

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

RICHMOND EXPRESSWAY SYSTEM

CONTRACT NO. MOL-2018

MILL AND OVERLAY

POWHITE PARKWAY

PROPOSAL DOCUMENTS
CONTRACT AND CONTRACT BOND
SUPPLEMENTAL SPECIFICATIONS
SPECIAL PROVISIONS

HNTB Corporation

April 2018

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

RICHMOND EXPRESSWAY SYSTEM

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MILL AND OVERLAY

POWHITE PARKWAY

INSTRUCTIONS TO BIDDERS

1. FORM OF BID: Submit bid, on forms furnished by the Authority, without alterations in the form. When completing bid, please notice the unit (Lump Sum, Each, Square Foot, etc...) of the individual line item and enter bid item prices and total amount accordingly.

If applicable, Contractor shall replace any original bid tab sheets with replacement bid tab sheets issued through an Addendum.

- a. Required Forms: The following list of required forms to be included in bid is provided for Contractors reference only:
 - i. Bid (see below)
 - ii. Non-Collusion Affidavit
 - iii. Statement of Contracts Underway
 - iv. Joint Venture Statement (if applicable)
 - v. Bidder or Subcontractor Stone Matrix Asphalt Overlay Experience
 - vi. Bidder or Subcontractor Roadway Milling Experience
 - vii. Bidder or Subcontractor Type B, Class VI Pavement Markings Experience
 - viii. Bid Bond
 - ix. Receipt of Addenda (if applicable)
2. SUBMISSION OF BID: Bidder is responsible for delivery of the bid at or before the time set for opening. Bids received after the time set will be rejected. Bids will be received at the location listed in the Invitation to Bid.

If mailing, please write “Attention: RMTA MOL – 2018 Contract Bid Opening” on outside of envelope or on mailing label.

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INVITATION TO BID

The Richmond Metropolitan Transportation Authority (RMTA), 901 East Byrd Street, Suite 1120, Richmond, Virginia 23219, will receive sealed Proposals for the above project until 10:00 a.m. local time on Tuesday May 08, 2018 at which time and place the bids will be publicly opened and read.

The work under this contract shall be completed no later than Wednesday October 31, 2018. The principal items of work and approximate quantities are as follows:

<u>ITEM:</u>	<u>QUANTITY:</u>	<u>UNIT:</u>
FLEXIBLE PAVEMENT PLANING (UP TO 2" DEPTH)	245,417	SY
STONE MATRIX ASPHALT SMA-9.5(64E-22)	21,702	TON
TY. B CL.VI PAVE. LINE MARK. 6"	115,593	LF
SNOW PLOW. RAISED PAVE. MARK. ASPH. CONC.	1,396	EA

A mandatory pre-bid meeting will be held at 901 East Byrd Street, Suite 1120, Richmond, Virginia 23219 at 10:00 a.m. local time, on Tuesday April 17, 2018. A mandatory site visit shall immediately follow the office portion of the pre-bid meeting.

Bids for this Contract must be submitted on complete bidding forms bound in the Contract documents. The successful bidder will be notified in writing.

To submit Proposals for this Contract, contractors or qualified subcontractors shall, on Tuesday, April 17, 2018 at 10:00 a.m. local time, meet the following requirements:

- Have prior experience in the placement of Stone Matrix Asphalt (SMA) overlays and be able to provide written documentation demonstrating the successful placement of at least 3 SMA overlay projects where the cumulative tonnage placed is a minimum of 7,000 Tons of SMA.

- Have prior experience in performing roadway milling on asphalt surfaces. Contractor shall be able to provide written documentation demonstrating the successful completion of at least three overlay projects where the cumulative square yardage milled is a minimum of 50,000 SY.
- Have prior experience in applying Type B, Class VI pavement markings. Contractor shall be able to provide written documentation demonstrating the successful completion of at least two projects where the cumulative Type B, Class VI pavement markings linear footage applied is a minimum of 20,000 LF.
- Be prequalified by the Virginia Department of Transportation for bidding on State projects. The Authority reserves the right to request additional experience information for any bidder that has not been assigned the “**Asphalt Pavement**”, “**Roadway Milling**” and “**Pavement Markings**” work classes by VDOT or for contractors that have a prequalification level of Conditional, Currently Inactive or Probationary.

Note that a bidder must have prior experience and be able to provide written documentation in a minimum of one of the three work experience categories as noted above. A bidder cannot have subcontractors be the documented experience in all categories. **Bidder must perform a minimum of 40 percent of contract value.**

Complete Contract documents will be available on Tuesday, April 03, 2018 after 1:00 p.m. (local time) from www.rmtaonline.org or may be purchased for \$75.00 per set from the Richmond Metropolitan Transportation Authority at 901 East Byrd Street, Suite 1120, Richmond, Virginia 23219. The documents may also be examined by any party, without purchase, at the Authority’s office during normal business hours after such date. Specifications (Virginia Department of Transportation “Road and Bridge Specifications”, 2016) which form an integral part of this Contract, are available from the Virginia Department of Transportation.

Unsubmitted Contract documents need not be returned and no refunds will be made for any documents.

Each Bidder submitting a Proposal must also complete a statement bound with the Proposal forms, in which each Bidder shall give full information relating to the status of their contracts presently underway.

Each Proposal must be accompanied by a Proposal Guarantee consisting of either a certified check in the amount of at least five (5) percent of the Total Bid Price, made payable to the Richmond Metropolitan Transportation Authority, or a Proposal Bond (on the form provided) in the amount of five (5) percent of the same Total Bid Price.

The Authority strongly encourages the submission of bids by contractors whose principal businesses are located in the Richmond Metropolitan Area and further strongly encourage such contractors to utilize the services of local subcontractors and vendors.

The Authority strongly encourages minority owned and women owned businesses to submit proposals for this contract.

The Authority reserves the right to reject any and all Proposals submitted, and to waive informalities in bidding, as it may deem in its best interests.

Project related inquiries must be submitted in writing to Mr. Mark Grossenbacher, P.E. at HNTB Corporation at mgrossenbacher@hntb.com or Ms. Theresa Simmons, P.E., RMTA Director of Operations at theresa.simmons@rmtaonline.org. The deadline to submit inquiries and questions is Tuesday, May 01, 2018 at 1 P.M. local time.

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY
Joi T. Dean, CEO
Richmond, Virginia

(Note: Bidders shall not remove this Bidding form from attached documents.)

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

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POWHITE PARKWAY

BID FOR GENERAL CONSTRUCTION CONTRACT

To: Richmond Metropolitan Transportation Authority
901 East Byrd Street, Suite 1120
Richmond, Virginia 23219

Gentlemen:

I/we, the undersigned, declare: that no other person, firm or corporation is interested in this Bid; that I/we have carefully examined the Plans, Standard Specifications, Supplemental Specifications, and all other documents pertaining to this Contract which form a part of this Bid as if set forth at length herein; that I/we understand that the quantities of items shown herein below are approximate only; that I/we have examined the location of the proposed work; that I/we agree to bind myself/ourselves, upon award to me/us by the Richmond Metropolitan Transportation Authority under this Bid, to enter into and execute a Contract, with necessary surety bond, for the project named above; that I/we agree to start work not later than the date stated in the written Notice to Proceed (Sec. 105.01 of the Specifications), to furnish all necessary materials, provide all necessary labor, equipment, tools and plant, pay for all required insurance, bonds, permits, fees and service, and do all required work in strict compliance with the terms of all documents comprising said Contract, and to fully complete the entire project by Wednesday October 31, 2018 and that I/we agree to accept as full compensation for the satisfactory prosecution of this project the following named unit and lump sum prices for the various scheduled items of work.

MOL-2018 BID TAB

(_____) (INSERT BIDDER FIRM NAME HERE)

ITEM NO.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	AMOUNT	SPECIFICATION
1	MOBILIZATION	LS	1	\$	\$	513
2	MAINTENANCE OF TRAFFIC	LS	1	\$	\$	512/ SP-B
3	CRUSHER RUN AGGREGATE NO. 21A OR 21B	TON	261	\$	\$	208/302/305/SP-G
4	FLEXIBLE PAVEMENT PLANING (UP TO 2" DEPTH)	SY	245,417	\$	\$	515/SP-C
5	RIDGID PAVEMENT PLANING (UP TO 2" DEPTH)	SY	1,435	\$	\$	515/SP-C
6	STONE MATRIX ASPHALT SMA-9.5 (64E-22) (1.5" DEPTH)	TON	21,702	\$	\$	248/317/SP-C
7	SURFACE MIX SM-9.5D (2" DEPTH)	TON	690	\$	\$	211/315/SP-C
8	TYPE B CLASS VI PAVEMENT LINE MARKING 4"	LF	1,870	\$	\$	704/SP-E
9	TYPE B CLASS VI PAVEMENT LINE MARKING 6"	LF	115,593	\$	\$	704/SP-E
10	TYPE B CLASS VI PAVEMENT LINE MARKING 8"	LF	5,181	\$	\$	704/SP-E
11	TYPE B CLASS VI PAVEMENT LINE MARKING 12"	LF	3,237	\$	\$	704/SP-E
12	PAVEMENT MESSAGE MARK. "E-Z PASS"	EA	17	\$	\$	704/SP-E
13	PAVEMENT MESSAGE MARK. "ONLY"	EA	17	\$	\$	704/SP-E
14	PAVEMENT MESSAGE MARK. "CASH"	EA	2	\$	\$	704/SP-E
15	PAVEMENT MESSAGE MARK. "STAY"	EA	4	\$	\$	704/SP-E
16	PAVEMENT MESSAGE MARK. "IN"	EA	4	\$	\$	704/SP-E
17	PAVEMENT MESSAGE MARK. "LANE"	EA	4	\$	\$	704/SP-E
18	PAVEMENT MESSAGE MARK. DIRECTIONAL ARROW	EA	21	\$	\$	704/SP-E
19	PAVEMENT MESSAGE MARK. HANDICAPPED SYMBOL AND HASH	EA	2			704/SP-E
20	SNOW PLOW.RAISED PAVE.MARK.ASPH.CONC	EA	1,396	\$	\$	235/SP-F
21	RUMBLE STRIP, ASPHALT	LF	24,599	\$	\$	315/SP-F
22	LIQ. ASPH. COATING (RUMBLE STRIP)	SY	4,100	\$	\$	315/SP-F
23	GEOSYNTHETIC REINFORCEMENT	SY	3,500	\$	\$	245/SP-G
24	ERADICATION OF PAVEMENT MARKINGS	LF	2,700	\$	\$	512/SP-G

Total \$

(SIGN HERE)

(INSERT HERE)

Signature of Owner, Partner, or Corporate Officer:

Title:

The quantities shown in the above schedule of items are considered to be approximate only and are given as the basis for comparison of bids. The Authority may increase or decrease the amount of any item or portion of the work as may be deemed necessary or expedient. The Authority reserves the right to delete, in whole or in part, without prejudice prior to the award of the Contract, any items listed in the Bid. It is understood that payment for unit price items will be made for the actual quantities of such work satisfactorily completed, rather than the estimated quantities given hereinabove. An increase or decrease in the quantity for any unit price item will not be regarded as sufficient ground for an increase or decrease in the unit price, nor in the time allowed for the completion of the work, except as provided for in the Specifications.

The cost of any work performed, materials furnished, services provided or expenses incurred, whether or not specifically delineated in the Contract document but which are incidental to the scope, intent and completion of this Contract, have been included in the price bid for the various items scheduled hereinabove.

Accompanying this Bid is a Proposal Guarantee (Sec. 102.07 of the Specifications) consisting of either a certified check in the amount of at least (5) percent of the Total Bid Price for this Contract or a Bid Bond (Elsewhere herein) in the amount of (5) percent of the same Total Bid Price. It is hereby understood and agreed that said check or bond is to be forfeited as described in the Bid Bond, in the event that, on the basis of this Bid, the Authority should award this Contract to me/us and that I/we should fail to execute and deliver said Contract and the prescribed Contract Bond, together with the required progress schedule, proof of proper insurance coverage and other necessary documents, all within the prescribed time (Sec. 103.07 of the Specifications); otherwise, said check or bond is to be returned to the undersigned.

Business Name of Bidder: _____

Type of Organization: Individual
 Partnership
 Corporation

Virginia Contractor Registration No.: _____

Address of Bidder: _____

Name of Owner, Partner or Corp. Officer: _____

Printed

Name of Owner, Partner or Corp. Officer: _____

Signature

Title: _____

Date: _____

Witness or Attest _____

(Affix Corporate Seal Here)

NOTE: ONLY A PREQUALIFIED BIDDER MAY USE THIS BIDDING FORM.
BIDDING FORMS ARE NOT TRANSFERABLE.

RICHMOND EXPRESSWAY SYSTEM

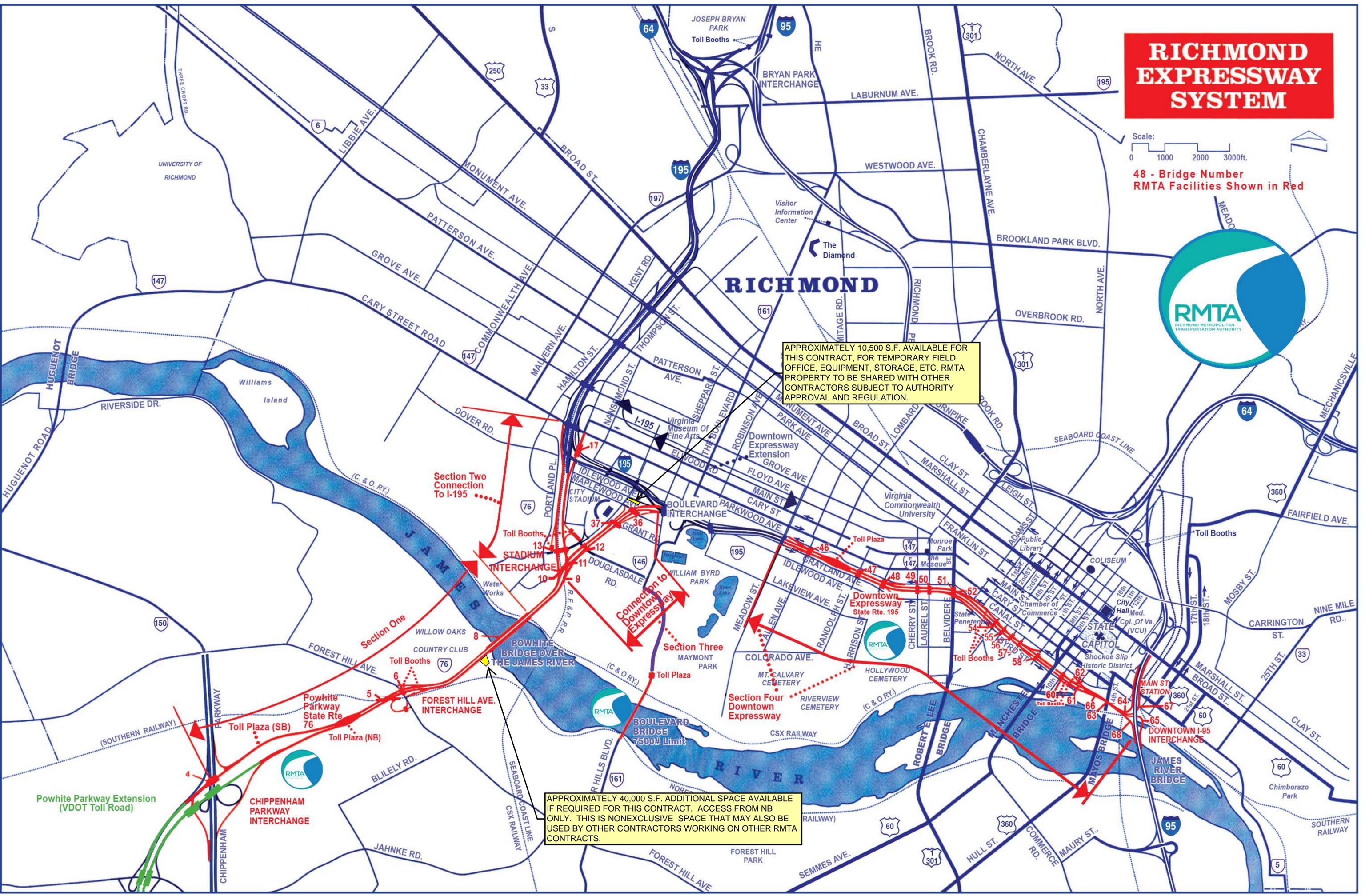
Scale: 0 1000 2000 3000ft.

48 - Bridge Number
RMTA Facilities Shown in Red



APPROXIMATELY 10,500 S.F. AVAILABLE FOR THIS CONTRACT, FOR TEMPORARY FIELD OFFICE, EQUIPMENT, STORAGE, ETC. RMTA PROPERTY TO BE SHARED WITH OTHER CONTRACTORS SUBJECT TO AUTHORITY APPROVAL AND REGULATION.

APPROXIMATELY 40,000 S.F. ADDITIONAL SPACE AVAILABLE IF REQUIRED FOR THIS CONTRACT. ACCESS FROM NB ONLY. THIS IS NONEXCLUSIVE SPACE THAT MAY ALSO BE USED BY OTHER CONTRACTORS WORKING ON OTHER RMTA CONTRACTS.



RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

RICHMOND EXPRESSWAY SYSTEM

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POWHITE PARKWAY

NON-COLLUSION AFFIDAVIT

STATE OF _____)
_____) ss.
COUNTY OF _____)

I, _____, of the City
of _____, County of _____ and State of
_____, being of full age and duly sworn according to law on my oath
depose and say:

That I am _____(Title) of
_____, the Bidder making
the Bid submitted to the Richmond Metropolitan Transportation Authority, on the _____ day of
_____, 20___, for Contract No. MOL -2018 in connection with the Richmond
Expressway System; that I executed the said Bid with full authority to do so;

The said Bidder has not, directly or 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 or which
would increase the cost of construction or maintenance in connection with the said Contract; that
no person or selling agency has been employed or retained to solicit or secure the said Contract
upon an agreement or understanding for a commission, percentage, brokerage or contingent fee,

except bona fide full-time employees;

And that said Bidder is or has been a member of the following highway contractors' association during the preceding twelve months:

Name of Association	Location of Principal Office
_____	_____
_____	_____
_____	_____

I further warrant that all statements contained in said Bid and in this Affidavit are true and correct and made with full knowledge that the said Authority relies upon the truth of the statements contained in said Bid and in this Affidavit in awarding the said Contract.

Sworn to and subscribed
before me this _____
day of _____,
20__.

By: _____ (L.S.)
Person Signing Bid
Print Name: _____

Notary Public

My commission expires:

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

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STATEMENT OF CONTRACTS UNDERWAY

The following is a tabulation of all contracts in which I/we am/are engaged as of the date given below, whether as a prime contractor or as a subcontractor. This tabulation includes not only contracts which are under construction, but also those awarded to me/us but not begun, and those on which I/we am/are the lowest bidder awaiting formal award.

<u>Contract Designation</u>	<u>City and State</u>	<u>Owner</u>	<u>Estimated Value of Work Remaining to be Completed</u>	<u>Estimated Completion Date</u>

Total: \$ _____

NOTE: Contracts in which the remaining work in each amounts to less than \$25,000 may be combined into one entry under the fourth column and designated as "Miscellaneous" in the first column.

If more space is needed, attach additional sheet(s).

The undersigned guarantees the accuracy and completeness of all the information given above.

Business Name of Bidder: _____

Address of Bidder: _____

Owner, Partner or Corp. Officer: _____
Print

Owner, Partner or Corp. Officer: _____
Signature

Title: _____

Date: _____

Witness or Attest:

(Affix Corporate Seal Here)

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

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JOINT VENTURE STATEMENT

STATE OF _____)
_____) ss.
COUNTY OF _____)

We, the undersigned, being duly sworn according to law, upon our respective oaths depose and say that:

1. The following named contractors have entered into a Joint Venture for the purpose of carrying out all the provisions of Contract No. MOL-2018 for the above project:

(a) _____ An Individual
 A Partnership
 A Corporation

(b) _____ An Individual
 A Partnership
 A Corporation

(c) _____ An Individual
 A Partnership
 A Corporation

2. The contractors, under whose names we have affixed our respective signatures, have duly authorized and empowered us to execute this Joint Venture Statement in the name of and on behalf of such contractors for the purpose herein above stated.

3. Under the provisions of such Joint Venture, the assets of each of the contractors named in Paragraph 1 hereof, and in case any contractor so named above is a partnership, the assets of the individual members of such partnership, will be available for the performance of such Joint Venture and liable therefore and for all obligations incurred in connection therewith.

4. The assets and liabilities of the named contractors for whom we respectively execute this Joint Venture Statement are set forth in the statements given to the Virginia Department of Transportation in our prequalification questionnaire(s).

5. This Joint Venture Statement is executed so that the named contractors, as one organization, may, under such Joint Venture, bid upon said Contract, and be awarded the Contract if they should become the successful bidder therefore. Any bid, bond and agreement relating to said Contract shall be executed by any of the undersigned, and when so executed shall bind this Joint Venture and each and every contractor named herein, severally and jointly. Simultaneously with the execution of the Contract, the contractors entering into this Joint Venture shall designate and appoint a Project Supervisor to act as their true and lawful agent with full power and authority to do and perform any and all acts or things necessary to carry out the work set forth in said Contract.

6. We bind the contractors for whom we respectively execute this Joint Venture Statement in firm agreement with the Richmond Metropolitan Transportation Authority that each of the representations herein set forth is true.

Subscribed and sworn to before me,
this _____ day of

_____, 20__.

Notary Public

My commission expires _____

(a) _____

Name of Contractor

By _____ (L.S.)

Print Name:

Title: _____

Va. Contractor Reg. No. _____

Subscribed and sworn to before me,
this _____ day of
_____, 20__.

Notary Public

My commission expires _____

(b) _____
Name of Contractor

By _____ (L.S.)
Print Name:

Title: _____

Va. Contractor Reg. No. _____

Subscribed and sworn to before me,
this _____ day of
_____, 20__.

Notary Public

My commission expires _____

(c) _____
Name of Contractor

By _____ (L.S.)
Print Name:

Title: _____

Va. Contractor Reg. No. _____

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

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STONE MATRIX ASPHALT OVERLAY EXPERIENCE – BIDDER OR SUBCONTRACTOR

In addition to the bidding requirements stated elsewhere in these documents, prospective bidders or their subcontractor must have successfully completed within the last five (5) years at least three Stone Matrix Asphalt (SMA) Overlay projects where the cumulative tonnage placed is at least 7,000 Tons. This form is provided to bidders for them to demonstrate that experience, and must be completed and submitted by all bidders, bound in this proposal. Note that a bidder must be experienced, and complete the experience forms, in the SMA overlay, roadway milling, or pavement markings, or all forms. A bidder cannot have a subcontractor be the documented experience in all categories. If the bidder is not anticipating self-performing the scope of work associated with the experience type listed herein, please list the name of the qualified subcontractor below:

Subcontractor _____
(If applicable) Company Name

SMA OVERLAY PROJECT NO. 1

Job Location(s)/Description(s): _____

No. of Tons of SMA Placed: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

SMA OVERLAY PROJECT NO. 2

Job Location(s)/Description(s): _____

No. of Tons of SMA Placed: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

SMA OVERLAY PROJECT NO. 3

Job Location(s)/Description(s): _____

No. of Tons of SMA Placed: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

SMA OVERLAY PROJECT NO. 4

Job Location(s)/Description(s): _____

No. of Tons of SMA Placed: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

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ROADWAY MILLING EXPERIENCE – BIDDER OR SUBCONTRACTOR

In addition to the bidding requirements stated elsewhere in these documents, prospective bidders or their subcontractor must have successfully completed within the last five (5) years at least three roadway milling on asphalt surfaces projects where the cumulative total of roadway milled is at least 50,000 S.Y. This form is provided to bidders for them to demonstrate that experience, and must be completed and submitted by all bidders, bound in this proposal. Note that a bidder must be experienced, and complete the experience forms, in the SMA overlay, roadway milling, or pavement markings, or all forms. A bidder cannot have a subcontractor be the documented experience in all categories. If the bidder is not anticipating self-performing the scope of work associated with the experience type listed herein, please list the name of the qualified subcontractor below:

Subcontractor _____
(If applicable) Company Name

ROADWAY MILLING PROJECT NO. 1

Job Location(s)/Description(s): _____

No. of S.Y. of Roadway Milling: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

ROADWAY MILLING PROJECT NO. 2

Job Location(s)/Description(s): _____

No. of S.Y. of Roadway Milling: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

ROADWAY MILLING PROJECT NO. 3

Job Location(s)/Description(s): _____

No. of S.Y. of Roadway Milling: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

ROADWAY MILLING PROJECT NO. 4

Job Location(s)/Description(s): _____

No. of S.Y. of Roadway Milling: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

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TYPE B, CLASS VI PAVEMENT MARKINGS EXPERIENCE –
BIDDER OR SUBCONTRACTOR

In addition to the bidding requirements stated elsewhere in these documents, prospective bidders or their subcontractor must have successfully completed within the last five (5) years at least two Type B, Class VI pavement marking projects where the cumulative total of pavement marking linear footage installed is at least 20,000 L.F. This form is provided to bidders for them to demonstrate that experience, and must be completed and submitted by all bidders, bound in this proposal. Note that a bidder must be experienced, and complete the experience forms, in the SMA overlay, roadway milling, or pavement markings, or all forms. A bidder cannot have a subcontractor be the documented experience in all categories. If the bidder is not anticipating self-performing the scope of work associated with the experience type listed herein, please list the name of the qualified subcontractor below:

Subcontractor _____
(If applicable) Company Name

TYPE B, CLASS VI PAVEMENT MARKINGS PROJECT NO. 1

Job Location(s)/Description(s): _____

No. of L.F. of Type B, Class VI Pavement Markings installed: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

TYPE B, CLASS VI PAVEMENT MARKINGS PROJECT NO. 2

Job Location(s)/Description(s): _____

No. of L.F. of Type B, Class VI Pavement Markings installed: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

TYPE B, CLASS VI PAVEMENT MARKINGS PROJECT NO. 3

Job Location(s)/Description(s): _____

No. of L.F. of Type B, Class VI Pavement Markings installed: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

TYPE B, CLASS VI PAVEMENT MARKINGS PROJECT NO. 4

Job Location(s)/Description(s): _____

No. of L.F. of Type B, Class VI Pavement Markings installed: _____

Owner/Contact Information: _____

Owner/Contact Phone Number: _____

Approximate Date(s) of Project: _____

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BID BOND

KNOW ALL MEN BY THESE PRESENTS, that _____
_____, as Principal/Contractor, and
_____, as Surety, legally authorized to do
business in the Commonwealth of Virginia, are held and firmly bounded unto the Richmond
Metropolitan Transportation Authority, as Authority, in the amount of FIVE (5) PERCENT OF
THE DOLLAR VALUE OF THE TOTAL AMOUNT WRITTEN IN THE BID, on which the
Contract is awarded lawful money of the United States of America, for the payment of which, well
and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and
assigns, jointly and severally and firmly by these presents:

WHEREAS, the Contractor is herewith submitting its Bid for Contract No. MOL-2018
entitled Mill and Overlay, in connection with the Richmond Expressway System; and

NOW, THEREFORE, the condition of this obligation is such, that if the Contractor shall be
awarded the Contract upon said Bid and shall, within fifteen (15) calendar days after the date of
written notice of such award, enter into and deliver a Contract and the prescribed Contract Bond
for the faithful performance of the Contract, together with the required proof of proper insurance
coverage and other necessary documents, then this obligation shall be null and void; otherwise, to
remain in full force and effect, and the Contractor and Surety will pay unto the Authority the
difference in money between the amount of the Total Amount written in the Bid of said Contractor
and the amount for which the Authority may legally contract with another party to perform the
said work, if the latter amount be in excess of the former; but in no event shall the Surety's liability
exceed the penal sum hereof.

SIGNED AND SEALED this _____ day of _____, 20_____.

PRINCIPAL/CONTRACTOR

Business Name

Address

Witness or Attest:

By: _____ (L.S.)

Title:

(Affix Corporate Seal Here)

SURETY:

Business Name

Address

Witness or Attest:

By: _____ (L.S.)

Title:

(Attach evidence of Power of Attorney)

(Affix Corporate Seal Here)

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

RICHMOND EXPRESSWAY SYSTEM

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MILL AND OVERLAY

POWHITE PARKWAY

CONTRACT AGREEMENT

THIS AGREEMENT, made this ____ day of _____, 20 ____, between the Richmond Metropolitan Transportation Authority, 901 East Byrd Street, Suite 1120, Richmond, Virginia, 23219, hereinafter called the Authority and _____, or his, its or their successors, executors, administrators and assigns, hereinafter called the Contractor.

WITNESSETH, that the Contractor agrees with the Authority for the consideration herein mentioned, and at his, its or their own proper cost and expense, to do all the work and furnish all the materials, equipment, teams and labor necessary to prosecute and complete and to extinguish all liens therefore, Contract No. MOL - 2018, entitled Mill and Overlay, in the manner and to the full extent as set forth in the Special Provisions, Plans, Supplemental Specifications, 2016 Road and Bridge Specifications of the Virginia Department of Transportation, Bid (for the basis of award stated herein below) and other documents related to said Contract which are on file at the office of the Richmond Metropolitan Transportation Authority and which are hereby adopted and made part of this Agreement as completely as if incorporated herein, and to the satisfaction of the Richmond Metropolitan Transportation Authority or its duly authorized representative who shall have at all times full opportunity to inspect the materials to be furnished and the work to be done under this Agreement. In the event of a conflict among the Contract Documents, the Contract Documents shall control one over another in the following descending order of precedence: Special Provisions, Plans, Supplemental Specifications, 2016 Road and Bridge Specifications of the Virginia Department of Transportation, Bid and other documents related to said Contract.

This Contract is awarded on the basis of the Total Bid Price (based on Bid quantities) of _____ dollars and _____ Cents (\$ _____).

In consideration of the foregoing premise, the Authority agrees to pay the Contractor for all items of work performed and materials furnished at the unit and lump sum prices bid therefore in the Bid submitted for this Contract, subject to any percentage reductions in the total Contract amount that may be named in the Bid corresponding to the basis of award stated in the above paragraph, and subject to the conditions set forth in the Specifications.

The Contractor agrees as follows:

Indemnification: The Contractor shall indemnify and hold harmless Richmond Metropolitan Transportation Authority, and all officers, directors and employees of the named entity, (individually and collectively), from any and all liability, loss, damage, expense, cause of action, suits, claims or judgments arising from injury to person or property resulting from activity arising out of this contract; and shall, at its own cost and expense, defend any and all suits which may be brought against such parties, either alone or in conjunction with others upon any such liability or claim or claims and shall satisfy, pay and discharge any and all judgments and fines that may be recovered against such parties in any such action or actions, provided, such indemnity shall not extend to the negligence of such parties and, provided, further, that such parties shall give the Richmond Metropolitan Transportation Authority written notice of any such claim or demand.

Cancellation of Contract: The Authority reserves the right to cancel and terminate any resulting contract, in part or in whole, without penalty, upon 60 days written notice. Any contract cancellation notice shall not relieve the contractor of the obligation to deliver and/or complete all work tasks in progress prior to the effective date of cancellation.

Term of Contract: Sealed proposals for the above project are due Tuesday May 08, 2018, 10:00 a.m. at which time and place the bids will be publicly opened and read. The work under this contract shall be completed no later than Wednesday October 31, 2018.

Scope of Work: A complete list of all bid items and estimated quantities is included beginning on sheet P-2 in BID FOR GENERAL CONSTRUCTION CONTRACT.

Anti-Discrimination: By submitting their (bids/proposals), (bidders/offerors) certify to the Commonwealth that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, as well as the Virginia Fair Employment Contracting Act of 1975, as amended, where applicable, the Virginians With Disabilities Act, the Americans With Disabilities Act and § 2.2-4311 of the *Virginia Public Procurement Act*. If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (*Code of Virginia*, § 2.2-4343.1 E).

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

- a. I/WE 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 Contractor.
- b. I/WE agree to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- c. I/WE in any solicitations or advertising for employees placed by or on behalf of itself, will state that it is an equal opportunity employer.
- d. Notices and advertisements and solicitations placed in accordance with federal law, rule or regulation, shall be deemed sufficient for the purposes of meeting the requirements of this section.
- e. The Contractor does not, and shall not during the performance of the contract for goods and services in the Commonwealth, knowingly employ an unauthorized alien as defined in the Federal Immigration Reform and Control Act of 1986.

To the extent that the Contractor enters into any subcontract or purchase order over Ten Thousand Dollars (\$10,000.00), the provisions of (a), (b) (c) (d) and (e) above shall be binding on each subcontractor or vendor.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement the day and year written above.

RICHMOND METROPOLITAN
TRANSPORTATION AUTHORITY

By: _____
Joi Taylor, CEO

Sworn to and Subscribed
before me this _____
day of _____, 20 _____.

(Authority's Seal)

Notary Public
My commission expires:

CONTRACTOR:

Business Name

Address

By: _____ (L.S.)
Title

(Affix Corporate Seal Here)

Sworn to and subscribed
before me this _____
day of _____, 20 _____.

Notary Public
My commission expires: _____

EVIDENCE OF CORPORATE AUTHORITY

I, _____, hereby certify that I am Secretary of _____, a Corporation existing under the laws of the State of _____, and that the following resolution was adopted at a meeting of the Board of Directors of the said Corporation duly called and held on the _____ day of _____, 20____, and that the same remains in full force and effect:

(Here insert resolution)

IN WITNESS WHEREOF, I have hereto appended my signature and the seal of the said Corporation on this the _____ day of _____, 20_____.

Secretary

SEAL

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

RICHMOND EXPRESSWAY SYSTEM

CONTRACT NO. MOL-2018

MILL AND OVERLAY

POWHITE PARKWAY

CONTRACT BOND

KNOW ALL MEN BY THESE PRESENTS, that _____,
_____, as Principal/Contractor, and _____,
as Surety, legally authorized to do business in the Commonwealth of Virginia, are held and firmly
bounded unto the Richmond Metropolitan Transportation Authority (Authority), in the amount
of _____ Dollars
and _____ Cents (\$ _____), lawful money of the United
States of America, for the payment of which, well and truly to be made, we bind ourselves, our
heirs, executors, administrators, successors and assigns, jointly and severally and firmly by these
presents:

WHEREAS, the Contractor has entered into a Contract with the Authority for the faithful
prosecution and completion of a project designated as Contract No. MOL-2018, entitled Mill and
Overlay Powwhite Parkway, in connection with the Richmond Expressway System; and

WHEREAS, it was one of the conditions of the Contract award by the Authority pursuant
to which said Contract was entered into, that these presents shall be executed;

NOW, THEREFORE, the condition of this obligation is such, that if the Contractor shall
faithfully prosecute and complete the entire work prescribed for this project in full compliance with
the terms and conditions of said Contract, including the Plans, Standard Specifications,
Supplemental Specifications, Bid and all other documents pertaining to this Contract, and such
alterations as may be made in said Plans and Specifications as therein provided for, shall indemnify
and save harmless the Authority against or from all costs, expenses; damages injury or loss to
which the Authority may be subjected by reason of any wrongdoing, misconduct, want of care or
skill, negligence or default, including patent infringement, on the part of the Contractor, his agents
or employees, in the execution or performance of said Contract, including errors in drawings
furnished by the Contractor, and shall promptly pay all just claims for damages, for injury to

property, and for labor, materials, equipment rentals, services and other charges incurred by the Contractor in or about the work contracted for, and extinguish all liens therefore, then this obligation shall be null and void; otherwise, to remain in full force and effect.

SIGNED AND SEALED THIS _____ day of _____, 20____.

PRINCIPAL/CONTRACTOR:

Business Name

Address

Address

Witness or Attest:

By: _____ (L.S.)

Title:

(Affix Corporate Seal Here)

SURETY:

Business Name

Address

Witness or Attest:

By: _____(L.S.)

Title:

(Attach evidence of Power of Attorney)

Countersigned by
Resident Virginia Agent:

(Affix Corporate Seal Here)

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

RICHMOND EXPRESSWAY SYSTEM

CONTRACT NO. MOL-2018

MILL AND OVERLAY

POWHITE PARKWAY

FINAL RELEASE OF LIABILITY

I/We, _____, hereby certify that all bills, charges and salaries for labor, services, materials and rental of equipment, arising out of the prosecution of the work under Contract/Project No. MOL-2018 have been paid, or satisfactory arrangements for payment have been made. I/We further certify that all other just demands and liens relating to this project have been fully satisfied or provided for. I/We hereby release the Richmond Metropolitan Transportation Authority, its Engineers and representatives from all claims demands and liability of whatsoever nature arising from anything done or furnished under this contract except to the extent only as to the following matters for which unresolved claims have been submitted by the Contractor in accordance with Section 105.19 of the Supplemental Specifications of the Contract:

SIGNED AND SEALED THIS _____ day of _____, 20_____.

Business Name

Address

By: _____ (L.S.)

Title: _____

(Affix Corporate Seal Here)

STATE OF VIRGINIA AT LARGE:

}

CITY/COUNTY OF

}

} to-wit:

The foregoing instrument was acknowledged before me this _____ day of _____, 20____, by _____, _____ of

_____ [name] _____ [title]

_____ [business name]

a _____ corporation/partnership, on behalf of said corporation/partnership,

_____ [state]

Notary Public

My Commission expires: _____.

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

RICHMOND EXPRESSWAY SYSTEM

CONTRACT NO. MOL-2018

MILL AND OVERLAY

POWHITE PARKWAY

SWaM Participation

The Authority strongly encourages the submission of bids by qualified contractors whose principal businesses are located in the Richmond Metropolitan Area and further encourage such contractors to utilize the services of local subcontractors and vendors.

In addition, the Authority strongly encourages the submission of bids by qualified contractors certified as Small, Women, and Minority Owned (SWaM) businesses and/or Disadvantaged Business Enterprises (DBE).

Furthermore, the Authority encourages the use of certified Small, Women, and Minority Owned (SWaM) businesses and Disadvantaged Business Enterprises (DBE) as subcontractors or vendors to the fullest extent reasonably possible.

Certification:

The Virginia Department of Small Business and Supplier Diversity is responsible for the certification of eligible small, women, and minority-owned businesses to participate in the SWaM Procurement Initiative. They also certify Disadvantaged Business Enterprises (DBEs) for participation under the Virginia Unified Certification Program (as part of the federal DBE Program). Service Disabled Veterans are also able to obtain SWaM certification upon receipt of their certification by the Department of Veterans Services and by meeting the eligibility requirements of the SWaM Program.

<http://www.dmbv.virginia.gov/SWaMSearchSub.html>

SWaM Category Type:

(As certified by the Virginia Department of Small Business and Supplier Diversity)

Minority Owned (M)

Small Business (S)

Women Owned (W)

Minority Owned with Small Business Certification (MS)

Women Owned with Small Business Certification (WS)

Other SWaM, DBE, WBE and MBE Programs:

Any contractors, subcontractors or vendors whose principal businesses are located outside the Commonwealth of Virginia must submit information on any business that is qualified as a Small, Women-Owned, Minority Owned and/or Disadvantaged Business Enterprises (DBE) by their home state or any federal program.

SwaM Summary:

As a part of the project closeout process and a prerequisite to final payment, the prime contractor shall submit fully executed pages DBE-3 and DBE-4, along with any additional sheets as needed, to document the actual amounts paid to each SWaM and/or DBE businesses that provided service or products during this execution of the contract.

Firm Name: _____

Firm Address: _____

Owner/Contact Name: _____

Owner/Contact Phone Number: _____

SWaM Category Type: _____ SWaM Certification Number: _____

Amount Paid: \$ _____

Firm Name: _____

Firm Address: _____

Owner/Contact Name: _____

Owner/Contact Phone Number: _____

SWaM Category Type: _____ SWaM Certification Number: _____

Amount Paid: \$ _____

Firm Name: _____

Firm Address: _____

Owner/Contact Name: _____

Owner/Contact Phone Number: _____

SWaM Category Type: _____ SWaM Certification Number: _____

Amount Paid: \$ _____

Contractor shall attach additional sheets if needed.

SIGNED AND SEALED THIS _____ day of _____, 20_____.

Business Name

Address

By: _____ (L.S.)

Title: _____

STATE OF VIRGINIA AT LARGE: }
CITY/COUNTY OF } to-wit:

The foregoing instrument was acknowledged before me this _____ day of _____,
20_____, by _____, _____ of
_____ [name] _____ [title]

_____ [business name]

a _____ corporation/partnership, on behalf of said Corporation/partnership,
_____ [state]

Notary Public

My Commission expires: _____.

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

RICHMOND EXPRESSWAY SYSTEM

CONTRACT NO. MOL-2018

MILL AND OVERLAY

POWHITE PARKWAY

RECEIPT OF ADDENDA

I/We hereby acknowledge receipt of the following addenda and have made the necessary revisions to the Contractor's Bid for General Construction Contract, plans, and specifications, etc., and agree that these addenda are included in the Contractor's Bid for General Construction Contract.

<u>Addenda #</u>	<u>Signature</u>	<u>Date</u>
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____
5.	_____	_____
6.	_____	_____

I understand that failure to confirm receipt of addenda may cause the bid to be irregular.

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY
SUPPLEMENTAL SPECIFICATIONS

To

VIRGINIA DEPARTMENT OF TRANSPORTATION
2016 ROAD AND BRIDGE SPECIFICATIONS

FOR
RICHMOND EXPRESSWAY SYSTEM

CONTRACT NO. MOL-2018

MILL AND OVERLAY

POWHITE PARKWAY

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RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

SUPPLEMENTAL SPECIFICATIONS

PREFACE:

The 2016 Road and Bridge Specifications of the Virginia Department of Transportation, available from the Virginia Department of Transportation, as amended and augmented by the Supplemental Specifications following, shall govern the construction of this Project and the performance of the Contract. These specifications are hereby made a part of the Contract as fully and with the same effect as if set forth at length herein.

Attention is directed to the fact that any other documents printed by the Virginia Department of Transportation modifying or supplementing said 2016 Road and Bridge Specifications, such as Standard Supplemental Specifications, Special Provisions (by the Department), Notice to Bidders, etc., do not form a part of this Contract nor govern its performance, unless specifically so stated in the Supplemental Specifications herein contained. The 2008 edition of the VDOT "Road and Bridge Standards" are hereby made a part of this contract. The Virginia Erosion and Sediment Control Handbook, Third Edition 1992 Standards and Specifications are hereby made a part of this Contract.

References to "Proposal" have been changed to "Bid" in the Authority's documents for this contract, including many standard VDOT terms such as "Examination of Site of Work and Bid [Proposal]". This shall be accounted for when working contract documents prepared by the Authority with those standards prepared by VDOT.

References made to specific section numbers in these Supplemental Specifications, or in any of the various documents which constitute the complete Contract Documents, shall, unless otherwise denoted, be construed as referenced to the corresponding section of the 2016 Road and Bridge Specifications issued by the Virginia Department of Transportation.

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

SUPPLEMENTAL SPECIFICATIONS

TO

VIRGINIA DEPARTMENT OF TRANSPORTATION
2016 ROAD AND BRIDGE SPECIFICATIONS

The following provisions represent modifications to the corresponding sections of the Virginia Department of Transportation Specifications, described above, and relate exclusively to the Richmond Metropolitan Transportation Authority Contracts. In case of conflicting requirements between the Virginia Department of Transportation Specifications and these Supplemental Specifications, the Supplemental Specifications shall govern. Any applicable provision in the Virginia Department of Transportation Specifications not amended by and not in conflict with any Supplemental Specifications or Special Provisions shall be in full effect.

All modifications contained herein are additions to the provisions of the designated sections of the Virginia Department of Transportation Specifications unless the text specifically identifies a requirement to be an amendment to, deletion of or substitution for a provision in the Virginia Department of Transportation Specifications.

SECTION 101 - DEFINITION OF ABBREVIATIONS, ACRONYMS AND TERMS

101.02 Terms

The following new definitions are added to this section:

ADDENDUM - - A written, fax or e-mail revision or addition to any of the Contract Documents, transmitted in advance of the opening of Bids to all parties who have been recorded by the Authority as having secured full sets of Contract Documents directly from the Authority or their designee.

AUTHORITY - - The Richmond Metropolitan Transportation Authority, a political subdivision and public body corporate and politic of the Commonwealth of Virginia, organized and existing under Virginia Code §§ 33.2-2900 et seq. The Authority's principal office is presently located at 901 East Byrd Street, Suite 1120, Richmond, Virginia, 23219.

AFFILIATE - - Any business entity which is closely associated to another business entity so that one has the power to control the other either directly or indirectly; or, where one business entity systematically shares resources, officers and/or other management with another business entity to the extent that a business relationship legally exists or is publicly perceived to exist; or, when a third party has the power to control both; or, where one business entity has been so closely allied with another through an established course of dealings, including but not limited to the lending of financial wherewithal or engaging in joint ventures, so as to cause a public perception that the two firms are one entity.

AVERAGE ANTICIPATED OPERATING SPEED - - The posted speed of the work zone plus 5 miles per hour as defined in Appendix A of the Virginia Work Area Protection Manual.

MOT - - Maintenance of Traffic

BID BOND - - One of the two permissible means of security offered as the Bid Guaranty, in the form of a surety bond executed by the Bidder and the Contractor's Surety, guaranteeing that if the Authority should award the Contract to the Contractor, the Bidder will execute and deliver the Contract Agreement and Contract Bond, together with other required documents, all within the prescribed time.

STANDARD DRAWINGS - - Whenever the Plans and/or Specifications refer to "Standards" or "Standard Drawings" such reference shall be construed to mean the set of drawings issued by the Location and Design Division, Virginia Department of Transportation, 2016, and entitled "Road and Bridge Standards", Volumes I and II. Only those standards or standard drawings specifically referred to by number on the Plans or in the various Contract Documents are applicable to work on this Contract.

FULL COMPLETION OF ALL WORK (OR TO FULLY COMPLETE ALL WORK) - - The completion of all work specified under this Contract as evidenced by the formal acceptance thereof by the Authority.

WORK AREA PROTECTION MANUAL - - The 2011 Virginia Work Area Protection Manual including Revision 1 (4/2015), and all subsequent revisions.

Whenever in the various Contract Documents the term, "Commission" or "State" appears it shall be replaced by the term, "Richmond Metropolitan Transportation Authority." Similarly, the term, "Commissioner" shall be replaced by the term, "CEO of the Richmond Metropolitan Transportation Authority," and the term, "Deputy Commissioner" replaced by the term, "Director of Operations of the Richmond Metropolitan Transportation Authority."

Whenever in the Virginia Department of Transportation Specifications and Standard Drawings the term, "Department" or "Virginia Department of Transportation" appears, it shall be replaced by the term, "Richmond Metropolitan Transportation Authority, (Authority)" except in references to said Virginia Department of Transportation as being the author of certain Specifications and Standard Drawings, and in reference to said Department as the agency prequalifying prospective Bidders.

Whenever in the Virginia Department of Transportation Specifications and Standard Drawings the term, "District Engineer" appears, it shall be replaced by the term, "Engineer."

The definitions for the following terms as they appear in this section are deleted and the following definitions substituted therefore:

CONTRACT TIME - - Each calendar date indicated in the Specifications or Special Provisions as the time allowed for the completion of any designated portion or for all of the work under the Contract, including any extensions thereto that may subsequently be authorized.

ENGINEER - - The authorized representative(s) of the firm of the General Consultant, HNTB Corporation, who have been duly appointed by the Authority to prepare Plans and Specifications for the Contract and to monitor the construction work performed in connection therewith.

The headquarters office of HNTB Corporation for this project is located at 2900 S. Quincy St, Suite 600, Arlington, Virginia 22206, telephone (703) 824-5100.

SPECIFICATIONS (SPEC) - - The general term comprising all the directions, provisions and requirements contained in the Virginia Department of Transportation, 2016 Road and Bridge Specifications, the Authority's Supplemental Specifications and Special Provisions, and in any Addenda and Change Orders or Supplemental Agreements that may be issued, all of which are necessary for the proper performance of the Contract.

SECTION 102 - BIDDING REQUIREMENTS AND CONDITIONS

102.01 Prequalification of Bidders

This Section is amended to add the following:

Only contractors who have been prequalified by the Virginia Department of Transportation for bidding on State projects will be permitted to submit Bids for Contracts for Construction of this Project. The foregoing notwithstanding, the Authority reserves the right to reject the bid of any bidder because of reason of unsatisfactory performance or progress on other or prior Authority contracts, as determined by the Authority in its sole discretion.

Contractor shall also see Prequalification requirements in the “Invitation to Bid” (Sheet IB-1 of the Contract Documents). If a Subcontractor is listed in one of the experience forms, that Subcontractor or a different Subcontractor which meets the experience requirements must complete at least 90% of the work in that category.

In order to bid on this project, prospective Bidders must meet the Prequalification requirements at the time specified in the “Invitation to Bid”. The Authority cannot be held liable in the event a party is unable to submit a valid bid due to a delay in the prequalification procedure. Securing prequalification and the timing thereof, shall at all times be the sole responsibility of the Contractor.

If a group of contractors should desire to submit a single bid for a contract or group of contracts, acting under the terms of a joint venture, each such contractor must be prequalified in the proper classification of work and must be registered with the Virginia Department of Transportation. The sum of the maximum pre-qualified classification capacity of the contractors comprising the joint venture must be greater than the estimated dollar value of the contract or group of contracts comprising the bid.

102.02 Content of Proposal

This section is amended as follows:

The following documents are bound with and are also a part of the Bid Form:

- Bid
- Non-Collusion Affidavit
- Statement of Contracts Underway
- Joint Venture Statement
- Stone Matrix Asphalt Experience – Bidder/Subcontractor
- Roadway Milling Experience – Bidder/Subcontractor
- Type B, Class VI Pavement Markings Experience - Bidder/Subcontractor
- Bid Bond
- Receipt of Addenda (if applicable)

102.04 Examination of Site of Work and Proposal

The Section is amended to add the following:

In addition to the mandatory site visit, the Bidders are allowed to visit the Project site to form their own conclusions regarding access requirements, effort required to perform the tasks and

other information needed to prepare their bid. Prior to visiting the site, a Bidder shall notify the Authority and Glen Parker at 804-938-3963 to coordinate the time and date of the Bidder's visit.

Any Addenda that may be issued will be posted on the RMTA website. <http://www.rmaonline.org/> All bidders are required to download any and all addenda from the website. The Authority shall not be responsible for individually delivering addenda to all proposers.

102.05 Preparation of Bid

Sub-Section (a) is amended to add the following:

No electronic bids shall be accepted. All bids shall be submitted on forms furnished by the Authority.

As part of the execution of the Bid, each Bidder shall execute the Statement of Contracts Underway, and the Non-Collusion Affidavit and, in the case of Joint Venture Bidders, the Joint Venture Statement.

The Statement of Contracts Underway shall list the stipulated status information of all other work in which the Bidder is presently engaged, whether as a prime contractor or a subcontractor. Such listings shall include not only contracts which are under construction, but also those awarded to the Contractor but not begun and those on which the contractor is the lowest bidder awaiting formal award. In the case of Joint Venture Bidders, each party involved shall complete, execute and submit a separate Statement of Contracts Underway, as well as the Bidder's portion of the Joint Venture Statement. Additional Statements of Contracts Underway forms are available at the office of the General Manager of the Authority.

The Non-Collusion Affidavit must be executed by the person signing the Bid. In the case of Joint Venture Bidders, only the person signing the Bid on behalf of the Contractors involved need execute the Non-Collusion Affidavit.

The Richmond Metropolitan Transportation Authority may elect to receive bids on more than one construction contract on the same date. When this event occurs, the Authority will award the various contracts after all of the bids for the various contracts are received and analyzed.

Sub-Section (f) is amended as follows:

In the event of a joint venture of a group of Contractors submitting a single Bid, the Bid shall be signed by an individual owner, partner or officer of any one of the Contractors bound in

the joint venture, and the official business address of the joint venture shall be given. In addition, a Joint Venture Statement must be executed by all Contractors involved.

102.06 Irregular Bids

This section is amended as follows:

The following section is deleted:

Section (m)

The following is added:

(p). If the bidder fails to submit the executed Statement of Contracts Underway; in the case of Joint Venture Bidders, failure to submit an executed Statement of Contracts Underway for each Contractor in the joint venture and the Joint Venture Statement.

(q). If the signed bid form is received from a party who was not represented, and recorded by the Authority as attending both the mandatory pre-bid meeting and site visit.

(r). If the bidder is not pre-qualified by the Virginia Department of Transportation at the time of the mandatory pre-bid meeting.

(s). If the bidder fails to attach required Stone Matrix Asphalt (SMA), Roadway Milling and Type B, Class VI Pavement Marking Experience forms.

(t). If the bidder fails to properly acknowledge receipt of addenda/addendum in the Receipt of Addenda form.

(u) Alterations to the Bid Tab

102.07 Proposal Guaranty (Bid Bond)

Add the following:

If a certified check is submitted as the Bid Guaranty, the check is to be made payable to the Richmond Metropolitan Transportation Authority, and the project name and Contract number shall also appear on the face of the check, as well as the business name of the bidder.

A bid bond will be accepted only if executed on a form which contains the exact wording as the Bid Bond included in these contract documents form. Any bid accompanied by a bond having wording which differs in any respect from the Bid Bond form may be rejected.

102.09 Submission of Bid

This section of the Specifications is completely replaced by the following:

Bids will be accepted at the Authority's office at 901 East Byrd Street, Suite 1120, Richmond, Virginia until scheduled bid opening time and shall be submitted in a sealed envelope. Bids shall be filed prior to the time specified in the Invitation to Bid. Bids received after that time will be returned to the bidder unopened. The bid date may be deferred by the Authority, in which case the bidders will be notified.

102.12 Public Opening of Bids

This section of the Specifications is completely replaced by the following:

Bids will be opened and read publicly at the time and place specified in the Invitation to Bid. Interested parties are invited to be present.

SECTION 103 - AWARD AND EXECUTION OF CONTRACTS

103.01 Consideration of Bids

Add the following:

In reviewing bids received, the Authority will give full consideration to a Bidder's capacity for undertaking and handling the work included in the bid. The difference in amounts between the maximum capacity stated in the prequalification certification for this classification of work, and the total estimated value of work remaining to be completed by the Bidder's organization as given in the Bidder's Statement of Contract Underway, shall constitute the Bidder's net capacity for handling additional work. Such net capacity will be considered by the Authority in determining the successful Bidders for Contracts on this Project.

103.02 Award of Contract

This section of the Specifications is completely replaced by the following:

The Authority will award a contract within sixty (60) calendar days of the bid opening for said Contract. If a Contract is not awarded within this time period, the Bidder shall have the right to withdraw the Bidder's Bid for the Contract without penalty or prejudice, unless the award date is extended by mutual consent.

The Authority agrees that Award of Contract, if made, will be determined without discrimination on the ground of race, creed, color, sex or national origin.

Basis for Contract Award: The Contract, if awarded, will be awarded to the lowest responsive and responsible bidder, if any, provided the bid is reasonable and it is in the best interest of the Authority to accept it and subject to the Authority's right to reject any and all bids and to waive informality in the bids and in the bidding. Determination of the lowest responsive bidder, if any, will be based on the Total Bid Amount entered on the Bid Tab Form including any properly submitted bid modifications taken in sequence as the Authority in its discretion chooses to Award. **Where the sum of the values entered in the multiple parts do not agree with the Total Bid Amount, the Total Bid Amount entered on the Bid Tab Form, including any properly submitted bid modifications, shall take precedence.**

In the event that the Total Bid Amount from the lowest responsible bidder exceeds available funds, the Authority may negotiate the Total Bid Amount with the apparent low bidder to obtain a contract price within available funds, pursuant to §2.24318 of the Code of Virginia, as amended, and Section 12(c) herein.

Informalities: The Authority reserves the right to waive any informality in the bids when such waiver is in the interest of the Authority.

Negotiation with Lowest Responsible Bidder: If award of a contract to the lowest responsive and responsible bidder is precluded because of limitations on available funds, under the provisions of §2.2-4318 of the Code of Virginia (the Public Procurement Act), the Authority reserves the right to negotiate the Total Bid Amount with the lowest responsive, responsible bidder to obtain a contract price within the available funds. This may involve changes in either the features or scope of the work included in the Contract Documents. Such negotiations with the apparent low bidder may include reducing the quantity, quality, unit prices, or other cost saving mechanisms involving items in the Total Bid Amount. The Authority shall notify the lowest responsive and responsible bidder that such a situation exists and the Authority and bidder shall then conduct their negotiations in person, by mail, by telephone or by any means they find convenient. If an acceptable contract can be negotiated, the changes to the Invitation

to Bid documents agreed upon in the negotiations shall be summarized in a "Post Bid Modification" and included in the contract. If an acceptable contract cannot be negotiated, the Authority reserves the right to terminate negotiations and begin negotiations with the second lowest responsive and responsible bidder or terminate negotiations with all bidders and reject all bids.

Notice of Award: The Notice of Award, the Notice of Intent to Award, or the Notice of Decision to Award will be posted at the Authority's Construction Engineering Inspection Office.

103.06 Contract Documents

Subsection (d) of this section of the Specifications is amended to include:

- All insurance certificates as required in Sec. 103.06 (d), as prescribed in Sec. 107 and as may be required in other sections.

Subsection (e) of this subsection of the Specifications is amended to include the following:

The Contractor shall submit a progress schedule using the Critical Path Method (CPM) format. As a minimum, the schedule shall include:

- The duration of activities.
- The interrelationship of critical activities.
- Maintenance of traffic changes.
- Any temporary work necessary to complete project.
- An easily distinguishable critical path.
- Final completion by the date specified.

SECTION 104 - SCOPE OF WORK

104.02 Changes in Quantities or Alterations in the Work

Subsection (b) of this section of the Specifications is amended to include:

1. Major Items: There are no major items under this contract.
2. Minor Items: All items under this Contract are considered minor items. No adjustment of contract unit prices will be made for overruns or underruns of the original contract quantities, regardless of the extent of such overruns or underruns.

SECTION 105 - CONTROL OF WORK

105.01 Notice to Proceed

Add the following:

Notice to Proceed will be issued within seven (7) calendar days after the execution of the Contract by the Authority.

Contractor shall submit CPM schedule as detailed in Section 103.06 within fourteen (14) days of issuance of Notice to Proceed by the Authority.

105.06 Subcontracting

Add the following:

Except as noted below, the consent to sublet any part of the work, or obtain supplies, shall not be construed to be an approval of the said subcontract, supply contract or any of its terms, but shall operate only as an approval of the making of a subcontract or supply contract between the Contractor and Subcontractor or Supplier. The Subcontractor agrees, as a condition of entering into a subcontract on the project, that the Contractor shall make no claim whatsoever against the Authority, the Engineer, or any of their officers, servants, agents or employees for any work performed or thing done by reason of said subcontract, or for any other cause whatsoever that may arise by reason of the relationship created between the Contractor and Subcontractor unless the proposed Subcontractor furnishes a statement to the effect that said Subcontractor is acquainted with all provisions of the Contract and agrees thereto.

In the case of extra work to be performed on a force-account basis, if any portion of such work is proposed to be sublet on the basis of negotiated unit and/or lump-sum prices instead of on a force-account basis, then such negotiated unit and/or lump-sum prices shall first meet with the approval of the Engineer before consent will be given to sublet the work.

Sublet work shall not begin until approval thereof has been secured from the Engineer. It is understood, however, that any consent by the Engineer for the subletting of any of the work under the Contract in no way relieves the Contractor from the Contractor's full obligations under the Contract. The Contractor shall be responsible for all acts of omissions of any Subcontractor or Supplier.

105.13 State Force Construction Surveying

This Section is deleted in its entirety. All construction surveying shall be the responsibility of the Contractor.

105.15 Removing and Disposing of Structures and Obstructions

This section is amended as follows:

All materials removed by the Contractor as specified therein, shall become the property of the Contractor, except as may be otherwise specifically required, and shall be legally disposed of by the Contractor off of RMTA property.

105.19 Submission and Disposition of Claims

This section of the Specifications is completely replaced by the following:

(a) Alleged Damages and Exceptions. Early or prior knowledge by the Authority of an existing or impending claim for damages might alter the plans, scheduling and other actions of the Authority or result in mitigation or elimination of the effect of the act objected to by the Contractor. Therefore, a written statement describing (1) the act of omission or commission by the Authority or its agents that allegedly caused or will likely cause damage to the Contractor and (2) the nature of the claimed damage must be submitted to the Engineer at the time of occurrence or beginning of the work upon which the claim and subsequent action is based. If such damage is reasonable likely to result from the Contractor's acting upon an order emanating from the Engineer, the Contractor shall take written exception, delivered to the Authority, to such order immediately. Submission of such written statement or exception, as specified, shall be mandatory. Failure to submit such written statement or exception shall be a conclusive waiver of such damages or exception by the Contractor. Mere oral notice or statement will not be sufficient, nor will notice or statement after the event.

(b) Additional Compensation. At the time of occurrence or prior to beginning the work the Contractor shall furnish the Engineer, in writing, an itemized list of materials, equipment, and labor for which additional compensation will be claimed. The contractor shall afford the Engineer every facility for keeping an actual cost record of the work. The Contractor and the Engineer shall compare records and bring them into agreement at the end of each day. Failure on the part of the Contractor to afford the Engineer proper facilities for keeping a record of actual costs will constitute a conclusive waiver of a claim for such extra compensation except to the extent that it is substantiated by the Authority's records. The filing of such notice by the Contractor and the keeping of cost records by the Engineer shall in no way establish the validity of a claim. Failure to submit such written itemized list shall be a conclusive waiver of such claim for additional compensation. Mere oral notice or statement will not be sufficient, nor will notice or statement after the fact.

(c) Verification. If the Contractor's claim contains data furnished by the Contractor that cannot be verified by the Authority's records, the data shall be subject to complete audit by the Authority or its authorized representative if they are to be used as a basis for claim settlement.

(d) Claims Procedure. Upon completion of the Contract, the Contractor may, within 60 calendar days from expiration of the period for review of the Final Estimate by the Contractor as provided in Section 109.10, submit to the Authority a written claim (original plus three legible copies) for such amount as the Contractor deems it is entitled to under the said contract setting forth the facts upon which said claim is based and including all pertinent data and correspondence which may substantiate the claim, provided that written notice of intention to file such claim shall have been given to the Authority at the time of occurrence or beginning of the work upon which claim and subsequent action is based. Failure of the Contractor to furnish any of the items required by Section 109.10 as prerequisite to the issuance of final payment shall not extend the time period in which the Contractor may submit a claim under this or any other section of the Contract. If the claim is not disposed of by agreement, then within 90 calendar days from receipt of said claim, the Authority will make an investigation and notify the Contractor by registered or certified mail, return receipt requested, of its decision; however, the Authority and Contractor may, by mutual agreement, extend such 90 calendar day period for another 30 calendar days. The decision of the CEO of the Authority shall be final, and failure of the Contractor to comply with the provisions of this section shall constitute a conclusive waiver of any such claim hereunder.

SECTION 106 - CONTROL OF MATERIAL

106.01 Source of Supply and Quality Requirements

This section is amended to add the following:

The Contractor shall not use in preparation of the bid nor on construction of this project any supplier or material person, hereinafter referred to simply as supplier, debarred by the Virginia Department of Transportation as of the date of advertisement.

It shall be the responsibility of the Bidder to determine from the Department's listings which suppliers are debarred as of the date of advertisement of this project. Such listings will be posted in the office of the Contract Engineer, 1401 E. Broad Street, Richmond, Virginia and in each District Office.

The Engineer will not approve for use any material furnished by a supplier debarred by the Department.

If subsequent to award of this contract, a previously debarred supplier is reinstated to eligibility, the Engineer may approve the use of that supplier on this project when requested by the Contractor and after consideration of all relevant factors.

106.02 Material Delivery

This section is amended as follows:

Contractor's invoices for materials delivered to the site shall show actual prices for such materials.

106.04 Disposal Areas.

The entire third paragraph under section (a) of the Specification is deleted.

SECTION 107 – LEGAL RESPONSIBILITIES

107.12 Responsibility for Damage Claims

Delete the first line of paragraph (a) and substitute:

"The Contractor shall indemnify and save harmless the Authority, the Engineer and its..."

Add the following statement to the end of paragraph (b):

". . . the contract provided, however, that the Authority and, where applicable, the Engineer are intended beneficiaries of this Contract and shall have standing to enforce the provisions of this Contract including the right to indemnification and the right to ascertain claims for damages.

Add the following after the last paragraph of this section:

In connection with the indemnification assumed by the Contractor by virtue of this section, but without limitation or release of the Contractor's responsibility for such indemnification or any other liability hereunder, the Contractor shall provide the following types and minimum amounts of insurance coverage for this project:

- (a) Contractor's Comprehensive General Bodily Injury and Property Damage Liability Insurance, including Contractor's Protective Liability Insurance and Contractual Liability Insurance:

- (1) One (1) person in any one (1) occurrence, amount One Million Dollars (\$1,000,000).
- (2) Two (2) or more persons in any one (1) occurrence, amount One Million Dollars (\$1,000,000).
- (3) Property Damage in any one (1) occurrence, amount One Million Dollars (\$1,000,000), with aggregate property damage policy limit of One Million Dollars (\$1,000,000).

The portion of the policy dealing with property damage liability shall contain a provision of endorsement providing insurance protection against property damage, including loss of use, caused by explosion and/or collapse, and against damage to existing underground and overhead pipes, cables, ducts and other such facilities, whether or not such facilities appear on available plans and whether or not accurately located on such plans.

The Contractual Liability Insurance policy shall contain an endorsement attesting to the Contractor's responsibilities for indemnification set forth in this section. Insurance certificates shall specifically indicate the inclusion of such an endorsement with particular reference to the Contract number and to "Compliance with Sec. 107.13 of the Specifications."

- (b) Comprehensive Automobile and Truck Liability Insurance including coverage for Contractor's automotive equipment (and including non-owned and hired vehicles):
 - (1) One (1) person in any (1) occurrence, amount One Million Dollars (\$1,000,000).
 - (2) Two (2) or more persons in any one (1) occurrence, amount One Million Dollars (\$1,000,000).
 - (3) Property damage in any one (1) occurrence, amount One Million Dollars (\$1,000,000).
- (c) Workmen's Compensation Insurance - Statutory. Employer's Liability Insurance in the amount of Five-Hundred Thousand Dollars (\$500,000).

If any part of the work is sublet, similar insurance shall be obtained by or on behalf of the Subcontractor to cover the Subcontractor's operation.

The insurance specified shall be with an insurance company acceptable to the parties hereto and licensed to do business in the State of Virginia. All insurance must be obtained before any work is commenced and kept in effect until its completion.

In compliance with Sec. 103.06, satisfactory evidence, in triplicate, of all required insurance coverage, including special endorsements, shall be forwarded to the Authority for approval within fourteen (14) Calendar Days after the date of written notice of Award of Contract. All insurance coverage must be approved by the Authority before the Contract will be executed by the Authority.

The Authority's approval of insurance furnished by the Contractor, or its failure to disapprove such insurance shall not relieve the Contractor of full responsibility for liability, damages and accidents as set forth elsewhere herein.

All policies required above shall include an endorsement requiring thirty (30) calendar days prior written notice to the Authority before any change or cancellation is made effective.

All policies required shall be maintained until completion and acceptance of all work under this Contract.

No separate payment will be made for the cost of the insurance herein specified but the Contractor shall include the cost of such insurance in the prices bid for the various items scheduled in the Bid.

107.19 Railway - Highway Provisions

This section is amended as follows:

It is not anticipated that the scope of work will require any right of entry to railroad property. The successful bidder should develop all means and methods for performing the scope of work without encroaching upon railroad property or easements and shall not foul the tracks.

If any coordination, submittals, right of entry, watchpersons, or additional insurance is required by a railroad for any reason during the performance of the scope of work, the payment for any railway-highway costs shall be covered in other pay items and will not be measured for payment. Any railway-highway requirements will be completed at no extra cost to the RMTA and with no extension of contract time.

MEASUREMENT AND PAYMENT

No separate payment will be made for the cost of Railway-Highway Provisions but the Contractor shall include the cost in the prices bid for the various items scheduled in the Bid.

SECTION 108 - PROSECUTION AND PROGRESS OF WORK

108.04 Determination and Extension of Completion Date

In the second paragraph of this section, substitute the number "75" for the number "60" wherever it appears.

108.06 Failure To Complete on Time

Sub-section (B) is completely replaced by the following:

CONTRACTOR WAIVES ANY DEFENSE AS TO THE VALIDITY OF ANY LIQUIDATED DAMAGES STATED IN THIS CONTRACT ON THE GROUNDS THAT SUCH LIQUIDATED DAMAGES ARE VOID AS PENALTIES OR ARE NOT REASONABLY RELATED TO ACTUAL DAMAGES.

SECTION 109 - MEASUREMENT AND PAYMENT

109.06 Common Carrier Rates.

This Section of the Specifications is deleted in its entirety.

109.08 Partial Payments

This section is completely replaced by the following:

Partial payments will be made once each month covering work performed and materials complete-in-place in accordance with the contract and for materials delivered in accordance with Sec. 109.09 on and between the 5th day of a month and the 4th day of the succeeding month as the work progresses. Partial payments will be made on the value of work performed based on approximate estimates prepared by the Engineer, provided, however, that no estimate shall be certified or payment made where the net amount receivable by the Contractor is less than

Five-hundred Dollars (\$500.00). The value of work done on items measured on a unit basis will be determined on a pro rata basis. If the Engineer determines that the Contractor has been overpaid, all further partial payments may be credited against such overpayment.

The Engineer will review the partial payment estimate with the Contractor's representative prior to each partial payment.

From the total of the amounts so determined will be deducted an amount equivalent to five (5) percent of the whole, which will be retained by the Authority until completion of the entire Contract in an acceptable manner and the balance, less all previous payments, shall be certified for payment.

Total Contract value shall be considered to mean the original amount of the Contract, except when the Contract is increased or decreased by a supplemental agreement in which case the adjusted total shall be used.

The Authority reserves the right to withhold the payment of any partial or final estimate voucher or any sum or sums thereof from such vouchers in the event of the failure of the Contractor to promptly make payment to all persons supplying equipment, tools or materials, or for any labor used by the Contractor in the prosecution of the work provided for in the Contract, and for any other cause as determined by the Authority in its sole discretion, including overpayment on previous partial payments.

109.10 Final Payment

This section of the Specifications is completely replaced by the following:

After final inspection and final acceptance of the project has been made by the Engineer, as provided in Sec. 108.09, the Engineer will prepare the final estimate of item quantities and amounts for the completed work. The Contractor will be afforded a period of fifteen (15) calendar days from the date of the final estimate to review the final estimate at the Authority's office.

As a prerequisite to the issuance of final payment, the Contractor will be required to furnish the following items to the Engineer:

- (a) An executed SWaM Participation form (on the Authority's standard form) attesting to actual amounts fully paid to each Small, Women, and Minority Owned (SWaM) businesses and/or Disadvantaged Business Enterprises (DBE).
- (b) An executed Final Release of Liability (on the Authority's standard form) attesting to the fact that all bills, charges and salaries for labor, services, materials and rental

of equipment, arising out of the prosecution of work under this Contract have been fully paid or arrangements satisfactory to the Engineer therefore have been made and all other just demands and liens relating to this project fully satisfied or arrangements to the Engineer therefore have been made, and releasing the Authority and their representatives from all claims, demands and liability of whatsoever nature from anything done or furnished under this Contract, except to the extent only as to such matters for which unresolved claims have been submitted by the Contractor in accordance with Section 105.16 hereof;

- (c) Sworn statements of any property owners or other parties who may have had any claims against the Contractor or liens against the project, evidencing that all their claims and liens are fully satisfied or provided for and the Contractor and Authority are released there from;
- (d) Any other documents, invoices, releases or objects which the Engineer may request in finalizing the Contract.

After the above items have been forwarded to the Engineer, and the final estimate and certificate for final payment sent to the Authority with the Engineer's recommendation for acceptance, the Contractor will be paid the total Contract amount less the amounts of all previous partial payments and less any imposed liquidated damages. This net amount will be subject to any increase or decrease resulting from corrections to any errors in previous partial payments that may be detected at this time and to deductions for unacceptable work not corrected by the Contractor as required hereunder.

This final payment will become due and payable to the Contractor within ninety (90) calendar days after the date when all the above listed documents and tracings have been received by the Engineer and acknowledged in writing by the Contractor. The Contractor will be entitled to interest on the final payment amount at the rate of four (4) percent per annum for the length of time beyond said 90 calendar days period that the final payment should remain unpaid.

SECTION 303 – EARTHWORK

303.02 Materials

Sub-Section (e) – The section is added as follows:

- (e) **Seed** shall conform to Section 244.02(c) of the Specifications

SECTION 512 - MAINTAINING TRAFFIC

512.01 Description

The following is added to this section:

The Contractor shall schedule the Contractor's operations in a manner as to not adversely affect traffic conditions. At all locations the Contractor shall schedule the Contractor's operations in such a manner that all available traffic lanes are open to traffic on Commonwealth of Virginia holidays, the day preceding holidays and the day after holidays. If a holiday falls on a Sunday, Friday shall be considered the preceding day. If a holiday falls on a Saturday, Monday shall be considered the day after. Ramp traffic (unless otherwise noted) shall be maintained at all times.

The Engineer reserves the right to require the Contractor to provide a proposed maintenance of traffic plan for all lane closures 7 calendar days prior to closure. The Engineer shall coordinate the maintenance of traffic plan with the RMTA and provide any changes and additions required prior to the lane closure. In the event that a detour route is detailed in the contract drawings, the Contractor shall be required to provide a traffic plan for installing and removing the proposed detour route.

The Contractor shall not utilize shoulders, median or similar areas for storage of equipment or material including vehicles used by Contractor's personnel to access the site. Any stored equipment shall be placed behind guardrail or concrete barriers.

The Contractor shall provide continuous monitoring of traffic control devices as part of the effort required to maintain them. Additionally, the Contractor shall possess a minimum of one spare operable electronic arrow on site only when directed by the Engineer.

When night work is in progress, the Contractor shall provide sufficient lighting of the work site(s) to enable the satisfactory completion of the work. Lighting shall be arranged so as not to interfere with or impede traffic approaching the worksite(s). Payment for lighting of the work site shall be covered in other pay items and will not be measured for payment.

See Maintenance of Traffic Special Provision for further information.

512.04 Measurement and Payment

Maintaining Traffic items shall not be measured and will be paid for on a lump sum basis. See Maintenance of Traffic Special Provision for further information.

SECTION 514 - FIELD OFFICE

This section of the Specifications is completely replaced by the following:

A field office is not required for this project.

RICHMOND METROPOLITAN TRANSPORTATION AUTHORITY

SPECIAL PROVISIONS

To

VIRGINIA DEPARTMENT OF TRANSPORTATION

2016 ROAD AND BRIDGE SPECIFICATIONS

FOR

RICHMOND EXPRESSWAY SYSTEM

CONTRACT NO. MOL-2018

MILL AND OVERLAY

POWHITE PARKWAY

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SPECIAL PROVISION TOLL COLLECTION PASS CARDS

DESCRIPTION

This provision details the disbursement and return of Toll Collection Pass Cards.

PROCEDURES

The Contractor shall provide the Engineer and the RMTA with a written request for Toll Collection Pass Cards within (7) days prior to work start. The written request shall contain, but not be limited to, the number of Toll Collection Pass Cards requested, names and addresses of the individuals to whom the Cards shall be assigned, a digital passport style photo of each individual, a brief but thorough explanation why each individual requires a Card, and the anticipated time frame for each individual to require the Card.

The Engineer shall review the Request for Cards within (8) working days of receipt of Request. The RMTA, via the Engineer, may provide between zero and the total number of Cards requested.

Cards cannot be used in the Open Road Tolling (ORT), or “Express,” lanes located on northbound and southbound Powhite Parkway and on the westbound Downtown Expressway (DTE). At these Toll Plazas, Contractors’ vehicles must go through “Cash” Toll Full Service Lanes to use Toll Pass Cards.

Prior to the distribution of a Card, the individual designated to receive a Card shall be required to provide a picture ID (driver’s license) of him- or herself, their home phone number, the name of their employer, their employer’s address, and their employer’s phone number. In addition, each person receiving a Card is required to sign a statement of fact that the Card shall be used only for and during the execution of RMTA contract obligations. Misuse of any Card by an individual shall result in the immediate revocation of Card privileges. Engineer shall notify individual’s company and the Contractor of the assumed Card misuse. The Contractor is responsible for returning the misused Card to the Engineer within 48 hours of notification.

In addition, all Cards issued in accordance to this contract shall be returned to the Engineer within 48 hours after completion of work. Failure to return all Cards may result in delays in processing of the final payment.

**SPECIAL PROVISION
MAINTENANCE OF TRAFFIC**

MAINTENANCE OF TRAFFIC

All maintenance of traffic operations shall be conducted in accordance with the most current versions of the Manual on Uniform Traffic Control Devices (MUTCD), the Virginia Work Area Protection Manual (WAPM), and subject to the approval of the Engineer, VDOT, City of Richmond, and the RMTA. The Contractor shall prepare and submit a Maintenance of Traffic (MOT) Plan for review and approval by the Engineer for each phase of construction. The Contractor's signing and MOT plan shall consider the efforts of adjacent contractors, motorists and pedestrian traffic.

The Contractor shall provide the Engineer no less than 7 calendar days notice before closing any lane, ramp or bridge. A minimum of 10 calendar days notice is required if the request is to close Boulevard Bridge. A minimum of 14 calendar days notice is required if the request is to close any lane that would impact or extend onto a VDOT/City of Richmond roadway. Approval to close any ramp or bridge is subject to review and consideration of event traffic in the vicinity.

No work or installation of any MOT devices may commence unless the work can be completed and the area reopened to traffic within the allowable lane closure hours, AND the Contractor has a contingency plan approved by the Engineer. No less than (7) calendar days prior to beginning the work, the Contractor shall submit a contingency plan to the Engineer for approval. This plan shall detail temporary protective measures to allow for restoration of the road for use when the Contractor is unable to complete a repair due to unusual circumstances beyond his control. Temporary protective measures shall only be used in emergency situations and are not allowed to remain in place for an extended period of time without authorization by the Engineer.

The Contractor shall be aware that no traffic control devices (such as Group II channeling devices, cones, Arrow Boards, etc.), with the exception of advance warning signs, shall be placed on any median, roadway or shoulder prior to the time shown. Advance warning signs may be placed not more than thirty (30) minutes prior to the begin time in this special provision. All traffic control devices including advance warning signs and detours shall be removed, the roadway free of debris, and the lane open to traffic by the end time in this special provision.

The Contractor shall be aware that failure to comply with the times set forth in this special provision could result in liquidated damages.

Prior to setting any lane or shoulder closures, the Contractor shall meet with the Engineer to review MOT for each of the lane closures the Contractor intends to perform. The Contractor shall prepare a sketch identifying the signs to be used and their respective locations. Sketches shall be prepared in accordance with the current version of the WAPM. The Contractor shall coordinate these meetings with the Engineer, so that the RMTA has no less than (7) days after

the meeting ends, to advise the motoring public of upcoming traffic restrictions. Maintenance and installation of all lane closures shall be the sole responsibility of the Contractor.

DOWNTOWN EXPRESSWAY (DTE) & BELTLINE EXPWY. CONNECTOR TO DTE

Eastbound DTE/Northbound Connector: The road is to be clear by 6:00 a.m.

Westbound DTE/Southbound Connector: The road is to be clear by 3:00 p.m.

TIMES OF ALLOWABLE SINGLE LANE CLOSURES:

(1) E.B. DTE / N.B. Connector:

A. Weekdays – 10:00 a.m. to 6:00 a.m.

B. Weekends – 10:00 a.m. Friday – 6:00 a.m. Monday

(2) W.B. DTE / S.B. Connector:

A. Weekdays – 6:00 a.m. to 3:00 p.m. & 7:00 p.m. to 6:00 a.m.

B. Weekends – 7:00 p.m. Friday – 3:00 p.m. Monday

TIMES OF ALLOWABLE MULTIPLE LANE CLOSURES: Multiple lane closures which restrict open lanes to (1) one in a single direction.

(1) E.B. DTE / N.B. Connector:

A. Weekdays – 7:00 p.m. to 6:00 a.m.

B. Weekends – RMTA shall decide allowable times based on individual weekend request by Contractor

(2) W.B. DTE / S.B. Connector:

A. Weekdays – 9:00 p.m. to 6:00 a.m.

B. Weekends – RMTA shall decide allowable times based on individual weekend request by Contractor

NUMBER OF LANES CLOSED (ANY DIRECTION)

- All roadways must have a minimum of (1) one lane open at all times. If a full roadway closure is required, the Contractor, the Authority and the Engineer shall schedule a mutually agreeable time. The length of the full closure shall be minimized by the Contractor.

- Where three (3) or more roadway lanes exist, the number of lanes which the Contractor may close is at the Engineer's discretion, based on the geometry of the area where lane/shoulder closures are desired.

DTE TOLL PLAZA (GATED LANES) AND EXPRESS LANES (ORT ZONE) RESTRICTIONS

NUMBER OF LANES CLOSED W.B DTE TOLL PLAZA (GATED LANES)

- No more than one lane closure will be permitted at any time for the cash lanes 43-46.
- One (1) Full Service lane must remain open at all times.
- No Toll Lane shall be closed from 3:00 p.m. to 7:00 p.m.
- Lane 45 (Secure Booth) may not be closed from 11:00 p.m. to 7:00 a.m. any day

NUMBER OF LANES CLOSED E.B DTE TOLL PLAZA (GATED LANES)

- There shall be at least three toll lanes open in a single direction at all times.
- One (1) Full Service lane must remain open at all times.
- No Toll Lane shall be closed from 3:00 p.m. to 7:00 p.m.
- Lane 55 (Secure Booth) may not be closed from 11:00 p.m. to 7:00 a.m. any day

NUMBER OF LANES CLOSED W.B DTE EXPRESS (ORT) LANES

- No more than two lane closures will be permitted at any time for the WB express lanes 47- 49.
- No Toll Lane shall be closed from 3:00 p.m. to 7:00 p.m.

DOWNTOWN EXPRESSWAY (DTE) RAMP CONNECTIONS TO/FROM I-95

Lane closures on Bridges 63 and 66 shall only be permitted at nights between 9 P.M. and 6 A.M. and on weekends between 9 P.M. Friday and 6 A.M. Monday. Closures of Ramp Bridges 64, 65, 67 and 68 shall only be permitted at nights between 10 P.M. and 5 A.M. weekdays, and on weekends between 5 A.M. Saturday and 5 A.M. Monday.

There shall be no total closures of the either the eastbound Downtown Expressway (DTE) or westbound DTE permitted; One lane shall be maintained on Bridge 63 and Bridge 66 at all times. In addition, Contractor shall maintain at least one ramp entering and at least one ramp exiting the city at all times; Bridge 64 shall not be permitted to be closed while Bridge 65 is closed and Bridge 67 shall not be permitted to be closed while Bridge 68 is closed.

All lane closures must be coordinated with VDOT, RMTA and the Engineer for final approval of dates and times. Contractor shall notify VDOT Smart Traffic Center at 804-796-4520 to advice of the lane closure status of these bridges

POWHITE PARKWAY

Northbound/Eastbound: The road is to be clear by 6:00 am.

Southbound/Westbound: The road is to be clear by 3:00 pm.

TIMES OF ALLOWABLE SINGLE LANE CLOSURES:

(1) Northbound/Eastbound:

A. Weekdays – 10:00 a.m. to 5:00 a.m.

B. Weekends – 10:00 a.m. Friday – 5:00 a.m. Monday

(2) Southbound/Westbound:

A. Weekdays – 6:00 a.m. to 3:00 p.m. & 7:00 p.m. to 6:00 a.m.

B. Weekends – 7:00 p.m. Friday – 3:00 p.m. Monday

TIMES OF ALLOWABLE MULTIPLE LANE CLOSURES: Lane closures which restrict open lanes to (1) one in a single direction.

(1) Northbound/Eastbound:

A. Weekdays – 9:00 p.m. to 5:00 a.m.

B. Weekends – RMTA shall decide allowable times based on individual weekend request by Contractor

(2) Southbound/Westbound:

A. Weekdays – 9:00 p.m. to 6:00 a.m.

B. Weekends – RMTA shall decide allowable times based on individual weekend request by Contractor

LANE RESTRICTIONS (ANY DIRECTION)

- All roadways must have a minimum of (1) one lane open at all times.
- Where three (3) or more roadway lanes exist, the number of lanes which the Contractor may close is at the Engineer's discretion, based on the geometry of the area where lane/shoulder closures are desired.

POWHITE PARKWAY TOLL PLAZA (GATED LANES) AND EXPRESS LANES (ORT ZONE) RESTRICTIONS

NUMBER OF LANES CLOSED POWHITE N.B. AND S.B. TOLL PLAZAS (GATED LANES)

- There shall be at least three toll lanes open in a single direction at all times.
- One (1) Full Service lane must remain open at all times.
- No NB Toll Lane shall be closed from 5:00 a.m. to 10:00 a.m.
- No SB Toll Lane shall be closed from 3:00 p.m. to 7:00 p.m.
- Lane 3 and Lane 12 (Secure Booths) may not be closed between 11:00 p.m. to 7:00 a.m. any day

NUMBER OF LANES CLOSED POWHITE EXPRESS (ORT) LANES

- No more than two lane closures will be permitted at any time for the NB express lanes 90- 92.
- No more than two lane closures will be permitted at any time for the SB express lanes 93- 95.
- No NB ORT Toll Lane shall be closed from 5:00 a.m. to 10:00 a.m.
- No SB ORT Toll Lane shall be closed from 3:00 p.m. to 7:00 p.m.

EXIT AND ENTRANCE RAMP TOLL PLAZAS

TIMES AND NUMBERS OF TOLL LANE CLOSURES (ANY DIRECTION)

No toll lane closures shall be permitted during peak hours each weekday. Peak hours are 6:00 a.m. to 10:00 a.m. for EB or NB ramps and 3:00 p.m. to 7:00 p.m. for WB or SB ramps.

- The number of lanes which the Contractor may close is at the Engineer's discretion, based on the geometry of the area where lane/shoulder closures are desired.
- The Authority and the Engineer shall schedule a mutually agreeable time.
- The length of the full closure shall be minimized by the Contractor.

The Contractor shall provide the Engineer no less than 7 calendar days notice before closing any given toll lane or any exit or entrance ramp. Pick up operation shall commence no later than 30 minutes prior to closing period(s) referenced above.

The Contractor shall provide written notice to the Engineer a minimum of 7 calendar days notice before any lane or ramp closures. The RMTA and the Engineer reserve the right to restrict dates and times of proposed lane or ramp closures. Contractor shall not be permitted to close any ramps or lanes during events in Downtown Richmond or the vicinity when high traffic volumes are expected to enter or exit Downtown.

All lane closures must be coordinated with VDOT, RMTA, City of Richmond (if applicable) and the Engineer for final approval of dates and times. It will be the Contractor's sole responsibility to notify VDOT Traffic Operations Center (Smart Traffic) at 804-796-4520 to advise of the lane closure status of these bridges. The Contractor shall communicate any changes in these times/dates immediately with the Engineer.

POINT OF CONTACT

The Contractor must have a point of contact or construction foreman responsible for the entire project on site at all times. This person will coordinate all work and shall be in close contact with

the onsite inspections and shall clearly communicate any changes to the work plan, if they occur. In the event that this individual changes from the previous day, the Contractor shall contact the Engineer and confirm this change, prior to starting any work. The Contractor will be required to have a point of contact on duty at all times, regardless of extended shifts or type(s) of work being performed

LANE CLOSURE AND MOT VIOLATIONS

The RMTA reserves the right to charge liquidated damages for the Contractor's failure to remove a lane or ramp closure by the prescribed time each day. The liquidated damages shall be established as One Thousand Dollars (\$1,000) per each fifteen (15) minutes, or a portion of 15 minutes, per lane or ramp, for any closure beyond the limits established above. Assessment of liquidated damages will stop when all maintenance of traffic devices have been removed from the roadway and lanes or ramps have been safely reopened to the approval of the Engineer. Any liquidated damages assessed in this Special Provision will be in addition to those listed in Section 108 of the Specifications.

Active work shall be pursued by the Contractor within one (1) hour from the time a lane or ramp closure is placed. The RMTA reserves the right to charge liquidated damages, as stated above, after one (1) hour of non-active work from the time the lane or ramp closure placement is completed. If active work has not started within two (2) hours from the time that the lane closure placement is completed, the Engineer shall require the lane closure to be immediately removed. Assessment of liquidated damages will end when lanes or ramps have been safely reopened to the approval of the Engineer or active work is pursued. Active work will be on-site activity as determined by the Engineer and the RMTA.

In addition, active work must be on-going at all times while a closure is in place. If active work is stopped for one (1) hour while a closure is in place or a closure is not removed within one (1) hour of the completion of active work, the Authority reserves the right to charge liquidated damages as stated above. The Contractor shall be aware that he will be required to perform active work while the deck is curing and shall have a minimum of two vehicles in the lane closure with high-intensity rotating, oscillating, or strobe lights flashing at all times.

STAGING AREA / CONSTRUCTION ENTRANCE

The Contractor shall be aware of the close proximity of live traffic to the work zone. Extra care shall be taken when slow moving vehicles are entering live traffic. Contractor must demonstrate how vehicles can enter and exit the work zone safely and minimize impacts to general public in his MOT plan. Contractor may consider the use of a shadow vehicle for equipment entering live traffic at slow speeds

CERTIFICATION OF PERSONNEL

FHWA regulations provided in 23 CFR Subpart J state “States shall require that personnel involved in the development, design, implementation, operation, inspection, and enforcement of work zone related transportation management and traffic control be trained, appropriate to the job decisions each individual is required to make.” In accordance with the FHWA regulation and VDOT regulations, the Contractors foreman, or employee who is directly responsible for placing maintenance of traffic devices, shall be properly trained. The minimum training required for this Contract is the “Basic Work Zone Traffic Control Training” course. This is a one-day course designed by VDOT. For more information on the course, see the following: <http://www.vdot.virginia.gov/business/trafficeng-WZS.asp>

A trained employee must be on-site prior to setting up traffic control devices or a stop work order may be issued. In addition, a trained employee must be on-site at all times when any work inside a work zone requiring traffic control is on-going. A trained employee must be on-site at all times during the removal of traffic control devices. This employee will coordinate with the “Point of Contact” at all times. If the inspector or engineer observes the Contractor without a trained employee on-site during the setting up, maintenance or removal of the work zone traffic control, the RMTA reserves the right to charge liquidated damages at the rate of One Thousand Dollars (\$1,000) per day.

RESTRICTED TIME OF WORK AREAS

Portions of the Downtown Expressway, Beltline Expressway Connectors, and the Powhite Parkway are adjacent to residential areas. These areas are identified as, but not limited to, the neighborhoods near the intersection of Powhite Parkway and Forest Hill Avenue and neighborhoods between the Downtown Expressway Beltline Connector and Park Drive/Blanton Avenue on the north end of the project.

Work in these areas after 11:00 PM shall be restricted. Activities permitted after this time shall include saw-cutting, placement of concrete, and asphalt paving. Any activities that produce unacceptable decibel levels, as determined by the Engineer and the RMTA, shall not be permitted. Typical activities not permitted after 11:00 PM include, but are not limited to, jack hammering or roto-hammering.

PROTECTION OF PROPERTY

The Contractor shall provide for the Engineer's review the method intended to protect the motoring public, from any activity which poses a potential threat to another's property or person (i.e. cars, motorcycles, pedestrians, businesses, etc.).

TRAFFIC ON MILLED SURFACES

At the Contractor's discretion he will be allowed to have traffic drive on a milled surface for no more than 48 hours after the milling operation is complete. If the Contractor chooses this

method and there are elevation differences, he will be required to install temporary pavement wedges per VDOT Road and Bridge Standard 305.01, ACOT -1. This detail is provided below for the Contractor's reference. The Contractor shall also have proper drainage measures in-place prior to forecasted inclement weather. Drainage measures shall be submitted to the Engineer for approval prior to installation. Contractor shall be responsible for installation and maintenance of the pavement wedges and drainage measures to the approval of the Engineer. The Contractor shall not be allowed to remove any lane closure until all required pavement wedges and drainage measures are installed

HOLIDAYS AND SPECIAL EVENTS

The project will be officially shut down for the following holidays during the periods noted:

- Memorial Day: 5/25/18 (Friday) – 5:00 A.M. through 5/29/18 (Tuesday) – 10:00 A.M.
- Independence Day: 7/3/18 (Tuesday) – 5:00 A.M. through 7/5/18 (Thursday) – 10:00 A.M.
- Labor Day: 8/31/18 (Friday) - 5:00 A.M. through 9/4/18 (Tuesday) - 10:00 A.M.
- Thanksgiving: 11/21/18 (Wednesday) – 5:00 A.M. through 11/26/18 (Monday) – 10:00 A.M.
- Christmas: 12/24/18 (Monday) – 5:00 A.M. through 12/26/18 (Wednesday) – 10:00 A.M.
- New Year's Day: 12/28/18 (Friday) – 5:00 A.M. through 1/1/19 (Tuesday) – 10:00 A.M.

The Authority will not allow any lane closures during special events. The Engineer reserves the right to limit/cancel/modify the lane closure times and/or work that may be performed to accommodate the following special events. The Contractor should be aware of typical increased weekend traffic during these events.

- Any NASCAR Race in Richmond (Typically 2 per year, in April and September)
- Ukrop's Monument Ave. 10K Race (Typically the second weekend in April)
- Dominion River Rock (Weekend in middle of May)
- Slide the City (Typically a Saturday in June)
- Jazz Festival at Maymont Park (Typically a weekend in August).
- Richmond Folk Festival (Weekend in the Middle of October)
- Richmond Marathon (Weekend in the Middle of November)

The Contractor shall prepare and submit a Schedule of Work Activities and Maintenance of Traffic (MOT) Plan for review and approval by the Engineer a minimum of 14 calendar days in advance of any special event.

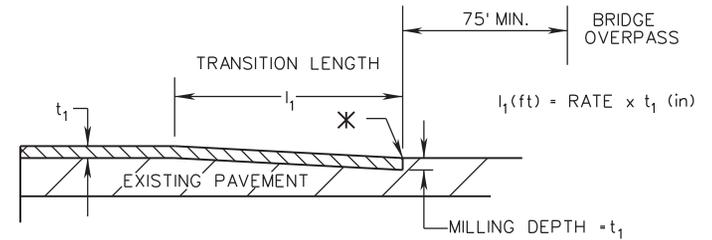
No allowance shall be made for these periods in determining the contract end date.

MEASUREMENT AND PAYMENT

Standard Maintenance of Traffic pay items will be measured and paid as per VDOT 2016 Road and Bridge Specifications Section 512.04.

NOTES

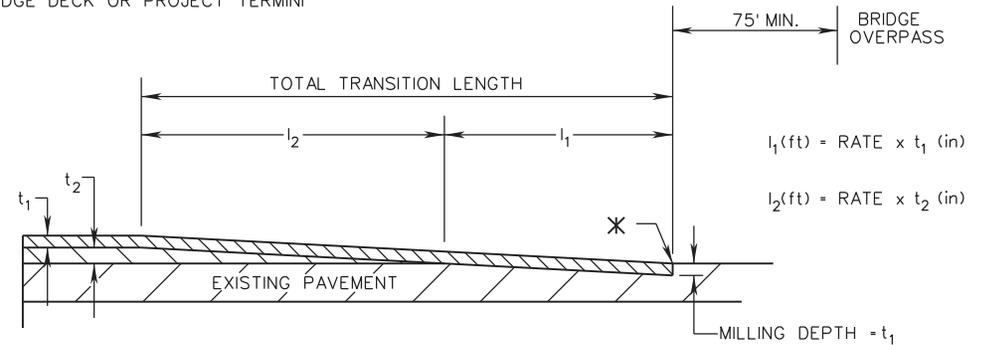
1. TIE-IN REQUIREMENTS TO INTERSECTING ROADS OR STREETS SHALL BE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR AT THE DIRECTION OF THE ENGINEER.
2. EXISTING PAVEMENT SURFACE SHALL BE PLANED TO TRANSITION THE TOP COURSE OF THE ASPHALT CONCRETE OVERLAY. ANY SUB-COURSE TERMINATION MAY BE NOTCHED INTO THE EXISTING PAVEMENT OR BLENDED WITH THE NEXT COURSE OF PAVEMENT.
3. WHEN THERE IS A SPECIAL PROVISION FOR RIDEABILITY INCLUDED IN THE CONTRACT, A DISTANCE OF 105 FEET (0.02 OF A MILE), MEASURED FROM THE LINE OF THE TIE-IN WILL BE EXEMPTED FROM PAY ADJUSTMENT.
4. TRANSITION SHALL BEGIN/END AT THE PROJECT LIMITS, AT BRIDGE APPROACH SLAB/ABUTMENT (OR AN INTERMEDIATE POINT DETERMINED BY THE ENGINEER), AND A MINIMUM OF 75 FEET FROM A VERTICAL PLANE OF THE NEAREST OUTER FACE OF THE BRIDGE OVERPASS.
5. NO OVERLAY OR MILLING SHALL BE PERMITTED ON THE BRIDGE DECK WITHOUT THE PRIOR WRITTEN APPROVAL OF THE DISTRICT BRIDGE ENGINEER.



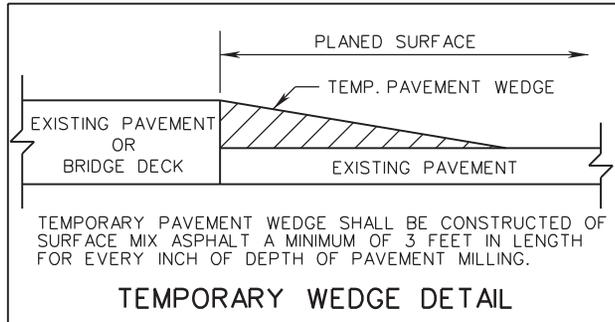
SINGLE COURSE OVERLAY TRANSITION GEOMETRY
(NOT TO SCALE)

TRANSITION RATE		POSTED SPEED MPH					
		25	35	45	55	65	70
RATE (FT/INCH)		20	25	35	40	45	50

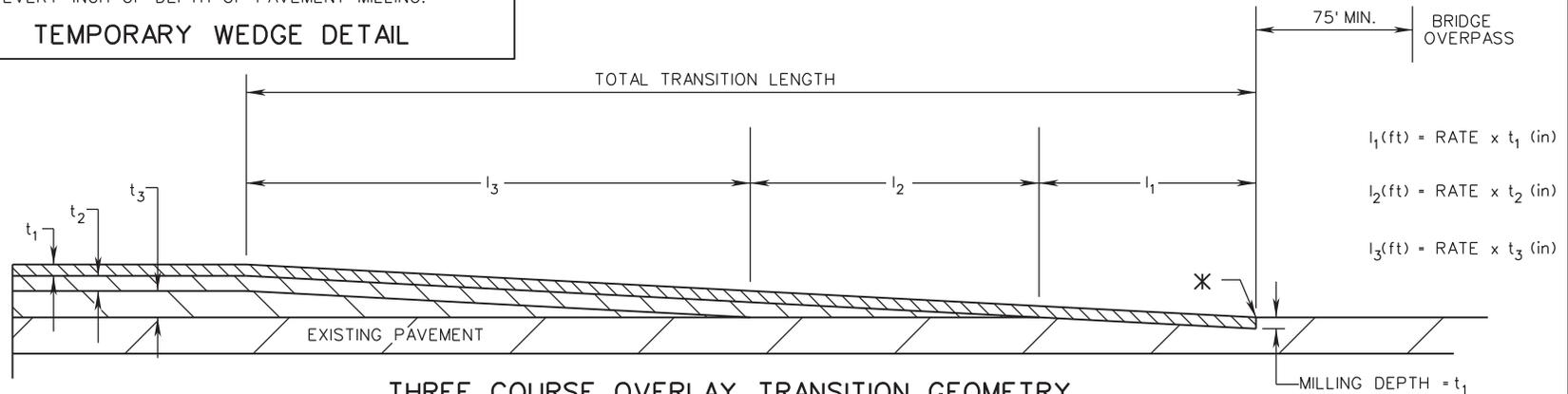
✱ BRIDGE DECK OR PROJECT TERMINI



TWO COURSE OVERLAY TRANSITION GEOMETRY
(NOT TO SCALE)



TEMPORARY WEDGE DETAIL



THREE COURSE OVERLAY TRANSITION GEOMETRY
(NOT TO SCALE)

SPECIFICATION REFERENCE

- 210
- 315
- 515

A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.
ASPHALT CONCRETE OVERLAY TRANSITIONS

VIRGINIA DEPARTMENT OF TRANSPORTATION



ROAD AND BRIDGE STANDARDS

REVISION DATE

SHEET 1 OF 1

7/12

305.01

SPECIAL PROVISION ASPHALT CONCRETE OVERLAY

DESCRIPTION

Roadways/Shoulders:

This work shall consist of milling the roadway surface and installing a new Stone Matrix Asphalt - SMA-9.5(64E-22) overlay. The Contractor shall match existing grades and cross slopes. Minor cross slope corrections may be required at the direction of the Engineer. In general, the Contractor shall mill and overlay a total of one and a half (1.5) inches on both traveling lane and shoulder.

Toll Plaza Lots and Service Roads:

This work shall consist of milling the roadway surface and installing a new Surface Mix Asphalt - SM-9.5D overlay. The Contractor shall match existing grades and cross slopes. Minor cross slope corrections may be required at the direction of the Engineer. In general, the Contractor shall mill and overlay a total of two (2) inches on the parking lots and service roads.

Once the Contractor begins the process of roadway milling and overlaying the road surface, the work shall progress in an expedient manner to complete the work and provide all lanes of traffic open during the times specified in the Maintenance of Traffic Special Provision SP-B.

Limitations of operations for placing asphalt concrete overlay shall be in accordance with the requirements of Section 108.02 of the Specifications and as specified herein.

Any discrepancies between the as-bid contract documents, general specification, and this provision for any item of work herein, shall be resolved at the pre-construction meeting and before beginning these operations.

Rumble strips will be replaced if currently existing in specific locations or as directed by the Engineer. Installation shall be in accordance with standard drawing RS-1 and Sections 315.05(g) of the Specifications and as specified herein

LOCATIONS

Appendix SP-H contains a map of the Powhite Parkway and Toll plaza project limits. The Engineer shall mark the limits of the mill and overlay in the field with the contractor before any milling begins.

MATERIALS

<u>ITEM:</u>	<u>VDOT SECTION:</u>
Asphalt Concrete Ty. SMA-9.5(64-E22)	210, 211, 248, 315 & 317*
Asphalt Concrete Ty. SM-9.5D	210, 211, 248, 315 & 317*
Tack Coat	310
Flexible Pavement Planing	515*

*Note: Contractor shall comply with the VDOT 2016 Road and Bridge Specification Revisions in:

- “Division 2 – Materials”
- “Division 3 – Roadway Construction”
- “Division 5 – Incidental Construction”

PROCEDURES

I. Flexible Pavement Planing:

Prior to initiating flexible pavement planing, the Contractor shall remove all debris and trash if present within five (5) feet from the edge of pavement and behind guardrails. The Contractor shall make all necessary saw cuts at the limits of the overlay. All saw cut line locations shall be to the approval of the Engineer.

In the event that a loop detector is located within the limits of flexible pavement planing, the contractor shall notify the RMTA prior to operations to allow for proper disconnect and removal. The contractor shall be liable for any damage to the tolling equipment and lost revenue.

The Contractor shall then proceed with flexible pavement planing operations. Planing depths are presented below and shall be constant over the entire lane or shoulder unless varied by the Engineer.

Flexible Pavement Planing Depth (Inches)		
Travelling Lane	Shoulder	Toll Plaza Lots and Service Roads
1.5	1.5	2.0

The Contractor shall be aware that no pavement drop off of more than two (2) inches will be allowed at any time in between adjacent lanes or lane and shoulder or within a lane. Contractor shall refer to the Virginia Work Area Protection Manual for all applicable standards and further guidance. The Contractor will be permitted to allow traffic to drive on milled surfaces for no more than 48 continuous hours. If traffic is allowed on milled surfaces, the Contractor shall install construction pavement markings (Type D, E or F) and temporary pavement wedges per VDOT Road and Bridge Standards standard sheet ACOT-1, which has been included in the contract documents for reference.

At the location of any overhead sign or bridge, the Contractor shall measure the existing vertical clearance in both lanes and both shoulders to the approval of the Engineer prior to the milling operation. During installation of the overlay the Contractor shall not reduce the vertical clearance under any structure.

Due to the limitations of the milling machine and with the approval of the Engineer, the Contractor shall utilize jack hammering and saw cutting to remove pavement around drainage inlets and other drainage features. Contractor shall provide adequate shielding, to the approval of the Engineer, to protect nearby live traffic from sparks and other dislodged debris. Any damage to existing drainage features shall be repaired to the approval of the Engineer, with no additional cost to the RMTA, and with no extension in contract time.

II. Asphalt Concrete Overlay:

The Contractor shall furnish and place asphalt overlay pavement courses on existing roadway surfaces in accordance with the requirements herein and in conformity with the lines, grades, and thickness as established in the contract document or as directed by the Engineer. Overlay depths are presented in the table below.

Asphalt Concrete Overlay Depth (Inches)		
Travelling Lane	Shoulder	Toll Plaza Lots and Service Roads
1.5	1.5	2.0

Additional locations may require further milling and overlay at the direction of the Engineer. The Contractor will be paid at the contract unit price for any additional milling and overlay required.

To the approval of the Engineer, the Contractor may be directed to vary these depths to maintain the same vertical clearance height under any overhead sign or bridge structure.

In the event that a loop detector will be replaced within the asphalt concrete overlay limits, the contractor shall give advance notice to the RMTA to allow for proper installation once the overlay is complete. The contractor shall be liable for any damage to the tolling equipment and loss revenue.

Asphalt concrete pavement overlay operations shall be performed in a full lane or full shoulder at a time. Under no circumstance will the Contractor be permitted to overlay a portion of the width of a travel lane or shoulder. In the event that an entire lane or shoulder cannot be completed during the lane closure the Contractor will be required to install pavement wedges per VDOT Road and Bridge Standards standard sheet ACOT-1.

The Contractor shall submit mix designs to the Engineer no less than seven (7) days prior to placement for approval. All mixes will be sampled and tested for strength requirements during each time SMA is placed.

MEASUREMENT AND PAYMENT

Flexible Pavement Planing (Up to 2.0" Depth) will be measured by the square yard and be paid at the contract price. This price shall be full compensation for debris and trash removal and disposal offsite within the specified limits, saw cutting, jack hammering and shielding, pavement planing at the required depth, disposal of waste debris offsite, fees and any permits or applications required for disposal, all equipment, labor, and incidentals required to complete the work. If pavement wedges are installed, cost of asphalt, all labor, tools, equipment, removal and disposal of asphalt, and cleaning the roadway after removal will be incidental to this work. The cost of any construction pavement markings (Type D, E or F) will be incidental to this work

Pay Item

Flexible Pavement Planing (Up to 2.0" Depth)

Pay Unit

Square Yard

Stone Matrix Asphalt SMA-9.5(64-E22) will be measured by ton and be paid at the contract price. This price shall be full compensation for furnishing and placing SMA overlay at the required depth, cleaning the surface prior to placement, furnishing and installing tack coat, all equipment, labor, and incidentals required to complete the work. If pavement wedges are installed, cost of asphalt, all labor, tools, equipment, removal and

disposal of asphalt, and cleaning the surface shall be incidental to this work. The cost of any construction pavement markings (Type D, E or F) will be incidental to this work.

<u>Pay Item</u>	<u>Pay Unit</u>
Stone Matrix Asphalt SMA-9.5(64-E22)	Ton

Surface Mix Asphalt SM-9.5D will be measured by ton and be paid at the contract price. This price shall be full compensation for furnishing and placing SMA overlay at the required depth, cleaning the surface prior to placement, furnishing and installing tack coat, all equipment, labor, and incidentals required to complete the work. If pavement wedges are installed, cost of asphalt, all labor, tools, equipment, removal and disposal of asphalt, and cleaning the surface shall be incidental to this work. The cost of any construction pavement markings (Type D, E or F) will be incidental to this work.

<u>Pay Item</u>	<u>Pay Unit</u>
Surface Mix Asphalt SM-9.5D	Ton

**SPECIAL PROVISION
ASPHALT MATERIAL PRICE ADJUSTMENT**

DESCRIPTION

All asphalt material contained in the attached listing of eligible bid items and designated by pay items in the contract will be price adjusted in accordance with the provisions as set forth herein. Other items will not be adjusted, except as otherwise specified in the contract. If new pay items which contain asphalt material are established by a Change Order, they will not be subject to Price Adjustment unless specifically designated in the Change Order to be subject to Price Adjustment.

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

This monthly statewide average price will be the Base Index for all contracts on which bids are received during the calendar month of its posting and will be the Current Index for all asphalt placed during the calendar month of its posting. In the event an index changes radically from the apparent trend, as determined by the Engineer, the Department may establish an index which it determines to best reflect the trend.

The amount of adjustment applied will be based on the difference between the contract Base Index and the Current Index for the applicable calendar month during which the work is performed. Adjustment of any asphalt material item designated as a price adjustment item which does not contain PG 64-22, except PG 76-22, will be based on the indexes for PG 64-22. The quantity of asphalt cement for asphalt concrete pavement to which adjustment will be applied will be the quantity based on the percent of asphalt cement shown on the appropriate approved job mix formula.

The quantity of asphalt emulsion for surface treatments to which adjustment will be applied will be the quantity based on 65 percent residual asphalt.

Price adjustment will be shown as a separate entry on the monthly progress estimate; however, such adjustment will not be included in the total cost of the work for progress determination.

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

PAYMENT

The following is a listing of bid items the Authority has identified as eligible for price adjustment on this project. Only items on this listing will be eligible for adjustment under this Contract. An electronic version of VDOT's Form C-21B (c) will be used and can be downloaded from VDOT's website.

ASPHALT MATERIAL ITEMS ELIGIBLE FOR PRICE ADJUSTMENT

ITEM	DESCRIPTION	UNITS	SPECIFICATION
10650	Asphalt Concrete Type SMA-9.5	Ton	210, 211, 248, 315 & 317
10636	Asphalt Concrete Type SM-9.5D	Ton	210, 211 & 315

**SPECIAL PROVISION
PAVEMENT MARKINGS**

DESCRIPTION

This work shall consist of applying Type B Class VI Pavement Line Markings to the newly placed Asphalt Concrete overlay. The Contractor shall install pavement markings per the manufacturer's recommendations.

The Contractor will be required to maintain all pavement markings during the overlay. The Contractor shall install temporary markings prior to opening any lane or ramp closure in the event that traffic is driving on a milled surface or intermediate pavement layer. The Contractor may use either Type A or Type D markings on all milled and intermediate pavement layers. In the event that the center stripe is replaced it shall be solid for the entire length of the ramp. No skip or dashed lines shall be used until the final pavement markings are installed.

The Contractor shall use Type D markings only on the final surface course, if the Contractor is unable to install permanent markings prior to the lane being opened for traffic. The Contractor shall refer to the Maintenance of Traffic Special Provision SP-B for allowable lane closure times.

MATERIALS

<u>ITEM</u>	<u>VDOT SECTION</u>
Type A Traffic Paint	704*
Type B Class VI Pavement Line Marking 4"	704*
Type B Class VI Pavement Line Marking 6"	704*
Type B Class VI Pavement Line Marking 8"	704*
Type B Class VI Pavement Line Marking 12"	704*
Pavement Message Marking "ONLY"	704*
Pavement Message Marking "E-Z PASS"	704*
Pavement Message Marking "CASH"	704*
Pavement Message Marking "STAY"	704*
Pavement Message Marking "IN"	704*

Pavement Message Marking “LANE”	704*
Pavement Message Marking DIRECTIONAL ARROW	704*
Pavement Message Marking HANDICAPPED SYMBOL AND HASH	704*
Type D Temporary Pavement Markings	704*

*Note: Contractor shall comply with the VDOT 2016 Road and Bridge Specification Revisions in “Division 7 – Traffic Control Devices”

Pavement markings shall conform to the requirements of Section 246 and the glass beads shall conform to the requirements of Section 234

Materials shall be delivered to the job site in the manufacturer’s original sealed containers. Each container shall be marked with the manufacturer’s name and lot number. Materials will be accepted based on the manufacturer’s certification, subject to the storage and handling requirements of the manufacturer. The Contractor shall use an approved inventory tracking system for all materials received from the manufacturer. Shipment of materials from such inventory shall be accompanied by a signed form C-85 containing the following certification statement:

Material shipped under the certification has been tested and approved by VDOT as indicated by Laboratory test numbers listed hereon.

PROCEDURES

The Contractor shall submit an MOT plan (7) days prior for approval of the Engineer and the RMTA.

Markings shall be installed in accordance with the latest editions of the “Manual on Uniform Traffic Control Devices” (MUTCD), the Virginia Supplement to the MUTCD, the Virginia Work Area Protection Manual.

The Contractor shall have a Certified Pavement Marking Technician present during pavement marking operations. The Contractor shall install either permanent or temporary pavement markings, as specified in this special provision, prior to removing the lane closure and opening the lane to traffic. All pavement marking shall be installed per the Manufacturer’s recommendations or as approved by the Engineer.

The Contractor and the Engineer shall agree on all locations to be replaced prior to any installation of pavement line markings.

The cost of installing, maintaining, and removing either Type A or Type D pavement markings shall be incidental to all Type B Class VI Pavement Line Marking items.

Contractor shall refer to Mill and Overlay Exhibit herein the Contract Documents for additional guidance.

LOCATIONS

<u>Roadway:</u>	<u>Material:</u>	<u>Size</u>
Powwhite Parkway	Type B Class VI Pavement Line Marking	6"
	Type B Class VI Skip Markings (10' with 30' gap)	6"
	Type B Class VI Skip Markings (3' with 9' gap)	6"
	Type B Class VI Pavement Line Marking	8"
	Type B Class VI Pavement Line Marking	12"
	Pavement Message Marking "ONLY"	
	Pavement Message Marking "CASH"	
	Pavement Message Marking "STAY"	
	Pavement Message Marking "IN"	
	Pavement Message Marking "LANE"	
	Pavement Message Marking DIRECTIONAL ARROW	
<u>Area:</u>	<u>Material:</u>	<u>Size</u>
Powwhite Parking lots/Service Rds	Type B Class VI Pavement Line Marking	4"
	Pavement Message Marking	
	HANDICAPPED SYMBOL AND HASH	

Other locations for pavement markings may be determined by the Engineer.

MEASUREMENT AND PAYMENT

Type B Class IV Pavement Line Marking 4", **Type B Class IV Pavement Line Marking 6"**, **Type B Class IV Pavement Line Marking 8"** and **Type B Class IV Pavement Line Marking 12"** will be measured by linear foot and be paid at the contract price. This price shall be full compensation for furnishing and installing pavement line markings, surface preparation, all equipment, labor, and incidentals required to complete the work. The cost of eradicating any existing pavement markings on asphalt concrete or bituminous asphalt concrete; installing, maintaining, and removing any Type A and Type D Construction Pavement Markings will be incidental to this item.

Pavement Message Marking “ONLY”, Pavement Message Marking “E-Z PASS”, Pavement Message Marking “STAY”, Pavement Message Marking “IN”, Pavement Message Marking “LANE”, Pavement Message Marking DIRECTIONAL ARROW and Pavement Message Marking HANDICAPPED SYMBOL AND HASH will be measured by each and be paid for at the contract unit price. This price shall be full compensation for furnishing and installing pavement message markings, surface preparation, all equipment, labor, and incidentals required to complete the work. The cost of eradicating any existing pavement markings on asphalt concrete or bituminous asphalt concrete; installing, maintaining, and removing any Type A and Type D Construction Pavement Markings will be incidental to this item.

<u>Pay Item</u>	<u>Pay Unit</u>
Type B Class VI Pavement Line Marking 4”	Linear Foot
Type B Class VI Pavement Line Marking 6”	Linear Foot
Type B Class VI Pavement Line Marking 8”	Linear Foot
Type B Class VI Pavement Line Marking 12”	Linear Foot
Pavement Message Marking “ONLY”	Each
Pavement Message Marking “E-Z PASS”	Each
Pavement Message Marking “STAY”	Each
Pavement Message Marking “IN”	Each
Pavement Message Marking “LANE”	Each
Pavement Message Marking DIRECTIONAL ARROW	Each
Pavement Message Marking HANDICAPPED SYMBOL AND HASH	Each

**SPECIAL PROVISION
SNOW-PLOWABLE RAISED PAVEMENT MARKERS
AND RUMBLE STRIPS**

DESCRIPTION

This work shall consist of applying installing snow-plowable raised pavement markers and rumble strips to the newly placed Asphalt Concrete overlay. The Contractor shall install all items per the manufacturer’s recommendations.

Snow-plowable raised pavement markers shall be installed in locations per the 2016 Road and Bridge Standards and as directed by the Engineer. Markers typically shall be placed along the edge lines and as directed by the Engineer.

Contractor shall refer to the 2016 Road and Bridge Specifications and VDOT’s IIM-LD-212.5 for additional guidance. All rumble strips and snow-plowable pavement markers shall be installed per manufacture’s recommendations and at the direction of the Engineer.

Rumble strips will be placed on both shoulders of the mainline lanes of the DTE Connector Roadways and only on left (inside) shoulder of the mainline lanes of the Downtown Expressway. Installation shall be in accordance with standard drawing RS-1 and Sections 315.05(g) of the Specifications and as specified herein.

MATERIALS

<u>ITEM</u>	<u>VDOT SECTION</u>
Snow-Plowable Raised Pavement Markers	235, 704*
Rumble Strip (Asphalt)	315
Liquid Asphalt Coating (Rumble Strips)	315

*Note: Contractor shall comply with the VDOT 2016 Road and Bridge Specification Revisions in “Division 7 – Traffic Control Devices”

Snow-Plowable raised pavement markers shall conform to the requirements of section 235 in the specifications.

Rumble Strips shall be installed as per VDOT Road and Bridge Standards 304.01. Liquid Asphalt Coating (Emulsion) shall be applied as per VDOT sec. 310.

PROCEDURES

Snow-Plowable Raised Pavement Markers, Rumble strips and Liquid Asphalt Coating shall be installed in accordance with the latest editions of the “Manual on Uniform Traffic Control Devices” (MUTCD), the Virginia Supplement to the MUTCD, the Virginia Work Area Protection Manual, and the 2016 Road and Bridge Standards

MEASUREMENT AND PAYMENT

Rumble Strips, Asphalt will be measured by linear foot and be paid at the contract price. This price shall be full compensation for surface preparation, all equipment, labor, and incidentals required to complete the work. The cost of eradicating any existing pavement markings and installing, maintaining, and removing any Type D Construction Pavement Markings will be incidental to this item.

<u>Pay Item</u>	<u>Pay Unit</u>
Rumble Strips, Asphalt	Linear Foot

Snow-Plowable Raised Pavement Markers will be measured each and be paid at the contract price. This price shall be full compensation for furnishing and installing markers, surface preparation, grooving for inlay, all equipment, labor, and incidentals required to complete the work.

<u>Pay Item</u>	<u>Pay Unit</u>
Snow-Plowable Raised Pavement Markers White/Red	Each
Snow-Plowable Raised Pavement Markers Yellow/Red	Each

Liquid Asphalt Coating will be measured by square yard and be paid at the contract price. This price shall be full compensation for surface preparation, grooving for inlay, all equipment, labor, and incidentals required to complete the work.

<u>Pay Item</u>	<u>Pay Unit</u>
Liquid Asphalt Coating	Square Yard

**SPECIAL PROVISION
POWHITE SOUTH TO CHIPPENHAM RAMP
ASPHALT CONCRETE OVERLAY AND GEOSYNTHETIC REINFORCEMENT**

DESCRIPTION

This work shall consist of milling the asphalt roadway surface and installing a new Stone Matrix Asphalt (SMA) overlay. Work location will include the southbound Powhite Parkway Ramp to southbound Chippenham Parkway. This ramp includes asphalt and concrete surfaces. There will be no milling of the concrete surfaces. The Contractor shall match existing grades and cross slopes. Minor cross slope corrections may be required at the direction of the Engineer. In general, the Contractor shall mill a total of one and a half (1.5) inches on both travel lane and shoulder for tie-ins to the concrete section of this ramp. The roadway surface will be replaced with a SMA overlay.

Once the Contractor begins the process of roadway milling and overlaying the road surface, the work shall progress in an expedient manner to complete the work and provide all lanes of traffic open during the times specified in the Maintenance of Traffic Special Provision SP-B.

Limitations of operations for placing asphalt concrete overlay shall be in accordance with the requirements of Section 108.02 of the Specifications and as specified herein.

Any discrepancies between the as-bid contract documents, general specification, and this provision for any item of work herein, shall be resolved at the pre-construction meeting and before beginning these operations.

MATERIALS

<u>ITEM:</u>	<u>VDOT SECTION:</u>
Paving Geosynthetics	245*
Asphalt Concrete Ty. SMA-9.5(64E-22)	210, 211, 248, 315 & 317*
Tack Coat	310
Flexible Pavement Planning	515*

*Note: Contractor shall comply with the VDOT 2016 Road and Bridge Specification Revisions in:

“Division 2 – Materials”

“Division 3 – Roadway Construction”

“Division 5 – Incidental Construction”

PROCEDURES

I. Flexible Pavement Planing:

There will be no milling of the concrete portion of this ramp. Flexible Pavement Planing will only be performed for tie-ins to the concrete portion of this ramp. Prior to initiating flexible pavement planning, the Contractor shall remove all debris and trash if present within five (5) feet from the edge of pavement and behind guardrails. The Contractor shall make all necessary saw cuts at the limits of the overlay. All saw cut line locations shall be to the approval of the Engineer.

The Contractor shall be aware that no pavement drop off of more than two (2) inches will be allowed at any time in between adjacent lanes or lane and shoulder or within a lane. Contractor shall refer to the Virginia Work Area Protection Manual for all applicable standards and further guidance. The Contractor will be permitted to allow traffic to drive on milled surfaces for no more than 48 continuous hours. If traffic is allowed on milled surfaces, the Contractor shall install construction pavement markings (Type D, E or F) and temporary pavement wedges per VDOT Road and Bridge Standards standard sheet ACOT-1, which has been included in the contract documents for reference.

Due to the limitations of the milling machine and with the approval of the Engineer, the Contractor shall utilize jack hammering and saw cutting to remove pavement around drainage inlets and other drainage features. Contractor shall provide adequate shielding, to the approval of the Engineer, to protect nearby live traffic from sparks and other dislodged debris. Any damage to existing drainage features shall be repaired to the approval of the Engineer, with no additional cost to the RMTA, and with no extension in contract time.

II. Paving Geosynthetics:

Geosynthetic Reinforcement will only be installed over the concrete portion of this ramp. Prior to the placement of the SMA overlay the Contractor shall install a Geosynthetic reinforcement layer. The Contractor shall follow all of the Manufacturer’s recommendations for installation. The Contractor shall use HaTelit G50 by Huesker or Engineer approved equal.

Prior to placement of the geosynthetics the surface should be free and clean of debris after the roadway milling. Existing pavement markings shall be eradicated and recessed pavement markers removed and the void filled. Contractor shall seal all visible cracks

and voids with an approved product compatible with the geosynthetic material. Once sealing is completed, to the approval of the Engineer, the Contractor shall apply a tack coat. Tack coat shall be incidental to the Geosynthetic Reinforcement item.

Once tack is applied the Contractor shall install the geosynthetic reinforcement. The Contractor shall follow the overlap required between rolls set forth in the manufacturer's recommendations. The Contractor shall take extra care not to damage the reinforcement during placement and when overlay machinery is driving on top of the reinforcement.

The Contractor shall be aware that the Manufacturer recommends that trucks delivering asphalt drive under their own power. The Contractor will not be allowed to "push" asphalt trucks with the paving machine under any circumstance. Any damage to the geosynthetic reinforcement prior to the placement of the overlay shall be repaired to the approval of the Engineer and with no extension in contract time and with no additional cost to the RMTA.

III. Asphalt Concrete Overlay:

Once the geosynthetic reinforcement is in place the contractor shall begin the SMA overlay. The Contractor shall furnish and place SMA overlay pavement courses on existing roadway surfaces in accordance with the requirements herein and in conformity with the lines, grades, and thickness as established in the contract document or as directed by the Engineer. Overlay depths are presented in the table below.

Asphalt Concrete Overlay	
Travelling Lane	Shoulder
2.0	2.0

To the approval of the Engineer, the Contractor may be directed to vary these depths to maintain the same vertical clearance height under any overhead sign or bridge structure.

Asphalt concrete pavement overlay operations shall be performed in a full lane or full shoulder at a time. Under no circumstance will the Contractor be permitted to overlay a portion of the width of a travel lane or shoulder. In the event that an entire lane or shoulder cannot be completed during the lane closure the Contractor will be required to install pavement wedges per VDOT Road and Bridge Standards standard sheet ACOT-1.

The Contractor shall submit mix designs to the Engineer no less than seven (7) days prior to placement for approval. All mixes will be sampled and tested for strength requirements during each time SMA is placed.

MEASUREMENT AND PAYMENT

Flexible Pavement Planing (up to 2.0” depth) will be measured by the square yard and be paid at the contract price. This price shall be full compensation for debris and trash removal and disposal offsite within the specified limits, saw cutting, jack hammering and shielding, pavement planing at the required depth, disposal of waste debris offsite, fees and any permits or applications required for disposal, all equipment, labor, and incidentals required to complete the work. If pavement wedges are installed, cost of asphalt, all labor, tools, equipment, removal and disposal of asphalt, and cleaning the roadway after removal will be incidental to this work. The cost of any construction pavement markings (Type D, E or F) will be incidental to this work

<u>Pay Item</u>	<u>Pay Unit</u>
Flexible Pavement Planing (up to 2.0” depth)	Square Yard

Stone Matrix Asphalt SMA-9.5(64-E22) will be measured by ton and be paid at the contract price. This price shall be full compensation for furnishing and placing SMA overlay at the required depth, cleaning the surface prior to placement, furnishing and installing tack coat, all equipment, labor, and incidentals required to complete the work. If pavement wedges are installed, cost of asphalt, all labor, tools, equipment, removal and disposal of asphalt, and cleaning the surface shall be incidental to this work. The cost of any construction pavement markings (Type D, E or F) will be incidental to this work.

<u>Pay Item</u>	<u>Pay Unit</u>
Stone Matrix Asphalt SMA-9.5 (64-E22)	Ton

Geosynthetic Reinforcement will be measured by the square yard and be paid at the contract price. This price shall be full compensation for furnishing and installing the reinforcement per manufacturer’s recommendations, surface preparation, all equipment, labor, and incidentals required to complete the work.

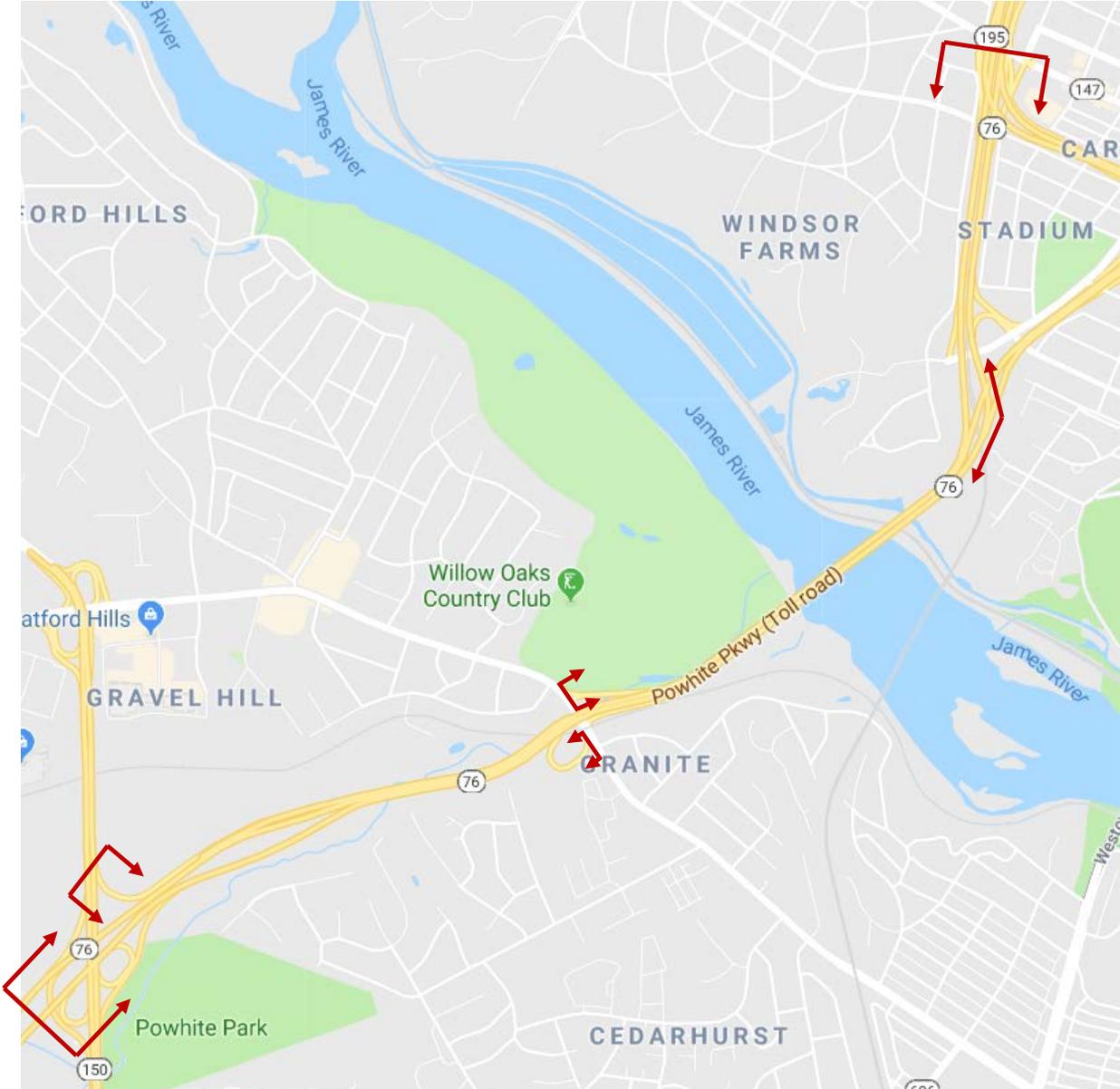
<u>Pay Item</u>	<u>Pay Unit</u>
Geosynthetic Reinforcement	Square Yard

Eradication of Existing Pavement Marking will be measured by linear foot and be paid at the contract price.

<u>Pay Item</u>	<u>Pay Unit</u>
Eradication of Existing Pavement Marking	LF

APPENDIX H (Work Locations)

POWHITE PARKWAY APPROXIMATE LIMITS



SP-H-1

POWHITE SOUTH TERMINI AT CHIPPENHAM PARKWAY



POWHITE SOUTH PLAZA PARKING LOT



POWHITE PLAZA - SOUTH TO NORTH SERVICE ROAD



POWHITE PLAZA NORTH



FOREST HILL NORTH RAMP



SP-H-6

POWHITE AT THE DOWNTOWN EXPRESSWAY



POWHITE AT DOUGLASDALE



POWHITE NORTH LIMITS

