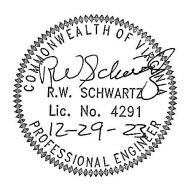


### PROJECT MANUAL FOR PROPOSED BRIDGE RAIL REPAIR OF VILLAGE BOULEVARD OVER WOLF CREEK

### TOWN OF ABINGDON, VIRGINIA



COMMISSION NO. 2023022

PREPARED BY

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

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## ADVERTISEMENT FOR BIDS PROPOSED BRIDGE RAIL REPAIR OF VILLAGE BOULEVARD OVER WOLF CREEK

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

CALENDAR OF EVENTS		
Solicitation Issue Date	January 22, 2024	
Obtain copies of solicitation/contract documents from: (A .pdf of Project Manual and Plans will be emailed) Project Manual and Plans will be posted on the Town's Procurement website at: <a href="https://www.Abingdon-va.gov/featured/bids">https://www.Abingdon-va.gov/featured/bids</a> or by email at mlane@thelanegroupinc.com	Schwartz & Associates, Inc. Consulting Engineers 7331 Timberlake Road, Suite 305 Lynchburg, VA 24502	
A Pre-bid meeting will be held at the Town of Abingdon Public Works Department, 299 Kings Mountain Drive, Abingdon, VA 24210	February 7, 2024 at 11:00 am.	
Deadline for Questions to be submitted <u>VIA E-MAIL</u> to mlane@thelanegroupinc.com	February 14, 2024 at 12:00 pm.	
Answers e-mailed to Pre-Bid Conference Attendees and posted at <a href="https://www.Abingdon-va.gov/featured/bids">https://www.Abingdon-va.gov/featured/bids</a>	February 16, 2024 at 11:00 am.	
Sealed Bids Due	February 21, 2024, 10:00 am at Town of Abingdon Public Works Dept. Attn: Kevin Worley, Project Manager 299 Kings Mountain Drive Abingdon, VA 24210	
Bids Opened	February 21, 2024, 10:05 am at Town of Abingdon Public Works Dept. 299 Kings Mountain Drive Abingdon, VA 24210	
Notice of Award	March 12, 2024	
Fixed Completion Date of Project	May 10, 2024	

The Project scope involves delaminated and spalled concrete, new concrete curb, new bridge rail, posts, post anchor bolts and guardrail.

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

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

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

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

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

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

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

MBE/WBE firms are encouraged to submit bids.

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

Attendance at the Pre-Bid Conference is not mandatory, but contractors are encouraged to attend.

### INSTRUCTIONS TO BIDDERS

### 1. THE WORK

The project involves delaminated and spalled concrete, new concrete curb, new bridge rail, posts, post anchor bolts and guardrail.

### 2. SECURING DOCUMENTS

Copies of the proposed Contract Documents may be obtained from:

The Town's Procurement Website: <a href="https://www.Abingdon-va.gov/featured/bids">https://www.Abingdon-va.gov/featured/bids</a> upon the conditions set forth in the Advertisement to Bid.

### 3. BID FORM

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

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

### 4. BONDS

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

### 5. EXAMINATION OF DOCUMENTS AND SITE OF WORK

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

### 6. BIDDER ELIGIBILITY

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

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

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

### 6A. PROOF OF COMPETENCY OF BIDDER

A bidder may be required to furnish evidence satisfactory to the Owner that he and his proposed subcontractors have sufficient means and experience in the types of work called for to assure completion of the Contract in a satisfactory manner.

### 7. MODIFICATION AND WITHDRAWAL OF BIDS

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

### 8. AWARD OF CONTRACT

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

### 9. EXECUTION OF AGREEMENT

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

### 10. INTERPRETATION OF CONTRACT DOCUMENTS PRIOR TO BIDDING

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

### 11. PRE-BID CONFERENCE

A Pre-Bid Conference will be held for the purpose of considering questions posed by bidders. The conference will be open to general contract and subcontract bidders. A Pre-Bid Conference will be conducted at the Town of Abingdon Public Works Department, 299 Kings Mountain Drive, Abingdon, VA 24210 on February 7, 2024 at 11:00 am.

### 12. CONSTRUCTION TIME AND LIQUIDATED DAMAGES

The Contractor agrees to commence work and complete the project in accordance with the time period set forth in the written "Notice to Proceed". The project shall be completed in its entirety on or before May 10, 2024. The Agreement shall stipulate that the Contractor shall complete the work no later than May 10, 2024. This is a "Fixed Completion Date" (47 days) Contract with the "Fixed Completion Date" being May 10, 2024 and the Contractor shall begin work on or before March 25, 2024. A Notice of "Award" will be issued by the Owner around March 12, 2024.

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

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

### 13. TOWN BUSINESS LICENSE

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

END OF INSTRUCTIONS TO BIDDERS

### **BID FORM**

Mr. Kevin Worley Project Manager Town of Abingdon Public Works Department 299 Kings Mountain Drive Abingdon, VA 24210

### Dear Mr. Worley:

(\$\_\_\_\_\_\_) which shall be referred to hereinafter as the BASE BID. This project has a "Fixed Completion Date" of May 10, 2024.

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

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

There is no guarantee of award for alternates, however, all bidders are required to submit pricing for all alternates. The Town reserves the right to award based on the combination of any or no alternates.

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

### **BID PROPOSAL FORM**

## "PROPOSED BRIDGE RAIL REPAIR OF VILLAGE BOULEVARD OVER WOLF CREEK"

### **TOWN OF ABINGDON, VIRGINIA**

### **NO MAJOR ITEMS & NO PRICE ADJUSTMENTS**

Item <u>No.</u>	<u>Description</u>	Estimated Quantities	Unit <u>Price</u>	Total <u>Amount</u>
1	MOBILIZATION	LUMP SUM	LUMP SUM	\$
2	MAINTENANCE OF TRAFFIC	LUMP SUM	LUMP SUM	\$
3	CONCRETE SUPERSTRUCTURE SURFACE REPAIR	12 SF	\$	\$
4	RAD. CONCRETE CURB, CG-2 (APPROACH)	15 LF	\$	\$
5	(MOD.) CG-2 CONCRETE CURB (BRIDGE)	5 LF	\$	\$
6	BRIDGE RAIL & 3 POST REPLACEMENTS	28 LF	\$	\$
7	RAD. GUARDRAIL, GR-2	12.5 LF	\$	\$
8	GUARDRAIL, GR-2	25 LF	\$	\$
9	REMOVAL OF EXISTING GUARDRAIL	37.5 LF	\$	\$
10	TYPE B PATCHING	0.44 SY	\$	\$

We are properly equipped to execute all work of the character and extent of the agreement as so covered by this bid and will enter into an agreement for the execution and completion of the work in accordance with the drawings and specifications and this bid. We further agree that if awarded the contract, we will maintain a work force large enough to execute the work and all obligations and complete the work by May 10, 2024. This is a "Fixed Completion Date" contract with the "Fixed Completion Date" being May 10, 2024."

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

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

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

### Proof Of Authority To Transact Business In Virginia

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

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

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

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

### CONTRACTOR'S CERTIFICATION

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

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

### TOWN OF ABINGDON, VIRGINIA

### AFFIDAVIT AND INFORMATION REQUIRED OF BIDDERS

### Affidavit of non-collusion:

Under oath, I hereby affirm under penalty of perjury:

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

Si	igned
_	
Fi	irm Name
TOWN OF ABINGDON COMMONWEALTH OF VIRGINIA, to wi	t:
I	, a Notary Public, do certify that
	whose name is signed to the
foregoing, has this date acknowledged the sa	ame before me in my Town
foresaid.	
Given under my hand thisday of _	,20 My
Commission expires	·
_	Notary Public

### AGREEMENT

THIS AGRI	EEMENT is dated as of the	day of	
	and between the Town of	Abingdon, Virginia	
(hereinafter called C	$\overline{\mathrm{DW}}\mathrm{NER}$ ) and		
	,		
(hereinafter called C	CONTRACTOR)		

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

### Article 1. WORK

CONTRACTOR shall complete all Work as specified or indicated in the Contract Documents. The work is generally described as follows: The project involves demolition of the existing superstructure and portions of the existing substructure, repairing portions of existing substructure and reconstructing the superstructure with a 4 span continuous steel beam bridge and concrete deck.

### Article 2 ENGINEER

The Project has been designed by Schwartz and Associates, Inc., Consulting Engineers. They are hereinafter called ENGINEER and will assume all duties and responsibilities and shall have the rights and authority assigned to ENGINEER in the Contract Documents in connection with completion of the Work in accordance with the Contract Documents.

### Article 3. CONTRACT TIME

- 3.1 Contract Time shall be a fixed completion date as shown below:
- A. This project has a "Fixed Completion Date" of May 10, 2024.
- 3.2 Liquidated Damages. OWNER and CONTRACTOR recognize that time is of the essence of this Agreement and that OWNER will suffer financial loss if the Work is not complete within the time specified in paragraph 3.1 above, plus any extensions thereof allowed in accordance with the Town of Abingdon General Terms and Conditions. They also recognize the delays, expense and difficulties involved in proving in a legal or arbitration proceeding the actual loss suffered by OWNER if the Work is not completed on time. Accordingly, instead of requiring any such proof, OWNER and CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) CONTRACTOR shall pay OWNER one thousand five hundred dollars (\$1,500.00) for each day that expires after the time specified in paragraph 3.1 for completion until the Work is complete.

### Article 4. CONTRACT PRICE

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

### Article 5. PAYMENT PROCEDURES

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

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

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

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

### Article 6. INTEREST

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

### Article 7. CONTRACTOR'S REPRESENTATIONS

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

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

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

### Article 9 MISCELLANEOUS

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

### Article 10. OTHER PROVISIONS

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

This Agreement will be eff	ective on		20
OWNER C	ONTRACTOR		
by	Ву		
(CORPORATE SEAL)	(CORI	PORATE SEAL)	
Attest	Attest		
Address for giving notices			
		_	
(Attach evidence of authorito sign and resolution or othe document authorizing execu of Agreement).	er		

END OF AGREEMENT

### NOTICE OF AWARD

To:		
DDO TECH. Description		
PROJECT Description:		
The TOWN has considered the Bidescribed WORK in response to it	ts Advertisement	
You are hereby notified that in the amount of $\$$	<del>-</del>	
You are required by the Inf Agreement and furnish the require Bond, and Certificate of Insuran date of this Notice to you.	red Contractor's	Performance Bond, Payment
If you fail to execute said within ten (10) days from the day entitled to consider all your regour BID as abandoned and as a sentitled to such other rights as	ate of this Notic ights arising out forfeiture of you	e, said OWNER will be of the OWNER'S acceptance of or Bid Bond. The OWNER will be
You are required to return AWARD to the TOWN.	an acknowledged	copy of this NOTICE OF
Dated this	day of	,20
	Town	of Abingdon
	DV	
	BY Title	
ACCEPTANCE OF NOTICE		
Receipt of the NOTICE OF AWARD is hereby acknowledged		
by		
this the day		
of, 20	·	
DV		
BYTitle		

### NOTICE TO PROCEED

To:	Date
	Description of the second of t
You are hereby notified	to commence work in accordance with the Agreemen
dated, 2	20, on or before,
20, and you are to	complete the WORK
The date of completion of all	WORK is therefore,
20	
-	TOWN OF ABINGDON
E	3Y
Γ	Title
ACCEPTANCE OF NOTICE	
Receipt of the above NOTICE T	O PROCEED
is hereby acknowledged by	
this the	day
of	, 20
	<del></del>
BY	
Title	

### SUPPLEMENTARY CONDITIONS

### 1. DEFINITIONS

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

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

### 2. BONDS

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

### 3. INSURANCE

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

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

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

- 6. Contractual Liability Insurance.
- 7. Broad Form Property Damage, Including Completed Operations.
- 8. Independent Contractor's (Contractor's Protective Liability).
- 9. Personal Injury (All Insuring Agreements), Deleting the Employee Exclusion.
- 3.02 Contractor's Automobile Liability (Bodily injury and property damage) shall be provided for the following limits:
  - A. Bodily Injury Liability \$ 1,000,000 dollars each person
    - \$ 1,000,000 dollars each occurrence
  - B. Property Damage Liability \$1,000,000 dollars each occurrence
    - C. The Automobile Liability Insurance shall include the following coverages:
    - 1. Comprehensive Form
    - 2. Owned
    - 3. Hired
    - 4. Non-Owner
- Excess Catastrophe coverage shall be provided by Contractor with a minimum additional limit of \$2,000,000.
- 3.04 CONTRACTOR'S Worker's Compensation Insurance as required by Federal, State, and Municipal laws for the protection of all CONTRACTOR'S employees working on or in connection with the Project, including broad form all states and voluntary compensation coverage and employers' liability coverage.

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

- 2. Conferences: Attend preconstruction conferences.

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

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

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

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

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

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

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

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

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

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

- 8. Reports: Furnish OWNER periodic reports as required of progress of the Work and CONTRACTOR'S compliance with the approved progress schedule and schedule of shop drawing submissions.
  - Consult with OWNER in advance of scheduled major tests, inspections or start of important phases of work.
  - Report immediately to OWNER upon the occurrence of any accident.
- 9. Payment requisitions: Review applications for payment with CONTRACTOR for compliance with the established procedure for their submission and forward them with recommendations to OWNER, noting particularly their relation to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the Work.

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

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

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

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

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

### 5. EMPLOYMENT DISCRIMINATION PROHIBITED

- 5.01 During the performance of this contract, the CONTRACTOR agrees as follows:
  - A. The CONTRACTOR will not discriminate against any employee or applicant for employment because of race, religion, color, sex or national origin, except where religion, sex or national origin is a bonafide occupational qualification reasonably necessary to the normal operation of the CONTRACTOR. The CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
  - B. The CONTRACTOR, in all solicitations or advertisements for employees placed by or on behalf of the CONTRACTOR, will state that such CONTRACTOR is an equal opportunity employer.
  - C. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting the requirements of this section.
- 5.02 The CONTRACTOR will include the provisions of the foregoing paragraphs A, B, C in every subcontract or purchase order of over \$10,000.00, so that the provisions will be binding upon each subcontractor or vendor.

### 6. CONSTRUCTION SCHEDULE:

- 6.01 The CONTRACTOR shall submit for review, a detailed construction schedule prior to beginning the project. The Owner shall be notified in advance of any major changes in the Construction Schedule as the project progresses. In order to assist the Engineer with Project Staffing Requirements for the following week, the CONTRACTOR shall provide the Engineer (& Town Engineer's Office) on each Friday, with a detailed work schedule for the following week. The CONTRACTOR shall provide the Engineer with at least a 72-hour notice for the following items:
  - 1. All Type B patching
  - 2. All concrete superstructure surface repair
  - 3. All adhesive anchor installations
  - 4. All curb replacement
  - 5. Bridge rail and post installations
  - 6. Guardrail installation
  - 7. Traffic control

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

### 7. APPLICATION FOR PROGRESS PAYMENT

A. Applications for progress payment shall be made on forms identical to those shown on pages <u>00800-10</u>, <u>00800-11</u>, and <u>00800-12</u> shown in these SUPPLEMENTARY CONDITIONS.

# APPLICATION FOR PAYMENT NO.

			VALUE TO DATE					
CONTRACTOR:DATE:	 نن		QUANTITY TO DATE					
	TION DAT	COMPLETION DATE:	VALUE THIS REQUISITION					
	COMPLE		QUANTITIES THIS REQ.					
			CONTRACT					
	PROJECT NO.:		DESCRIPTION					
	 <u>نن</u>		CONTRACT UNIT PRICE					
	PROJECT NAME:		CONTRACT					
	PROJ		ITEM NO.					

## APPLICATION FOR PAYMENT NO.

### APPLICATION FOR PAYMENT

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

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

Application for Payment: Sheet 3 of 3

### VIII. Town of Abingdon General Terms and Conditions

- A. <u>APPLICABLE LAWS AND COURTS</u>: This solicitation and any resulting contract shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought before a court of competent jurisdiction in the Town of Abingdon, Virginia. The Town and the contractor are encouraged to resolve any issues in controversy arising from the award of the contract or any contractual dispute using Alternative Dispute Resolution (ADR) procedures (Code of Virginia, § 2.2-4366). ADR procedures are described in Chapter 9 of the Vendors Manual. The contractor shall comply with all applicable federal, state and local laws, rules and regulations.
- **B.** <u>ANTI-DISCRIMINATION</u>: By submitting their bids, Bidders certify to the Town 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 (VPPA). If the award is made to a faith-based organization, the organization shall not discriminate against any recipient of goods, services, or disbursements made pursuant to the contract on the basis of the recipient's religion, religious belief, refusal to participate in a religious practice, or on the basis of race, age, color, gender or national origin and shall be subject to the same rules as other organizations that contract with public bodies to account for the use of the funds provided; however, if the faith-based organization segregates public funds into separate accounts, only the accounts and programs funded with public funds shall be subject to audit by the public body. (Code of Virginia, § 2.2-4343.1E).

In every contract over \$10,000 the provisions in 1 and 2 below apply:

- 1. During the performance of this contract, the contractor agrees as follows:
  - a. The contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, national origin, age, disability, or any other basis prohibited by state law relating to discrimination in employment, except where there is a bona fide occupational qualification reasonably necessary to the normal operation of the contractor. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
  - b. The contractor, in all solicitations or advertisements for employees placed by or on behalf of the contractor, will state that such contractor is an equal opportunity employer.
  - c. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation shall be deemed sufficient for the purpose of meeting these requirements.
- The contractor will include the provisions of 1 above in every subcontract or purchase order over \$10,000, so that the provisions will be binding upon each subcontractor or vendor.
- C. <u>ETHICS IN PUBLIC CONTRACTING</u>: By submitting their bids, Bidders certify that their bids are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other Bidder, supplier, manufacturer or subcontractor in connection with their bid, and that they have not conferred on any public employee having official responsibility for this procurement transaction any payment, loan, subscription, advance, deposit of money, services or anything of more than nominal value, present or promised, unless consideration of substantially equal or greater value was exchanged.
- D. <u>IMMIGRATION REFORM AND CONTROL ACT OF 1986</u>: By submitting their bids, Bidders certify that they do not and will not during the performance of this contract employ illegal alien workers or otherwise violate the provisions of the federal Immigration Reform and Control Act of 1986.
- **E. DEBARMENT STATUS**: By submitting their bids, Bidders certify that they are not currently debarred by the any agency, locality, or political subdivision of Commonwealth of Virginia from submitting bids or bids on contracts for the type of goods and/or services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.
- **F.** <u>ANTITRUST</u>: By entering into a contract, the contractor conveys, sells, assigns, and transfers to the Town of Abingdon all rights, title and interest in and to all causes of action it may now have or hereafter acquire under the antitrust laws of the United States and the Commonwealth of Virginia, relating to the particular goods or services purchased or acquired by the Town of Abingdon under said contract.

### G. MANDATORY USE OF FORMS AND TERMS AND CONDITIONS FOR IFBs

1. Failure to submit a bid on the official form provided for that purpose may be a cause for rejection of the bid. Modification of or additions to the General Terms and Conditions of the solicitation may be cause for rejection of the bid; however, the Commonwealth reserves the right to decide, on a case by case basis, in its sole discretion, whether to reject such a bid.

H.<u>CLARIFICATION OF TERMS</u>: If any prospective Bidder has questions about the specifications or other solicitation documents, the prospective Bidder should contact the buyer whose name appears on the face of the solicitation no later than five working days before the due date. Any revisions to the solicitation will be made only by addendum issued by the buyer.

### I. PAYMENT:

### 1. To Prime Contractor:

- a. Invoices for items ordered, delivered and accepted shall be submitted by the contractor directly to the payment address shown on the purchase order/contract. All invoices shall show the Town purchase order number; social security number (for individual contractors) or the federal employer identification number (for proprietorships, partnerships, and corporations).
- b. Any payment terms requiring payment in less than 30 days will be regarded as requiring payment 30 days after invoice or delivery, whichever occurs last. This shall not affect offers of discounts for payment in less than 30 days, however.
- c. All goods or services provided under this contract or purchase order, that are to be paid for with public funds, shall be billed by the contractor at the contract price.
- d. The following shall be deemed to be the date of payment: the date of postmark in all cases where payment is made by mail, or the date of offset when offset proceedings have been instituted as authorized under the Virginia Debt Collection Act.
- e. Unreasonable Charges. Under certain emergency procurements and for most time and material purchases, final job costs cannot be accurately determined at the time orders are placed. In such cases, contractors should be put on notice that final payment in full is contingent on a determination of reasonableness with respect to all invoiced charges. Charges which appear to be unreasonable will be researched and challenged, and that portion of the invoice held in abeyance until a settlement can be reached. Upon determining that invoiced charges are not reasonable, the Commonwealth shall promptly notify the contractor, in writing, as to those charges which it considers unreasonable and the basis for the determination. A contractor may not institute legal action unless a settlement cannot be reached within thirty (30) days of notification.

The provisions of this section do not relieve an agency of its prompt payment obligations with respect to those charges which are not in dispute (Code of Virginia, § 2.2-4363).

### 2. To Subcontractors:

- a. A contractor awarded a contract under this solicitation is hereby obligated:
- (1) To pay the subcontractor(s) within seven (7) days of the contractor's receipt of payment from the Town for the proportionate share of the payment received for work performed by the subcontractor(s) under the contract; or
- (2) To notify the Town and the subcontractor(s), in writing, of the contractor's intention to withhold payment and the reason.
- b. The contractor is obligated to pay the subcontractor(s) interest at the rate of one percent per month (unless otherwise provided under the terms of the contract) on all amounts owed by the contractor that remain unpaid seven (7) days following receipt of payment from the Town, except for amounts withheld as stated in (2) above. The date of mailing of any payment by U. S. Mail is deemed to be payment to the addressee. These provisions apply to each sub-tier contractor performing under the primary contract. A contractor's obligation to pay an interest charge to a subcontractor may not be construed to be an obligation of the Town.
- c. Each prime contractor who wins an award in which provision of a SWAM procurement plan is a condition to the award, shall deliver to the Town, on or before request for final payment, evidence and certification of compliance (subject only to insubstantial shortfalls and to shortfalls arising from subcontractor default) with the SWAM procurement plan. Final payment under the contract in question may be withheld until such certification is delivered and, if necessary, confirmed by the agency or institution, or other appropriate penalties may be assessed in lieu of withholding such payment.
- J. PRECEDENCE OF TERMS: The following General Terms and Conditions VENDORS MANUAL, APPLICABLE LAWS AND COURTS, ANTI-DISCRIMINATION, ETHICS IN PUBLIC CONTRACTING, IMMIGRATION REFORM AND CONTROL ACT OF 1986, DEBARMENT STATUS, ANTITRUST, MANDATORY USE OF FORM AND TERMS AND CONDITIONS, CLARIFICATION OF TERMS, PAYMENT shall apply in all instances. In the event there is a conflict between any of the other General Terms and Conditions and any Special Terms and Conditions in this solicitation, the Special Terms and Conditions shall apply.
- K. QUALIFICATIONS OF BIDDERS: The Town may make such reasonable investigations as deemed proper and necessary to determine the ability of the Bidder to perform the services/furnish the goods and the Bidder shall furnish to the Town all such information and data for this purpose as may be requested. The Town reserves the right to inspect Bidder's physical facilities prior to award to satisfy questions regarding the Bidder's capabilities. The Town further reserves the right to reject any bid if the evidence submitted by, or investigations of, such Bidder fails to satisfy the Town that such Bidder is properly qualified to carry out the obligations of the contract and to provide the services and/or furnish the goods contemplated therein.
- L. <u>TESTING AND INSPECTION</u>: The Town reserves the right to conduct any test/inspection it may deem advisable to assure goods and services conform to the specifications.
- M. <u>ASSIGNMENT OF CONTRACT</u>: A contract shall not be assignable by the contractor in whole or in part without the written consent of the Town.

- N. CHANGES TO THE CONTRACT: Changes can be made to the contract in any of the following ways:
- 1. The parties may agree in writing to modify the scope of the contract. An increase or decrease in the price of the contract resulting from such modification shall be agreed to by the parties as a part of their written agreement to modify the scope of the contract.
- 2. The Purchasing Agency may order changes within the general scope of the contract at any time by written notice to the contractor. Changes within the scope of the contract include, but are not limited to, things such as services to be performed, the method of packing or shipment, and the place of delivery or installation. The contractor shall comply with the notice upon receipt. The contractor shall be compensated for any additional costs incurred as the result of such order and shall give the Purchasing Agency a credit for any savings. Said compensation shall be determined by one of the following methods:
- a. By mutual agreement between the parties in writing; or
- b. By agreeing upon a unit price or using a unit price set forth in the contract, if the work to be done can be expressed in units, and the contractor accounts for the number of units of work performed, subject to the Purchasing Agency's right to audit the contractor's records and/or to determine the correct number of units independently; or
- c. By ordering the contractor to proceed with the work and keep a record of all costs incurred and savings realized. A markup for overhead and profit may be allowed if provided by the contract. The same markup shall be used for determining a decrease in price as the result of savings realized. The contractor shall present the Purchasing Agency with all vouchers and records of expenses incurred and savings realized. The Purchasing Agency shall have the right to audit the records of the contractor as it deems necessary to determine costs or savings. Any claim for an adjustment in price under this provision must be asserted by written notice to the Purchasing Agency within thirty (30) days from the date of receipt of the written order from the Purchasing Agency. If the parties fail to agree on an amount of adjustment, the question of an increase or decrease in the contract price or time for performance shall be resolved in accordance with the procedures for resolving disputes provided by the Disputes Clause of this contract or, if there is none, in accordance with the disputes provisions of the Commonwealth of Virginia Vendors Manual. Neither the existence of a claim nor a dispute resolution process, litigation or any other provision of this contract shall excuse the contractor from promptly complying with the changes ordered by the Purchasing Agency or with the performance of the contract generally.
- **O. DEFAULT:** In case of failure to deliver goods or services in accordance with the contract terms and conditions, the Town, after due oral or written notice, may procure them from other sources and hold the contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Town may have.
- P. INSURANCE: By signing and submitting a bid or bid under this solicitation, the bidder or Bidder certifies that if awarded the contract, it will have the following insurance coverage at the time the contract is awarded. For construction contracts, if any subcontractors are involved, the subcontractor will have workers' compensation insurance in accordance with §§ 2.2-4332 and 65.2-800 et seq. of the Code of Virginia. The bidder or Bidder further certifies that the contractor and any subcontractors will maintain this insurance coverage during the entire term of the contract and that all insurance coverage will be provided by insurance companies authorized to sell insurance in Virginia by the Virginia State Corporation Commission.
- **Q.** ANNOUNCEMENT OF AWARD: Upon the award or the announcement of the decision to award a contract as a result of this solicitation, the Town will publicly post such notice on the Town's website for a minimum of 10 days.
- R. <u>DRUG-FREE WORKPLACE:</u> During the performance of this contract, the contractor agrees to (i) provide a drug-free workplace for the contractor's employees; (ii) post in conspicuous places, available to employees and applicants for employment, a statement notifying employees that the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana is prohibited in the contractor's workplace and specifying the actions that will be taken against employees for violations of such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the contractor that the contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of over \$10,000, so that the provisions will be binding upon each subcontractor or vendor. For the purposes of this section, "drug-free workplace" means a site for the performance of work done in connection with a specific contract awarded to a contractor, the employees of whom are prohibited from engaging in the unlawful manufacture, sale, distribution, dispensation, possession or use of any controlled substance or marijuana during the performance of the contract.
- **S. NONDISCRIMINATION OF CONTRACTORS:** A bidder, Bidder, or contractor shall not be discriminated against in the solicitation or award of this contract because of race, religion, color, sex, national origin, age, disability, faith-based organizational status, any other basis prohibited by state law relating to discrimination in employment or because the bidder or Bidder employs ex-offenders unless the state agency, department or institution has made a written determination that employing ex-offenders on the specific contract is not in its best interest. If the award of this contract is made to a faith-based organization and an individual, who applies for or receives goods, services, or disbursements provided pursuant to this contract objects to the religious character of the faith-based organization from which the individual receives or would receive the goods, services, or disbursements, the public body shall offer the individual, within a reasonable period of time after the date of his objection, access to equivalent goods, services, or disbursements from an alternative provider.

- T. AVAILABILITY OF FUNDS: It is understood and agreed between the parties herein that the Town shall be bound hereunder only to the extent of the funds available or which may hereafter become available for the purpose of this agreement.
- U. <u>SET-ASIDES</u>. This solicitation is set-aside for DMBE-certified small business participation only when designated "SET-ASIDE FOR SMALL BUSINESSES" in the solicitation. DMBE-certified small businesses are those businesses that hold current small business certification from the Virginia Department of Minority Business Enterprise. This shall not exclude DMBE-certified women-owned and minority-owned businesses when they have received the DMBE small business certification. For purposes of award, bidders/offerors shall be deemed small businesses if and only if they are certified as such by DMBE on the due date for receipt of bids/proposals.
- V. **NEGOTIATIONS WITH THE LOWEST BIDDER** DELETED
- W. <u>AUTHORIZATION TO CONDUCT BUSINESS IN THE COMMONWEALTH</u>: A contractor organized as a stock or non-stock corporation, limited liability company, business trust, or limited partnership or registered as a registered limited liability partnership shall be authorized to transact business in the Commonwealth as a domestic or foreign business entity if so required by Title 13.1 or Title 50 of the *Code of Virginia* or as otherwise required by law. Any business entity described above that enters into a contract with a public body pursuant to the *Virginia Public Procurement Act* shall not allow its existence to lapse or its certificate of authority or registration to transact business in the Commonwealth, if so required under Title 13.1 or Title 50, to be revoked or cancelled at any time during the term of the contract. A public body may void any contract with a business entity if the business entity fails to remain in compliance with the provisions of this section.
- X. STATE CORPORATION COMMISSION IDENTIFICATION NUMBER: Pursuant to Code of Virginia, §2.2-4311.2 subsection B, a bidder or offeror organized or authorized to transact business in the Commonwealth pursuant to Title 13.1 or Title 50 is required to include in its bid or proposal the identification number issued to it by the State Corporation Commission (SCC). Any bidder or offeror that is not required to be authorized to transact business in the Commonwealth as a foreign business entity under Title 13.1 or Title 50 or as otherwise required by law is required to include in its bid or proposal a statement describing why the bidder or offeror is not required to be so authorized. Indicate the above information on the SCC Form provided. Contractor agrees that the process by which compliance with Titles 13.1 and 50 is checked during the solicitation stage (including without limitation the SCC Form provided) is streamlined and not definitive, and the Commonwealth's use and acceptance of such form, or its acceptance of Contractor's statement describing why the bidder or offeror was not legally required to be authorized to transact business in the Commonwealth, shall not be conclusive of the issue and shall not be relied upon by the Contractor as demonstrating compliance.

# SECTION II GENERAL REQUIREMENTS

TOWN OF ABINGDON, VIRGINIA

PREPARED BY

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

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#### SUMMARY OF WORK

## 1.01 WORK COVERED BY CONTRACT DOCUMENTS

A. The "PROJECT," which the "WORK" of this CONTRACT constitutes, is titled, "Proposed Bridge Rail Repair of Village Boulevard over Wolf Creek".

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

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

## C. CONTRACTOR'S Duties:

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

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

# 1.02 CONTRACTS:

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

## 1.03 CONCURRENT WORK:

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

# 1.04 WORK SEQUENCE:

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

#### 1.05 CONTRACTOR USE OF PREMISES:

A. Confine operations at site to areas permitted by:

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

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

# 1.06 COMPLETION OF THE WORK:

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

#### FIELD ENGINEERING

## PART 1 - GENERAL

#### 1.01 WORK INCLUDED

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

# 1.02 RELATED WORK

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

# 1.03 QUALITY ASSURANCE

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

# 1.04 SUBMITTALS

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

## 1.05 PROCEDURES

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

#### CHANGE ORDER PROCEDURE & CONFLICT RESOLUTIONS

#### PART 1 - GENERAL

#### 1.01 DESCRIPTION

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

## 1.02 RELATED WORK SPECIFIED ELSEWHERE

- 1. Changes in the Work: General Terms and Conditions and 13.3 VDOT Lap Manual
- 2. Change in Contract Price: General Terms and Conditions and 13.3 VDOT Lap Manual
- 3. Construction Schedules: Section 01310
- 4. Shop Drawings and Project Data: Section 01340
- 5. CONTRACTOR'S Record Drawings: Section 01720

# 1.03 SUBMITTALS

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

## 1.04 PRODUCT HANDLING

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

## 1.05 PROCESSING CHANGES INITIATED BY THE OWNER

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

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

## 1.06 PROCESSING CHANGES INITIATED BY THE CONTRACTOR

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

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

#### 1.07 PROCESSING BULLETINS

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

#### 1.08 PROCESSING CHANGE ORDERS

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

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

# 1.09 CONFLICT RESOLUTIONS

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

# PROJECT COORDINATION AND PROGRESS MEETINGS

## 1.01 GENERAL

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

## 1.02 PRE-CONSTRUCTION MEETING

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

# C. Minimum Agenda:

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

# 1.03 PROGRESS MEETINGS

- A. Schedule Regular Meetings to be held monthly at a time and place mutually agreed upon between CONTRACTOR and ENGINEER and OWNER.
- B. Hold Called Meetings as progress of Work dictates.
- C. Attendance:
  - 1. ENGINEER and his Consultants.
  - 2. All CONTRACTORS working at the Project Site.
  - 3. Subcontractors as pertinent to agenda.
  - 4. Safety Representatives.
  - 5. Representatives of Governmental or other Regulatory Agencies, as required.

# D. Minimum Agenda:

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

# CONSTRUCTION SCHEDULES

# PART 1 GENERAL

#### 1.01 GENERAL:

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

## 1.02 FORM OF SCHEDULES:

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

# 1.03 CONTENT OF SCHEDULES:

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

# 1.04 UPDATING:

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

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

# 1.05 SUBMITTALS

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

# 1.06 DISTRIBUTION:

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

#### SHOP DRAWINGS AND PROJECT DATA

# 1.01 GENERAL:

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

## 1.02 SHOP DRAWINGS:

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

#### 1.03 PROJECT DATA:

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

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

#### 1.04 CONTRACTOR RESPONSIBILITIES:

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

# 1.05 SUBMISSION REQUIREMENTS:

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

# E. Submittals shall include:

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

- 9. A blank space, 4" x 4".
- 10. Identification of deviations from Contract Documents.
- 11. CONTRACTOR'S stamp, initialed or signed, certifying the review of submittal, verification of field measurements and compliance of Contract Documents.

# 1.06 RESUBMISSION REQUIREMENTS:

# A. Shop Drawings:

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

## 1.07 ENGINEER'S DUTIES:

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

#### TEMPORARY FACILITIES

# PART 1 GENERAL

#### 1.01 BY WHOM WORK TO BE DONE

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

## 1.02 WORK INCLUDED

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

#### PART 2 FACILITIES TO BE PROVIDED

## 2.01 TEMPORARY HEAT

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

#### 2.02 TEMPORARY ELECTRIC POWER

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

#### 2.03 TEMPORARY SIGNS

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

# 2.04 TEMPORARY STAIRS, LADDERS, RAMPS, ETC.

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

## 2.05 TEMPORARY TOILET

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

#### 2.06 STORAGE SHEDS

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

#### 2.07 PUMPS AND DRAINAGE

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

# 2.08 WATER FOR REPAIRS AND TESTING

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

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

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

# SITE, ACCESS, STAGING, PARKING AND TRAFFIC REGULATIONS

# PART 1 GENERAL

#### 1.01 RELATED WORK SPECIFIED ELSEWHERE

- A. General Requirements: General Conditions.
- B. Summary of Work: Section 01010.
- C. Clearing: Section 02100
- D. Maintenance of Traffic: Section 02703

#### 1.02 ACCESS

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

## 1.03 PARKING AND STAGING AREA

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

### 1.04 MAINTENANCE

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

# PRODUCT DELIVERY, STORAGE AND PROTECTION

# PART 1 GENERAL

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

# 1.03 STORAGE AND PROTECTION

#### A. General:

- 1. The CONTRACTOR shall store and protect products in accordance with the manufacturer's recommendations and the requirements specified herein. No on-site or existing storage facilities are available for use by the CONTRACTOR. All on-site facilities shall be furnished by the CONTRACTOR if space is available in the area defined as the "Site Limits" for the Work.
- 2. When area for storage facilities is not available within the "Site Limits," the CONTRACTOR shall provide off-site, weather- proof storage facilities reviewed by the ENGINEER at no extra charge to the OWNER in accordance with the storage requirements in the Contract Documents.
- 3. The CONTRACTOR shall provide weatherproof storage for all spare parts. This storage shall be off site in a facility reviewed by the ENGINEER when area within the "Site Limits" for provision of such facilities does not exist. Storage facilities shall provide for security of such spare parts and for the segregation of spare parts from uninstalled products that will be used by the CONTRACTOR in the performance of his work.

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

# B. Uncovered Storage:

- 1. The following types of materials may be stored out-of-doors without cover:
  - a. Masonry units
  - b. Reinforcing steel
  - c. Structural steel
  - d. Piping
  - e. Precast concrete items
  - f. Castings
  - g. Gratings
  - h. Hand railing
- 2. Store the above materials on wood blocking.

# C. Covered Storage:

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

# D. Fully Protected Storage:

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

## CONTRACT CLOSEOUT

# PART 1 GENERAL

#### 1.01 DESCRIPTION

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

#### 1.02 RELATED WORK SPECIFIED ELSEWHERE

- A. Substantial Completion: General Conditions
- B. Completion: General Conditions
- C. Final Inspection: General Conditions
- D. Final Application for Payment: General Conditions
- E. Waiver of Claims: General Conditions
- F. Change Order Procedure: Section 01153
- G. Operations and Maintenance Data: Section 01350
- H. Cleaning: Section 01710
- I. CONTRACTOR'S Record Drawings: Section 01720

## 1.03 PROCEDURES

# A. Substantial Completion:

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

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

# B. Final Completion:

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

# 3. Certify that:

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

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

# 1.04 INSTRUCTION

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

## **CLEANING**

# PART 1 GENERAL

#### 1.01 DESCRIPTION

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

# 1.02 SAFETY REQUIREMENTS:

- A. Standards: Maintain project in accordance with the following safety and insurance standards.
  - 1. Applicable State, Town, County and Federal Codes and Regulations.

# B. Hazards Control:

- 1. Store volatile wastes in covered metal containers and remove from premises daily.
- 2. Prevent accumulation of wastes which create hazardous conditions.
- 3. Provide adequate ventilation during use of volatile or noxious substances.
- C. Conduct cleaning and disposal operations to comply with local ordinances and anti-pollution laws.
  - 1. Do not burn or bury rubbish and waste materials on project site.
  - 2. Do not dispose of volatile wastes such as mineral spirits, oil, or paint thinner in storm or sanitary drains.
  - 3. Do not dispose of wastes into streams or waterways.

#### PART 2 PRODUCTS

# 2.01 MATERIALS:

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

# PART 3 EXECUTION

## 3.01 DURING CONSTRUCTION:

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

# 3.02 FINAL CLEANING:

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

# CONTRACTOR'S RECORD DRAWINGS

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

# 1.02 MAINTENANCE OF DOCUMENTS:

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

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

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

#### 1.04 RECORDING:

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

## 1.05 SUBMITTAL:

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

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

# SECTION 02013

# PROJECT SIGNS

No project signs will be required on this project.

# **SECTION III**

# SPECIAL PROVISIONS DEPARTMENT OF TRANSPORTATION ROAD & BRIDGE SPECIFICATIONS 2020

TOWN OF ABINGDON, VIRGINIA

# PREPARED BY

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

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03002	Special Provision B – Hydraulic Cement Concrete	03002-1 - 03002-6

#### 1.01 MISCELLANEOUS NOTES

1. Section 101 Virginia Department of Transportation or Department shall be deemed to mean the Town of Abingdon.

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

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

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

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

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

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

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

SECTION 105.13 of the Specifications is replaced by the following:

#### 1.03 MATERIALS - GENERAL

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

#### SPECIAL PROVISION B. HYDRAULIC CEMENT CONCRETE

#### 1.04 HYDRAULIC CEMENT CONCRETE

- 1. Testing Section 404 of 2020 Virginia Department of Transportation (VDOT)

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

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

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

The QC cylinders will be taken by the CONTRACTOR.

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

2. <u>SECTION 217.08(b)—STRENGTH TESTS</u> is amended to replace the first paragraph with the following:

Strength Tests: The 28-day strengths specified in Table II-17 are the strengths used in the design calculations. The Engineer will verify design strengths by tests made during the progress of the work in accordance with the requirements of ASTM C39, C31, or C42. If the test results do not conform to the strengths specified in Table II-17, immediate steps shall be taken to adjust the design mixture and an investigation will be initiated to determine the acceptability of the concrete.

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

In all structural concrete the water/cement ratio shall not exceed 0.40, maximum slump of concrete upon arrival at construction site shall not be less than 3" and shall not exceed 6". All concrete with a 0.40 water/cement ration shall contain a mid range superplasticizer, such as Master Builder's Polyheed, conforming to ASTM C 494, Type F and added at the concrete plant as part of the batch procedure.

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

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

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

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

# SAI-1 CONCRETE PRODUCER TESTS

Producer		Project	
Date_		Load No	
		Truck No	
1.	Moisture Contents:		
	Fine Aggregate	Date Tested	
	Coarse Aggregate	Date Tested	
2.	Temperature at Time of Testing Concret	ce	
	Air degrees	F	
	Concrete degrees	F	
3.	Air Content %		
4.	Slump inch	nes	
5.	Gallons of Water Withheld at Plant		
6.	Actual Water/Cement Ratio		
		Signed: VDOT Certified Concrete Technicia	
	(0	Certification Expiration Date	

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

5. SECTION 404.02 is expanded to include the following:

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

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

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

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

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

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

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

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

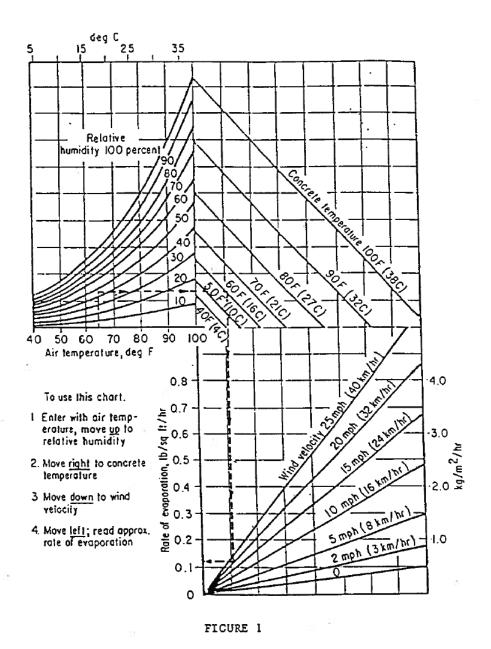
8. <u>SECTION 404.03 (1) 1. WEATHER</u> of the Specifications is amended to replace the last sentence of the fourth paragraph with the following:

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

All concrete overlay placements shall take place between 10:00 pm & 5:00 am.

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

# CONCRETING



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

# **SECTION IV**

# TECHNICAL SPECIAL PROVISIONS

TOWN OF ABINGDON, VIRGINIA

# PREPARED BY

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

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# SECTION IV TECHNICAL SPECIAL PROVISION MAINTENANCE OF TRAFFIC SECTION NO. 04001

#### PART 1 - GENERAL

#### 1.01 DESCRIPTION

This work shall consist of maintenance and protection of pedestrian and vehicular traffic through or around areas of construction and detours. It Shall include covering and uncovering existing signs, furnishing, erecting and maintenance of construction signs, sign posts, flags, cones, Type III barricades, Group 2 channelizing devices and all other items used for traffic maintenance as required by the contract drawings and the Virginia Work Area Protection Manual. It also includes the furnishing of flagmen and lights. At the completion of this project the construction signs and sign posts shall be removed by the Contractor and shall remain property of the Contractor. This item also includes all costs associated with lighting and barricading the work areas from pedestrians and motorists according to the plan developed by the CONTRACTOR and approved by the ENGINEER.

Contractor will be allowed to use concrete traffic barriers and Group 2 channelizing devices already on the project site. Contractor shall move the above items into place as shown in project drawings. At the completion of this project, Contractor shall deliver and unload the Town-owned concrete traffic barriers, Group 2 channelizing devices and cones to a Town of Abingdon determined location. All costs shall be included in "Maintenance of Traffic".

In addition, it shall include all costs associated with providing at all times safe pedestrian access to all businesses and residencies within the limits of the signs erected for the project.

The structural integrity and alignment of barricades and safety devices shall be maintained at all times. Reflectorized surface and warning lights shall be maintained in a clean and visible condition at all times. All safety devices shall be inspected at least daily, and deficiencies shall be immediately corrected. Safety and protective devices furnished by the Contractor will remain the property of the Contractor and shall be removed from the project site upon completion of the work or as directed by the Engineer.

Site specific adjustments to maintenance of traffic operations, quantity, location, or spacing of traffic control devices, within construction limits or on any approaches to the project, required by the Engineer to improve traffic operation or safety shall not be considered an alteration to the character of work.

All work shall be scheduled and performed in such a manner as to provide a minimum of interference and maximum protection to traffic and workmen. In no case shall traffic be stopped on Route 19.

The CONTRACTOR shall take adequate precautions to prevent material, sand or other debris from being spilled, blown or tracked onto traveled roadways throughout the duration of this project. Should any material get onto a traveled roadway, the CONTRACTOR shall immediately stop work and have it removed. The ENGINEER may stop work, if conditions warrant, Due to blowing sand.

#### 1.02 TRAFFIC CONDITIONS & CHANGES IN TRAFFIC PATTERNS OR TRAFFIC CONTROL

The CONTRACTOR shall immediately report accidents and vehicle breakdowns via cellular phone to the Lynchburg Emergency Communication Center (911) and notify the Department and/or its Engineer.

Prior to making any changes affecting traffic, he shall provide the City's office and the Engineer's office a minimum of two (2) full working days' notice (48 hours). He shall provide each of the following parties all of the information requested above via email.

TBD

Randy Saunders Schwartz & Associates, Inc.

Phone: (434) 237-6584

Email: rsaunders@schwartzinc.com

#### 1.03 BASIS OF PAYMENT

Maintenance of traffic will be paid for at the Contract "Lump-Sum" price, which price shall be full compensation for covering and uncovering existing signs, furnishing, installing, erecting, maintenance and removal of new construction signs, sign posts, flags, Group 2 channelizing devices, cones, Type III barricades, lights, moving Townowned concrete traffic barriers and Group 2 channelizing devices to location shown in the project drawings, delivering and unloading Townowned concrete barriers, Group 1 and 2 channelizing devices to a Town of Abingdon determined location, and all costs for flagmen. Also included is lighting and barricading the work area from pedestrians and motorists; providing safe pedestrian access to all businesses and residencies; and for all materials, labor, tools, equipment, and incidentals necessary to complete the work. Payment will be made under the Contract pay item:

"MAINTENANCE OF TRAFFIC - Pay unit will be on a "Lump-Sum" basis.

The Contractor will be paid 30-percent of the lump sum bid price upon satisfactory installation of the required maintenance of traffic items to commence construction operations and active prosecution of the work. Contingent upon active pursuit of work. The Contractor will receive monthly payments for maintenance of traffic based on the daily dollar amount of the bid price for maintenance of traffic until 90-percent of the unit bid price is paid. The remaining 10-percent will be paid for after all maintenance of traffic items are removed at final acceptance of the Contract.

# SECTION IV TECHNICAL SPECIAL PROVISION CONCRETE SUPERSTRUCTURE SURFACE REPAIR SECTION NO. 04002

#### PART 1 - GENERAL

#### 1.01 DESCRIPTION

This work shall consist of removal and disposal of existing concrete, existing post anchor bolts, asphalt material, sandblasting existing concrete and faces of existing concrete that new concrete will bond to, forming, furnishing and placing new self-consolidated concrete, new asphalt material, 2-hour minimum pre-wetting concrete surfaces, preventing material from getting in stream, curing concrete and form removal.

#### 1.02 METHOD OF MEASUREMENT

"Concrete Superstructure Surface Repair" will be measured on a Square Foot basis.

#### 1.03 BASIS OF PAYMENT

The unit price shown in contract for "Concrete Superstructure Surface Repair" shall be full compensation for removal and disposal of existing concrete, existing post anchor bolts, existing asphalt wearing surface, sandblasting concrete and surfaces that will contact new concrete, 2-hour minimum pre-wetting of existing concrete surfaces prior to new concrete placement, forming, curing concrete, form removal, furnishing and placing new asphalt wearing surface and the furnishing of all materials, labor, tools, equipment and incidentals necessary to complete the work. Payment will be made under the contract pay item of:

"Concrete Superstructure Surface Repair" - Pay unit will be on a Square Foot basis.

# SECTION IV TECHNICAL SPECIAL PROVISION (MOD.) CG-2 CONCRETE CURB (BRIDGE) SECTION NO. 04003

#### PART 1 - GENERAL

#### 1.01 DESCRIPTION

This work shall consist of removal and disposal of existing concrete curb, existing asphalt wearing surface and existing dowels, cleaning top of existing deck where new asphalt wearing surface will contact concrete, forming, curing concrete, furnishing and placement of new asphalt wearing surface, #4 rebar adhesive anchors, adhesive material, new concrete CG-2 curb and form removal.

#### 1.02 METHOD OF MEASUREMENT

"(Mod.) CG-2 Concrete Curb (Bridge)" will be measured on a per linear foot basis, complete-in-place.

#### 1.03 BASIS OF PAYMENT

The unit price shown in contract for "(Mod.) CG-2 Concrete Curb (Bridge)" shall be full compensation for removal and disposal of existing concrete curb, existing asphalt wearing surface and existing dowels, cleaning top of existing deck where new asphalt wearing surface will contact concrete, forming, curing concrete, furnishing and placement of new asphalt wearing surface, #4 rebar adhesive anchors, adhesive material, new concrete CG-2 curb, form removal and the furnishing of all materials, labor, tools, equipment and incidentals necessary to complete the work. Payment will be made under the contract pay item of:

"(Mod.) CG-2 Concrete Curb (Bridge)" - Pay unit will be on a per linear foot basis.

# SECTION IV TECHNICAL SPECIAL PROVISION BRIDGE RAIL & 3 POST REPLACEMENT SECTION NO. 04004

#### PART 1 - GENERAL

#### 1.01 DESCRIPTION

This work shall consist of removal and disposal of existing bridge rail, posts, offset blocks, hardware, tightening nuts on existing bridge post anchor bolts, filling in existing bridge post anchor bolt holes with a Engineer approved non-shrink grout, drilling holes and cleaning out holes for new adhesive anchors, tightening anchor bolt nut on bridge post #4, furnishing and installing 1 ½" diameter all thread adhesive anchors, nuts, flat washers, adhesive material, three (3) W6x20 posts, new bridge rail, offset blocks, all hardware to attach new bridge rail to offset blocks and posts.

Also, all bridge rail, posts, offset blocks,  $1\,\,kappa''$  diameter adhesive anchors and all nuts, washers, and hardware shall be galvanized in accordance with VDOT Road and Bridge Specifications.

 $1\ \mbox{\em 4}''$  diameter adhesive anchor bolts shall be ASTM A325, threaded full length of rod.

#### 1.02 METHOD OF MEASUREMENT

"Bridge Rail & 3 Post Replacement" will be measured on a per linear foot basis, complete-in-place.

# 1.03 BASIS OF PAYMENT

The unit price shown in contract for "Bridge Rail & 3 Post Replacement" shall be full compensation for removal and disposal of existing bridge rail, posts, offset blocks, hardware, tightening nuts on existing bridge post anchor bolts, filling in existing bridge post anchor bolt holes with a Engineer approved non-shrink grout, drilling holes and cleaning out holes for new adhesive anchors, tightening anchor bolt nut on bridge post #4, furnishing and installing 1 ¼" diameter all thread adhesive anchors, nuts, flat washers, adhesive material, non-shrink grout, three (3) W6x20 posts, new bridge rail (GR-2 guardrail), offset blocks, all hardware to attach new bridge rail to offset blocks and posts, galvanization and the furnishing of all materials, labor, tools, equipment and incidentals necessary to complete the work. Payment will be made under the contract pay item of:

"Bridge Rail & 3 Post Replacement" - Pay unit will be on a per linear foot basis.

# SECTION IV TECHNICAL SPECIAL PROVISION ADHESIVE ANCHORS SECTION NO. 04005

### PART 1 GENERAL

# 1.01 <u>DESCRIPTION</u>

A. This item consists of drilling holes in existing concrete, cleaning holes, placing reinforcing steel or threaded rod (galvanized to meet ASTM A123) in holes and anchoring reinforcing steel or threaded rod with anchoring material, all in accordance with the Contract Drawings and these Special Provisions.

# 1.02 QUALITY ASSURANCE

A. The Contractor shall provide a notarized certification stating that the material meets the specified requirements.

# PART 2 PRODUCTS

# 2.01 <u>MATERIALS</u>

- A. The steel (#4 bars) shall be reinforcing steel meeting requirements of ASTM A615 Grade 60 of the size specified on the Drawings.
- B. The anchoring material shall be a polyester resin (made in USA) with no weakening additives or fillers.
- C. The threaded rods shall meet the requirements of ASTM A325 (1 1/4" diameter).

# 2.02 <u>ACCEPTABLE MANUFACTURERS</u>

- A. Anchoring Material KELIBOND SYSTEM as manufactured by Kelken-Gold, Incorporated, South Plain Field, New Jersey, is considered to conform to the requirements of this specification.
- B. Substitutions: The use of other than the specified products will be considered providing the Contractor requests their use in writing to the Engineer. This request shall be accompanied by (a) a notarized certificate of compliance from an approved independent testing laboratory stating that the proposed substitute products meet or exceed the specified performance criteria, tested in accordance with the specified test standards of the acceptable manufacturer listed and (b) tests reports from independent testing laboratory giving data proving to the satisfaction of the Engineer the system is capable of achieving minimum yield strength of embedment steel.

# C. The anchoring material shall have the following properties:

Compressive Strength	(ASTM D695)	17,000 psi
Tensile Strength	(ASTM D638)	5,510 psi
Tensile Modulus	(ASTM D638)	1.14 x 10 <sup>6</sup> psi
Flexural Modulus	(ASTM D790)	1.06 x 10 <sup>6</sup> psi

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

# 2.03 PHYSICAL PROPERTIES

REINFORCING BAR	90% OF YIELD OF
DIAMETER (LBS)	REINFORCING BAR
4	10,800
5	16,740
6	23,760
7	32,400
8	42,660
9	54,000
10	68,580
1 1/4" diameter Cont. Coil Threaded Rod	45,000

# PART 3 EXECUTION

# 3.01 <u>APPLICATION</u>

- A. Basic steps for Adhesive Anchors are:
  - 1. Clean the area around the hole to be drilled.
  - 2. Drill hole in concrete to required depth.
    - a. Extreme caution shall be taken in order that existing reinforcing steel is not damaged. Any reinforcing steel damaged shall be corrected at Contractor's expense.
  - b. Holes shall be drilled with vacuum air drills using hollow drill bits.
  - c. The holes shall be vacuum cleaned during drilling with air vacuumed through the hollow bits.
  - d. The holes shall be horned out by use of a stiff mechanic's or metal bristle brush in order to add roughness to the sidewall.
  - e. At the completion of drilling and after drill is removed, full penetration air "blowout" and vacuuming shall be used to perform the final "clean-out" of hole.
  - 3. Mixing Anchoring Material and Placement of Reinforcement Steel or Threaded Rod:
    - a. Pour hardening powder from its container into resin. Hand mix by stirring vigorously for 60 seconds. Then pour into the bottom half of several clean, drilled holes. The holes may be damp but may not have running or standing water present.

- b. The anchors are pushed to the bottom of the holes and rotated to be sure of total "wetting".
- c. If horizontal hole is used, use polypropylene disposable gun that will reach to base of hole in order to insert anchoring material. For horizontal holes across cut stoppers shall also be used to prevent loss of anchoring material.
- d. They are left undisturbed until gel occurs, which happens within minutes to approximately one hour depending on the temperature at the time of installation.
- e. After the material has cooled, it will have 50 to 60 percent of its ultimate strength.
- B. Make sure that all material is installed using manufacturer's recommended equipment and in strict accordance with manufacturer's recommendations.

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

# 4.01 <u>METHOD OF MEASUREMENT</u>

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

# 4.02 <u>BASIS OF PAYMENT</u>

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