SOUTH KING STREET WIDENING PHASE II (MASONS LN. TO GREENWAY DR.) IFB No. 13301-FY15-20

Addendum #3 May 12, 2015

1. All bidders are required to use the revised bid form dated May 12, 2015 in order for their bid to be considered responsive (Attachment 'A'). The bid form will also be available on the Town's Bid Board (www.leesburgva.gov/bidboard) in MS Word format; however any changes to the bid items' description, unit or quantity shall render the bid non responsive.

2. Questions and Answers:

Question 1: The General Notes for South King Street Intersection (sheet T-2) states that "One 3000E Master with Internal 850nm Fiber Modem shall be provided" (C. Controller and Cabinet, note 14). I do not see a pay item for the 3000E Master. Should the cost of the 3000E Master be included in the pay item of the Traffic Signal Cabinet (263) or will you add a pay item to the bid?

Answer 1: see revised Bid Form dated May 12, 2015 (attachment 'A').

Question 2: What is the correct substantial completion time? Page 50 states 540 calendar days, Page 64 states 456 calendar days.

Answer 2: The correct substantial completion time is 540 calendar days.

Question 3: Is Bid Form Item #110 a duplication of Item #71, and is Bid Form Item #123 a duplication of Item #119?

Answer 3: Bid Item #110 is for Structure 725 and bid item #123 is a duplication of bid item #119, see revised Bid Form dated May 12, 2015 (attachment 'A').

Question 4: The plans show removal of existing light poles. Is this work included in this project?

Answer 4: No, Dominion Power will be removing the existing street light poles.

Question 5: Bid Form Item #69 shows 400 LF and the Plans show 40 LF, is this a typo?

Answer 5: Yes this is a typo. The plan quantity is 40 LF, see revised Bid Form dated May 12, 2015 (attachment 'A').

Question 6: Cross sections were provided on this project on plan sheets 57 thru 82 in which cut and fill cross sectional areas were given for each cross section. Based on the information provided we calculate 14,074 cubic yards of cut and 25,253 cubic yards of fill will be required. If our calculation is correct, common borrow will be required to balance the dirt work on the project.

Pay item 276 addresses the roadway excavation but we cannot find a pay item for the 15-18,000 cubic yards of borrow that will be required to complete the grading portion of the project. The actual borrow quantity will vary based on the reusability or quality of the existing cut materials available (ie asphalt, concrete, rock, etc.). Please clarify how the importation of Common Borrow will be paid on this contract or contact us if you should have any further questions concerning this matter.

Answer 6: This is unit price contract and contractor will be paid based on

Answer 6: This is unit price contract and contractor will be paid based on actual quantities installed per plan and specifications; our earth work calculations show the job to have some surplus excavation material. The bid form has been revised to include 1,500 CY to replace poor quality or material deemed not to be reusable excavated material (see revised Bid Form dated May 12, 2015 - attachment 'A').

Question 7: The project contains 16 Landscape plan sheets but there are no landscape proposal bid items. We assume these plans are for information only and the work is not in this contract. Please clarify if landscaping is included in this contract or not and if it is required how the work will be paid.

Answer 7: Landscaping is not included in this contract. It will be bid separately.

Question 8: We are unable to make successful contact/result with manufacture Cisco, or obtain a supplier/rep source for Cisco, for the PTZ-6930 series, Line items 184-187. Does the Town have any supplier information for this product so that we may obtain necessary costs and such?

Answer 8: There are multiple places to order Cisco products online. Customers with Direct Purchasing agreements can <u>Order Direct from Cisco</u>. There are also numerous channel partners that transact e-commerce on their web site for Cisco products. A full list of global Cisco Partners can be found on Cisco's <u>Partner Locator</u>. Customers at small and medium sized business who want the convenience of online ordering can use Cisco's <u>Online Partners</u>.

Question 9: Also, there is a pay Item for PTZ installation in section II-Greenway Drive Item 213 and section for III- Battlefield Pkwy/Meade Drive Item 250 however, there is no pay item for PTZ installation in section for I-Mason Lane. Please advise. **Answer 9: see revised Bid Form dated May 12, 2015 (attachment 'A').**

Question 10: Bid Items 276 and 277 are for unclassified excavation items. Bid items 279 and 281 are for rock excavation items. Please clarify the intent of bid items 279 and 281 and when they will be used. Please also clarify when the payment for the unclassified excavation items will stop and when the payment for the rock excavation items will begin?

Answer 10: Bid item # 279 is for roadway excavation to 6" beyond proposed subgrade elevation. Bid item #281 is for utility trench excavation that meets the classification for rock as not being rippable with a Caterpillar 330 hydraulic backhoe or equivalent.

Question 11: There is approximately 350 linear feet of existing storm sewer pipe that has to be removed of which approximately 50% crosses existing South King Street. Pavement removal and replacement will be required for the removal of these crossings. How is the removal of the existing pipe and the associated asphalt pavement removal and replacement paid for?

Answer 11: See bid items 31 through 37.

Question 12: How is the removal and replacement of existing asphalt pavement paid for in the new storm sewer lines crossing South King Street?

Answer 12: See bid items 31 through 37.

Question 13: Pay Item 276 is for unclassified excavation (including asphalt and concrete). Pay items 43, 44 and 51 are for removal of curb & gutter, asphalt paths and asphalt pavement in the proposed median areas respectively. Please clarify if 100% of the curb & gutter removal will be paid by bid item 43 and if 100% of the path removal will be paid by bid item 44. We assume all roadway asphalt pavement demolition outside the proposed median areas will be paid as roadway excavation. Please confirm our assumption is correct.

Answer 13: Pay Item 276 includes asphalt and concrete not paid for under other contract pay items.

Question 14: Please confirm all offsite disposal of excavation materials will be paid for by bid item 277 including excess or unsuitable materials generated in bid items 278, 279 and 281.

Answer 14: Bid Item #277 "Unclassified Excavation to haul off-site" does not include bid items # 278, 279, 281 or any other excavated, excess or unsuitable material paid for under other contract pay item.

Question 15: On the bid form for this project, page 7 of 316, there is a stipulated price item for "Crusher Run VDOT #25 or Approved Equal" at \$35.00 per cubic yard. Depending upon the material unit weight as well as the point and method of measurement, this unit price could quite possibly only cover material cost. Industry standard payment for this aggregate type is on a per ton basis, which leads me to wonder if this is a typo and the stipulated price was intended to be on a per ton basis. Please advise.

Answer 15: The Town will increase the stipulated price for crusher run to \$40/CY.

Question 16: Special Provision page 65 of 361 outlines CBR Testing and Pavement Design requirements to be performed by the Contractor. Pavement sections and Geotechnical Reports are also provided in the contract plans and specs. This work is normally performed by the Owner prior to the bid. Please confirm this work is required on this contract or not.

Answer 16: The Town requires that the contractor perform CBR testing and provide a pavement design to verify that the field conditions match those shown in the geotechnical report.

Question 17: Special Provision page 68 of 316 requires a MOT plan to be submitted for approval to the City of Leesburg. MOT Plans are included in the bid documents. Please confirm this work is required. If so, please confirm submission of the contract MOT plans is all that is required.

Answer 17: The MOT plans included with the bid documents are acceptable for submission with the right-of-way permit. If the successful contractor has a different sequence of construction that they wish to propose, that will require providing a MOT plan that is signed and sealed by a licensed engineer in Virginia.

Question 18: Special Provision page 146 of 316 states inspection of construction will be performed by the Contractor including testing. Page 177 of 316 states testing will be performed by the Owner. Please clarify if Quality Control inspection and testing is required to be performed by the Contractor on this project.

Answer 18: Quality Control (QC) testing is to be performed by the contractor. Any Quality Assurance (QA) testing will be performed by the Town.

Question 19: RE: Bid Item #150 – CG-11 Connection, What should be included in this Item? Should it include only Concrete or should it include Concrete, Stone and Asphalt?

Answer 19: Bid Item # 150 "CG-11 Connection for Street Intersection and Commercial Entrance, Complete in place".

END OF ADDENDUM #3

ATTACHMENT 'A'

TOWN OF LEESBURG, VIRGINIA OFFICE OF CAPITAL PROJECTS 25 WEST MARKET STREET LEESBURG, VIRGINIA 20176 IFB NO. 13301-FY15-20

BID FORM, PAGE <u>7</u> THRU <u>29</u> <u>SUBMIT A SIGNED BID FORM BY MAIL OR IN PERSON TO</u> <u>RENEE LAFOLLETTE, DIRECTOR</u> OFFICE OF CAPITAL PROJECTS

FORMAL BIDS WILL BE DUE NO LATER THAN 3:30 P.M., THURSDAY, MAY 21, 2015

CONSTRUCTION OF THE PLANS TITLED SOUTH KING STREET WIDENING PHASE II (MASONS LN. TO GREENWAY DR.)

THE UNDERSIGNED CERTIFIES THAT (CONTRACTOR NAME):

AGREES TO FURNISH ALL NECESSARY LABOR, EQUIPMENT, MATERIALS, AND ALL THINGS NECESSARY TO PERFORM THE WORK AS SET FORTH IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS AT THE FOLLOWING PRICES: (ALL PRICES INCLUDE PROVISION AND INSTALLATION).

STIPULATED PRICE ITEMS: THE CONTRACTOR AGREES TO PERFORM RELATED WORK FOR THE FOLLOWING ITEMS AT THE STIPULATED PRICES SHOWN. USE OF THESE ITEMS WILL BE THE SOLE DISCRETION OF THE ENGINEER.

ITEMUNITUNIT PRICECRUSHER RUN VDOT #25 OR APPROVED EQUALCY\$40.00

ROCK IS DEFINED AS ANY SOLID MATERIAL OR BOULDERS THAT CANNOT BE REMOVED FROM THE GROUND BY EXCAVATION EQUIPMENT WITHOUT THE USE OF A HOE RAM OR BLASTING METHODS.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE 2007 VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS.

CONTRACTORS BIDDING THIS PROJECT MUST BE VDOT PRE-QUALIFIED CONTRACTORS.

SUBMITTED BY:	
VENDOR NAME:	
ADDRESS:	
CITY/STATE/ZIP:	
AUTHORIZED SIGNATURE:	
PRINT NAME AND TITLE:	
TELEPHONE NO:	FACSIMILE NO.:
STATE CORPORATION COMMISSION ID #	
TAX ID NUMBER (FIN/SSN):	
THIS FIRM IS A: (INSERT NAME OF STAT	E):
CORPORATION •	_ LIMITED PARTNERSHIP
GENERAL PARTNERSHIP •	_ UNINCORPORATED ASSOC.
LTD LIABILITY COMPANY •	SOLE PROPRIETORSHIP
E-MAIL ADDRESS:	LEESBURG BPOL #:
ADDI	ENDA
Bidder acknowledges receipt of the following Alpreparation of this bid.	DDENDA, which have been considered in the
Addendum No	Dated:
Addendum No	Dated:
Addendum No.	Dated:
Addendum No.	Dated:
Addendum No.	Dated:

BID FORM

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
	Miscellaneous				
1	Mobilization / Demobilization	LS	1		
2	Construction Survey	LS	1		
3	As-built, complete per DCSM requirements	LS	1		
4	Allaying dust using water truck	DY	25		
5	5'x4' Project Sign, complete as detailed in "Instructions to Bidders/Contract Items of Work".	EA	2		
6	Field Office, VDOT Type II, complete as detailed in "Instructions to Bidders/Contract Items of Work".	LS	1		
	Sub-Total Miscellaneous				
	Clearing, Erosion & Sediment Controls				
7	Clearing & Grubbing	LS	1		
8	Tree removal up to 12" dia., including stump removal, backfill and disposal	EA	110		
9	Tree removal 12" to 18" in dia., including stump removal, backfill and disposal	EA	60		
10	Tree removal larger than 18" dia., including stump removal, backfill and disposal	EA	50		
11	Tree removal BY ARBORIST, up to 12" dia. including stump removal, backfill and disposal	EA	8		
12	Tree removal BY ARBORIST, larger than 12" dia. including stump removal, backfill and disposal	EA	7		
13	Air tool investigation / Root Pruning complete as required incl. Cambistat (Performed by certified arborist)	LF	500		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
14	Tree Branch/Limbs Pruning , complete as directed by Town Arborist	EA	10		
15	Monitoring by Certified Arborist When Requested by Town	HR	100		
16	Construction Entrance Including Wash Rack, Complete in Place Incl. Maintenance & Removal	EA	2		
17	Super Silt Fence Complete in Place Incl. Maintenance & Removal	LF	600		
18	Silt Fence Complete in Place Incl. Maintenance & Removal	LF	3,330		
19	Tree Protection Complete in Place Incl. Maintenance & Removal	LF	2,800		
20	Check Dam Complete in Place Incl. Maintenance & Removal	EA	5		
21	Inlet Protection Complete in Place Incl. Maintenance & Removal	EA	48		
22	Outlet Protection Complete in Place Incl. Maintenance & Removal	EA	4		
23	Culvert Inlet Protection, Complete in Place Incl. Maintenance & Removal	EA	10		
24	Grass Lined (V) Channel, Complete in Place	LF	75		
25	VDOT EC3 Blanket Lined Channel, Complete in Place	LF	1,410		
26	Class I Rip Rap Complete in Place incl. excavation, fabric and installation	TN	50		
27	Class II Rip Rap Complete in Place incl. excavation, fabric and installation	TN	20		
28	Temp. Seeding & Mulching	SY	20,000		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
29	Permanent Seeding & Mulching Incl. Lime and Fertilizer	SY	30,000		
	Sub-Total Clearing, Erosion & Sediment Controls				
	Demolition / Relocation				
30	Remove & Replace temporary 2" Blow off and Encase Valve Boxes in 2'x3' concrete collar, complete in place including excavation, bedding and backfill	LS	1		
31	Remove / Dispose & Restore area - 12" CMP Pipe (EX31-EX32)	LF	35		
32	Remove / Dispose & Restore area - 18" CMP Pipe (EX34-EX35)	LF	12		
33	Remove / Dispose & Restore area - 15" RCP Pipe (EX50-EX51, EX 57-EX601, EX701-EX702, EX801-EX802) Incl. End Sections	LF	195		
34	Remove / Dispose & Restore area - 21" RCP Pipe (EX39-EX40, EX42-EX43)	LF	105		
35	Remove / Dispose & Restore area - 24" RCP Pipe (EX44-EX45, EX48-EX49) Incl. End Sections	LF	115		
36	Remove / Dispose & Restore area - 30" RCP Pipe (EX340-EX345) Incl. End Sections	LF	20		
37	Remove / Dispose & Restore area - Storm Pipe (EX74-EX75)	LF	26		
38	Remove & Dispose of Storm Structures (Structures/ES etc.)	EA	1		
39	Remove & Dispose of Existing EW-12	EA	1		
40	Remove & Dispose of Existing Level Spreader incl. Riprap and Grade area for positive Drainage.	LS	1		
41	Clean Existing Storm Pipe (EX720-EX730)	LF	90		
42	Remove & Dispose of Existing UD-4	LF	500		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
43	Remove & Dispose of Concrete Curb/Gutter	LF	1,900		
44	Demo / Remove & Dispose of Existing Asphalt Trail and Restore Area	SF	2,900		
45	Remove & Dispose of Sign & Post	EA	1		
46	Relocate Existing Sign & Post	EA	2		
47	Remove / Replace / Reset Existing White Vinyl Fence	LF	450		
48	Remove & Replace Fence in Kind	LF	50		
49	Relocate Existing TS Box, complete in place including excavation and backfill	EA	5		
50	Remove and Reset Mail Boxes	EA	3		
51	Demo & Dispose of up to 10" Thick Flexible Pavement (within proposed Median)	SY	6,730		
52	Saw Cut Asphalt Concrete	LF	9,450		
	Sub-Total Demolition / Relocation				
	Maintenance of Traffic (MOT)				
53	Short Term Traffic Control	HR	2,000		
54	MOT Phase I Including but not limited to: (1 EA) W21-4 "Road Under Construction", (1 EA) R2-5a "Reduced Speed Ahead", (1 EA) R2-1 "Speed Limit 35", (2 EA) W20-4 "One Lane Road Ahead", (2 EA) W3-4 "Be Prepared to Stop", (2 EA) W20-7 "Flagman", (1 EA) W20-1 "Road Work Ahead", (2 EA) G20-2V "End Road Work", (1 EA) Cushion Truck, (25 EA) Group II Channelization Devices.	LS	1		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
55	MOT Phase II Including but not limited to: 4,000 LF Concrete Barrier, (8 EA) Impact Attenuator, (1 EA) W21-4 "Road Under Construction", (6 EA) W20-1 "Road Work Ahead", (1 EA) W3-5 "Speed Limit 35", (1 EA) W21-5bR "Right Shoulder Closed Ahead", (1 EA) W21-5aR "Right Shoulder Closed", (1 EA) w16-VP1 "Next 4000 FT", (5 EA) G20-2V "End Road Work", (1 EA) R2-1 "Speed Limit", (1 EA) W9-3L "Left Lane Closed Ahead", (1 EA) "W4-V7R "Keep Right", (1 EA) W4-2L, (25 EA) Group II Channelization Devices.	LS	1		
56	MOT Phase III Including but not limited to: 3,500 LF Concrete Barrier, (2 EA) Impact Attenuator, (1 EA) 60"x24" "Road Under Construction", (1 EA) W3-5 "Speed Limit 35↑", (4 EA) G20-2V "End Road Work", (2 EA) W4-2R, (1 EA) VR-9 "Keep Left", (1 EA) R2-1 "Speed Limit", (5 EA) W20-1 "Road Work Ahead", (2 EA) W9-3R "Right Lane Closed Ahead", (1 EA) "W4-V7L "Keep Left", (150 EA) Group II Channelization Devices, (1 EA) Arrow Board.	LS	1		
57	MOT Phase IV (Stage 1) Including but not limited to: 3,900 LF Concrete Barrier, (4 EA) Impact Attenuator, (1 EA) 60"x24" "Road Under Construction", (1EA) R2-5a "Reduced Speed Ahead", (1 EA) W3-5 "Speed Limit 35↑", (4 EA) G20-2V "End Road Work", (1 EA) R2-1 "Speed Limit", (2 EA) W20-1 "Road Work Ahead", (60 EA) Group II Channelization Devices.	LS	1		
58	MOT Phase IV (Stage 2) Including but not limited to: 1,600 LF Concrete Barrier, (2 EA) Impact Attenuator, (2 EA) G20-2V "End Construction", (2 EA) W4-2R, (1 EA) VR-9 "Keep Left", (1 EA) R2-1 "Speed Limit", (3 EA) W20-1 "Road Work Ahead", (2 EA) W9-3L "Left Lane Closed Ahead", (1 EA) "W4-V7R "Keep Right", (2 EA) W4-2L, (25 EA) Group II Channelization Devices.	LS	1		
59	Group II Channelization Devices	EA	75		
60	Portable Message Board	DY	125		
61	Eradication of Existing Pavement Marking	LF	2,000		
62	Construction Pavement Marking Type 'D'	LF	8,000		
63	Repair / Replace Temporary Impact Attenuator	EA	4		
	Sub-Total Maintenance of Traffic				

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
	Storm Sewer				
64	15" SSP Pipe, Completed in place including Excavation, Bedding & Backfill	LF	1,346		
65	21" SSP Pipe, Completed in place including Excavation, Bedding & Backfill	LF	28		
66	24" SSP Pipe, Completed in place including Excavation, Bedding & Backfill	LF	685		
67	30" SSP Pipe, Completed in place including Excavation, Bedding & Backfill	LF	308		
68	36" SSP Pipe, Completed in place including Excavation, Bedding & Backfill	LF	1,105		
<u>69</u>	19"X30" HERCP, Completed in place including Excavation, Bedding & Backfill	LF	40		
70	STR 320, Replace Top with DI-3A (4' THT), Complete in place including excavation & backfill	EA	1		
71	STR 322, Replace Top with DI-3B (4' THT), Complete in place including excavation & backfill	EA	1		
72	STR 324, Replace Top with DI-3B (6' THT), Complete in place including excavation & backfill	EA	1		
73	STR 326, SWM FILTER 6'X15', Complete in place including excavation, bedding & backfill	EA	1		
74	STR 350, DI-4B (H=6.36, L=8'), Complete in place including excavation, bedding & backfill	EA	1		
<u>75</u>	STR 352, 24" ES-1 Including VDOT HR-1, Complete in place including excavation, bedding & backfill	EA	1		
76	STR 360, DI-4B (H=6.6', L =6'), Complete in place including excavation, bedding & backfill	EA	1		
77	STR 362, 21" ES-1, Complete in place including excavation, bedding & backfill	EA	1		
78	STR 370, Std MH-2 (H=6.76'), Complete in place including excavation, bedding & backfill	EA	1		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
79	STR 380, DI-4B (H=6.6', L=6'), Complete in place including excavation, bedding & backfill	EA	1		
80	STR 385, DI-3B (H=4.54', L=6'), Complete in place including excavation, bedding & backfill	EA	1		
81	STR 390, DI-4B (H=6.34', L=6'), Complete in place including excavation, bedding & backfill	EA	1		
82	STR 400, DI-4B (H=6.17', L=6'), Complete in place including excavation, bedding & backfill	EA	1		
83	STR 410, DI-4B (H=5.09', L=6'), Complete in place including excavation, bedding & backfill	EA	1		
84	STR 420, DI-4B (H=5.46', L=6'), Complete in place including excavation, bedding & backfill	EA	1		
85	STR 430, DI-4B (H=5.45', L=8'), Complete in place including excavation, bedding & backfill	EA	1		
86	STR 432, 30" ES-1 Including VDOT HR-1, Complete in place including excavation, bedding & backfill	EA	1		
87	STR 435, SWM FILTER 6'X15', Complete in place including excavation, bedding & backfill	EA	1		
88	STR 440, DI-3B (H=6.08', L=6'), Complete in place including excavation, bedding & backfill	EA	1		
89	STR 442, 24" ES-1 Including VDOT HR-1, Complete in place including excavation, bedding & backfill	EA	1		
90	STR 450, SWM FILTER 6'X15', Complete in place including excavation, bedding & backfill	EA	1		
91	STR 453, DI-3B (H=4.48', L=4'), Complete in place including excavation, bedding & backfill	EA	1		
92	STR 460, DI-3A (H=2.37'), Complete in place including excavation, bedding & backfill	EA	1		
93	STR 470, DI-3B (H=2.37', L=6'), Complete in place including excavation, bedding & backfill	EA	1		
94	STR 480, DI-3B (H=2.27', L=10'), Complete in place including excavation, bedding & backfill	EA	1		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
95	STR 455, MOD Shallow Curb Drop Inlet (H=3.77', L=10'), Complete in place including excavation, bedding & backfill	EA	1		
96	STR 500, 15" ES-1, Complete in place including excavation, bedding & backfill	EA	1		
97	STR 505, Std MH-2 (H=5.16'), Complete in place including excavation, bedding & backfill	EA	1		
98	STR 510, Replace Top with DI-3A, Complete in place including excavation & backfill	EA	1		
99	STR 520, Replace Top with DI-3C (6' THT), Complete in place including excavation & backfill	EA	1		
100	STR 530, Replace Top with DI-3A, Complete in place including excavation & backfill	EA	1		
101	STR 540, DI-3A (H=3.48'), Complete in place including excavation, bedding & backfill	EA	1		
102	STR 632, 15" ES-1, Complete in place including excavation, bedding & backfill	EA	1		
103	STR 633, 15" ES-1, Complete in place including excavation, bedding & backfill	EA	1		
104	STR 634, 15" ES-1, Complete in place including excavation, bedding & backfill	EA	1		
105	STR 635, 15" ES-1, Complete in place including excavation, bedding & backfill	EA	1		
106	STR 636, 15" ES-1, Complete in place including excavation, bedding & backfill	EA	1		
107	STR 637, 15" ES-1, Complete in place including excavation, bedding & backfill	EA	1		
108	STR 720, Replace MH with DI-3A and Raise Top, Complete in place including excavation & backfill	EA	1		
109	STR 722, DI-3C (H=8.38', L=6'), Complete in place including excavation, bedding & backfill	EA	1		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
110	STR <u>725</u> , Replace MH with DI-3B (6' THT) and Raise Top, Complete in place including excavation & backfill	EA	1		
111	STR 727, DI-3C (H=6.92', L=6'), Complete in place including excavation, bedding & backfill	EA	1		
112	STR 730, Replace MH with DI-3A and Raise Top, Complete in place including excavation & backfill	EA	1		
113	STR 735, DI-3C (H=7.32', L=6') Including connection of pipes at each end of structure, Complete in place including excavation, bedding & backfill	EA	1		
114	STR 740, Replace MH with DI-3B (6' THT) and Raise Top, Complete in place including excavation & backfill	EA	1		
115	STR 750, Std MH-2 (H=6.46'), Complete in place including excavation, bedding & backfill	EA	1		
116	STR 760, 24" ES-1 Including VDOT HR-1, Complete in place including excavation, bedding & backfill	EA	1		
117	STR 770, 19"x30" ES-1A, Complete in place including excavation, bedding & backfill	EA	1		
118	STR 780, 19"x30" ES-1A, Complete in place including excavation, bedding & backfill	EA	1		
119	STR 810, 15" ES-1, Complete in place including excavation, bedding & backfill	EA	1		
120	STR 820, DI-3A (H=8.59'), Complete in place including excavation, bedding & backfill	EA	1		
121	STR 830, DI-3BB (H=8.10', L=4'), Complete in place including excavation, bedding & backfill	EA	1		
122	STR 840, DI-3B (H=5.65', L=6'), Complete in place including excavation, bedding & backfill	EA	1		
123	Tie-in to Existing STR 340, Complete in place including excavation, bedding & backfill	LS	1		
124	Fill above steel casing pipe with VDOT #57 Stone (between STR 530 & 540), Complete in place including excavation, bedding, concrete & backfill	TN	75		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
125	Underdrain UD-4, Complete in place including excavation, fabric, bedding, tie-in & backfill	LF	5,280		
126	Modified Underdrain UD-4, Complete in place including excavation, fabric, bedding, tie-in & backfill	LF	8,350		
	Sub-Total Storm Sewer				
	Pavement				
127	Cement Treated Aggregate Base, VDOT 21-A with 4% Hydraulic Cement, Complete in Place incl. fine grading & curing	TN	2,550		
128	Aggregate Base, VDOT 21-B, Complete in Place incl. fine grading	TN	7,800		
129	Base Asphalt Mix, BM-25.0A	TN	6,200		
130	Intermediate Asphalt Mix, IM-19.0A	TN	1,825		
131	Surface Asphalt Mix, SM-9.5D	TN	1,750		
132	Milling of Asphalt Pavement (Min. 2")	SY	19,600		
133	Resurface Milled Area with Surface Mix, SM 9.5D	TN	2,400		
134	Additional Base Asphalt BM-25.0A for Pipe Trench	TN	150		
135	Additional Intermediate Asphalt IM-19.0A for Pipe Trench	TN	125		
136	10' Asphalt Shared Use Path, Complete in place including excavation, (6") VDOT 21-B & (2") SM-9.5A Asphalt	LF	3,630		
137	2' Paved Shoulder Complete Including Excavation and (2" SM-9.5D + 2" IM-19.0 + 4" 21-B Min.)	LF	750		
138	8' Shoulder Complete Including Excavation and (4" 21-A & 4" 21-B).	LF	750		
139	4' Concrete Side walk, Complete in place incl. excavation, VDOT 21-A & Concrete	LF	30		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
140	5' Concrete Side walk, Complete in place incl. excavation, VDOT 21-A & Concrete	LF	50		
141	Brick Pavers per plan details, Complete in place incl. excavation, VDOT 21-A & Sand	SF	1,150		
142	Curb & Gutter - CG6, Complete in place incl. excavation, stone under curb & backfill	LF	6,955		
143	Curb & Gutter - CG7, Complete in place incl. excavation, stone under curb & backfill	LF	380		
144	Median Strip MS-1A, Complete in place incl. excavation, stone base & Backfill	SY	170		
145	Median Strip MS-2 (CG-2), Complete in place incl. excavation, stone base & backfill	LF	5,720		
146	Median Strip MS-2 (CG-3), Complete in place incl. excavation, stone base & backfill	LF	2,100		
147	Median Strip MS-2 (MOD CG-3), Complete in place incl. excavation, stone base & backfill	LF	90		
148	CG-12A, Handicap Ramp, Complete in place incl. excavation, stone base & backfill	EA	9		
149	CG-11 Connection for Street Intersection and Commercial Entrance, Complete in place	LF	100		
	Sub-Total Pavement				
	Pavement Marking / Signs				
150	Single Solid 5" White line Type B CL I	LF	3,700		
151	Single Solid 6" White line Type B CL I	LF	1,550		
152	Single Dashed 5" White Line Type B CL I (10' long, 30' Skips)	LF	1,600		
153	Single Dashed / Dotted 5" White Line Type B CL I (2' long, 4' space)	LF	500		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
154	24" Wide White Line (Stop Bar) Type B CL I	LF	435		
155	Double Solid 5" Yellow Line with 4" Spacing Type B CL I	LF	470		
156	Single Solid 5" Yellow Line Type B CL I	LF	8,990		
157	24" Wide White Line Pedestrian Crossing Type B CL I	LF	1,260		
158	Wide Diagonal Yellow Line 2' @ 45 degree with 12' space (1st line to be 3' wide on each end)	LF	270		
159	Pavement Message Mark "Elongated Arrow"	EA	30		
160	Pavement Message Mark "ONLY" Solid White 6' Long Type B CL I	EA	7		
161	Sign W3-5 (36"x36") Diamond Grade - Prismatic Lens, Reflective Sheeting, Complete incl. 2x2, 14 Gauge Galv Steel Post (per DCSM TS-5)	EA	1		
162	Sign W4-2 (36"x36") Diamond Grade - Prismatic Lens, Reflective Sheeting, Complete incl. 2x2, 14 Gauge Galv Steel Post (per DCSM TS-5)	EA	3		
163	Sign W6-3 (36"x36") Diamond Grade - Prismatic Lens, Reflective Sheeting, Complete incl. 2x2, 14 Gauge Galv Steel Post (per DCSM TS-5)	EA	1		
164	Sign R2-1 (30"X36") Diamond Grade - Prismatic Lens, Reflective Sheeting, Complete incl. 2x2, 14 Gauge Galv Steel Post (per DCSM TS-5)	EA	2		
165	Sign W9-11 (36"X36") Diamond Grade - Prismatic Lens, Reflective Sheeting, Complete incl. 2x2, 14 Gauge Galv Steel Post (per DCSM TS-5)	EA	1		
166	Sign W9-2 (36"X36") Diamond Grade - Prismatic Lens, Reflective Sheeting, Complete incl. 2x2, 14 Gauge Galv Steel Post (per DCSM TS-5)	EA	2		
167	Sign R3-4 (24"X24") Diamond Grade - Prismatic Lens, Reflective Sheeting, Complete incl. 2x2, 14 Gauge Galv Steel Post (per DCSM TS-5)	EA	1		
168	Sign R4-7 (24"X30") Diamond Grade - prismatic Lens, Reflective Sheeting, Complete incl. 2x2, 14 Gauge Galv Steel Post (per DCSM TS-5)	EA	8		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
169	Sign R6-1 (36"x12") Diamond Grade - Prismatic Lens, Reflective Sheeting, Complete incl. 2x2, 14 Gauge Galv Steel Post (per DCSM TS-5)	EA	3		
	Sub-Total Pavement Marking / Signs				
	Traffic Signal				
	I- MASONS LANE				
170	3" PVC Conduit, Complete in place incl. excavation, bedding & backfill	LF	2,200		
171	4" PVC Conduit, Complete in place incl. excavation, bedding & backfill	LF	130		
172	4" PVC Conduit BORED, Complete in place.	LF	110		
173	14/2C (S) Conductor Cable Shielded	LF	1,800		
174	14/2C Conductor Cable	LF	800		
175	14/4C Conductor Cable	LF	500		
176	14/7C Conductor Cable	LF	1,000		
177	14/1 Enclosed Conductor Cable	LF	4,800		
178	1310 NM Fiber Optic Cable (Min. 6 Fibers)	LF	2,200		
179	Fiber Optic Termination and Testing	LS	1		
180	OPTICOM Cable GTT 134	LF	800		
181	Video control cable-16/3 power & 8281 Belden coax	LF	500		
182	CAT 5e cable & 18/2C	LF	175		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
183	PTZ-Cisco 6930 series, per plans and specifications	EA	1		
<u>184</u>	PTZ installation to include all mounting hardware installed per plans	EA	1		
185	KUSA Managed Gigabit Ethernet switch per plans and specifications	EA	4		
186	Etherwan SE6101-00B media converter per plans and specifications	EA	3		
187	4 Port Encoder-Cisco per plans and specifications	EA	1		
188	Video Detection Cameras, complete incl. installation as per plans and specifications	EA	1		
189	Video Detection processor shall be card rack mountable, equivalent or equal to PEEK VideoTrak IQ currently in use in the Town traffic signal system with 4 video inputs, monitor and mouse, IP addressable with all communication cabling for remote access, video cameras shall be from same manufacture.	EA	1		
190	Junction Box, JB - R1, Complete in place as per plans and specifications	EA	10		
191	Adjust Existing Junction Box to Grade, Complete in place	EA	3		
192	Signal Pole (A) - Relocate Existing Mast Arm Pole to New Foundation, Remove Existing PH 6 Signal Equipment, Cut Cap Mast Arm as Directed by Town Engineer.	EA	1		
193	Signal Pole (B) - One 45' Mast Arm, Complete as per plans and specifications	EA	1		
194	Traffic Signal head Section 12" LED, Complete as per plans and specifications	EA	6		
195	Concrete Foundation Signal Pole, Incl. excavation, backfill and all incidentals	EA	2		
196	Modify Cabinet Controller to Provide the Intended Operation Shown in the Phasing Diagram	LS	1		
197	Temporary Signal Including but not limited to: Relocate Signals as needed and Install temporary detection as needed for north bound and south bound signals as part of MOT Phase III traffic switch.	LS	1		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
198	Relocate Existing Signs S-4, S-7 & S-9	EA	3		
199	Mast Arm Mounted Sign S-1, Diamond Grade - prismatic Lens, Reflective Sheeting, Complete incl. installation	EA	1		
200	Relocate Existing Street Name Sign & EVP Detectors as Directed by Town Engineer	EA	1		
201	Adjust Existing Signal Heads	EA	3		
202	Saw Cut Asphalt for Loop Detectors	LF	2,000		
	II- GREENWAY DRIVE				
203	3" PVC Conduit, Complete in place incl. excavation, bedding & backfill	LF	1,900		
204	14/2C (S) Conductor Cable Shielded	LF	3,700		
205	14/2C Conductor Cable	LF	500		
206	14/4C Conductor Cable	LF	500		
207	14/7C Conductor Cable	LF	550		
208	14/1 Enclosed Conductor Cable	LF	4,500		
209	1310 NM Fiber Optic Cable (Min. 6 Fibers)	LF	1,800		
210	Video Detection cable-16/3 power & 8281 Belden coax	LF	600		
211	CAT 5e cable & 18/2C	LF	100		
212	PTZ-Cisco 6930 series, per plans and specifications	EA	1		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
213	PTZ installation to include all mounting hardware installed per plans	LS	1		
214	KUSA Managed Gigabit Ethernet switch per plans and specifications	EA	4		
215	Etherwan SE6101-00B media converter per plans and specifications	EA	3		
216	4 Port Encoder-Cisco per plans and specifications	EA	1		
217	Fiber Optic Termination and Testing	LS	1		
218	Video Detection Cameras, complete incl. installation as per plans and specifications	EA	2		
219	Video Detection processor shall be card rack mountable, equivalent or equal to PEEK VideoTrak IQ currently in use in the Town traffic signal system with 4 video inputs, monitor and mouse, IP addressable with all communication cabling for remote access, video cameras shall be from same manufacture.	EA	1		
220	Junction Box, JB - R1, Complete in place as per plans and specifications	EA	8		
221	Relocate Existing Pedestrian Pole & Equipment Complete as per plans and specifications	EA	1		
222	Remove & Dispose of Existing Pedestrian Pole Foundation	EA	1		
223	Traffic Signal head Section 12" LED, Complete as per plans and specifications	EA	5		
224	Saw Cut Asphalt for Loop Detectors	LF	2,000		
	III- BATTLEFIELD PKWY / MEADDE DRIVE				
225	1" Metal Conduit, Complete in place incl. excavation, bedding & backfill	LF	760		
226	1 1/4" Metal Conduit, Complete in place incl. excavation, bedding & backfill	LF	20		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
227	2" PVC Conduit, Complete in place incl. excavation, bedding & backfill	LF	25		
228	3" PVC Conduit, Complete in place incl. excavation, bedding & backfill	LF	1,980		
229	4" PVC Conduit, Complete in place incl. excavation, bedding & backfill	LF	560		
230	4" PVC Conduit BORED, Complete in place.	LF	840		
231	14/2C (S) Conductor Cable Shielded	LF	9,395		
232	14/2C Conductor Cable	LF	4,325		
233	14/4C Conductor Cable	LF	1,000		
234	14/7C Conductor Cable	LF	5,020		
235	14/1 Enclosed Conductor Cable	LF	8,500		
236	Video control cable-16/3 power & 8281 Belden coax	LF	1,215		
237	CAT 5e cable & 18/2C	LF	85		
238	1310 NM Fiber Optic Cable (Min. 6 Fibers)	LF	500		
239	#6 AWG/3C	LF	1,510		
240	PRE-EMPTION Detector Cable	LF	1,950		
241	Loop Detector Amplifier Complete installed as per plans & specifications	EA	16		
242	OPTICOM Detector Eye, complete incl. installation as per plans and specifications	EA	5		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
243	Video Detection Cameras, complete incl. installation as per plans and specifications	EA	4		
244	Video Detection processor shall be card rack mountable, equivalent or equal to PEEK VideoTrak IQ currently in use in the Town traffic signal system with 4 video inputs, monitor and mouse, IP addressable with all communication cabling for remote access, video cameras shall be from same manufacture.	EA	1		
245	PTZ-Cisco 6930 series, per plans and specifications	EA	1		
246	KUSA Managed Gigabit Ethernet switch per plans and specifications	EA	4		
247	Etherwan SE6101-00B media converter per plans and specifications	EA	3		
248	4 Port Encoder-Cisco per plans and specifications	EA	1		
249	Fiber Optic Termination and Testing	LS	1		
250	PTZ installation to include all mounting hardware installed per plans	LS	1		
251	Junction Box, JB - R1, Complete in place as per plans and specifications	EA	26		
252	Junction Box, JB - R2, Complete in place as per plans and specifications	EA	1		
253	Signal Pole (1) - 75' Mast Arm, Complete as per plans and specifications	EA	1		
254	Signal Pole (2) - 70' Mast Arm, Complete as per plans and specifications	EA	1		
255	Signal Pole (3) - 65' Mast Arm, Complete as per plans and specifications	EA	2		
256	Pedestrian Pole (B) & (C) Complete as per plans and specifications	EA	6		
257	Pedestrian Signal Head, Complete as per plans and specifications	EA	8		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
258	Pedestrian Push Button with Sign R10-3E, Complete as per plans and specifications	EA	8		
259	Traffic Signal head Section 12" LED, Complete as per plans and specifications	EA	45		
260	Concrete Foundation Signal Pole, Incl. excavation, backfill and all incidentals	EA	4		
261	Concrete Foundation pedestal Pole, Incl. excavation, backfill and all incidentals	EA	6		
<u>262</u>	PEEK 3000E Master per specifications	EA	1		
263	TS2 type controller and MMU per plans and specifications	EA	1		
264	Traffic Signal Cabinet, complete in place incl. concrete foundation and equipment as per plans & specifications	LS	1		
265	Provide Power Source SE-5 (Meter / Disconnect Switch Pole), complete as per plans and specifications	LS	1		
266	<u>Temporary Signal (1) Including but not limited to :</u> Relocate Existing Pole Out of Construction Limits, Relocate Side Street Signals and Install Temporary Detection (Video) for north bound and south bound.	LS	1		
267	<u>Temporary Signal (2) Including but not limited to :</u> Shift Signals to Coincide with Phase III Traffic Switch, Realign Video Detection and north bound and south bound Signals.	LS	1		
268	Mast Arm Mounted Sign S-1 R3-5R (30"X36"), Diamond Grade - prismatic Lens, Reflective Sheeting, Complete incl. installation	EA	3		
269	Mast Arm Mounted Sign S-2 R3-6R (30"X36"), Diamond Grade - prismatic Lens, Reflective Sheeting, Complete incl. installation	EA	1		
270	Mast Arm Mounted Sign S-3 R10-3e(L) (9"X15"), Diamond Grade - prismatic Lens, Reflective Sheeting, Complete incl. installation	EA	4		
271	Mast Arm Mounted Sign S-4 R10-3e(R) (9"X15"), Diamond Grade - prismatic Lens, Reflective Sheeting, Complete incl. installation	EA	4		
272	Mast Arm Mounted Sign S-5 (18"X72"), Diamond Grade - prismatic Lens, Reflective Sheeting, Complete incl. installation	EA	2		

Ref.	DESCRIPTION	Units	Qty.	Unit Price	Extension
273	Mast Arm Mounted Sign S-6 (30"X144"), Diamond Grade - prismatic Lens, Reflective Sheeting, Complete incl. installation	EA	1		
274	Mast Arm Mounted Sign S-7 (30"X144"), Diamond Grade - prismatic Lens, Reflective Sheeting, Complete incl. installation	EA	1		
275	Mast Arm Mounted Sign S-8 R10-12 (30"X36"), Diamond Grade - prismatic Lens, Reflective Sheeting, Complete incl. installation	EA	3		
276	Saw Cut Asphalt for Loop Detectors	LF	4,200		
	Sub-Total Traffic Signal				
	Earthwork				
277	Unclassified Excavation (including but not limited to Asphalt & Concrete)	CY	14,100		
278	Unclassified Excavation to haul off-site	CY	1,500		
<u>279</u>	Import Suitable Structural Fill Material	CY	1,500		
280	Undercut unsuitable and REPLACE with select material type I Min. CBR 30	CY	500		
281	Undercut Rock (6") & Backfill with VDOT 21-B	CY	300		
282	4% Lime treatment for top 1' of subgrade layer in accordance with VDOT guidelines for moisture control /stabilization (IF REQUIRED - to be used at the direction of the Town)	SY	3,000		
283	Rock Excavation	CY	1,500		
284	Respread Topsoil (other than Median)	CY	3,000		
285	2" Topsoil Class 'A' for Median, Complete incl. Supply and Spreading	CY	1,000		
	Sub-Total Earthwork				
	TOTAL				

ESCROW OF RETAINED FUNDS

In accordance with Section 2.2-4334 of the Virginia Public Procurement Act (VPPA), any Contract valued at \$200,000.00 or more for construction of highways, roads, streets, bridges, parking lots, demolition, clearing, grading, excavating, paving, pile driving miscellaneous drainage structures, and the installation of water, gas, sewer lines and pumping stations where portions of the Contract price are to be retained, at the time of submitting a bid, the CONTRACTOR shall have the option to indicate preference for using the escrow account procedure for utilization of the Town retained funds by so indicating in the space provided in the proposal documents. In the event the successful Contract elects to use the escrow account procedure, the "Escrow Agreement" included in the Contract documents shall be executed and submitted to the Director, Department of Capital Projects Management within 15 days after receipt of the Notice to Award. If the "Escrow Agreement" form is not submitted, the CONTRACTOR shall forfeit his rights to the use of the escrow account procedure within the 15-day period.

In order to have retained funds paid to an escrow agent, the CONTRACTOR, the escrow agent, and the surety shall execute the "Escrow Agreement" furnished by the TOWN, and submit same to the Department of Capital Projects Management for approval. The CONTRACTOR's escrow agent shall be a trust company, approved bank or savings and loan institution with its principal office located in the Commonwealth of Virginia. The "Escrow Agreement" shall contain the complete address of the escrow agent and surety, and the executed "Escrow Agreement" will be authority for the TOWN to make payment of retained funds to the escrow agent. After approving the agreement, the TOWN will pay to the escrow agent the funds retained as provided herein, except that funds retained for lack of progress or other deficiencies on the part of the CONTRACTOR will not be paid to the escrow agent. The escrow agent may, in accordance with the stipulations contained in the "Escrow Agreement", invest the funds paid into the escrow account and pay earnings on such investments to the CONTRACTOR, or release the funds to the CONTRACTOR, provided such funds are fully secured by approved securities.

Retained funds invested, and securities held as collateral for retainage may be released only as and when directed by the Director, Department of Capital Projects Management. When the final estimate is released for payment, the Director, Department of Capital Projects Management will direct the escrow agent to settle the escrow amount by paying the CONTRACTOR or the TOWN monies due them as determined by the Director, Department of Capital Projects Management. The TOWN reserves the right to recall retained funds and to release same to the surety upon receipt of written request from the CONTRACTOR or in the event of default.

- () We elect to use the escrow account procedure for the deposit of retained funds.
- () We elect not to use the escrow account procedure for the deposit of retained funds.

END OF SECTION