 ABSP1 PLM CARB 435 (LOD 0.1%) ABBEN PLM EPA NOB** ABT2 TEM Level II ABSP2 D TEM Chatfield** ABBCH Other: Dust TEM EPA NOB** ABWA TEM Wipe ASTM D-6480 ABBTM New York ELAP ABDMV TEM Microvac ASTM D-5755 PLM EPA 600/M4-82-020 PLM Qualitative PLM NY ABQ ** Available on 24-hr. to 5-day TAT ABEPA2 NY ELAP 198.1 ABENY NY ELAP 198.6 PLM NOB Other Matrix ABHE EPA 100.2 ABBNY NY ELAP 198.4 TEM NOB Turn Around 3 HR (4 HR TEM) 6 HR (8HR TEM) 12 HR 🗆 24 HR 🗆 Times ☐ 4 Days 5 Days ☐ 2 Days □ 3 Days Special Instructions Volume Sample Flow Start - Stop Sample # Sample Identification/Location or Area Date Rate* Time* EXPANSION JOINT MATERIAL 001-EXC-A ABUTMENT B JOINT

Relinguished by	+	Date	Time	Received by	Date	Time
1	02/1	2021	TO FEDEX	rtn	30121	9:00 mm
10						

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST Friday will begin at 8 am Monday morning. Weekend or holiday work must be scheduled ahead of time and is charged for rush turnaround time. SanAir covers Standard Overnight FedEx shipping. Shipments billed to SanAir with a faster shipping rate will result in additional charges.

Pageage of of 5



Analysis Report prepared for Hurt & Proffitt, Inc.

Report Date: 3/8/2021

Project Name: Commerce St. Bridge

Project #: 20210309 SanAir ID#: 21009281



1551 Oakbridge Dr. Suite B I Powhatan, Virginia 23139-8061 888.895.1177 | 804.897.1177 | fax: 804.897.0070 | IAQ@SanAir.com | SanAir.com



Name: Hurt & Proffitt, Inc. Address: 2524 Langhorne Road

Lynchburg, VA 24501

Phone: 434-841-3893 (c)

SanAir ID Number 21009281 FINAL REPORT 3/8/2021 2:31:38 PM

Project Number: 20210309 P.O. Number: 20210309

Project Name: Commerce St. Bridge

Collected Date: 2/15/2021

Received Date: 3/1/2021 9:00:00 AM

Dear Brian Trent,

We at SanAir would like to thank you for the work you recently submitted. The 1 sample(s) were received on Monday, March 01, 2021 via FedEx. The final report(s) is enclosed for the following sample(s): L-001.

These results only pertain to this job and should not be used in the interpretation of any other job. This report is only complete in its entirety. Refer to the listing below of the pages included in a complete final report.

Sincerely,

Abisola Kasali Metals Laboratory Director SanAir Technologies Laboratory

Final Report Includes:

- Cover Letter

- Analysis on Test Family AA

- Disclaimers and Additional Information

Sample conditions:

- 1 samples in Good condition:



Name: Hurt & Proffitt, Inc. Address: 2524 Langhorne Road

Lynchburg, VA 24501 Phone: 434-841-3893 (c) SanAir ID Number 21009281 FINAL REPORT 3/8/2021 2:31:38 PM

Project Number: 20210309 P.O. Number: 20210309

Project Name: Commerce St. Bridge

Collected Date: 2/15/2021

Received Date: 3/1/2021 9:00:00 AM

Analyst: Oliver, Hannah

Test Method: SW846/M3050B/7000B

Lead Paint Analysis

PAINT		μg Pb	Sample Size	Calculated	Sample	Sample
Sample	Description	in Sample	(grains)	RL	Results	Results
21009281 - 1	L-001	17070	0.1102	90.7	154900	15.490 %
	Silver Paint				μg/g (ppm)	By Weight

Method Reporting Limit <10 μg/0.1 g paint Sample Contained Substrate.

Signature: 76

Hemmal L. Olive

Date: 3/5/2021

Reviewed:

Date: 3/5/2021

Disclaimer

SanAir Technologies Laboratory, Inc. participates in the Environmental Lead Accreditation Program (ELAP) administered by AIHA-LAP, LLC (Lab ID162952). Refer to our accreditation certificate or www.aihaaccreditedlabs.org for an up to date list of the Fields of Testing for which we are accredited. SanAir also participates in the State of New York's DOH-ELAP (Lab Id 11983), and has met the EPA's NLLAP program standards. This report does not constitute endorsement by AIHA-LAP, LLC and/or any other U.S. governmental agencies; and may not be accredited by every local, state or federal regulatory agency.

This report is the sole property of the client named on the SanAir Technologies Laboratory chain-of-custody (COC). Neither results nor reports will be discussed with or released to any third party without our client's written permission. Final reports cannot be reproduced, except in full, without written authorization from SanAir Technologies Laboratory, Inc. The information provided in this report applies only to the samples submitted and is relevant only for the date, time, and location of sampling. SanAir is not responsible for sample collection or interpretation made by others. SanAir assumes no responsibility for information provided by the client on the COC such as project number, project name, collection dates, po number, special instructions, samples collected by, sample numbers, sample identifications, sample type, selected analysis type, flow rate, total volume or area, and start stop times that may affect the validity of the results in this report. SanAir Technologies Laboratory, Inc only assures the precision and accuracy of the data it generates and assumes no responsibility for errors or biasing that occur during collection prior to SanAir's receipt of the sample(s). SanAir's Method Detection Limits (MDL) and Reporting Limits (RL) have been derived using various materials meeting each accrediting agencies' standards. All quality control results are acceptable unless otherwise noted. Results are not corrected for blanks. For Lead Exposure Limits in Paint, refer to HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards and State and Federal Regulations, where applicable.



Matrix Types

1551 Oakbridge Dr STE B Powhatan, VA 23139 804.897.1177 / 888.895.1177 Fax 804.897.0070 sanair.com

Metals & Lead Chain of Custody

Form 70, Revision 10, 05/18/18

SanAir ID Number

21009281

Company: Hurt & Proffitt Inc.	Project #: 20210309	Phone #: 434-847-7796
Address: 2524 Langhorne Road	Project Name: COMNERCE ST. BRIDGE	Phone #:
City, St., Zip: Lynchburg, VA 24501		Fax #: 434-847-0047
Samples Collected By: CLTENT	P.O. Number: 202/0309	Email: btrente handp.com
Account #: 2099	U.S. State Collected in: VA	Email:

Air (ug/m3) Total Concentration of Lead ICP-total concentration of metals (please list metals): Wipe (ug/ft2) Total Concentration of RCRA 8 Metals Soil Bulk (ug/g or ppm) TCLP for Lead Paint Other: TCLP for RCRA 8 Metals **Turn Around** Same Day 1 Day 2 days 3 Days Time 4 Days Standard (5 day) Other Test:

Metals Analysis Types

Sample #	Collection Date & Time	Sample Identification/Location	Flow Rate	Start Time	Stop Time	Volume (L) Area (Sq ft)
1-001		SILVER PAINT				
						-
	1					-
	1					
	,	X .				
	-/					
	/					
/						

Special Instructions

Relinquished by	Date	Time	Received by	Date	Time
1	02/16/2021	TOFEDEX	PH	3.121	9:00 Am
re					

If no technician is provided, then the primary contact for your account will be selected. Unless scheduled, the turnaround time for all samples received after 3 pm EST will be logged in the next business day. Weekend or holiday work must be scheduled ahead of time and is charged at 150% of the 3hr TAT or a minimum charge of \$150. A courier charge will be applied for same day and one-day turnaround times for offsite work. SanAir covers Standard Overnight FedEx shipping. Shipments Page 1 of 1 billed to SanAir with a faster shipping rate will result in additional charges.

APPENDIX 2

ENVIRONMENTAL PERMIT

WEST COMMERCE STREET OVER PEAK CREEK TOWN OF PULASKI, VIRGINIA



DEPARTMENT OF THE ARMY

US ARMY CORPS OF ENGINEERS
NORFOLK DISTRICT
FORT NORFOLK
803 FRONT STREET
NORFOLK VA 23510-1011

April 25, 2023

Special Projects Section NAO-2021-01589 / VMRC#21-V1563 (Peak Creek)

Town of Pulaski Attn: Bille Pedigo 42 1st Street Pulaski, Virginia 24301

Dear Mr. Pedigo:

This is regarding your Department of the Army permit application number NAO-2021-01589 (VMRC #21-1563) to temporarily impact 1,100 square feet of stream bottom for temporary cofferdams to allow extend existing wing walls and add riprap at the ends of the wing walls associated with bridge replacement over Peak Creek. The work will occur where Commerce Street crossed Peak Creek in Pulaski, Virginia. These impacts are detailed on the enclosed drawings entitled "Figure 1-4 a, Project Plan" prepared and submitted on behalf of the applicant by Schwartz & Associates, Inc. and dated February 19, 2021, (attached).

Your proposed work as outlined above satisfies the criteria contained in the Corps Nationwide Permit 3, attached. Certain Corps Nationwide Permits were published in the December 27, 2021, Federal Register notice (86 FR 73522) and the regulations governing their use can be found in 33 CFR 330 published in Volume 56, Number 226 of the Federal Register dated November 22, 1991.

This nationwide permit verification is contingent upon the following project specific conditions:

SPECIAL CONDITIONS:

 All temporarily impacted subaqueous bottom due to the cofferdam installation must be restored to preconstruction conditions upon completion of the work.

Provided the project specific conditions (above), Regional Conditions, and the Nationwide Permit General Conditions (enclosed) are met, an individual Department of the Army Permit will not be required. To assist in your compliance with NWP General Condition #30, enclosed is a "compliance certification" form, which must be signed and returned within 30 days of completion of the project, including any required compensatory mitigation.

Please be aware that a permit may be required from the Virginia Marine Resources Commission and/or your local wetlands board, and this verification may not be valid until

you obtain their approval, if necessary. This authorization does not relieve your responsibility to comply with local requirements pursuant to the Chesapeake Bay Preservation Act (CBPA), nor does it supersede local government authority and responsibilities pursuant to the Act. You should contact your local government before you begin work to find out how the CBPA applies to your project.

This verification is valid until the Nationwide Permit is modified, reissued, or revoked. This Nationwide Permit 3 is scheduled to be modified, reissued, or revoked prior to March 14, 2026.

It is incumbent upon you to remain informed of changes to the Nationwide Permits. We will issue a public notice when the Nationwide Permits are reissued. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant nationwide permit is modified or revoked, you will have twelve (12) months from the date of the modification or revocation of the Nationwide Permit to complete the activity under the present terms and conditions of this Nationwide Permit unless discretionary authority has been exercised on a case-by-case basis to modify, suspend, or revoke the authorization in accordance with 33 CFR 330.4(e) and 33 CFR 330.5 (c) or (d). Project specific conditions listed in this letter continue to remain in effect after the Nationwide Permit verification expires unless the district engineer removes those conditions. Activities completed under the authorization of a Nationwide Permit which was in effect at the time the activity was completed continue to be authorized by that Nationwide Permit.

In granting an authorization pursuant to this permit, we relied on the information and data provided by the permittee. If we determine that this information is false or incomplete, we may suspend or revoke, in whole or in part, this authorization and institute appropriate legal proceeding.

If you have additional questions or concerns about this permit authorization, please contact the office by telephone at (757) 201-7793 or by email at robert.a.berg@usace.army.mil.

Sincerely,

Robert Berg

Robert Berg

Special Projects Section

Enclosure(s)

CC:

Reynolds-Clark Development



CERTIFICATE OF COMPLIANCE WITH ARMY CORPS OF ENGINEERS PERMIT

Permit Number:	NAO-2021-01589
VMRC Number:	21-V1563
Corps Contact:	Robert Berg
Name of Permittee	e: Town of Pulaski
Date of Verification	n: April 25, 2023
Permit Type:	Nationwide Permit 3
mitigation requiraddress:	of completion of the activity authorized by this permit and any ed by the permit, sign this certification and return it to the following
	orps of Engineers - Norfolk District
CENAO-WI Attn: Rober	t Berg
803 Front S Norfolk, VA	23510-1096
Or scan and	d send via email to robert.a.berg@usace.army.mil
Corps of Engineer	our permitted activity is subject to a compliance inspection by a U.S. Army rs representative. If you fail to comply with this permit you are subject to modification or revocation.
in accordance with	at the work authorized by the above referenced permit has been completed in the terms and conditions of the said permit, and required mitigation has accordance with the permit conditions.
Signature of Perm	ittee Date
Signature of Perm	ittee Date

Effective Date: February 25, 2022 / Expiration Date: March 14, 2026 Authorities: Sections 10 and 404

- channel modification is limited to the minimum necessary for the repair, rehabilitation, or authorizes the removal of accumulated sediment and debris within, and in the immediate replacement of the structure or fill; such modifications, including the removal of material damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate serviceable structure or fill, or of any currently serviceable structure or fill authorized by other discrete events, provided the repair, rehabilitation, or replacement is commenced, replacement of those structures or fills destroyed or damaged by storms, floods, fire or authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of necessary to make the repair, rehabilitation, or replacement are authorized. This NWP from the stream channel, must be immediately adjacent to the project. This NWP also other regulatory agencies, or current construction codes or safety standards that are or is under contract to commence, within two years of the date of their destruction or CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or also authorizes the removal of previously authorized structures or fills. Any stream (a) The repair, rehabilitation, or replacement of any previously authorized, currently funding, contract, or other similar delays.
- feet in any direction from the structure. This 200-foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be dimensions that existed when the structure was built but cannot extend farther than 200 (b) This NWP also authorizes the removal of accumulated sediments and debris outside otherwise specifically approved by the district engineer under separate authorization. the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, necessary to restore the waterway in the vicinity of the structure to the approximate water intake structures, etc.). The removal of sediment is limited to the minimum deposited and retained in an area that has no waters of the United States unless
- entirety and the affected areas returned to pre-construction elevations. The areas affected temporary mats, necessary to conduct the maintenance activity. Appropriate measures maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, (c) This NWP also authorizes temporary structures, fills, and work, including the use of access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their must be taken to maintain normal downstream flows and minimize flooding to the by temporary fills must be revegetated, as appropriate.
- navigation. This NWP does not authorize beach restoration. This NWP does not authorize (d) This NWP does not authorize maintenance dredging for the primary purpose of new stream channelization or stream relocation projects.

submit a pre-construction notification to the district engineer prior to commencing the Notification: For activities authorized by paragraph (b) of this NWP, the permittee must information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (Sections 10 and 404)) activity (see general condition 32). The pre-construction notification must include

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance.

REGIONAL CONDITIONS:

Permits (NWPs) Applicable in Virginia (Including Northern Virginia Military Installations within Baltimore District's Area of Responsibility) for the 41 Nationwide Permits affixed to For applicable Regional Conditions, Water Quality Certification (WQC) determination or requirements, and Coastal Zone Management Act (CZMA) consistency determinations or requirements see the Norfolk District Final Regional Conditions for the 2021 Nationwide he end of this document.

GENERAL CONDITIONS:

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

1. Navigation.

- (a) No activity may cause more than a minimal adverse effect on navigation.(b) Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- the Corps of Engineers, to remove, relocate, or after the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration. navigation of the navigable waters, the permittee will be required, upon due notice from representative, said structure or work shall cause unreasonable obstruction to the free The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized Ö
- culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements. species that normally migrate through the area, unless the activity's primary purpose is to movements of those species of aquatic life indigenous to the waterbody, including those Impound water. All permanent and temporary crossings of waterbodies shall be suitably Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle R
- Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized. e
- Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

Nationwide Permit 3 - Activities, Regional Conditions, General Conditions, and Definitions

- Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWPs 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.
- Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).
- Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.
- Adverse Effects from Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.
- 9. Management of Water Flows. To the maximum extent practicable, the pre-construction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below. The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows unless the primary purpose of the activity is to impound water or manage high flows. The activity may after the pre-construction course, condition, capacity, and location of open waters if it benefits the aquatic environment (e.g. stream restoration or relocation activities).
- 10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.
- Equipment. Heavy equipment working in wellands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.
- 12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.
- 13. Removal of Structures and Fills. Temporary structures must be removed, to the maximum extert practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The affected areas must be revegetated, as appropriate.
- 14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.
- Single and complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.
- 16. Wild and Scenic Rivers.
- (a) No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in willing that

- the proposed activity will not adversely affect the Wild and Scenic River designation or study status.
- (b) If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a "study river" for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.
- Scenic River designation or study status.

 (c) Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: http://www.rivers.gov/.
- 17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunling rights.

18, Endangered Species.

- (a) No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the confinued existence of a threatened or endangered species or a species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify the critical habitat of such species. No activity is authorized under any NWP which "may affect" a listed species or critical habitat unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of "effects of the action" for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding "activities that are reasonably certain to occur" and "consequences caused by the proposed action."
- (b) Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted, if the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 or the ESA.
- appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.

 (c) Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species or designated critical habitat might be affected or is in the wichity of the activity or if the activity is located in designated critical habitat, and shall not begin work on the activity until notified by the district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species or designated critical habitat, the pre-construction notification must include the name(s) of the endangered or threatened species that might be affected by the proposed activity. The district engineer will determine whether the proposed activity will nave "no effect" to listed conficial habitat that might be affected by the proposed activity, and have "no effect" to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species or critical habitat that might be affected or is in the wichity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have "no effect" on listed species or critical habitat, or until ESA section 7 consultation has been completed, if the non-Federal applicant has not heard

Nationwide Permit 3 - Activities, Regional Conditions, General Conditions, and Definitions

back from the Corps within 45 days, the applicant must still wait for notification from the

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

(e) Authorization of an activity by an NWP does not authorize the Take" of a threatened or endangered species as defined under the ESA. In the absence of separale authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with "incidental take" provisions. etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person (e)

subject to the junsdiction of the United States to take a listed species, where "take" means

impaining essential behavioral patterns, including breeding, leeding or sheltering.
If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word "harm" in the definition of "take" means an act modification or degradation where it actually kills or injures wildlife by significantly which actually kills or injures wildlife. Such an act may include significant habitat 8

section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre- construction notification section 10(a)(1)(B) permit the district engineer does not need to conduct a separate ESA whether the ESA section 10(a)(1)(B) permit covers the proposed NWP activity or whether an approved Habitat Conservation Plan for a project or a group of projects that includes, the proposed NWP activity, the non-federal applicant should provide a copy of that ESA incidental take were considered in the internal ESA section 7 consultation for the ESA associated incidental take were considered in the internal ESA section 7 consultation section 10(a)(1)(B) permit to determine whether the proposed NWP activity and the condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general concurrence from the agency that the proposed NWP activity and the associated conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in additional ESA section 7 consultation is required.

Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their worldwide Web or http://www.fivs.gov/ipac_and pages at http://www.hws.gow (B)

Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether "incidental take" permits are necessary and available under the Migratory Bird Treaty Act or Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by NWP complies with the Migratory Bird Treaty Act and the Bald and Bald and Golden Eagle Protection Act for a particular activity. http://www.nmfs.neaa.gov/ar/species/esa/ respectively office of the U.S. Fish and Wildlife

20. Historic Properties.

(a) No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been

Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the 330.4(g)(1)). If pre-construction notification is required for the proposed NWP activity, the respective federal agency is responsible for fulfilling its obligation to comply with section appropriate documentation has been submitted. If the appropriate documentation is not requirements of section 106 of the National Historic Preservation Act (see 33 CFR submitted, then additional consultation under section 105 may be necessary. The Federal permittees should follow their own procedures for complying 9

Non-federal permittees must submit a pre-construction notification to the distinct engineer if the NWP activity might have the potential to cause effects to any historic properties. (0)

National Register of Historic Places, including previously unidentified properties. For such activities, the pre-construction notification must state which historic properties might have indicating the location of the historic properties or the potential for the presence of historic survey. Based on the information submitted in the PCN and these identification efforts, the identification efforts commensurate with potential Impacts, which may include background cause effects on the historic properties. Section 106 consultation is not required when the presence of historic properties can be sought from the State Historic Preservation Officer. and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing predistrict angineer shall determine whether the proposed NWP activity has the potential to district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800,3(a)). Section 106 consultation is required when historic properties. The district angineer will conduct consultation with consulting parties listed on, determined to be eligible for listing on, or potentially eligible for listing on the construction notifications, district engineers will comply with the current procedures for district engineer shall make a reasonable and good faith effort to carry out appropriate Tribal Historic Preservation Officer, or designated tribal representative, as appropriate addressing the requirements of section 106 of the National Historic Preservation Act. the district engineer determines that the activity has the potential to cause effects on research, consultation, oral history interviews, sample field investigation, and/or field Assistance regarding information on the location of, or polential for, the identified under 36 CFR 800.2(c) when he or she makes any of the following effect the potential to be affected by the proposed NVVP activity or include a vicinity map determinations for the purposes of section 106 of the NHPA, no historic properties

applicant that he or she carnot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, either that the activity has no potential to cause effects to historic properties or that NHPA Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the engineer will notify the prospective permittee within 45 days of receipt of a complete presection 106 consultation has been completed. For non-federal permittees, the district construction notification whether NHPA section 106 consultation is required. If NHPA non-Federal applicant shall not begin the activity until notified by the district engineer section 106 consultation is required, the district engineer will notify the non-Federal the applicant must still wait for notification from the Corps (0)

affected, no adverse effect, or adverse effect

historic properties on tribal lands or affects properties of interest to those tribes, and other determines that cocumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects having legal power to prevent it, allowed such significant adverse effect to occur, unless and proposed mitigation. This documentation must include any views obtained from the the Corps. after consultation with the Advisory Council on Historic Preservation (ACHP). circumstances, the degree of damage to the integrity of any historic properties affected who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally 305113) prevents the Corps from granting a permit or other assistance to an applicant significantly adversely affected a historic property to which the permit would relate, or parties known to have a legitimate interest in the impacts to the permitted activity on Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. Corps is required to notify the ACHP and provide documentation specifying the historic properties (e)

engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any accomplishing the activity authorized by NWP, they must immediately notify the district completed. The district angineer will initiate the Federal, Tribal, and state coordination previously unknown historic, cultural or archeological remains and artifacts while 27

required to determine if the Items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

- 22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.
 - (a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 5258 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.
- (b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.
- 23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:
 - (a) The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).
- (b) Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- (c) Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed V10-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For welland losses of V10-acre or less that require pre-construction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.
- to ensure that the activity results in only minimal adverse environmental effects.

 (d) Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 1/103/100-acre and require pre-construction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the paragraph (e) of this general condition. For losses of stream bed of 1/103/100-acre or less that require pre-construction notification, the district engineer may determine on a casse-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, though stream rehabilitation, enhancement, or preservation since streams are difficult-to-replace resources (see 33 CFR 332.3(e)(3)).
- (e) Compensatory mitigation plans for the restouctes (see 33 CFK 332.3(e)(3)). Prosevation since a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters, in some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will

be 25 to 50 feet wide on each side of the stream, but the district engineer may require silghtly wider inparian areas to address documented water quality or habital loss concerns. If it is not possible to restore or maintain/protect a riperian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory miligation (e.g., riparian areas and/or wetlands compensation) based on what is best for the aquatic environment on a watershed basis. In cases where fighanian areas are determined to be the most appropriate form of minimization or compensatory miligation, the district engineer may waive or reduce the requirement to provide welland compensatory miligation for welland losses.

- (f) Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
- (1) The prospective permittee is responsible for proposing an appropriate compensatory mitigation prior if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 GFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the district engineer may approve the use of permittee- responsible mitigation.
 - (2) The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f)).
- (3) Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option considered for permittee-responsible mitigation.
- (4) If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee-responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.
- (5) If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided (see 33 CFR 332.4(c)(1)(ii)).
 - (6) Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).
- (g) Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of \textit{L2-acre} of the NWPs. For example, if an NWP has a careage limit of \textit{L2-acre} of waters of the United States, even if compensatory mitigation is provided that replaces of restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.
 - accepte interest axo satisfies the floring than minimal impact requirement for the NVVPs.

 (h) Permittees may propose the use of miligation banks, in-lieu fee programs, or permitteeresponsible mitigation. When developing a compensatory mitigation proposal, the

4

Nationwide Permit 3 - Activities, Regional Conditions, General Conditions, and Definitions

permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332,3(b). For activities resulting in the loss of marine or estuarine resources, permittee-responsible mitigation may be environmentally preferable if there are no miligation banks or in-likeu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee-responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.

- (i) Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.
- 24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.
- 25. Water Quality.
- (a) Where the certifying authority (state, authorized tribe, or EPA, as appropriate) has not previously certified compliance of an NWP with CWA section 401. a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFF 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.
 - (b) If the NWP activity requires pre-construction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or walved. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification requirement has been satisfied by the
- (c) The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.
- 26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence and individual state coastal zone must occur (see 33 CFR 330,4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.
- 27. Regional and Case-By-Case Conditions. The activity must compty with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

- 28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:
- (a) If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for the total project cannot exceed 1/3-acre.
 (b) If one or more of the NWPs used to authorize the single and complete project has
 - (b) If one or more of the NWPs used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWPs cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.
- 29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:
 "When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To wildate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferce sign and

(Transferee)		
(Option)		

- 30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document with the NWP verification letter.
 - (a) A statement that the authorized activity was done in accordance with the NWP
- authorization, including any general, regional, or activity-specific conditions;

 (b) A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or inlieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(I)(3) to confirm
- that the permittee secured the appropriate number and resource type of credits; and (c) The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.
- 31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires permission from the Corps pursuent to 33 U.S.C. 408 because it will alter or tequires permission from the Corps pursuent to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that

Nationwide Permit 3 - Activities, Regional Conditions, General Conditions, and Definitions

occupy, or use the USACE project, and the district engineer issues a written NWP verification. appropriate Corps office issues the section 408 permission or completes its review to alter requires section 408 permission and/or review is not authorized by an NWP until the

Pre-Construction Notification.

- prospective permittee that the PCN is still incomplete and the PCN review process will not PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the make the PCN complete. The request must specify the information needed to make the engineer. The prospective permittee shall not begin the activity until either: (1) He or she is notified in writing by the district engineer that the activity may proceed engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the (a) Timing. Where required by the terms of the NWP, the permittee must notify the district permittee within that 30 day period to request the additional information necessary to date of receipt and, if the PCN is determined to be incomplete, notify the prospective commence until all of the requested information has been received by the district
 - under the NWP with any special conditions imposed by the district or division
- to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no effect" on listed species or "no potential to cause effects" on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee's right to proceed under the NWP may be modified, suspended, or revoked only in accordance division engineer. However, if the permittee was required to notify the Corps pursuant engineer notifies the permittee in writing that an individual permit is required within 45 PCN and the prospective permittee has not received written notice from the district or requires a written waiver to exceed specified limits of an NWP; the permittee may not begin the activity until the district engineer issues the waiver. If the district or division Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity with the pr set forth in 33 CFR 330.5(d)(2).

 Contents of Pre-Construction Notification: The PCN must be in writing and include the following information: 45 calendar days have passed from the district engineer's receipt of the complete 8
 - ê
- Name, address and telephone numbers of the prospective permittee;
 Location of the proposed activity;
 Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;

3

measure; a description of any proposed mitigation measures intended to reduce the amount of loss of wetlands, other special aquatic sites, and other waters expected used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of description of the proposed activity and any proposed mitigation measures should NWP(s), regional general permit(s), or individual permit(s) used or intended to be be sufficiently detailed to allow the district engineer to determine that the adverse adverse environmental effects the activity would cause, including the anticipated to result from the NWP activity, in acres, linear feet, or other appropriate unit of (i) A description of the proposed activity; the activity's purpose; direct and indirect adverse environmental effects caused by the proposed activity; and any other the Army authorization but do not require pre-construction notification. The

environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.

- wetlands, other special aquatic sites, and other waters for each single and complete construction notification, the PCN must include the quantity of anticipated losses of crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project and does not change those non-PCN NWP activities into NWP PCNs. (ii) For linear projects where one or more single and complete crossings require pre
 - with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker decision. Sketches should contain sufficient detail to provide an Illustrative description of the proposed activity (e.g., a conceptual plan), but do not (iii) Sketches should be provided when necessary to show that the activity complies need to be detailed engineering plans).
- The PCN must include a delineation of wetlands, other special aquatic sites, and other the Corps does the delineation, especially if the project site is large or contains many special aquatic sites and other waters on the project site, but there may be a delay if project site. Wetland delineations must be prepared in accordance with the current wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the method required by the Corps. The permittee may ask the Corps to delineate the waters, such as lakes and ponds, and perennial and intermittent streams, on the Corps, as appropriate. 6
 - explaining why the adverse environmental effects are no more than minimal and why (6) If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan. 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitgation requirement will be satisfied, or
- affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal listing) that might be affected by the proposed activity or utilize the designated critical For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat proposed for such designation) might be the name(s) of those endangered or threatened species (or species proposed for permittees must provide documentation demonstrating compliance with the 8
- effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National (8) For non-federal permittees, if the NWP activity might have the potential to cause Endangered Species Act. Historic Preservation Act.
 - (9) For an activity that will occur in a component of the National Wild and Scenic River inclusion in the system while the river is in an official study status, the PCN must System, or in a river officially designated by Congress as a "study river"
- (10) For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction identify the Wild and Scenic River or the "study river" (see general condition 16); and submitted a written request for section 408 permission from, or review by, the Corps notification must include a statement confirming that the project proponent has office having jurisdiction over that USACE project.

9

Vationwide Permit 3 - Activities, Regional Conditions, General Conditions, and Definitions

- (c) Form of Pre-Construction Notification: The natlonwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittees.
 - (d) Agency Coordination:
- (1) The district engineer will consider any comments from Federal and state agencies concerning the proposed activity's compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity's adverse environmental effects so that they are no more than minimal.
- (2) Agency coordination is required for:(i) All NWP activities that require pre-construction notification and result in the loss of

greater than 1/2-acre of waters of the United States;

- (ii) NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic
- Turiming Vov., or involve discharges of dredged of fill material into special aquatic sites; and (iii) NWVP 54 activities in excess of 500 linear feet, or that extend into the waterbody
- (iii) NWVP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.
- (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water quality agency, EPA, and, if appropriate, the NMFS), With the exception of NWP 37, these agencies will have 10 calendar days from the date the construction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record with the terms and conditions of the NWPs, including the need for mitigation to ensure transmission, or email that they inlend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so, contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preunacceptable hazard to life or a significant loss of property or economic hardship will the NWP 37 authorization should be modified, suspended, or revoked in accordance (3) When agency coordination is required, the district engineer will immediately provide The district engineer will consider any comments received to decide whether concerns were considered. For NWP 37, the emergency watershed protection and associated with each pre-construction notification that the resource agencies' material is transmitted to notify the district engineer via telephone, facsimile rehabilitation activity may proceed immediately in cases where there is an with the procedures at 33 CFR 330.5, occur.
 - (4) In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stewens Fishery Conservation and Management Act.
- 305(p)(4)(b) of the Magnuson-Stevens Fishery Conservation and Management Act. (5) Applicants are encouraged to provide the Corps with either electronic files or multiple copies of pre-construction notifications to expedite agency coordination.

DISTRICT ENGINEER'S DECISION:

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other.

aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

- 2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the direct and indirect effects caused by the NWP activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific fedors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the functions growing the vicinity of the two the adverse effects (temporary or permanent), the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and miligation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental effects
 - the NWP activity (after consideration of the mitigation proposal) are determined by the district applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation required compensatory mitigation. If the prospective permittee elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the more than minimal adverse environmental effects. If the net adverse environmental effects of waters of the United States, unless the district engineer determines that prior approval of the wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer determine whether the proposed mitigation would ensure that the NWP activity results in no response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in verification the district engineer deems necessary. Conditions for compensatory miligation final mitigation plan is not practicable or not necessary to ensure timely completion of the proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse erwironmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and engineer to be no more than minimal, the district engineer will provide a timely written will consider any proposed compensatory mitigation or other mitigation measures the NWP authorization by the district engineer.
 - The district angineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either:

 (a) That the activity does not qualify for authorization under the NVVP and instruct the applicant on the procedures to seek authorization under an individual permit;

Nationwide Permit 3 - Activities, Regional Conditions, General Conditions, and Definitions

- (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or
- Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of PCN period (unless additional time is required to comply with general conditions 18, 20, miligation is required, no work in waters of the United States may occur until the district and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse that the activity is authorized under the NWP with specific modifications or conditions. environmental effects so that they are no more than minimal. When compensatory he required compensatory mitigation.

FURTHER INFORMATION

- District engineers have authority to determine if an activity complies with the terms and conditions of an NWP
- 2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
- NWPs do not grant any property rights or exclusive privileges.
 NWPs do not authorize any injury to the property or rights of others.
 NWPs do not authorize interference with any existing or proposed Federal project (see general condition 31).

DEFINITIONS

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place. Discharge: The term "discharge" means any discharge of dredged or fill material into waters of the United States.

restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area proposed NWP 27 activity. An ecological reference takes into account the range of variation of Ecological reference: A model used to plan and design an aquatic habitat and riparian area habitat type or riparian area type to be restored, enhanced, or established as a result of the Alternatively, an ecological reference may be based on a conceptual model for the aquatic type that currently exists in the region where the proposed NWP 27 activity is located. the aquatic habitat type or riparian area type in the region.

Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a Enhancement: The manipulation of the physical, chemical, or biological characteristics of an decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). resource area.

characteristics present to develop an aquatic resource that did not previously exist at an upland Establishment (creation): The manipulation of the physical, chemical, or biological site. Establishment results in a gain in aquatic resource area.

height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell The line encompasses spring high tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, High Tide Line: The line of intersection of the land with the water's surface at the maximum tidal gages, or other suitable means that delineate the general height reached by a rising fide. accompanying a hurricane or other intense storm.

artifacts, records, and remains that are related to and located within such properties. The term inctudes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60). Independent utility: A test to determine what constitutes a single and complete non-linear building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes Historic Property: Any prehistoric or historic district, site (including archaeological site),

multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can would be constructed absent the construction of other projects in the project area. Portions of a project in the Corps Regulatory Program. A project is considered to have independent utility if it

be considered as separate single and complete projects with independent utility. Indirect effects: Effects that are caused by the activity and are later in time or farther removed

The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wellands for determining whether a project may qualify for an NWP: it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, In distance but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not construction, are not included in the measurement of loss of waters of the United States. excavated, or drained, but restored to pre-construction contours and elevations after

considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899, These waters are defined at 33 CFR part 329.

tidal waters. Non- tidal wetlands contiguous to tidal waters are located landward of the high tide Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of line (i.e., spring high tide line).

standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to Open water. For purposes of the NWPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or be open waters. Examples of "open waters" include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round

Practicable: Available and capable of being done after taking into consideration cost, existing during a typical year.

technology, and logistics in light of overall project purposes.

Nationwide Permit 3 - Activities, Regional Conditions, General Conditions, and Definitions

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Pre-construction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be volundarily submitted in cases where pre-construction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Reseablishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two

The purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: Re-establishment and rehabilitation.

Ritife and pool complex: Ritife and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Ritife and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a course substrate in rifles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with rifles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shell or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project. A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term "single and complete project" is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped welland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term "single and complete project" is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and

complete non-linear project must have independent utility (see definition of "independent utility"). Single and complete non-linear projects may not be "piecemealed" to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities. Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or Inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream's course, condition, capacity, or location that causes a more than minimal interruption of normal stream processes. A channelized fursacional stream remains a water of the United States.

jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, what', dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reet, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstance.

or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: (1) Held in trust by the United States for the benefit of any Indian tribe or individual; or (2) held by any Indian tribe or individual subject to restrictions by the Inited States entering signature.)

restrictions by the United States against alienation.

Tribar rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelihes. They are areas that are permanently inundated and under normal circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody. For purposes of the NWPs, a waterbody is a "water of the United States." If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a sing e aquatic unit (see 33 CFR 328.4(c)(2)).

Norfolk District Final Regional Conditions for the 2021 Nationwide Permits (NWPs) Applicable in Virginia (Including Northern Virginia Military Installations within Baltimore District's Area of Responsibility)

These Regional Conditions apply only to the 41 NWPs published in the December 27, 2021 (86 FR 73522). The following 41 NWPs are effective February 25, 2022 and will expire on March 14, 2026:

NWP 1, NWP 2, NWP 3, NWP 4, NWP 5, NWP 6, NWP 7, NWP 8, NWP 9, NWP 10, NWP 11, NWP 13, NWP 14, NWP 15, NWP 16, NWP 17, NWP 18, NWP 19, NWP 20, NWP 22, NWP 23, NWP 24, NWP 25, NWP 27, NWP 28, NWP 30, NWP 31, NWP 32, NWP 33, NWP 34, NWP 35, NWP 36, NWP 37, NWP 38, NWP 41, NWP 45, NWP 46, NWP 49, NWP 53, NWP 54, and NWP 59.

I. REGIONAL CONDITIONS APPLICABLE TO ALL NWPS UNLESS OTHERWISE STATED:

1. Waters Containing Submerged Aquatic Vegetation (SAV) Beds:

This condition applies to: NWPs 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 22, 23, 24, 25, 27, 28, 31, 32, 33, 35, 36, 37, 38, 45, 53, and 54.

A pre-construction notification (PCN) is required if work will occur in areas that contain submerged aquatic vegetation (SAV). Information about SAV habitat can be found at the Virginia Institute of Marine Science's website http://mobjack.vims.edu/sav/savwabmap/. Additional avoidance and minimization measures, such as relocating a structure or time-of-year restrictions (TOYR), may be required to avoid or reduce impacts to SAV habitat.

2. Anadromous Fish Use Areas:

Authorizations associated with the NWPs shall not adversely affect spawning habitat or a migratory pathway for anadromous fish. Areas of anadromous fish use are indicated on the Virginia Department of Wildlife Resources (DWR) information system at: https://services.dwr.virginia.gov/fwis/. If a project is located within an area documented as an anadromous fish use area (confirmed or potential), all in-stream work is prohibited from occurring between February 15 through June 30 of any given year or other time of year restriction (TOYR) specified by the DWR and/or the Virginia Marine Resources Commission (VMRC). Should the Norfolk District determine that the work is minimal and no TOYR is needed, the District will initiate consultation with NOAA Fisheries Service for their concurrence. A TOYR is not required for dredging activities in the Elizabeth River upstream of the Mid-Town Tunnel on the main-stem and the

West Norfolk Bridge (Route 164, Western Freeway) on the Western Branch of the Elizabeth River.

Designated Critical Resource Waters, which include National Estuarine Research Reserves:

A PCN is required for work under NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38 and 54 in the Chesapeake Bay National Estuarine Research Reserve in Virginia. This multi-site system along a salinity gradient of the York River includes Sweet Hall Marsh, Taskinas Creek, Catlett Islands, and Goodwin Islands. More information can be found at: http://www.vims.edu/cbnerr/.

NWPs 7, 12, 14, 16, 17, 31, 35, and 49 cannot be used to authorize the discharge of dredged or fill material in the Chesapeake Bay National Estuarine Research Reserve in Virginia.

4. Federally Listed Threatened or Endangered Species and Designated Critical Habitat for Non-Federal Permittees

For ALL NWPs, a PCN is required for any project that may affect a federally listed threatened or endangered species or designated critical habitat. The U.S. Fish and Wildlife Service (Service) has developed an online system that allows users to find information about sensitive resources that may occur within the vicinity of a proposed project. This system named "Information, Planning and Conservation System" (IPaC), is located at: http://ecos.fws.gov/ipac/. The applicant may use IPaC to determine if any federally listed threatened or endangered species or designated critical habitat may be affected by their proposed project. If your Official Species List from IPaC identifies any federally listed threatened or endangered species, you are required to submit a PCN for the proposed activity, unless the project clearly does not impact a listed species or suitable habitat for the listed species. If you are unsure about whether your project will impact federally listed threatened or endangered species, please submit a PCN, so the Norfolk District may review the action. Further information about the Virginia Field Office "Project Review Process" may be found at:

http://www.fws.gov/northeast/virginiafield/endangered/projectreviews.html.

Additional consultation may also be required with NOAA Fisheries Service, Protected Resources Division, for listed species or critical habitat under their jurisdiction, including sea turtles, marine mammals, shortnose sturgeon, and Atlantic sturgeon. For additional information about species under their jurisdiction in Virginia, please see https://www.fisheries.noaa.gov/new-england-mid-atlantic/consultations/section-7-consultations-greater-atlantic-region.

Additional resources to assist in determining compliance with this condition can be found on our webpage:

http://www.nao.usace.army.mil/Missions/Regulatory/USFWS.aspx

5. Conditions for Designated Trout Waters

A PCN is required for work in Designated Trout Waters, as defined by the Virginia State Water Control Board and the DWR. The waters, occurring specifically within the mountains of Virginia, are within the following river basins:

- 1) Potomac-Shenandoah River Basins
- 2) James River Basin
- 3) Roanoke River Basin
- 4) New River Basin
- 5) Tennessee and Big Sandy River Basins
- 6) Rappahannock River Basin

Information on designated trout streams can be obtained via DWR's Virginia Fish and Wildlife Information Service's (VAFWIS's) Cold Water Stream Survey database. Basic access to the VAFWIS is available via https://services.dwr.virginia.gov/fwis/.

DWR specifies the following time-of-year restrictions (TOYRs) for any in-stream work within streams identified as wild trout waters in its Cold Water Stream Survey database. The recommended TOYRs for trout species are:

Brook Trout: October 1 through March 31
 Brown Trout: October 1 through March 31
 Rainbow Trout: March 15 through May 15

This condition applies to the following counties and cities: Albemarle, Allegheny, Amherst, Augusta, Bath, Bedford, Bland, Botetourt, Bristol, Buchanan, Buena Vista, Carroll, Clarke, Covington, Craig, Dickenson, Floyd, Franklin, Frederick, Giles, Grayson, Greene, Henry, Highland, Lee, Loudoun, Madison, Montgomery, Nelson, Page, Patrick, Pulaski, Rappahannock, Roanoke City, Roanoke Co., Rockbridge, Rockingham, Russell, Scott, Shenandoah, Smyth, Staunton, Tazewell, Warren, Washington, Waynesboro, Wise, and Wythe.

Any discharge of dredged and/or fill material authorized by the NWPs, which would occur in the designated waterways or adjacent wetlands of the specified counties, requires a PCN to the appropriate Corps of Engineers field office, and written approval from that office prior to performing the work. The Norfolk District recommends that permittees first contact the applicable Norfolk District Field Office, found at this web link: http://www.nao.usace.army.mil/Missions/Regulatory/Contacts.aspx, to determine if the PCN procedures would apply.

6. Invasive Species

Plant species listed in the most current Virginia Department of Conservation and Recreation's (DCR) Invasive Alien Plant List shall not be used for re-vegetation for activities authorized by any NWP. The list of invasive plants in Virginia is found at: https://www.dcr.virginia.gov/natural-heritage/invsppdflist. DCR recommends the use of regional native species for re-vegetation as identified in the DCR Native Plants for Conservation, Restoration and Landscaping brochures for the coastal, piedmont and mountain regions https://www.dcr.virginia.gov/natural-heritage/native-plants-finder. https://www.dcr.virginia.gov/natural-heritage/native-plants-finder.

7. Countersinking Pipes and Culverts

This condition applies to: NWPs 3, 7, 12, 14, 17, 18, 23, 25, 27, 32, 33, 37, 38, 41, 45, 46, and 49.

NOTE FOR WORK IN TIDAL WATERS: New and replacement pipes/culverts in tidal waters must be installed with the inverts no higher than the prevailing stream/channel bottom elevation. If the permittee determines that matching existing elevations is not practicable, then a PCN is required. This condition does not apply to pipe extensions in tidal waters.

Based on consultation with DWR, the Norfolk District has determined that fish and other aquatic organisms are most likely present in any nontidal stream being crossed, in the absence of site-specific evidence to the contrary. The following conditions will apply in nontidal waters:

- a. All pipes and culverts placed in streams will be countersunk at both the inlet and outlet ends, unless indicated otherwise by the Norfolk District on a case-by-case basis (see below). Pipes that are 24" or less in diameter shall be countersunk 3" below the natural stream bottom. Pipes that are greater than 24" in diameter shall be countersunk 6" below the natural stream bottom. The countersinking requirement does not apply to bottomless pipes/culverts or pipe arches. All single pipes or culverts (with bottoms) shall be depressed (countersunk) below the natural streambed at both the inlet and outlet of the structure. In sets of multiple pipes or culverts (with bottoms) at least one pipe or culvert shall be depressed (countersunk) at both the inlet and outlet to convey low flows.
- b. When countersinking culverts, permittees must ensure reestablishment of a surface water channel (within 15 days post construction) that allows for the movement of aquatic organisms and maintains the same hydrologic regime that was present pre-construction (i.e. the depth of surface water through the permit area should match the upstream and downstream depths). This may require the addition of finer materials to choke the larger stone and/or placement of riprap to allow for a low flow channel.

- c. The requirement to countersink does not apply to extensions of existing pipes or culverts that are not countersunk, or to maintenance to pipes/culverts that does not involve replacing the pipe/culvert (such as repairing cracks, adding material to prevent/correct scour, etc.).
- d. Floodplain pipes: The requirement to countersink does not apply to pipes or culverts that are being placed above ordinary high water, such as those placed to allow for floodplain flows. The placement of pipes above ordinary high water is not jurisdictional (provided no fill is discharged into wetlands).
- Hydraulic opening: Pipes should be adequately sized to allow for the passage of ordinary high water with the countersinking and invert restrictions taken into account.
- f. Pipes on bedrock or above existing utility lines: Different procedures will be followed for pipes or culverts to be placed on bedrock or above existing buried utility lines where it is not practicable to relocate the lines, depending on whether the work is for replacement of an existing pipe/culvert or a new pipe/culvert:
 - i. Replacement of an existing pipe/culvert: Countersinking is not required provided the elevations of the inlet and outlet ends of the replacement pipe/culvert are no higher above the stream bottom than those of the existing pipe/culvert. Documentation (photographic or other evidence) must be maintained in the permittee's records showing the bedrock condition and the existing inlet and outlet elevations.
 - ii. A pipe/culvert is being placed in a new location; If the permittee determines that bedrock or an existing buried utility line that is not practicable to relocate prevents countersinking, they should evaluate the use of a bottomless pipe/culvert, bottomless utility vault, span (bridge) or other bottomless structure to cross the waterway, and also evaluate alternative locations for the new pipe/culvert that will allow for countersinking. If the permittee determines that neither a bottomless structure nor an alternative location is practicable, then a PCN is required. The permittee must provide documentation of measures evaluated to minimize disruption of the movement of aquatic life as well as documentation of the cost, engineering factors, and site conditions that prohibit countersinking the pipe/culvert. Options that must be considered include partial countersinking (such as less than 3" of countersinking, or countersinking of one end of the pipe), and constructing stone step pools, low rock weirs downstream, or other measures to provide for the movement of aquatic organisms. PCN must also include photographs documenting site conditions. NOTE: Blasting of stream bottoms through the use of explosives is not acceptable as a means of providing for countersinking of pipes on bedrock.

- g. Pipes on steep terrain: Pipes being placed on steep terrain (slope of 5% or greater) must be countersunk in accordance with the conditions above and will in most cases be non-reporting. It is recommended that on slopes greater than 5%, a larger pipe than required be installed to allow for the passage of ordinary high water in order to increase the likelihood that natural velocities can be maintained. There may be situations where countersinking both the inlet and outlet may result in a slope in the pipe that results in flow velocities that cause excessive scour at the outlet and/or prohibit some fish movement. This type of situation could occur on the side of a mountain where falls and drop pools occur along a stream. Should this be the case, or should the permittee not want to countersink the pipe/culvert for other reasons, they must submit a PCN. The permittee must provide documentation of measures evaluated to minimize disruption of the movement of aquatic life as well as documentation of the cost, engineering factors, and site conditions that prohibit countersinking the pipe/culvert. The permittee should design the pipe to be placed at a slope as steep as stream characteristics allow, countersink the inlet 3-6", and implement measures to minimize any disruption of fish movement. These measures can include constructing a stone step/pool structure, preferably using river rock/native stone rather than riprap, constructing low rock weirs to create a pool or pools, or other structures to allow for fish movements in both directions. Stone structures should be designed with sufficient-sized stone to prevent erosion or washout and should include keying-in as appropriate. These structures should be designed both to allow for fish passage and to minimize scour at the outlet. The quantities of fill discharged below ordinary high water necessary to comply with these requirements (i.e., the cubic yards of stone, riprap or other fill placed below the plane of ordinary high water) must be included in project totals.
- h. Problems encountered during construction: When a pipe/culvert is being replaced, and the design calls for countersinking at both ends of the pipe/culvert, and during construction it is found that the streambed/banks are on bedrock, a utility line, or other documentable obstacle, then the permittee must stop work and contact the Norfolk District (contact by telephone and/or email is acceptable). The permittee must provide the Norfolk District with specific information concerning site conditions and limitations on countersinking. The Norfolk District will work with the permittee to determine an acceptable plan, taking into consideration the information provided by the permittee, but the permittee should recognize that the Norfolk District could determine that the work will not qualify for a NWP.
- i. Emergency pipe replacements: In the case of an emergency situation, such as when a pipe/culvert washes out during a flood, a permittee is encouraged to countersink the replacement pipe at the time of replacement, in accordance with the conditions above. However, if conditions or timeframes do not allow for countersinking, then the pipe can be replaced as it was before the washout, but the permittee will have to come back and replace the pipe/culvert and countersink it in accordance with the guidance above. In other words, the replacement of the washed out pipe is viewed as a temporary repair, and a countersunk replacement should be made at the earliest possible date. The Norfolk District must be notified

of all pipes/culverts that are replaced without countersinking at the time that it occurs, even if it is an otherwise non-reporting activity, and must provide the permittee's planned schedule for installing a countersunk replacement (it is acceptable to submit such notification by email). The permittee should anticipate whether bedrock or steep terrain will limit countersinking, and if so, should follow the procedures outlined in (f) and/or (g) above.

8. Repair of Pipes

This condition applies to: NWPs 3, 7, 12, 14, 17, 18, 23, 25, 27, 32, 33, 37, 38, 41, 45, 46, and 49.

NOTE FOR WORK IN TIDAL WATERS: New and replacement pipes/culverts in tidal waters must be installed with the inverts no higher than the prevailing stream/channel bottom elevation. If the permittee determines that matching existing elevations is not practicable, then a PCN is required. This condition does not apply to pipe extensions in tidal waters.

For Nontidal Waters: If any discharge of fill material will occur in conjunction with pipe maintenance, such as concrete being pumped over rebar into an existing deteriorated pipe for stabilization, then the following conditions apply:

- a. If the existing pipe or multi-barrel array of pipes are NOT currently countersunk:
 - i. As long as the inlet and outlet invert elevations of at least one pipe located in the low flow channel are not being altered, and provided that no concrete apron is being constructed, then the work may proceed under the NWP for the other pipes, provided it complies with all other NWP General Conditions. In such cases, a PCN is not required, unless specified in the Regional Conditions for other reasons, and the permittee may proceed with the work.
 - ii. Otherwise, the permittee must submit a PCN prior to commencing the activity. For all such projects, the following information should be provided:
 - 1) Photographs of the existing inlet and outlet;
 - A measurement of the degree to which the work will raise the invert elevations of both the inlet and outlet of the existing pipe;
 - The reasons why other methods of pipe maintenance are not practicable (such as metal sleeves or a countersunk pipe replacement);
 - 4) A vicinity map showing the pipe locations.

The Norfolk District will assess all such pipe repair proposals in accordance with guidelines that can be found under "Pipe Repair Guidelines" at:

http://www.nao.usace.army.mil/Missions/Regulatory/GuidanceDocuments.aspx

- iii. If the Norfolk District determines that the work qualifies for the NWP, additional conditions will be placed on the verification. Those conditions can be found at the web link above (in item ii).
- iv. If the Norfolk District determines that the work does NOT qualify for the NWP, the applicant will be directed to apply for either Regional Permit 01, applicable only for Virginia Department of Transportation (VDOT) projects or an Individual Permit. However, it is anticipated that the applicant will still be required to perform the work such that the waterway is not blocked or restricted to a greater degree than its current conditions.
- b. If the existing pipe or at least one pipe in the multi-barrel array of pipes IS countersunk and at least one pipe located in the low flow channel will continue to be countersunk, and no concrete aprons are proposed:
 - No PCN to the Norfolk District is required, unless specified in the Regional Conditions for other reasons, and the permittee may proceed with the work.
- c. If the existing pipe or at least one pipe in the multi-barrel array of pipes IS countersunk and no pipe will continue to be countersunk in the low flow channel:
 - This work cannot be performed under the NWPs. The permittee must apply for either a Regional Permit 01 (applicable only for VDOT projects) or an Individual Permit. However, it is anticipated that the permittee will still be required to perform the work such that the waterway is not blocked or restricted more so than its current conditions.
- d. In emergency situations, if conditions or timeframes do not allow for compliance with the procedure outlined herein, then the pipe can be temporarily repaired to the condition before the washout. If the temporary repair would require a PCN by the above procedures, the permittee must submit the PCN at the earliest practicable date, but no longer than 15 days after the temporary repair.

9. Impacts Requiring a Compensatory Mitigation Plan

When a PCN is required, a compensatory mitigation plan must be submitted if the permanent loss exceeds 0.1 acre of wetlands and/or 0.03 acre of stream bed or 300 linear feet of stream bed unless otherwise stated in the regional conditions (see Regional Condition 11 for Transportation Projects). The stream channel loss must be reported in acreage and linear feet.

10. Removal of Temporary Fills and Impacts

The soils of any temporarily impacted areas located in wetlands that are cleared, grubbed, excavated, dredged and/or filled, must be restored once these areas are

no longer needed for their authorized purpose, no later than completion of project construction, and not to exceed twelve (12) months after commencing the temporary impacts. To restore, temporary fill must be removed in its entirety and the affected areas returned to preconstruction elevations, the soil surface loosened by ripping or chisel plowing to a depth of 8-12", and then seeded using native wetland species. See Regional Condition 6: Invasive Species for more information on vegetation recommendations.

Fill or dredged material in waters of the U.S. that is not removed within the 12-month period will be considered a permanent impact, unless otherwise determined by the Corps. This additional impact to waters of the U.S. may result in the Corps initiating a permit non-compliance action, which may include a restoration order, after-the-fact permitting, and/or compensatory mitigation.

Transportation Projects Funded in Part or in Total by Local, State or Federal Funds

For all impacts associated with transportation projects funded in part or in total by local, state or federal funds and requiring a PCN, compensatory mitigation will generally be required for all permanent wetland impacts (including impacts less than 1/10 acre). Therefore, the PCN must include a compensatory mitigation plan.

12. Activities Affecting Structures or Works Built by the United States

If the NWP activity also requires permission from the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a Corps Federally authorized Civil Works project, the activity that requires section 408 permission is not authorized by the NWP until the appropriate Corps District office issues the section 408 permission to alter, occupy, or use the Corps Civil Works project, and the District Engineer issues a written NWP verification.

Contact a Norfolk District Regulatory Project Manager to assist in determining if your proposed activity might alter or temporarily or permanently occupy or use a Corps of Engineers Civil Works project.

Locations of Norfolk District Civil Works projects can be found at: http://www.nao.usace.army.mil/Portals/31/docs/regulatory/RPSPdocs/RP-17 Corps Project Maps.pdf

For projects located within the Civil Works boundary of the Baltimore, Huntington, Nashville or Wilmington District, please contact a Norfolk District Project Manager for assistance.

13.Clean Water Act Section 401 Water Quality Certification

The Virginia Department of Environmental Quality (VADEQ) provided general Section 401 Water Quality Certification (WQC) for NWPs 3, 4, 5, 6, 7, 8, 11, 13, 14, 15, 16, 18, 19, 20, 22, 23, 25, 27, 28, 30, 31, 33, 34, 35, 36, 37, 38, 41, 45, 46, 49, 53, 54 and 59. As a condition of the General Certifications, applicants are required to satisfy one of the following:

Comply with VADEQ's WQC Conditions 1-12 (see attached Appendix A)

OR

Obtain one of the following from the VADEQ: a Virginia Water Protection (VWP)
permit, an Individual Section 401 Water Quality Certification, or a waiver from
the VWP program.

In addition, the VADEQ also included additional general Section 401 WQC conditions for NWP 3, 13, 14, 16, 18, 22, 27, 33, 36, and 59. See these specific NWP requirements in <u>Section II. REGIONAL CONDITIONS APPLICABLE TO SPECIFIC 2021 NWPS</u> to determine if your project qualifies for general water quality certification or if you must obtain an individual Section 401 WQC from VADEQ.

The VADEQ provided a written Section 401 WQC waiver for NWPs 1, 2, 9, 10, 24, and 32; therefore, no further Section 401 WQC action is needed for the use of these NWPS.

The VADEQ denied general WQC for NWP 17; therefore, applicants must obtain an individual Section 401 WQC from the VADEQ in order to qualify for use of NWP 17.

14.Federal Consistency under the Coastal Zone Management Act (CZMA)

For proposed activities located within Virginia's designated coastal zone, applicants are required to access the Virginia Department of Wildlife Resources' (DWR) Virginia Fish and Wildlife Information Service (VAFWIS) at https://services.dwr.virginia.gov/fwis/ to determine if a state-listed species or designated resource is known within 2 miles of the proposed activity being permitted. Should a state-listed species and/or designated resource be identified within 2 miles of the proposed activity, the applicant must coordinate with the DWR's Environmental Services Section (ESS) by submitting information on permit applications via email to: ESSProjects@dwr.virginia.gov. Applicant shall allow at least 30 days for review and comment by the DWR ESS.

II. REGIONAL CONDITIONS APPLICABLE TO SPECIFIC 2021 NWPS:

NWP 3 - Maintenance

Section 401 WQC Conditions-An Individual WQC is required if any of the following conditions are not met.

- Activities conducted under NWP 3 shall not modify the original configuration or filled area such that the character, scope, or size of the original or DEQ approved alternative design is changed.
- Activities conducted under NWP 3 that involve emergency reconstruction shall occur as soon as practicable after damage occurs or is discovered.
- Discharges conducted under NWP 3 shall not increase the capacity of an impoundment or reduce instream flows.

NWP 5 - Scientific Measurement Devices Condition for Construction or Installation of Subaqueous Turbines:

A PCN is required if a permittee proposes the construction or installation of subaqueous turbines because this work may have more than minimal impacts and the work will need to be coordinated with appropriate federal, state, and/or local agencies.

NWP 7 - Outfall Structures and Associated Intake Structures Conditions for Intakes in Anadromous Fish Waters:

When an intake is proposed in designated anadromous fish waters, the following design parameters will be incorporated as permit conditions to protect the sensitive life stages of shellfish, resident and anadromous fish:

- Screening over the mouth of the intake with mesh size that does not exceed 1mm;
- Intake velocities that do not exceed 0.25 feet per second;
- Intake must be positioned such that an unimpeded flow of water parallel to the screen surface occurs along the entire surface of the screen to take advantage of sweeping velocity.

NWP 10 - Mooring Buoys Conditions for Sufficient Mooring Depths:

 Water depths in the mooring areas should be sufficient that vessels moored float at all stages of the tide.

- Boats should not hit bottom during low water conditions. The swing radius of the vessel plus the mooring chain should not result in the vessel becoming an obstruction to navigation.
- Use of this NWP is prohibited in and around SAV beds. Information about SAV habitat can be found at the Virginia Institute of Marine Science's website http://mobjack.vims.edu/sav/savwabmap/.

NWP 11 - Temporary Recreational Structures Conditions for Sufficient Mooring Depths:

- Water depths in the mooring areas should be sufficient that structures moored float at all stages of the tide or stoppers must be utilized to prevent the structures from resting on the bottom, so as to not damage the underlying benthic communities.
- 2. Structures should not hit bottom during low water conditions.
- Use of this NWP is prohibited in and around SAV beds. Information about SAV habitat can be found at the Virginia Institute of Marine Science's website http://mobjack.vims.edu/sav/savwabmap/.

NWP 13 - Bank Stabilization Section 401 WQC Conditions-An Individual WQC is required if any of the following conditions are not met.

- Stabilization activities conducted under NWP 13 shall not channelize the stream bed or stream channel as defined in 9VAC25-210-10.
- Stabilization activities shall not permanently impact more than 1,500 linear feet below the ordinary water mark of any type of nontidal stream bed or stream channel as defined in 9VAC25-210-10, regardless of any waiver decision made by the Norfolk District.

NWP 14-Linear Transportation Projects Restricted use of NWP 14 Linear Transportation Projects in Nontidal Waters

A portion of NWP 14 overlaps with the current State Program General Permit (SPGP-01); therefore, NWP 14 may not be used for projects impacting Section 404 only, nontidal waters of the United States, including wetlands, unless the Norfolk District determines that the SGPG-01 is not applicable. NWP 14 may still be considered for projects impacting tidal waters of the United States, other nontidal, Section 10 waters of the United States and in the Northern Virginia Military Installations within Baltimore District's Area of Responsibility.

Section 401 WQC Conditions-An Individual WQC is required if the following condition is not met.

Activities conducted under NWP 14 shall not cumulatively impact more than 1/10 of an acre of wetlands or open water or more than 300 linear feet of stream bed or stream channel, as defined in 9VAC25-210-10.

NWP 16 - Return Water from Upland Disposal Areas Section 401 WQC Conditions-An Individual WQC is required if the following condition is not met.

Return flow discharges from dredge disposal sites conducted under NWP 16 shall not occur where prohibited by state law or without applicable authorization from DEQ.

NWP 17 – Hydropower Projects Section 401 WQC Denial- An Individual WQC is required for all NWP 17 projects.

NWP 18 – Minor Discharges Section 401 WQC Conditions-An Individual WQC is required if the following condition is not met.

Discharges conducted under NWP 18 shall comply with Virginia Department of Environmental Quality law and regulations for discharge of sewage and other wastes from boats, if applicable.

NWP 22 – Removal of Vessels Section 401 WQC Conditions-An Individual WQC is required if the following condition is not met.

Discharges conducted under NWP 22 shall comply with Virginia Department of Environmental Quality law and regulations for discharge of sewage and other wastes from boats, if applicable.

NWP 23 - Approved Categorical Exclusions Conditions Specific to NWP 23:

 The use of this NWP applies to an entire project addressed in the Categorical Exclusion prepared by another Federal agency. This NWP cannot be used separately at individual crossings/impact areas of a single project. However, multiple crossings/impact areas of a single project can be authorized by this NWP provided the combined impacts of all crossings/impact areas do not exceed the

- thresholds described below. This NWP cannot be used in combination with other NWPs for a single project.
- Discharges from an entire project must not cause a combined permanent loss of greater than ½ acre of wetlands or 1,000 linear feet of stream.
- The permittee must submit a PCN if the project results in a discharge to a special aquatic site, including wetlands, and/or results in combined impacts to more than 300 linear feet of streambed from the entire project.
- 4. To ensure that permanent losses of waters of the United States do not result in more than minimal adverse effects to the aquatic environment, compensation will be required for all wetland impacts and for any single impact to a stream of greater than 300 linear feet. For projects where the combined impacts to streams due to the entire project exceed 300 linear feet, but no single impact exceeds 300 linear feet, the Corps will determine on a case-by-case basis whether compensation for stream impacts is required.

NWP 27-Aquatic Habitat Restoration, Establishment, and Enhancement Activities

1. For all projects proposing stream restoration, when a PCN is required, proponents must provide a completed Natural Channel Design Review Checklist and Selected Morphological Characteristics form, including the name and location of the reference reach, unless the district engineer waives this criterion by making a written determination concluding that the discharge will result in no more than minimal adverse environmental effects. These forms and the associated manual can be located at:

https://www.fws.gov/chesapeakebay/PDF/stream-restoration/Natural-Channel-Design-Checklist-Doc-V2-Final-11-4-11.pdf

- Proponents must provide a monitoring plan to DEQ in accordance with the 401 certificate conditions for NWP 27.
- 3. If the permittee intends for the permitted activity to generate compensatory mitigation credits, the permittee must comply with all terms and conditions of the mitigation banking instrument/in-leu fee program instrument and modifications to those instruments. Verification of this NWP prior to execution of the mitigation banking instrument/in-leu fee program instrument or modifications to those instruments does not guarantee the approval of the use of any credits, generated from the permitted activities, for compensatory mitigation.
- Section 401 WQC Conditions-An Individual WQC is required if any of the following conditions are not met.

- a. When NWP 27 authorizes wetland or stream mitigation banks or in-lieu fee mitigation sites, compensation required for any surface water impacts shall be debited from the bank's or in-lieu fee program's credits.
- Natural stream channel design methods shall be used for stream restoration projects authorized by NWP 27.
- Performance monitoring shall be conducted for projects authorized by NWP 27.
 - i. Reports shall be submitted with the as-built during post-construction monitoring years, at a frequency and duration adequate to observe performance according to project objectives. If there is no monitoring schedule otherwise specified, then an as-built and a minimum of five years of annual postconstruction monitoring will be required.
 - ii. The as-built report may include final grade topographic surveys (plan, profile, and cross sections, as appropriate, and approved by DEQ), final location of all planted riparian buffer vegetation (as appropriate and approved by DEQ), site photographs, and a discussion of project design versus as-built conditions.
 - iii. As approved by DEQ, each postconstruction monitoring report may include comparison of as built to monitoring year surveys (plan, profile, and cross sections, as appropriate), vegetation surveys (as appropriate), site photographs/ and a discussion of project performance.

NWP 33 - Temporary Construction, Access, and Dewatering Section 401 WQC Conditions-An Individual WQC is required if any of the following conditions are not met.

- Activities conducted under NWP 33 that involve emergency reconstruction shall occur as soon as practicable after damage occurs or is discovered.
- Discharges conducted under NWP 33 shall not increase the capacity of an impoundment or reduce instream flows.

NWP 36 - Boat Ramps Section 401 WQC Conditions-An Individual WQC is required if any of the following conditions are not met.

- Activities conducted under NWP 36 shall not impact more than 1/10 of an acre of wetlands or more than 1,500 linear feet of stream bed or stream channel as defined in 9VAC25-210-10.
- Excavation conducted under NWP 36 shall be limited to the area necessary for site
 preparation and all excavated material shall be removed to an area that has no
 surface waters. Deviations from the original configuration or filled area shall not
 change the character, scope, or size of the original or DEQ approved alternative
 design.

NWP 53-Removal of Low-Head Dams

The following information related to physical removal of the dam structure should be included in the PCN:

- Timing and rate of the drawdown of the impoundment to avoid and minimize downstream flooding and excessive sedimentation to downstream areas.
- Method of re-establishment and stabilization of the stream channel, and avoidance of other environmental impacts, including the potential for drainage of adjacent wetlands.
- Construction equipment to be used in the stream channel and appropriate measures that will be taken, such as the use of construction mats or barges, to minimize impacts.
- Information sufficient to ensure that accumulated sediments are free from contaminants and are disposed of properly. If testing is required, the testing criteria shall be developed in cooperation with Virginia Department of Environmental Quality.
- Information concerning competing uses of the waterbody above the dam if the impoundment is not fully owned by the applicant.

NWP 54-Living Shorelines

- 1. This activity authorizes the placement of sandy fill material, including the placement landward of sill(s) provided the fill is for shoreline protection and/or wetland establishment or enhancement (and not solely a recreational beach). The maximum fill area within waters of the United States that can be authorized under this NWP is one (1) acre. For the purpose of this NWP, a sill is defined as a low (not to exceed +1 ft. above MHW), detached structure constructed near shore and parallel to the shoreline for the purpose of building up an existing beach by trapping and retaining sand in the littoral zone. Because a sill acts like a natural bar, it is most effective when constructed at or near the mean low water line and low enough to allow wave overtopping.
- 2. The grain size of the source material used for fill must be beach quality sand that is the same size or slightly larger than that of the native beach material and suitable for the proposed project. Excess silt/clay fraction and grain sizes smaller than the former native sands will perform poorly. In most cases, sand material with no more than 10% passing a #100 sieve is appropriate. All fill material will be obtained from either an upland source, a borrow pit, or dredge material approved by the Corps.

- Coir logs, coir mats, and native oyster shell should be of sufficient weight, adequately anchored, or placed in a manner to prevent them from being dislodged or carried away by wave action.
- 4. Sills may be constructed of riprap stone, gabion baskets, or clean broken concrete free of metal and re-bar. Alternative materials may be considered for use during the permit review process. The materials should be of sufficient weight or adequately anchored to prevent them from being dislodged and carried away by wave action. Asphalt and materials containing asphalt or other contaminants shall not be used in the construction of sills.
- Sills will be designed with at least one 5-foot window/gap per property and per 100 linear feet of sill unless waived by the District Engineer.
- The sill height should be a maximum of +1 foot above mean high water and should be placed at a distance no greater than 30 feet from mean low water to the channelward toe of the sill unless waived by the District Engineer.
- 7. The total amount of existing vegetated wetlands, which may be filled, graded, or excavated, in square feet, may not exceed the length of the activity along the shoreline in linear feet unless the District Engineer waives this criterion by making a written determination concluding that the project will result in minimal adverse effects. Impacts to sub-tidal, inter-tidal, and/or existing wetland vegetation may require a wetland mitigation plan and must result in no net loss of vegetated wetlands.
- 8. If the proposed project results in impacts to existing wetland vegetation, then a written monitoring report may be required at the end of the first full growing season following planting, and after the second year of establishment. If required, the monitoring should be undertaken between June and September of each year and should include at a minimum: the project location, the Corps project number, representative photos of the site, and a brief statement on the success of the project.
- As the design of a living shoreline project is site specific, it is suggested that the
 applicant refer to the Virginia Institute of Marine Sciences Living Shoreline Design
 Guidelines for Shore Protection in Virginia's Estuarine Environments and other
 reference documents which can be found at:
 https://www.virns.edu/ccrm/outreach/living_shorelines/index.php
- 10. Projects which include placement of sandy fill material may result in impacts to or creation of suitable habitat for various federally listed threatened or endangered species. If this occurs or the applicant seeks to either add to or replenish the area previously filled, the Corps will consult with the U.S. Fish and Wildlife Service pursuant to Section 7 of the Endangered Species Act to ensure work is not likely to adversely affect proposed or listed species or proposed or designated critical

habitat. Specific requirements on the type of sand allowed for beach and dune work may be required.

NWP 59 – Water Reclamation and Reuse Facilities Section 401 WQC Conditions-An Individual WQC is required if any of the following conditions are not met.

- 1. Construction or expansion activities conducted under NWP 59 shall not impact more than 1/4 of an acre of wetlands or 300 linear feet of stream bed or stream channel as defined in 9VAC25-210-10. Maintenance activities conducted under NWP 59 shall not impact more than 300 linear feet of stream bed or stream channel when conducted in impact areas not previously authorized by DEQ or when located on or in existing, currently serviceable structures or fills.
- Activities conducted under NWP 59 that involve emergency reconstruction shall occur as soon as practicable after damage occurs or is discovered.
- Discharges conducted under NWP 59 shall not increase the capacity of an impoundment or reduce instream flows.

APPENDIX A

Norfolk District Final Regional Conditions for the 2021 Nationwide Permits (NWPs) Applicable in Virginia (Including Northern Virginia Military Installations within Baltimore District's Area of Responsibility)

Section 401 Water Quality Certification Conditions (1-12)

1. For activities that are proposed to occur in state surface waters as defined in § 62.1-44.3 of the Code of Virginia: Once an activity is proposed to occur in any surface water that is not subject to federal jurisdiction, and as such not subject to a NATIONWIDE PERMIT, application to DEQ shall be required in accordance with Virginia Administrative Code 9VAC25-210 et seq., 9VAC25-660 et seq. through -690 et seq. as applicable, and State Water Control Law for i) coverage under a Virginia Water Protection (VWP) general permit, ii) a VWP individual permit, or iii) a decision that no permit is required (in situations where VWP permitting exclusions apply). A DEQ VWP permit or decision shall need to have been finalized prior to the project proponent impacting any surface waters. If a DEQ VWP general permit coverage or individual permit is issued, it shall be based on all impacts of the proposed activities in surface waters under both state and federal jurisdiction, pursuant to applicable permit regulations and State Water Control Law. Other permits may be required from DEQ based on the proposed activities or impacts.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life.

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2 through -44.6, § 62.1-44.15; § 62.1-10; §

2. For activities in wetlands, open water, streams, or mitigation sites that are under a deed restriction, conservation easement, declaration of restrictive covenant, or other land use protective instrument ("protected areas"), and when such restriction, easement, covenant, or instrument is the result of a federal or state permit action and is specific to activities in wetlands and compensatory mitigation sites, application to DEQ shall be required in accordance with Virginia Administrative Code 9VAC25-210 et seq...

9VAC25-660 et seq. through -690 et seq., and State Water Control Law for i) coverage under a Virginia Water Protection (VWP) general permit, ii) a VWP individual permit, or iii) a decision that no permit is required (in situations where VWP permitting exclusions apply). A DEQ VWP permit or decision shall need to have been finalized prior to the project proponent impacting any surface waters. If a DEQ VWP general permit coverage or individual permit is issued, it shall be based on all impacts of the proposed activities in surface waters under both state and federal jurisdiction, pursuant to applicable permit regulations and State Water Control Law. Compensatory mitigation may be required for all permanent impacts. Other permits may be required from DEQ based on the proposed activities or impacts.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life."

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2 through -44.5, § 62.1-44.13, § 62.1-44.15, § 62.1-44.15:01, § 62.1-44.15:51, § 62.1-44.15:23, § 62.1-44.15:23, § 62.1-44.15:5; § 62.1-44.34:18]; § 28.2-1300 et seq.; 9VAC25 - Preface (Agency Summary); 9VAC25-31 et seq.; 9VAC25-210 Sections 10 through 230 and 500; 9VAC25-380 et seq.; 9VAC25-660 et seq., 9VAC25-670 et seq., 9VAC25-680 et seq. or 9VAC25-690 et seq. as applicable; 9VAC25-770 et seq.; 33 U.S.C. § 1341 et seq.; 33 U.S.C. § 1344 et seq.; 33 U.S.C. § 1370; 33 C.F.R. Part 332; 40 C.F.R. § 121 et seq.; 40 C.F.R. § 131 et seq.; 40 C.F.R. § 230 et seq.

- 3. Activities conducted in state surface waters shall not cause or contribute to a significant impairment of state fish and wildlife resources, including but not limited to: 1) documented spawning habitat or a migratory pathways for anadromous fish; 2) trout waters in specified locations of Virginia, as provided by the Virginia State Water Control Board's Water Quality Standards 9VAC25-260-370 et seq. and 9VAC25-260-390 et seq.; 3) state-listed threatened or endangered species or designated critical habitat; and 4) areas that contain submerged aquatic vegetation (SAV). This certification condition does not preclude compliance by the permittee with all applicable state laws and regulations concerning Virginia's fish and wildlife or critical habitat resources.
 - a. The project proponent shall ensure the activities do not cause or contribute to a significant impairment of state waters or fish and wildlife resources, including state listed threatened or endangered species or critical habitat, through screening or coordination with state resource agencies prior to doing work in surface waters. This requirement is in addition to identifying any potential or actual impacts to federal listed threatened or endangered species or critical habitat that may be required by the NATIONWIDE PERMIT or regional conditions.
 - (i) Where a project proponent is not required to obtain a verification from the Corps that the proposed activities qualify for the NATIONWIDE PERMIT, the project proponent shall follow all Time-of-Year Restrictions (TOYRs) applicable to state surface waters that are recommended by the

state resource agencies and other interested and affected agencies in the results or information provided to the project proponent. Results or information may include correspondence or documentation from state resource agencies and other interested and affected agencies addressing potential impacts, or reference materials that address potential impacts such as database search results or confirmed waters and wetlands delineations or jurisdictional determinations, or a combination thereof.

(ii) Where the project proponent receives a verification from the Corps that the proposed activities qualify for the NATIONWIDE PERMIT, the project proponent or authorized agent shall submit upon receipt or the next business day the screening or coordination results or information concerning the potential for activities to impact state threatened and endangered species (listed or proposed) or critical habitat to the Corps office having responsibility over the proposed project. Results or information may include correspondence or documentation from state resource agencies and other interested and affected agencies addressing potential impacts, or reference materials that address potential impacts such as database search results or confirmed waters and wetlands delineations or jurisdictional determinations, or a combination thereof. Time-of-year restrictions (TOYRs) recommended by state resource agencies and other interested and affected agencies shall be applied to any Corps verification of the NATIONWIDE PERMIT.

State resource agencies include the Virginia Department of Wildlife Resources (DWR), the Virginia Department of Conservation and Recreation (DCR), the Virginia Marine Resources Commission (MRC) at minimum. Other interested and affected agencies may include the Virginia Department of Health (VDH) or the Maryland Department of the Environment where activities occur in the Potomac River. The Virginia DWR has developed an online system that allows users to find information about sensitive state resources that may occur within the vicinity of a proposed project. This system named the Virginia Fish and Wildlife Information System is located at https://vafwis.dqif.virginia.gov/fwis/. This system may be used to determine if any state listed threatened or endangered species or designated critical habitat may be affected by the proposed activities.

b. Notification to the Corps is required prior to conducting any activities in state surface waters if they contain submerged aquatic vegetation (SAV). Information regarding submerged aquatic vegetation can be located on the Virginia Institute of Marine Science's SAV website at http://mobjack.vims.edu/sav/savwabmap/. Additional avoidance and minimization measures, such as relocating a structure or time-of-year restrictions (TOYR), may be required to reduce impacts to SAV habitat in state surface waters.

- c. Activities in surface waters shall be performed behind cofferdams, turbidity curtains, or other methods to control turbidity when operationally feasible and state listed threatened or endangered species may be present.
- d. No activities may substantially disrupt the movement of aquatic life indigenous to the water body, including those species which normally migrate through the area, unless the primary purpose of the activity is to impound water.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life."

40 C.F.R. § 121.7(d)(2)(ii). Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2 through -44.6, § 62.1-44.13, § 62.1-44.15. § 62.1-44.15:4.1, § 62.1-44.15:5.1, § 62.1-44.15:5.2, § 62.1-44.15:20, § 62.1-44.15:21, § 62.1-44.15:23, § 62.1-44.15:24, §62.1-44.15:25, §62.1-44.15:27, §62.1-44.15:28, §62.1-44.15:31, §62.1-44.15:34, §62.1-44.15:37, §62.1-44.15:37, 62.1-44.15:40.5 62.1-44.15:50.5 62.1-44.15:52.5 62.1-44.15:54.5 62.1-44.15:55.5 62.1-44.15:56.5 62.1-44.15:58.5 62.1-44.15:58.5 44.15:58.1, Article 2.5 of Title 62.1 (§§ 62.1-44.15:67 through § 62.1-44.15:79), §§ 62.1-44.16 through § 62.1-44.17. § 62.1-44.17:2, § 62.1-44.17:3, § 62.1-44.18, § 62.1-44.19, § 62.1-44.19:3, § 62.1-44.19:5, § 62.1-44.33, § 62.1-44.34:14 through § 62.1-44.34:19. § 62.1-44.34:23. § 62.1-44.34:26]; §§ 3.2-1000 through 3.2-1011; § 10.1-400 et seq.; § 10.1-604 et seq.; § 28.2-1200 et seq.; § 28.2-1300 et seq.; § 29.1-500 through -579; § 62.1-7; § 62.1-8; § 62.1-10, § 62.1-11, § 62 1-194 through -194.3; 4VAC15-20 et seq.; 4VAC15-30 et seq.; 4VAC15-290-60; 4VAC15-320-100; 9VAC25 - Preface (Agency Summary); 9VAC25-31 Sections 10 through 60, 120, 150 through 220, 330, and if applicable, 420 through 1030; 9VAC25-40 et seq.; 9VAC25-120 et seq.; 9VAC25-151 et seq.; 9VAC25-190 et seq.; 9VAC25-191 through -196 et seq.; 9VAC25-210 Sections 10 through 230 and 500; 9VAC25-260 et seq.; 9VAC25-370 et seq.; 9VAC25-380 et seq.; 9VAC25-390 et seq.; 9VAC25-401 et seq.; 9VAC25-410 and 415 et seq.; 9VAC25-630 et seq.; 9VAC25-660 et seq.; 9VAC25-670 et seq., 9VAC25-680 et seq. or 9VAC25-690 et seq. as applicable; 9VAC25-720 et seq., 9VAC25-740 et seq.; 9VAC25-790 et seq.; 9VAC25-800 et seq.; 9VAC25-820 et seq.; 9VAC25-830 et seq.;

9VAC25-840 et seq., 9VAC25-860 et seq., 9VAC25-870 through 890 et seq., 33 U.S.C. § 1251 et seq., 33 U.S.C. § 1313(d), 33 U.S.C. § 1315(b); 33 U.S.C. § 1317(a); 33 U.S.C. § 1341 et seq., 33 U.S.C. § 1344 et seq., 33 U.S.C. § 1370; 40 C.F.R. § 121 et seq.; 40 C.F.R. § 131 et seq.; Public Law 95-217

4. Plant species listed in the most current Virginia Department of Conservation and Recreation's (DCR) Virginia Invasive Plant Species List shall not be used for revegetation. The list of invasive plants in Virginia is found at: http://www.dcr.virginia.gov/natural-heritage/invsppdflist. DCR recommends the use of regional native species for re-vegetation as identified in the DCR Native Plants for Conservation, Restoration and Landscaping brochures for the coastal, piedmont and mountain regions http://www.dcr.virginia.gov/natural-heritage/nativeplants#brochure. See also DCR's native plant finder at https://www.dcr.virginia.gov/natural-heritage/native-plants-finder.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements, ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life."

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2, § 62.1-44.13, § 62.1-44.15, § 62.1-44.15:20, § 62.1-44.15:21, § 62.1-44.15:23, § 62.1-44.15:50]; §§ 3.2-800 through -805; 2VAC5-317 et seq.; 4VAC15-20-210; 4VAC15-30-20; 4VAC15-30-40; 4VAC15-20-130 B and C; 4VAC15-290-60; 9VAC25 - Preface (Agency Summary); 9VAC25-210 Sections 10 through 230 and 500; 9VAC25-380 et seq.; 9VAC25-660 et seq., 9VAC25-670 et seq., 9VAC25-680 et seq. or 9VAC25-690 et seq. as applicable; 9VAC25-800 et seq.; 9VAC25-830 et seq.; 9VAC25-840 et seq.; 33 U.S.C § 1341 et seq.; 33 U.S.C § 1342 et seq.; 33 U.S.C § 1343 et seq.; 40 C.F.R. § 230 et seq.

 Stormwater management facilities, as defined in 9VAC25-870-10, shall not be constructed in a perennial stream bed or stream channel, as defined in 9VAC25-210-10, or in waters designated as oxygen-impaired or temperature-impaired (does not include wetlands).

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life."

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2 through -44.6, § 62.1-44.15; § 62.1-44.15; 21, § 62.1-44.15; 21, § 62.1-44.15; 24, § 62.1-44.15; 25, § 62.1-44.15; 27, § 62.1-44.15; 28, § 62.1-44.15; 31, § 62.1-34.15; 34, § 62.1-44.15; 31, § 62.1-34.15; 34, § 62.1-44.15; 31, § 62.1-34.15; 32, § 62.1-34.15; 31, § 62.1-34.15; 32, § 62.1-34.15; 31, § 62.1-34.15; 32, § 62.1-34.15; 31, § 62.1-34.15; 32, § 62.1-34.15; 33, § 62.1-34.15; 31, § 62.1-34.15; 32, § 62.1-34.15; 31, § 62.1-34.15; 32, § 62.1-34.15; 31, § 62.1-34.15; 32, § 62.1-34.15; 31, § 62.1-34.

- 6. Compensatory mitigation for unavoidable permanent impacts, including the conversion of forested wetlands, that are greater than 1/10 of an acre of wetlands or greater than 300 linear feet of stream bed or stream channel as defined by 9VAC25-210-10 shall be provided in accordance with Section 62.1-44.15:23 A through C of the Code of Virginia, as applicable to the project activities and Virginia Water Protection Permit Program regulations.
 - a. Stream bed or stream channel impacts shall be determined by utilizing a stream impact assessment methodology acceptable to the Department of Environmental Quality.
 - b. The mitigation shall be sufficient to achieve no net loss of existing wetland acreage and functions or stream functions and water quality benefits. In the absence of same river watershed alternatives in Hydrologic Unit Codes (HUC) 02040303 and 02040304, single-family dwellings or locality projects may use compensatory mitigation in HUC 02080102, 02080108, 02080110, or 02080111 in Virginia.
 - c. Unless the area is outside of permittee control, the permittee shall have all non-impacted surface waters and compensatory mitigation areas within 50 feet of authorized activities and within the project or right-of-way limits clearly flagged or marked for the life of the construction activity at that location to preclude

unauthorized disturbances to these surface waters and compensatory mitigation areas during construction. The permittee shall notify contractors that no activities are to occur in these marked surface waters.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or equatic life."

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2 through -44.5, § 62.1-44.13, § 62.1-44.15, § 62.1-44.15:01, § 62.1-44.15:5.1, § 62.1-44.15:21, § 62.1-44.15:21; § 62.1-44.15:23]; 9VAC25 - Preface (Agency Summary); 9VAC25-210 Sections 10 through 230 and 500; 9VAC25-380 et seq.; 9VAC25-660 et seq., 9VAC25-670 et seq., 9VAC25-680 et seq.; 33 U.S.C § 1341 et seq.; 33 U.S.C § 1344 et seq.; 33 U.S.C § 1370; 33 C.F.R. Part 332; 40 C.F.R. § 121 et seq.; 40 C.F.R. § 131 et seq.; 40 C.F.R. § 230 et seq.

- 7. The following information associated with activities in state surface waters, as applicable, shall be submitted by the permittee to the Virginia Water Protection Permit Program at the DEQ office having responsibility over the project location. The Joint Permit Application process may be used to meet this condition, provided all required information is included.
 - a. When required, any pre-construction notification (PCN) materials or information shall be concurrently submitted to DEQ and the Corps.
 - b. All jurisdictional determination information provided to the Corps and issued from the Corps, such as jurisdictional determination requests, maps, forms, photos, correspondence, Corps determinations or confirmations, shall be concurrently submitted to or shared with DEQ. Delineation of state surface waters on the entire project site is strongly encouraged prior to submitting an application to expedite state permit processing, if required.
 - c. Proof of coverage ("verification") under one or more NATIONWIDE PERMITS, upon issuance by the Corps or on the next business day, unless the activities are excluded from permitting under the Virginia Water Protection Permit Program or no NATIONWIDE PERMIT verification is issued by the Corps.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life."

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2, § 62.1-44.3, § 62.1-44.6, § 62.1-44.13, § 62.1-44.15:5, § 62.1-44.15:5, § 62.1-44.15:21, § 62.1-44.15:21, § 62.1-44.15:23]; § 10.1-604 et seq.; § 28.2-1300 et seq.; 9VAC25 - Preface (Agency Summary); 9VAC25-210 Sections 10 through 230 and 500; 9VAC25-380 et seq.; 9VAC25-660 et seq., 9VAC25-670 et seq., 9VAC25-680 et seq. or 9VAC25-690 et seq. as applicable; 33 U.S.C. § 1251 et seq.; 33 U.S.C. § 1313(d); 33 U.S.C. § 1315(b); 33 U.S.C. § 1317(a); 33 U.S.C. § 1341 et

seq.; 33 U.S.C § 1344 et seq.; 33 U.S.C. § 1370; 40 C.F.R. § 121 et seq.; 40 C.F.R. § 131 et seq.; 40 C.F.R. § 230 et seq.; Public Law 95-217

8. Activities shall include measures to prevent spills of fuels or lubricants into state waters. Any fish kills or spills of fuels or oils shall be reported to DEQ immediately upon discovery. If DEQ cannot be reached, the spill or fish kill shall be reported to the Virginia Department of Emergency Management (VDEM) at 1-800-468-8892 or the National Response Center (NRC) at 1-800-424-8802. Any spill of oil as defined in § 62.1-44.34:14 of the Code of Virginia that is less than 25 gallons, and that reaches or is expected to reach land only, is not reportable if recorded per § 62.1-44.34:19.2 of the Code of Virginia and if properly cleaned up. If unauthorized impacts have occurred, the permittee shall notify DEQ within 24 hours of discovery.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life."

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2 through -44.6, § 62.1-44.13, § 62.1-44.15, § 62.1-44.15:41, § 62.1-44.15:20, § 62.1-44.15:21, § 62.1-44.15:40, § 62.1-44.15:50, Article 2.5 of Title 62.1 (§§ 62.1-44.15:67 through § 62.1-44.15:79), §§ 62.1-44.16 through § 62.1-44.17, § 62.1-44.17:2, § 62.1-44.17:3, § 62.1-44.34:19.2, § 62.1-44.19:5, § 62.1-44.33, §§ 62.1-44.34:14 through § 62.1-44.34:19, § 62.1-44.34:23, § 62.1-44.34:26]; § 62.1-10; § 62.1-11; § 62.1-194 through -194.3; 9VAC25 - Preface (Agency Summary); 9VAC25-31 Sections 10 through 60, 120, 150 through 220, 330, and if applicable, 420 through 1030; 9VAC25-40 et seq.; 9VAC25-71 et seq.; 9VAC25-101 et seq.; 9VAC25-120 et seq.; 9VAC25-151 et seq.; 9VAC25-100 et seq.; 9VAC25-210 Sections 10 through 230 and 500; 9VAC25-260 et seq.; 9VAC25-670 et seq.; 9VAC25-680 et seq.; 9VAC25-690 et seq.; 9VAC25-720 et seq.; 9VAC25-820 et seq.; 9VAC25-670 et seq.; 33 U.S.C. § 1314 et seq.; 33 U.S.C. § 1344 et seq.; 33 U.S.C. § 1370; 40 C.F.R. § 121 et seq.; 40 C.F.R. § 131 et seq.; 40 C.F.R. § 140; Public Law 95-217

 Activities shall be executed in a manner so as to minimize adverse impacts on instream beneficial uses as defined in § 62.1-10 (b) of the Code of Virginia.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life."

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2 through -44.6, § 62.1-44.15; § 62.1-44.17; § 62.1-44.17; § 62.1-44.19; § 62.1-44.19; § 62.1-44.19; § 62.1-44.33; § 62.1-44.34; § 62

33 U.S.C. § 1251 et seq.; 33 U.S.C. 403 et seq.; 33 U.S.C. § 1313(d); 33 U.S.C. § 1315(b); 33 U.S.C. § 1317(a); 33 U.S.C. § 1341 et seq.; 33 U.S.C. § 1344 et seq.; 33 U.S.C. § 1370; 40 C.F.R. § 121 et seq.; 40 C.F.R. § 131 et seq.; 40 C.F.R. § 140; 40 C.F.R. § 230 et seq.; Public Law 95-217

10. All fill material in state surface waters shall be clean and free of contaminants in toxic concentrations or amounts in accordance with all applicable state laws and regulations.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): *State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life."

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2, § 62.1-44.4 through -44.6, § 62.1-44.15; § 62.1-44.15; 5.1, § 62.1-44.15; 5.1, § 62.1-44.15; 5.1, § 62.1-44.15; 5.2, § 62.1-44.15; 5.4, § 62.1-44.15; 5.5, § 62.1-44.15; 5.6, Article 2.5 of Title 62.1 (§§ 62.1-44.15; 67 through § 62.1-44.15; 79), §§ 62.1-44.16 through § 62.1-44.17; §

- 11. Temporary disturbances to surface waters during construction shall be avoided and minimized to the maximum extent practicable.
- a. All temporarily disturbed wetland areas shall be restored to preexisting conditions within 30 days of completing work at each respective temporary impact area, which shall include reestablishing preconstruction elevations and contours with topsoil from the impact area where practicable and planting or seeding with appropriate wetland vegetation according to cover type (i.e., emergent, scrub-shrub, or forested). The permittee shall take all appropriate measures to promote and maintain revegetation of temporarily disturbed wetland areas with wetland vegetation through the second year post-disturbance. All temporarily impacted stream beds or stream channels and streambanks shall be restored to their preconstruction elevations and contours with topsoil from the impact area where practicable within 30 days following the construction at that stream segment. Streambanks shall be seeded or planted with the same vegetation cover type originally present, including any necessary supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List shall not be used without prior approval from the Department of Environmental Quality.
- b. Materials (including fill, construction debris, and excavated and woody materials) temporarily stockpiled in wetlands, and heavy equipment in temporarily impacted wetland areas shall be placed on mats, geotextile fabric, or other suitable material; shall be immediately stabilized to prevent entry into state waters; shall be managed such that leachate does not enter state waters; and shall be completely removed within 30 days following completion of that construction activity. Disturbed areas shall be returned to preconstruction elevations and contours with topsoil from the impact area where

practicable; restored within 30 days following removal of the stockpile; and restored with the same vegetation cover type originally present, including any necessary supplemental erosion control grasses. Invasive species identified on the Department of Conservation and Recreation's Virginia Invasive Plant Species List shall not be used to the maximum extent practicable or without prior approval from the Department of Environmental Quality.

c. All construction, construction access (e.g., cofferdams, sheet piling, and causeways) and demolition activities associated with the project shall be accomplished in a manner that minimizes construction or waste materials from entering surface waters to the maximum extent practicable.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general license or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inlimical or harmful to human, animal, plant, or aquatic life."

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2 through -44.6, § 62.1-44.13, § 62.1-44.15; § 62.1-44.15; 4.1, § 62.1-44.15; 5.1, § 62.1-44.15; 5.2, § 62.1-44.15; 2.1, § 62.1-44.15; 2.1, § 62.1-44.15; 2.1, § 62.1-44.15; 2.1, § 62.1-44.15; 2.1, § 62.1-44.15; 2.1, § 62.1-44.15; 2.1, § 62.1-44.15; 2.1, § 62.1-44.15; 2.1, § 62.1-44.15; 3.1, § 62.1-44.

12. If stream channelization or relocation is required, all work in surface waters shall be done in the dry, unless otherwise authorized by the Department of Environmental Quality, and all flows shall be diverted around the channelization or relocation area until the new channel is stabilized. This work shall be accomplished by leaving a plug at the inlet and outlet ends of the new channel during excavation. Once the new channel has been stabilized, flow shall be routed into the new channel by first removing the downstream plug and then the upstream plug. The rerouted stream flow must be fully established before construction activities in the old stream bed or stream channel can begin.

40 C.F.R. § 121.7(d)(2)(i): This condition is necessary in order to assure that i) any discharge authorized under the general ficense or permit will comply with water quality requirements; ii) activities will not cause or contribute to a significant impairment of state waters or fish and wildlife resources; and iii) state water quality requirements are met, including the General Criteria (9VAC25-260-20 et seq.): "State waters, including wetlands, shall be free from substances attributable to sewage, industrial waste, or other waste in concentrations, amounts, or combinations which contravene established standards or interfere directly or indirectly with designated uses of such water or which are inimical or harmful to human, animal, plant, or aquatic life."

40 C.F.R. § 121.7(d)(2)(ii): Article XI, Section 1 Constitution of VA; Title 62.1 of the Code of Virginia; Chapter 3.1 of Title 62.1 of the Code of Virginia (§§ 62.1-44.2 through 62.1-44.34:28) [§ 62.1-44.2, § 62.1-44.5, § 62.1-44.6, § 62.1-44.13; § 62.1-44.15; § 62.1-44.15:51, § 62.1-44.15:51, § 62.1-44.15:51, § 62.1-44.15:51, § 62.1-44.15:51, § 62.1-44.15:51, § 62.1-44.15:52, § 62.1-44.15:52, § 62.1-44.15:53, § 62.1-44.15:54, § 62.1-44.15:54, § 62.1-44.15:55, § 62.1-44.15:56, Article 2.5 of Title 62.1 (§§ 62.1-44.15:67 through § 62.1-44.15:79)]; § 62.1-10; § 62.1-11; § 62.1-194 through -194.3; 9VAC25 - Preface (Agency Summary); 9VAC25-210 Sections 10 through 230 and 500; 9VAC25-260 et

seq.; 9VAC25-660 et seq., 9VAC25-670 et seq., 9VAC25-680 et seq. or 9VAC25-690 et seq. as applicable; 9VAC25-800 et seq.; 9VAC25-840 et seq.; 33 U.S.C. § 1341 et seq.; 33 U.S.C. § 1344 et seq.; 33 U.S.C. § 1370; 40 C.F.R. § 121 et seq.; 40 C.F.R. § 131 et seq.

