



TOWN OF VIENNA, VIRGINIA

**WOLFTRAP CREEK STREAM RESTORATION
CONTRACT NUMBER: IFB 17-12**

INVITATION FOR BID

IFB NUMBER: IFB 17-12

IFB SUBJECT: WOLFTRAP CREEK STREAM RESTORATION – PHASE II

BID DUE DATE: December 21, 2016 at 11:00 AM

PUBLIC OPENING: OFFICE OF THE PURCHASING AGENT
127 CENTER STREET, SOUTH
VIENNA, VIRGINIA 22180

All inquiries should be made, in writing, to Gina Gilpin, Purchasing Agent, at ggilpin@viennava.gov by **December 16, 2016 AT 2:00 PM.** Questions received after the deadline may not be answered.

NOTICE TO RECIPIENT

Your name appears on the Town of Vienna bidders listing or has been identified as a potential bidder desiring to receive Invitations for Bid for the commodity/service named above. Failure to respond to this invitation with either a bid proposal or a "no bid" may result in the removal of your firm's name from the referenced commodity/service listing. If "no bid", state the reason and return the bid form to the Purchasing Agent.

PURPOSE:

This project is for the construction of approximately 1,040 feet of stream restoration of the Wolftrap Creek. The work shall include the following: Stream restoration, clearing, tree removal, eradication of invasive plant species, trees, shrubs, erosion and sediment control, and site restoration. The proposed stream restoration work has been designed to Natural Channel Design (NCD) standards.

On the above date and at the time specified, bids so received will be publicly opened and read aloud.

This IFB may be downloaded from the Town's website at: www.viennava.gov

The drawings can be found online at: <https://www.viennava.gov/index.aspx?NID=1185> and are incorporated by reference.

The Town of Vienna reserves the right to reject any and all bids or to accept the bid(s) which, in its judgment, will be for its best interest.

NO BID MAY BE WITHDRAWN FOR A PERIOD OF SIXTY (60) DAYS SUBSEQUENT TO THE DATE OF THE BID OPENING.

Any bid may be withdrawn PRIOR to the scheduled time for bid opening or authorized postponement thereof.

Envelopes shall be clearly marked on the outside, "SEALED BID" and show the IFB number, IFB subject, opening time, opening date, and Contractor's Registration Number (if applicable).

TOWN OF VIENNA

IFB 17-12

WOLFTRAP CREEK STREAM RESTORATION

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OFFICIAL TOWN BID FORM

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SECTION A

INFORMATION FOR BIDDERS

A-1. SUBMISSION OF BIDS AND BID OPENING

- A. Bids will be received by the Town of Vienna, Virginia (Town) and will be opened and read at the times and places set forth in the Advertisement for Bid. Pre-qualified bidders, or their representative, and other interested persons may be present at the opening of proposals.
- B. Bidders must use the attached Official Bid Form to submit their bid. All bids must show unit price, if applicable, and total price. **All bidders must return ONE (1) original and ONE (1) copy of the Official Bid Form as well as any issued addendums or any other documentation considered to be part of the Bid Package. KEEP A COPY OF THE IFB FOR YOUR FILES AND DO NOT SUBMIT IT WITH THE BID PACKAGE.** By signing the Official Bid Form, the bidder acknowledges they have read this solicitation, understand it, and agree to be bound by its terms and conditions. Bids may be submitted by mail or delivered in person.
- C. The signed bids must be returned in a sealed envelope and identified as follows: "SEALED BID", show the IFB number, IFB subject, opening time, opening date, and bidder's name and address. The bids must be received at the following location before date and time specified:
- Vienna Town Hall
Office of the Purchasing Agent
127 Center Street S
Vienna, VA 22180
- D. The Bidder shall assume full responsibility for timely delivery at the location designated for receipt of Bids. **BIDS RECEIVED AFTER THE DATE OR TIME OF OPENING WILL NOT BE CONSIDERED FOR CONTRACT AWARD AND SHALL BE RETURNED TO THE BIDDER.**

Bidders are reminded that changes to the IFB, in the form of addenda, are often issued between the issue date and within three business (3) days before the closing of the IFB. Bidders are solely responsible for checking the Town website to insure that they have the most current information regarding the IFB.

A-2. BIDDING DOCUMENTS

- A. Bidding Documents include the, Information for Bidders, Form of Bid, the Bid Bond and the proposed Contract Documents, including any Addenda issued prior to receipt of bids. All requirements and obligations of the Bidding Documents are hereby incorporated by reference into the Contract Documents and are binding on the Successful Bidder upon Award of the Contract.
- B. Bidders may obtain complete sets of the Bidding Documents from the issuing office designated in the Advertisement for Bid in the number and for the price, if any, stated therein.

- C. Bidders shall use complete sets of Bidding Documents in preparing Bids; the Town shall not assume any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- D. The Town in making copies of the Bidding Documents available on the above terms does so only for the purpose of obtaining Bids on the Work and does not confer a license or grant for any other use.

A-3. DEFINITIONS

- A. THE BID: A Bid is a complete and properly signed proposal to do the Work or designated portion thereof for the sums stipulated therein, submitted in accordance with the Bidding Documents.
- B. BASE BID: The Base Bid is the sum stated in the Bid for which the Bidder offers to perform the Work described in the Bidding Documents as the base, to which work may be added or from which work may be deleted for sums stated in Alternate Bids, if any.
- C. ALTERNATES: An Alternate Bid (or Alternate) is an amount stated in the Bid to be added to or deducted from the amount of the Base Bid if the corresponding change in the Work, as described in the Bidding Documents, is accepted.

A-4. QUALIFICATION OF BIDDER

- A. VDOT Prequalified Contractors and/or Subcontractors are required for this project. Prequalification of Contractors and/or Subcontractors shall be in accordance with VDOT Road and Bridge Specifications, Section 102. The Successful Bidder shall perform at least that percentage of the Work specified in Article 7 of the Town-Contractor Agreement, with forces that are in the direct employment of the Contractor's organization. If requested by the Town, prior to the signing of the contract, the successful Bidder shall submit a statement of work to be performed by his own forces.
- B. Prior to Contract award or within seven (7) days of the Town's request to do so, the successful Bidder shall be prepared to demonstrate that his present organization, direct labor force and prior work experience is of adequate size and development to maintain responsible control of the project and to schedule, coordinate and perform the Work in an expeditious manner and in accordance with the Contract Documents.
- C. Bidders, whether residents or nonresidents of Virginia, will be required to show evidence of a certificate of registration as required by Chapter 11 of Title 54.1 of the Code of Virginia prior to the award. Bidders do not, however, need to show such evidence prior to bidding. If a bid is \$70,000 or more, or if the Contractor's annual volume is \$500,000 or more, the Contractor must be licensed as a "Class A Contractor". If a bid is \$7,500 or more but less than \$70,000, the Contractor must be licensed as at least a "Class B Contractor".
- D. The Town will consider, in determining the qualifications of a Bidder, his record in the performance of any contracts for the construction work into which he may have entered with the Town or with such public bodies or corporations. The Town expressly reserves the right to reject the bid of any Bidder if such record discloses that such Bidder, in the opinion of the Town, has not properly performed such contracts or has habitually and without just cause neglected the payment of bills, or has otherwise disregarded his obligations to subcontractors, material men, suppliers or employees.
- E. The Town may make such investigation as he deems necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to the Town all such information and

data for his purpose as he may request. The Town reserves the right to reject any bid if the evidence submitted by, or investigation of such Bidder, fails to satisfy the Town that such Bidder is a responsive and responsible Bidder in accordance with the criteria set forth herein. Conditional bids will not be accepted.

A-5. BIDDER'S REPRESENTATIONS

Each Bidder, by submitting his Bid, represents that:

- A. He has read and understands the Bidding Documents and his Bid is made in accordance therewith; and Bidder agrees to be bound by the terms and requirements set forth in the Bidding and Contract Documents;
- B. He has visited the site, has familiarized himself with the local conditions under which the Work is to be performed in accordance with Article A-8 and has correlated his observations with the requirements of the proposed Contract Documents;
- C. His Bid is based upon the materials, systems and equipment required by the Bidding Documents without exception; and
- D. He has the capability, in all respects, and the moral, ethical and business integrity, reliability, technical ability, financial resources, plant, management, superintendents, equipment and materials which will assure effective and efficient good faith performance in full compliance with the Contract Documents and with any and all schedules and Milestone and Completion dates required by the Town. The Bidder acknowledges and represents that he has made allowances for normal inclement weather indigenous to the Project Site, in his estimating, planning and scheduling of the Work. The Bidder further acknowledges that the Contract Documents are, in his opinion, appropriate and adequate for completing this project and for the construction of sound and suitable Work. The Bidder hereby certifies that the Work shall be completed, in place, in full accordance with the Contract Documents, within the time limits specified.

A-6. BID SECURITY

- A. Each bid must be accompanied by (1) cash; or (2) a Cashier's Check or a Certified Check of the Bidder made payable to the Town of Vienna; or (3) a bidder's bond on the Bid Bond Form provided herein or on a similar form which in every respect materially complies with said Bid Bond form. The amount of this bid security will be 2½% of the bid amount for bids of \$100,000 or less, and 5% of the bid amount for bids greater than \$100,000. For purposes of this provision, the amount of the bid shall be the Base Bid plus all positive amount alternates. The bidder's bond shall be issued by a surety company licensed to conduct business in Virginia and acceptable to the Town.
- B. Said bid security is given as a guarantee that the Bidder will enter into a contract if awarded the Work and, in the case of refusal or failure to so enter into said contract, the security shall be declared forfeited to the Town. Such security shall be returned to all but the three lowest Bidders within three days after the opening of bids and the remaining security will be returned within 48 hours after the Town and the successful Bidder have executed the Contract. If no Contract has been awarded or the Bidder has not been notified of the acceptance of his bid, within forty-five (45) days of the bid opening, the Bidder may withdraw his bid and request the return of his bid security. If, at the Town's request, the Bidder agrees to extend and maintain his bid beyond the specified 45 days, his bid security will not be returned.
- C. The Bidder's Cash, Certified or Cashier's Check or Bid Bond shall be accompanied by a written guarantee by a surety company licensed to do business in Virginia and acceptable to the Town,

that in the event a contract is awarded to the Bidder, said surety will furnish the required Performance, Labor and Material Payment and Guarantee Bonds, as required herein.

A-7. LIQUIDATED DAMAGES

The Successful Bidder, upon his failure or refusal to execute the Contract within fifteen (15) days after he has received notice of the acceptance of his bid, shall forfeit to the Town the security deposited with his bid, as liquidated damages for such failure or refusal.

A-8. SITE CONDITIONS AND CONDITIONS OF WORK

- A. Each Bidder must acquaint himself thoroughly as to the character and nature of the Work to be done. Each Bidder furthermore must make a careful examination of the site of the Work and inform himself fully as to the difficulties to be encountered in the performance of the Work, the facilities for delivering, storing and placing materials and equipment, and other conditions relating to construction and labor.
- B. Except where subsurface and/or latent conditions at the site are determined in accordance with paragraph 11.9 of the General Conditions to be materially different than those shown on the drawings or indicated in the contract documents, the Successful Bidder, assumes all risk as to the nature and behavior of the soil or subsurface conditions which underlie the Work or is adjacent thereto, or difficulties that may be due to any unfavorable conditions that may be encountered in the Work, whether apparent on surface inspection or disclosed after construction begins.
- C. No plea of ignorance of conditions that exist prior to submission of bids, or may hereafter exist on the site of the Work subsequent to the Notice to Proceed, or difficulties that may be encountered in the execution of the Work, as a result of failure to make necessary investigations and examinations, will be accepted as an excuse for any failure or omission on the part of the successful Bidder to fulfill in every detail all the requirements of the Contract Documents and to complete the Work for the consideration set forth therein, or as a basis for any claim whatsoever.
- D. Insofar as possible, the Successful Bidder, in carrying out his Work, must employ such methods or means as will not cause interruption of or interference with the Work of the Town or any separate contractor.

A-9. BIDDER'S QUESTIONS, ADDENDA AND INTERPRETATIONS

- A. Bidders and Sub-bidders shall promptly notify the Town of any ambiguity, inconsistency or error which they may discover upon examination of the Bidding and Contract Documents or of the site and local conditions. No interpretation of the meaning of the drawings, specifications or other contract documents will be made to any Bidder orally.
- B. Every request for such interpretation should be in writing addressed to the Purchasing Agent, Vienna, Virginia, and to be given consideration must be received at least seven (7) days prior to the date fixed for the opening of the bids.
- C. Any and all such interpretations and any supplemental instructions will be in the form of written addenda to the Bidding Documents which, if issued, will be mailed to all prospective Bidders (at the respective addresses furnished for such purposes) not later than three (3) calendar days prior to the date fixed for the opening of bids. The Town will not be responsible for any other explanations or interpretations of the proposed documents. Failure of any Bidder to receive any such addendum or interpretation shall not relieve any Bidder from any

obligation under his bid as submitted. All addenda so issued shall become part of the Contract Documents.

- D. If the Bidder (or any person bidding to Bidder and/or subsequently in contract with the Bidder, relating to the subject project) knows, or should have known, that an ambiguity, discrepancy, error, omission or conflicting statement exists in the Bidding or Contract Documents, said Bidder (or sub-bidder) has an obligation to seek a clarification thereof from the Town prior to bid. The Town will welcome such a clarification request, and, if deemed necessary by the Town, the Town will issue a written addendum clarifying the matter in question. Should the Bidder fail to seek such a clarification prior to bid, Bidder thereby assumes the risk of loss related to such ambiguity, discrepancy, error, omission or conflicting statement which the Bidder (and any person bidding to Bidder and/or subsequently in contract with Bidder, relating to the subject project) knew or should have known existed at the time of bid.
- E. Each Bidder shall ascertain prior to submitting his bid that he has received all Addenda issued, and he shall acknowledge receipt and inclusion in his proposal of all Addenda.

A-10. PERFORMANCE AND PAYMENT BOND

The following bonds or surety shall be delivered to the Purchasing Agent within ten (10) days of notification of award and PRIOR to the commencement of any work and shall become binding on the parties upon the execution of the Contract:

A performance bond satisfactory to the Town, executed by a surety company authorized to do business in Virginia or otherwise secured in a manner satisfactory to the Town, for the faithful performance of the Contract in strict conformity with the plans, specifications and conditions of the Contract Documents. The bond shall be in an amount equal to 100% of the price specified in the contract; and a payments bond satisfactory to the Town, executed by a surety company authorized to do business in Virginia or otherwise secured in a manner satisfactory to the Town, for the protection of all persons supplying labor and material to the contractor or its subcontractors for the performance of the work provided for in the Contract Documents. Labor and materials shall include public utility services and reasonable rentals of equipment, but only for the periods when the equipment rented is actually used at the site. The bond shall be in an amount equal to 100% of the price specified in the contract.

A prime contractor shall not be precluded from requiring each subcontractor to furnish a payment bond with surety thereon in an amount equal to 100% of the contract with such subcontractor.

A-11. CONTRACT PERIOD

- 1. The period of this contract shall be from the date of award and shall be in effect until work is **completed and accepted** by the Town. The Contractor shall complete all work within 210 calendar days.

A-12. TIME FOR COMPLETION AND LIQUIDATED DAMAGES FOR NON-COMPLETION

The time for completion of this Contract and liquidated damages for non-completion within the stipulated time shall be as fixed in the Town-Contractor Agreement.

A-13. LOCATION OF WORK

Wolftrap Creek from Follin Lane crossing upstream to the Town line.

A-14. LIABILITY INSURANCE AND WORKMEN'S COMPENSATION

The Successful Bidder will be required to carry public liability and workmen's compensation and other insurance in the amounts and under the terms stipulated under Article II of the General Conditions.

A-15. BIDDERS REFERRED TO LAWS

- A. The attention of Bidders is called to the provisions of all Municipal, County and State laws, regulations, ordinances and resolutions, including but not limited to, the Virginia Human Rights Act; the Equal Opportunity, Small and Minority Business Enterprises and the Construction Safety Resolutions; as well as laws, regulations, ordinances, resolutions and permits relating to obstructing streets, maintaining signals, storing and handling of explosives, or affecting the Bidder, or his employees or his Work hereunder in his relation to the Town or any other person. The Bidder shall obey all such laws, regulations, ordinances, permits or resolutions controlling or limiting Contractors while engaged in the prosecution of Work under this Contract.
- B. The provisions of this Contract shall be interpreted in accordance with the laws of Virginia and in accordance with the laws, ordinances, regulations, permits and resolutions of the Town of Vienna.

A-16. TAXES

All applicable Federal, State and Local Taxes shall be included in the Bidder's proposal.

A-17. RIGHT TO REJECT BIDS

The Town expressly reserves the right to reject any or all bids, to waive any informalities or irregularities in the bids received, and to accept that bid which in its judgment, best serves the interest of the Town.

A-18. EQUAL PRODUCTS AND SUBSTITUTIONS

- A. Unless otherwise provided in the Contract Documents, the naming of a certain brand, make, manufacturer or article, device, product, material, fixture, form or type construction by name, make or catalog number, shall convey the general style, type, character and standard of quality of the article desired and shall not be construed as limiting competition. Any Bidder, in such cases, may, with Town approval, use any article, device, product, material, fixture, form or type of construction which in the judgment of the Town is equal to that specified considering quality, workmanship, economy of operation, suitability for the purpose intended, and acceptability for use on the project. Approval by the Town prior to bid opening will be in the form of an Addendum to the Specifications issued to all prospective Bidders indicating that the additional makes or brands are equivalent to those specified.
- B. Equal Products and Substitutions Prior to Bid Opening
 - 1. To obtain such approval on makes or brands of material other than those specified in Contract Documents, the Bidder shall submit his requests with adequate supporting technical data, as required below, to the Town not less than ten (10) days before the bid opening;
 - 2. The Bidder's request for approval of any equal product or substitution shall include:

- a. Itemized comparison of proposed equal product or substitution with product or method specified;
 - b. Product identification, including manufacturer’s name, street address, email address if applicable and phone number;
 - c. Manufacturer’s literature showing complete product description, performance and test data, and all reference standards;
 - d. Samples and colors in the case of articles or products;
 - e. Name and address of similar projects on which the product was used and date of installation;
 - f. For construction methods, include a detailed description for proposed method and drawings illustrating same, and
 - g. A certification form, notarized prior to bid, entitled “Bidder’s Request for Equal Product or Substitution and Bidder’s Representations”, contained in the Form of Bid. If approved by an Addendum, said form shall be resubmitted by the Bidder and all other Bidders that desire to use the same product or substitution in their Bid packages, at the time of bid.
- C. The decision of the Town regarding the approval of items as equal products or substitutions will be final.
- D. No change in brand or make from the originally specified item or approved equal product or approved substitution will be permitted unless satisfactory written evidence is presented to and approved by the Town.
- E. The Bidder may request approval for equal products or substitutions after award of the Contract in accordance with the provisions of Article 4 of the General Conditions.
- F. Equal products or substitutions will not be considered for approval by the Town prior to or after award of the Contract if acceptance of the proposed equal product or substitution will require substantial design revisions to the Contract Documents or is otherwise not acceptable to the Town.
- G. Equal products or substitutions will not be considered for approval by the Town after award of the Contract if the proposed item is indicated or implied on shop drawings or product data submittals and has not been formally submitted for approval by the Bidder in accordance with the above-stated requirements.
- H. Bidders, other than the bidder who requested a particular equal product or substitution, that choose to utilize that equal product or substitution, as approved by addendum, shall comply with the submittal requirements of Article A-17 subparagraph B.2.g herein. All provisions herein and in the General Conditions regarding the use of said equal product or substitution shall apply to all Bidders who choose to utilize said equal product or substitution.

A-19. PREPARATION AND SUBMITTAL OF FORM OF BID

- A. Bids shall be submitted utilizing the Form of Bid as found herein, or otherwise provided with the Contract Documents, and shall be complete in every respect. The total bid amount shall be entered in words and figures in the appropriate spaces provided. Where applicable, the unit price or lump sum items, and their extensions, shall be entered in figures in the respective columns provided for each bid item. All entries shall be typewritten or legibly printed in ink. The signatures of all persons shall be in longhand. Any entry of amount that appears on the face of the bid to have involved an erasure, deletion, white-out and/or substitution or other

such change or alteration, shall show by them the initials of the person signing the bid and the date of the change or alteration. A failure to comply with this requirement may be cause for disqualification of the bid.

- B. For Unit Price bids, in the event of any discrepancies between the unit prices and the extensions thereof or the total bid amount, the unit prices shall govern. For Lump Sum bids, in the event of a discrepancy between the bid amount in writing and that in figures, the written value shall govern.
- C. Bids shall not contain any restatement or qualifications of Work to be done. Alternate bids will not be considered unless specifically called for. No oral, telegraphic or telephonic bids or modifications will be considered.
- D. Bids shall be delivered to the Town on or before the day and until the beginning of the hour set for the receipt of bids, enclosed in a sealed envelope and bearing the Solicitation number (IFB or RFP), title of the Work, name of Bidder and Bidder's registration number.
- E. The Bidder will complete Section G - FORM OF BID in the following manner:
 - 1. Sheet G-1
 - a. At "From": Enter name and legal address of firm submitting bid,
 - b. Item A: Enter the total amount of the bid in words and figures,
 - 2. Sheet G-2
 - Item D: Enter date of receipt of addenda and initial as indicated thereon,
 - 3. Sheet G-3
 - a. Item H.1: Enter full legal name of the firm. Indicate type of business entity in subparagraph a, b or c,
 - b. Item H.2: Insert Bidder Virginia State Registration Number and Class of licensure, "A" or "B",
 - c. Item H.3: Fill in signature, name (typewritten or legibly printed), title or position of principal signing the bid, and date of signature and affix Corporate Seal along the right hand margin,
 - d. Item I: Fill in all names and addresses of individuals interested as principals in this proposal,
 - 4. Sheet G-4 and G-5
 - The enclosed Bid Bond Form is to be filled in completely, signed, sealed and notarized by both the Principal and the Surety and the appropriate Power(s) of Attorney attached,
 - 5. Sheet G-6
 - a. Enter the name and address of the Bidding Firm,
 - b. List all safety violations, as described in Article A-22 herein,
 - c. The Principal shall sign the Certification and affix the Corporate Seal,
 - d. The signature of the Principal shall be attested by an appropriate Notary,
 - 6. Sheet G-7
 - The appropriate Acknowledgment of Principal of Bidder, must be fully completed and notarized with the Notarial Seal affixed,

7. Sheet G-8

The Small and Minority Business Data information form must be completed,

8. Sheet G-9

The Contract Bond Certification shall be filled out and signed by the Bidder's Surety,

9. Sheet G-10 and G-11 (if applicable)

All Bidders that desire to utilize an equal product or other substitution which has been approved in an Addendum shall submit this form for each separate substitution, notarized, at the time of bid submittal,

10. Sheet(s) G-12-15 (if applicable)

Form of Bid form must be completed in full and executed. If applicable the form(s) attached for Alternate Bids and/or Unit Prices must be completed in full.

A-20. MODIFICATION OR WITHDRAWAL OF BID

- A. A Bidder may withdraw his bid from consideration if the price bid was substantially lower than the other bids due solely to a mistake therein, provided the bid was submitted in good faith, and the mistake was a clerical mistake as opposed to a judgment mistake, and was actually due to an unintentional arithmetic error or an unintentional omission of a quantity of Work, labor or material made directly in the compilation of a bid, which unintentional arithmetic error or unintentional omission can be clearly shown by objective evidence drawn from inspection of original Work papers, documents and materials used in the preparation of the bid sought to be withdrawn. The Bidder shall give notice in writing of his claim of right to withdraw his bid within two (2) business days after the conclusion of the bid opening procedure and shall submit original Work papers with such notice.

Work papers, documents, and materials submitted in support of a withdrawal of bids may be considered as trade secrets or proprietary information.

- B. Prior to the time and date designated for receipt of bids, any bid submitted may be modified or withdrawn by notice to the party receiving bids at the place designated for receipt of bids. Such notice shall be in writing over the signature of the Bidder.
- C. Withdrawn bids may be resubmitted up to the time designated for the receipt of Bids provided that they are then fully in conformance with this Information for Bidders.
- D. Bid security, if any is required, shall be in an amount sufficient for the bid as modified or resubmitted.
- E. A decision denying withdrawal of bid pursuant to Article A-19A herein shall be final and conclusive unless the Bidder institutes legal court action within ten (10) days after receipt of the decision.
- F. If it is determined by the Courts that the decision refusing withdrawal of the bid was arbitrary or capricious, the sole relief shall be withdrawal of the bid and return of his bid security.

A-21. NONCONFORMING TERMS AND CONDITIONS

If the bidder submits alternate terms and conditions with the bid that do not conform to the terms and conditions in this solicitation, the bid is subject to rejection as non-responsive. The Town reserves the right to permit the bidder to withdraw nonconforming terms and conditions from its

bid prior to a determination by the Town of non-responsiveness as a result of the submission of nonconforming terms and conditions.

A-22. EXCEPTIONS

Bidders taking exception to any part or section of this solicitation, including, by way of illustration and limitation, the Specifications, General Terms and Conditions, the Mandatory Terms and Conditions, and any attachments or references hereto, shall indicate such exceptions on the Bid Forms. Failure to indicate any exceptions shall be interpreted as the bidder's intent to fully comply with the solicitation as written. However, conditional or qualified bids with such exceptions, unless specifically allowed in the solicitation, are subject to rejection in whole or in part as non-responsive.

A-23. CONSTRUCTION SAFETY

A. It shall be required that each bid submitted to the Town for a contract for construction, alteration, and/or repairs, including painting or decorating of a building, highway, street, bridge, sidewalk, culvert, sewer, excavation, grading, or any other construction, include a list of all the following actions which have become final in the three years prior to the bid submission:

1. Willful violations, violations for failure to abate, or repeated violations, for which the bidder was cited by (a) the United States Occupational Safety and Health Administration; (b) the Virginia Department of Labor and Industry; or (c) the occupational safety and health plan for any other state; or
2. Three (3) or more serious construction safety violations for which the bidder was cited by the (a) United States Occupational Safety and Health Administration; or (b) the Virginia Occupational Safety and Health Administration; or (c) the occupational safety and health plan from any other state.
3. Termination of a contract between the Contractor and the Town by the purchasing agent or his designee for safety violations.

If the bidder has not received or been the subject of any such violations in the three (3) years prior to the bid submission, then the bidder shall so indicate by certification on the bid form entitled Certification of Safety Violations. The bidder will also indicate on this form each state in which Work was performed in the three (3) years prior to the bid submission.

B. No Town construction contract, as discussed above, may be bid on by any bidder or contractor who has been the subject of any citations for the type and number of violations listed in aforementioned paragraph A, which have become final within the three (3) years prior to the bid submission.

1. Notwithstanding the language of paragraph B, above, any bidder or contractor who has been the subject of a violation, as described heretofore in paragraph A, which has become final in the three (3) years prior to the bid submission, may bid, after a mandatory twelve (12) months from the date the violation became final, if the bidder or contractor meets the eligibility criteria set forth in paragraph D, below.
2. Notwithstanding the language of paragraph B, above, any bidder or contractor who has been the subject of the type and number of violations as described in paragraph A(2), which have become final within three (3) years prior to bid submission, may bid, after a mandatory waiting period of twelve (12) months from the date the last such violation became final, if the bidder or contractor meets the eligibility criteria in paragraph D, below.

3. Notwithstanding the language of paragraph B, above, any bidder or contractor who has previously been terminated from a Town contract, as described in paragraph A(3), within three (3) years prior to the bid submission, may bid, after a mandatory waiting period of twelve (12) months from the date of termination, if the bidder or contractor meets the eligibility criteria in paragraph D, below.
- C. Prior to bidding on a project, under the provisions of paragraph B, above, a Contractor may request that a determination be made by the Town, regarding its eligibility to submit a bid on a contract under the terms of this resolution. However, this request for determination and any subsequent adjudication process must be completed prior to submitting a bid on any project and the request for determination must be received no later than twenty-one (21) days before bids are due unless otherwise stated in the Advertisement for Bid.
 - D. The criteria used by the Town in reviewing the corrective action taken by a bidder or Contractor to prevent the recurrence of safety violations shall include but not be limited to the following:
 - Does the firm have an established safety program? If so, how long has it been in existence?
 - Does the firm incorporate safety and health related issues into their new employee orientation programs?
 - Does the firm include work safety as a part of an employee's performance evaluation?
 - To what degree does senior/corporate management support safety related matters? Does the firm have a safety policy statement signed by a member of senior/corporate management?
 - Does the firm have a full time Safety Manager? Does this person report to a high level, authoritative position within the Company?
 - Are safety inspections conducted at work sites? If so, how often & by whom?
 - Are safety training programs conducted for employees? If so, how often and by whom?
 - Are safety meetings conducted on site by the firm? If so, how frequently?
 - Does the firm have a visibly active safety committee? If so, how often does it meet? Who serves on the committee?
 - Is the firm an active member of a recognized construction safety organization in the Washington Metropolitan area, or in the state of contractor's domicile?
 - What is the firm's Workers Compensation Experience Modification Factor? Are there any evident trends?

The determination rendered by the Town shall be final unless it is appealed in accordance with the provisions of the solicitation.

- E. It shall be a condition of each Town construction contract, as discussed above, that no Contractor or Subcontractor contracting for any part of the contract Work shall require any laborer, mechanic, or other person employed in the performance of the contract to work in surroundings or under working conditions which are hazardous or unnecessarily dangerous to his safety as determined under construction safety standards promulgated by the U.S. Department of Labor or the Virginia Department of Labor and Industry.
- F. No contractor awarded a Town construction contract shall knowingly employ or contract with any person, company, or corporation for services pursuant to that contract if such person, company or corporation could not have been awarded such contract due to the restrictions in paragraph B, above.

A-24. AWARD OF CONTRACT

The Town will make an award on a unit price basis to the lowest responsive and responsible Bidder. Due consideration will be given to price, quality as judged by tests and previous experience, and the ability of the Bidder to render required services. The Town reserves the right to conduct any test it may deem advisable and to make all evaluations. The Town also reserves the right to reject any or all bids, in whole or in part, to waive informalities and to delete items prior to making the award, whenever it is deemed in the sole opinion of the Town to be in its best interest.

- A. The Purchasing Agent or her designee, shall have the authority to waive informalities in bids, reject all bids, parts of all bids, or all bids for any one or more goods or services included in a solicitation when in her judgment the public interest may be served thereby. If separate bids are received for the same total amount or unit price (including authorized discounts and delivery times) and if the public interest will not permit the delay of re-advertisement for bids, the Purchasing Agent or her designee, is authorized to award that is deemed to be in the best interest of the Town of Vienna.
- B. The Lowest Bidder is determined by the aggregate amount of the prices set forth in the Form of Bid, plus any Alternates selected by the Town.
- C. A Responsive Bidder shall mean a Bidder who has submitted a Bid which conforms, in all material respects, to the Bidding Documents.
- D. A Responsible Bidder shall mean a Bidder who has the capability, in all respects, to perform fully the Contract requirements and the moral, ethical and business integrity and reliability which will assure good faith performance. In determining responsibility, the following criteria will be considered:
 - 1. The ability, capacity and skill of the Bidder to perform the contract or provide the service required;
 - 2. Whether the Bidder can perform the contract or provide the service promptly, or within the time specified, without delay or interference;
 - 3. The character, integrity, reputation, judgment, experience and efficiency of the Bidder;
 - 4. The quality of performance during previous contracts or services. For example the following information will be considered:
 - a. The administrative and consultant cost overruns incurred by Towns on previous contracts with Bidder,
 - b. The Bidder's compliance record with Contract General Conditions on other projects,
 - c. The submittal by the Bidder of excessive and/or unsubstantiated extra cost proposals and claims on other projects,
 - d. The Bidder's record for completion of the Work within the Contract Time or within Contract Milestones and Bidder's compliance with scheduling and coordination requirements on other projects,
 - e. The Bidder's demonstrated cooperation with the Town, A/E and other contractors on previous contracts,
 - f. Whether the work performed and materials provided on previous contracts was in accordance with the Contract Documents;
 - 5. The previous and existing compliance by the Bidder with laws and ordinances relating to contracts or services;

6. The sufficiency of the financial resources and ability of the Bidder to perform the contract or provide the service;
7. The quality, availability and adaptability of the goods or services to the particular use required;
8. The ability of the Bidder to provide future maintenance and service for the warranty period of the contract;
9. Whether the Bidder is in arrears to the Town on debt or contract or is a defaulter on surety to the Town or whether the Bidder's taxes or assessments are delinquent;
10. Such other information as may be secured by the Director of Public Works or his designee, having a bearing on the decision to award the contract, to include, but not limited to:
 - a. The ability, experience and commitment of the Bidder to properly and reasonably plan, schedule, coordinate and execute the Work,
 - b. Whether the Bidder has ever been debarred from bidding or found ineligible for bidding on any other projects.
- E. The purpose of the above is to enable the Town of Vienna, in its opinion, to select the bid which is in the best interests of the Town. The ability of the low Bidder to provide the required bonds will not of itself demonstrate responsibility of the Bidder.
- F. The Town reserves the right to require from the Bidder: (1) submissions of references, within seven (7) days of bid opening, to include a listing of previous and current projects and (2) financial statements indicating current financial status, prepared in accordance with generally accepted accounting principles, by a CPA licensed to do business in Virginia.
- G. The Town reserves the right to defer award of this contract for a period of sixty (60) days after the due date of bids. During this period of time, the Bidder shall guarantee the prices quoted in his bid.

A-25. APPEAL OF DETERMINATION OF NONRESPONSIBILITY

- A. Any Bidder who, despite being the apparent low bidder, is determined not to be a responsible Bidder for a particular Town contract shall be notified in writing by the Purchasing Agent. Such notice shall state the basis for the determination, which shall be final unless the Bidder institutes legal court action within ten (10) days of receipt of the notice.
- B. If it is determined by the Courts that the decision of the Purchasing Agent, was arbitrary or capricious, or otherwise in error and the award for the particular Town contract in question has not been made, the sole relief available to the Bidder shall be a finding that the Bidder is a responsive or responsible Bidder for the Town contract in question. Where the award has been made and performance has begun, the Town may declare the contract void upon a finding that this action is in its' best interest. Where a contract is declared void, the performing contractor shall be compensated for the cost of performance up to the time of such declaration. In no event shall the performing contractor be entitled to lost profits.

A-26. PROTEST OF AWARD OR DECISION TO AWARD

- A. Any Bidder or offeror may protest the award or decision to award a contract by submitting a protest in writing to the Purchasing Agent or his designee, or other official designated by the Town of Vienna, no later than ten (10) days after the award or the announcement of the decision to award, whichever occurs first; provided, however, that no protest shall lie for a claim that the selected Bidder or offeror is not a responsible Bidder or offeror. The written

protest shall include the basis for the protest and the relief sought. The Purchasing Agent, shall issue a decision in writing within ten (10) days of the receipt of the protest stating the reasons for the action taken. This decision shall be final unless the Bidder or offeror institutes legal court action in the Town of Vienna within ten (10) days of receipt of the written decision.

- B. If prior to award it is determined that the decision to award is arbitrary or capricious, then the sole relief shall be a finding to that effect. The Purchasing Agent or her designee, shall cancel the proposed award or revise it to comply with the law. If, after an award, it is determined that an award of a contract was arbitrary or capricious, then the sole relief shall be as hereinafter provided. Where the award has been made but performance has not begun, the performance of the contract may be declared void by the Town. Where the award has been made and performance has begun, the Purchasing Agent or her designee may declare the contract void upon a finding that this action is in the best interest of the Town. Where a contract is declared void, the performing contractor shall be compensated for the cost of performance at the rate specified in the contract up to the time of such declaration. In no event shall the performing contractor be entitled to lost profits.
- C. Pending final determination of a protest, the validity of a contract awarded and accepted in good faith in accordance with this article shall not be affected by the fact that a protest or appeal has been filed.
- D. An award need not be delayed for the period allowed a Bidder or offeror to protest, but in the event of a timely protest, no further action to award the contract will be taken unless there is a written determination that proceeding without delay is necessary to protect the public interest or unless the bid or offer would expire.

A-27. NEGOTIATION WITH LOWEST RESPONSIBLE BIDDER
INTENTIONALLY OMITTED

A-28. SUBCONTRACTING

If one or more subcontractors are required, the Contractor is encouraged to utilize small, minority-owned, and women-owned business enterprises. Upon contract award, the prime contractor agrees to make maximum effort to provide the names and addresses of each subcontractor, that subcontractor's status as defined by the Town of Vienna as a small, minority-owned and/or woman-owned business, and the type and dollar value of the subcontracted goods/services provided.

A-29. INTEREST IN MORE THAN ONE BID AND COLLUSION

Multiple bids received in response to a single solicitation from an individual, firm, partnership, corporation, affiliate, or association under the same or different names will be rejected. Reasonable grounds for believing that a bidder is interested in more than one bid for a solicitation both as a bidder and as a subcontractor for another bidder, will result in rejection of all bids in which the bidder is interested. However, a firm acting only as a subcontractor may be included as a subcontractor for two or more bidders submitting a bid for the work. Any or all bids may be rejected if reasonable grounds exist for believing that collusion exists among any bidders. Bidders rejected under the above provisions shall be disqualified if they respond to a re-solicitation for the same work.

A-30. EXPENSES INCURRED IN PREPARING PROPOSAL

The Town accepts no responsibility for any expense incurred by the bidder in the preparation and presentation of a bid, such expenses to be borne exclusively by the bidder.

A-31. NONAPPROPRIATION

All funds for payments by the Town under this Contract are subject to the availability of an annual appropriation for this purpose by the Town Council. In the event of nonappropriation of funds by the Town Council for the goods or services provided under this Contract or substitutes for such goods or services which are as advanced or more advanced in their technology, the Town will terminate the Contract, without termination charge or other liability to the Town, on the last day of the then current fiscal year or when the appropriation made for the then current year for the services covered by this Contract is spent, whichever event occurs first. If funds are not appropriated at any time for the continuation of this Contract, cancellation will be accepted by the Contractor on thirty (30) days prior written notice, but failure to give such notice shall be of no effect and the Town shall not be obligated under this Contract beyond the date of termination.

A-32. CONTRACT RENEWAL WITH PRICE ADJUSTMENTS NEGOTIATED UP TO CPI-U

N/A

A-33. COOPERATIVE PROCUREMENT

N/A

A-34. MODIFICATION OF CONTRACT:

The Town may, upon mutual agreement with the contractor, issue written modifications to the scope of work of this contract, and within the general scope thereof, except that no modifications can be made which will result in an increase of the original contract price by a cumulative amount of more than \$50,000.00 or 25% whichever is greater, without the advance written approval of the Mayor and Council. (Section 2.2-4309 of Virginia Public Procurement Act).

Should it become necessary for the best interest of the Town to make modifications, the same shall be covered by change order. The Contractor shall not begin work on any alteration requiring a change order until the written agreement, setting forth the changes/modifications, has been executed by the Town and the Contractor.

If a satisfactory agreement cannot be mutually agreed to for any item requiring a change order, the Town reserves the right to terminate the contract as it applies to the items in question and make such arrangements as may be deemed necessary to complete the work.

The Town may, in writing, omit from the work any item, other than major items, found unnecessary to the project and such omission shall not be a waiver of any condition of the contract nor invalidate any of the provisions thereof. Major items may be omitted by change order.

The Contractor shall be paid for all work done toward the completion of the item prior to such cancellation, alteration or suspension of the work by the Town.

A major item shall be construed to be any item, the total cost of which is equal to or greater than ten percent (10%) of the total; contract amount for each separate alternate, computed on the basis of the proposed quantity and the contract unit price.

A-35. INSURANCE

The Contractor shall provide the Purchasing Agent with a Certificate of Insurance PRIOR to the start of any work under the contract and agrees to maintain such insurance until the completion of the contract. The minimum limits of liability shall be:

Workers' Compensation -- Standard Virginia Workers' Compensation Policy

Broad Form Comprehensive General Liability--\$2,000,000.00.

Combined Single Limit coverage to include:

Premises - Operations; Products/Completed Operations;

Contractual; Independent Contractors; Towns and Contractors

Protective; Personal Injury (Libel, Slander, Defamation of Character, etc.)

Automobile Liability--\$500,000.00 Combined Single Limit.

The Town of Vienna, Virginia is to be named as an additional insured and this is to be so noted on Certificate of Insurance.

The policy shall be delivered to the Town of Vienna PRIOR to the commencement of any work.

A thirty (30) day written notice of cancellation or non-renewal shall be furnished by certified mail to the purchasing office at the address indicated on the solicitation.

My signature on this solicitation constitutes certification that, if I am awarded the contract, I shall obtain the required coverage as specified herein within ten (10) days of notification of award.

A-36. HOLD HARMLESS CLAUSE

Bids shall provide for the contractor holding harmless the Town of Vienna and representatives thereof from all suits, actions, or claims of any kind brought on account of any injuries or damages sustained by any person or property in consequence of any neglect in safeguarding contact work, or on account of any act or omission by the contractor or its employees, or from any claim or amounts arising or recovered under any law, bylaw, ordinance, regulation or decree.

A-37. LAWS AND REGULATIONS

The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the work.

The Contractors and Subcontractors shall comply with the Virginia Contractor's Registration Law, Title 54.1, Chapter 11, Code of Virginia (1950), as amended.

All non-resident Contractors and Subcontractors submitting bids on the work described herein shall register with the Department of Labor and Industry under the provisions of Subsection 40.1-30 of the Code of Virginia (1950), as amended.

This contract and all other contracts and subcontracts are subject to the provisions of Articles 3 and 5, Chapter 4, Title 40.1, Code of Virginia (1950), as amended, relating to labor unions and the "right to work", and all Contractors and Subcontractors, whether residents or non-residents of the Commonwealth, who perform work related to the project shall comply with all of said provisions.

The Contractor shall furnish the Town copies of affidavits upon request giving original dates, renewal dates and expiration dates of all labor contracts related to any phase of the work to be performed on the job site under this contract.

The provisions of all rules and regulations governing safety as adopted by the Safety Codes Commission of the Commonwealth of Virginia, issued by the Department of Labor and Industry under Title 40.1 of the Code of Virginia (1950), as amended, shall apply to all work under this contract.

A-38. CONTRACT RATES N/A

SECTION B MANDATORY TERMS, CONDITIONS AND SPECIFICATIONS

I. PURPOSE

Sealed bids are being solicited for construction of approximately 1,040 feet of stream restoration of the Wolftrap Creek. The work shall include the following: Stream restoration, clearing, tree removal, eradication of invasive plant species, trees, shrubs, erosion and sediment control, and site restoration. The proposed stream restoration work has been designed to Natural Channel Design (NCD) standards.

II. SCOPE

The scope of this project includes the following items of work on Wolftrap Creek. The "Plans" refer to the plan package entitled Wolftrap Creek Stream Restoration Final Design Plan prepared by Stantec, Inc., dated 07/20/16. **The construction documents can be found on the Town's website at: <https://www.viennava.gov/index.aspx?NID=1185>** and are incorporated by reference.

1. Perform a preconstruction survey review of the site to confirm the existing conditions shown in the Plans. The Contractor shall be responsible for existing features within the limits of work that are not shown in the Plans which would require replacement or temporary relocation in order to perform the stream restoration improvements. The cost for this work is to be included in the Contractor's unit price bid and within an appropriate unit price categories provided.
2. The Contractor is responsible for all survey stakeout, utility coordination/relocation, material, tools, equipment, labor, permits, traffic control, cleanup and restoration and priced within other unit prices. The Contractor is responsible to restore all existing signs and pavement markings unless directed by the Plans.
3. Locate underground utilities prior to the start of construction. Protect all structures and utilities. The Contractor shall coordinate any adjustments with the appropriate utility owner. Locations of utilities shown on the plans are NOT guaranteed. The Contractor is solely responsible for any disruption in utility service and shall be solely responsible for any damage/repairs required. Several utilities are located within the construction limits and it is the intent of this design to either leave them in place or lower them in place as appropriate.
4. Provide sequence of construction plan/schedule to be approved by the Town's Engineer prior to starting work. No night work shall be permitted. Weekend work will be allowed with prior approval from the Town.
5. Provide and install erosion and sediment control devices.
6. Perform all stream restoration work in accordance with the specifications in Attachment B.
7. The contractor is responsible for all tree removals as shown on the plan. Coordination with the Town's arborist and engineer is required prior to tree removal. The site contractor shall walk the site with the Town staff to mark all trees to be removed.
8. Drainage structures and pipe installation shall be installed in accordance with Town and VDOT requirements and specifications. All drainage structure installation(s) shall include the cost(s) of the restoring of existing surfaces (including pavement areas) in accordance with the specifications.
9. Top soil is expected to be salvaged during excavation. If necessary, and approved by the Town, top soil can be imported and furnished to the site. Please note that topsoil shall be placed to the depth specified in the Construction Specifications: *Salvaged topsoil shall be placed, spread, and maintained over the areas designated to a depth of at least 4 inches, that after settlement, the completed work shall be in conformance with the thickness, lines, grades, and elevations specified in the Contract Documents.*

10. Requirements for Open Trenches: Regular and classified backfill shall be placed in uniform layers not more than 8 inches in thickness, loose measurement, before compaction. Class I backfill material shall be crusher run aggregate, No. 25 or 26; aggregate base material, Size 21A or 21B; or flowable fill. Class I backfill material shall be placed and compacted at a moisture content of optimum to plus 2 percentage points of optimum. Class I backfill material shall be thoroughly compacted under the haunches of pipe culverts. Each layer of Class I and regular backfill material shall be compacted by rolling, tamping with mechanical rammers, or hand tamping with heavy metal tampers with a face of at least 25 square inches. If vibratory rollers are used in the backfill operations, vibratory motors shall not be activated until at least 3 feet of backfill has been placed and compacted over the pipe. Backfill and compaction shall be advanced simultaneously on both sides of the pipe. The fill above the top of the regular backfill shall be installed and completed as specified for embankment construction.
11. Clean out all storm sewers after the construction is complete.
12. TV sanitary and storm and provide the Department of Public Works with a copy of the video in pdf format.
13. Provide the following submittals for review by the Town's Engineer:
 - a. Construction Phasing Plan
 - b. Formal Erosion and Siltation Plan, consistent with the Plans provided.
 - c. Materials Delivery Tickets
 - d. As-built red-line markups of Plans
14. Provide all other work as shown on the plans to complete the project.
 - a. The Contractor is to provide positive drainage for all areas of construction. No introductions of ponding areas shall be permitted. The Town will require the Contractor to adjust grades as necessary (at no additional cost to project) as needed to provide positive drainage.

IV. MANDATORY TERMS AND CONDITIONS

1. References

Work shall be in accordance with the most recent edition of the following references:

- a. Virginia Erosion and Sediment Control Handbook
- b. Town of Vienna Construction Details
- c. VDOT Road and Bridge Standards and Specifications
- d. Manual of Uniform Traffic Devices
- e. Virginia Work Area Protection Manual
- f. Project Specifications in Attachment B

Where a conflict exists between these referenced specifications, seek direction from the Town's Engineer.

2. Limits of Construction

This project is within Town Right of Way or Right of Entry Agreement required for offsite improvements granted for the project. Contractor shall not store any materials/equipment over-night (or during any non-working hours, i.e. weekends, holidays, etc.) without express written permission from the Town. Contractor and Contractor's personnel shall not intrude on any private property adjacent to the project.

The Contractor is responsible for ensuring all grounds/surfaces within five (5) feet of the temporary construction easement are equal to pre-construction conditions following completion of construction. Any restoration required, at the Town discretion, is at the Contractor's expense. Pre and Post Condition photos for the job site are required to be provided to the Town Construction Manager.

The contractor is responsible for procuring a staging area for any required stockpiling material and overnight storage of any equipment required, at no additional cost to the project.

3. Submittals

Preconstruction submittals shall be approved by the Town's Engineer before starting the related Work. Test results shall be received within 7 days of test completion. The Town Engineer shall have up to two weeks to review the submittals. Submittals that are not approved shall be corrected and re-submitted for review. Work may not start until submittals have been approved. If material test results indicate a failure of materials to meet their design strength, the Town may require the Contractor to remove and replace the affected materials at the Contractor's expense.

4. Measurement and Payment

This is a unit price contract. Measurement of unit price items shall be in accordance with the Project Specifications (Attachment B), the VDOT Road and Bridge Specifications, Division 1: Section 109 and the following sections where applicable.

- a. The following items are measured in unit prices as defined in their respective section. For incidental Work that falls outside of the description for these categories, the price shall be included within the unit pricing of related items of Work provided in the Bid Form. Units shall be per the units shown on the Bid Form.

- i. Clearing and Grubbing – Section 301.03
- ii. Drainage Structure – Section 302.04
- iii. Excavation – Section 303.06
- iv. Sub-grade – Section 305.04
- v. Sub-base Course – Section 308.05
- vi. Aggregate Base Course – Section 309.06
- vii. Tack Coat – Section 310.04
- viii. Prime Coat – Section 311.04
- ix. Base Course – Section 315.08
- x. Top Course – Section 315.08
- xi. Curb & Gutter – Section 502.04
- xii. Driveway Aprons – Section 502.04
- xiii. Sidewalks – Section 504.04
- xiv. Pavement Demolition – Section 508.03
- xv. Adjusting Existing At-grade Utility Appurtenances – Section 510.04
- xvi. Maintaining Traffic – Section 512.04
- xvii. Contractor Construction Surveying – Section 517.06
- xviii. Mail Box Post – Section 521.04

IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION

- xix. Selective Tree Removal, Trimming and Cleanup – Section 601.04
(For tree stumps, refer to Clearing and Grubbing – Section 301.03)
- xx. Topsoil – Section 602.04
- xxi. Sodding – Section 604.04
- xxii. Planting – Section 605.07
- xxiii. Pavement Markings – Section 704.04
- xxiv. Signage – Sections 700.05 & 701.04

SECTION C.

OWNER-CONTRACTOR AGREEMENT

CONTRACT NUMBER: IFB 17-12 (P.O. # _____)

THIS AGREEMENT, in 3 copies, is made this _____ day of _____ 20____, by and between The Town of Vienna, Virginia (herein referred to as the "Owner"), whose mailing address is c/o Department of Public Works, 127 Center Street South, Vienna, Virginia 22180, and _____ (herein referred to as the "Contractor"), whose mailing address is as follows, _____. All correspondence, submittals and notices relating to or required under this Contract shall be sent in writing to the above addresses; unless either party is notified in writing by the other, of a change in address.

WITNESSETH:

WHEREAS it is the intention of the Owner to obtain the services of the Contractor in connection with the construction activities of WOLFTRAP CREEK STREAM RESTORATION, hereinafter referred to as the "Project" or the "Work"; and WHEREAS the Contractor desires to perform such construction in accordance with the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the promises made herein and other good and valuable considerations, the following terms and conditions are hereby mutually agreed to, by and between the Owner and Contractor:

Article 1

DEFINITIONS

- 1.1 All terms in this Agreement which are defined in the Information for Bidders and the General Conditions shall have the meanings designated therein.
- 1.2 The Contract Documents are as defined in the General Conditions. Such documents form the Contract, and all are as fully a part thereof as if attached to this Agreement or repeated herein.

Article 2

STATEMENT OF THE WORK

- 2.1 The Contractor shall provide and pay for all materials, tools, equipment, labor and professional and non-professional services, and shall perform all other acts and supply all other things necessary, to fully and properly perform and complete the Work, as required by the Contract Documents.
- 2.2 The Contractor shall further provide and pay for all related facilities described in any of the Contract Documents, including all work expressly specified therein and such additional work as may be reasonably inferred therefrom, saving and excepting only such items of work as are specifically stated in the Contract Documents not to be the obligation of the Contractor. The totality of the obligations imposed upon the

Contractor by this Article and by all other provisions of the Contract Documents, as well as the structures to be built and the labor to be performed, is herein referred to as the "Work".

Article 3

ARCHITECT/ENGINEER

- 3.1 The Architect/Engineer (hereinafter referred to as the "A/E" and as defined in the General Conditions) shall be the Director of Public Works or his designee, whose address is 127 Center Street South, Vienna, Virginia 22180; provided, however, that the Owner may, without liability to the Contractor, unilaterally amend this Article from time to time by designating different persons or organizations to act as it's A/E and so advising the Contractor in writing, at which time the person(s) or organization(s) so designated shall be the A/E for purposes of this Contract.

Article 4

TIME OF COMMENCEMENT AND COMPLETION

- 4.1 The Contractor shall commence the Work promptly upon the date established in the Notice to Proceed for each task assigned under this contract. If there is no Notice to Proceed, the date of commencement of the Work shall be the date of this Agreement or such other date as may be established herein.
- 4.2 Time is of the essence. The Contractor shall complete each task assigned, as defined in the General Conditions within the limits established in the Notice to Proceed or the date otherwise established for the commencement of Work. This time period shall be designated the Contract Time as set forth in Section D, Article 4.11, Construction Schedule.
- 4.3 The liquidated damages incurred by the Owner due to the Contractor's failure to complete the Work within the Contract Time, including any extensions thereof, shall be \$350.00 per day for each consecutive calendar day beyond the Contract Time (Sundays and all holidays included) for which the Contractor shall fail to complete the Work.
- 4.4 The liquidated damages incurred by the Owner due to the Contractor's failure to complete each activity of Work designated in Article 4.3, above within the applicable interim Milestone date, as applicable, shall be as hereinafter stated for each Milestone, for each consecutive day beyond the Milestone date (Sundays and all holidays included) for which the Contractor shall fail to complete the activity of Work.
- 4.5 The amount of liquidated damages set forth in Articles 4.4 and 4.5 hereinabove shall be assessed cumulatively. The items of cost included in the assessment of liquidated damages are as defined in the General Conditions. This provision for liquidated damages does not bar Owner's right to enforce other rights and remedies against Contractor, including but not limited to, specific performance or injunctive relief.

Article 5

CONTRACT SUM

- 5.1 Provided that the Contractor shall strictly and completely perform all of its obligations under the Contract Documents, and subject only to additions and deductions by Modification or as otherwise provided in the Contract Documents, the Owner shall pay to the Contractor, in current funds and at the times and in the installments hereinafter specified. The amount of each task assigned under this contract will be established prior to issuance of a Notice to Proceed for that task. The total amount of the contract shall not exceed:
- _____ Dollars (\$ _____ .00), herein referred to as the "Contract Sum".

Article 6

PROGRESS PAYMENTS

- 6.1 The Contractor hereby agrees that on or about the first day of the month for every month during the performance of the Work he will deliver to the A/E a Pay Request Application in accordance with the provisions of Article 9 of the General Conditions. This date may be changed upon mutual agreement, stated in writing, between the Owner and Contractor. Payment under this Contract shall be made as provided in the General Conditions.

Article 7

OTHER REQUIREMENTS

- 7.1 The Contractor shall submit the Performance Bond, Labor and Material Payment Bond and Certification of Insurance as required by the Contract Documents.
- 7.2 The Owner shall furnish to the Contractor, a CD of the drawings and specifications, at no extra cost, for use in the Construction of the Work. Additional sets of drawings or specifications may be obtained by the Contractor by paying the Owner for the costs of reproduction, handling and mailing.
- 7.3 The Contractor shall perform at least sixty-five percent (65%) of the total Work with forces that are in the direct employment of the Contractor's organization unless a written waiver is obtained by the Owner.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement on the day and date first above written.

IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION

TOWN OF VIENNA, VA (Owner)

Attest:

By: _____
Town Clerk, Melanie J. Clark

By: _____
Laurie DiRocco, Mayor

CONTRACTOR:

Witness:

By: _____

By: _____
Contractor (SEAL)

By: _____

State of _____
County of _____, to-wit:

The foregoing instrument was acknowledged before me on this ____ day of _____
20____, by _____ (Name and title of agent or officer) on behalf
of (Name of Corporation/Partnership)

Notary Public

My Commission Expires: _____

SECTION D. **TOWN OF VIENNA PUBLIC WORKS DEPARTMENT
CONSTRUCTION CONTRACT GENERAL CONDITIONS**

A. INTRODUCTION TO TERMS

1. DEFINITIONS

- a. The terms "Town" and "Contractor" shall mean the respective parties to the Contract. They shall be treated throughout the Contract Documents as though each were of the singular number and masculine gender. Only one Contractor is recognized as a party to this Contract.
- b. The term "Engineer" means the Director, Department of Public Works, Town of Vienna, or designee. The designee may be identified in the Contract Documents as either the Town's appointed Project Officer or a contractor employed by the Town to perform construction services or project oversight.
- c. The term "Town" means the Town Council of Vienna, Virginia.
- d. The term "Subcontractor", as employed herein, shall include only those having a direct contract with the Contractor, and it shall include those who furnish material worked to a special design according to the plans and specifications for this Work but shall not include those who merely furnish material not so worked.
- e. The term "Contract Documents" means and shall include the Agreement and all the documents identified therein which shall include the Drawings and the Specifications and all modifications thereto properly incorporated in the Contract
 - (1) The term "Agreement" means the completed and signed Form of Contract agreement.
 - (2) The term "Drawings" means all drawings pertaining to the Contract, including the Contract Drawings and the Standard Details.
 - (a) The term "Contract Drawings" means the drawings and construction notes which show the locations, character, dimensions, and details of the Work to be performed under the Contract.
 - (b) The term "Standard Details" means the applicable drawings contained in the current edition of the Department of Public Works, Construction Standards and Specifications.
 - (3) The term "Specifications" means and shall include the Standard Specifications, Technical Specifications, the Special Provisions and all written agreements and instructions pertaining to the performance of the Work and to the quality of the materials to be furnished under the Contract.

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- (a) The term "Standard Specifications" means the applicable technical specifications contained in the current edition of the Department of Public Works, Construction Standards and Specifications.
 - (b) The term "Technical Specifications" means that part of the Contract Documents that describe the quality of materials, method of installation, standard of workmanship, and the administrative and procedural requirements for the performance of the Work under the contract.
 - (c) The term "Special Provisions" means the written statements modifying or supplementing the Standard Specifications or General Conditions for requirements or conditions peculiar to the Contract.
- f. The term "Work" shall mean the services performed under this Contract including, but not limited to, furnishing labor, and furnishing and installing materials and equipment required to complete the Work specified in the Contract Documents. Where "as shown", "as indicated" "as detailed", or words or similar import are used, it shall be understood that the direction, requirements, permission, approval or acceptance of the Engineer is intended unless stated otherwise. As used herein, "provide" shall be understood to mean "provide complete in place", that is, "furnish and install".
- g. "Notice to Proceed" shall mean a written notice issued by the Town to the Contractor stating the Commencement Date, the date on which the contract time will commence, and on which the Contractor is to begin the prosecution of the Work required under the Contract. The Notice to Proceed will specify the Time for Completion of the Contract.
- h. "Time for Completion" shall mean the number of consecutive calendar days after the Commencement Date stated in the Notice to Proceed which the Contractor has to complete all the Work under the Contract.
- i. The term "Force Majeure" means an earthquake, flood, cyclone or other cataclysmic phenomenon of nature. Rain, wind, or other natural phenomenon of normal intensity for the locality shall not be construed as a Force Majeure under this definition.
- j. "Written notice" shall be deemed to have been duly served if delivered in person to the individual or to the member of the firm or to an officer of the corporation for whom it is intended, or enclosed in a postage prepaid envelope addressed to the last known address of such other party and deposited in a U. S. Postal Service mail receptacle.
- B. DRAWINGS, SPECIFICATIONS AND RELATED DATA
1. INTENT OF THE DRAWINGS AND SPECIFICATIONS

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- a. It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, unsuitable or excess material haulage and disposal, water, water haulage, light power, transportation, superintendence, temporary construction of all kinds, and other services and facilities of every nature whatsoever that are necessary to execute and deliver the Work, complete and usable within the scope of the Contract with all parts in working order, and all connections properly made.
- b. The general character and scope of the Work are illustrated by the Drawings and listed in the Specifications. Any additional drawings and other instructions deemed necessary by the Engineer will be furnished to the Contractor when required for the Work.
- c. Unless otherwise specifically noted, the word "similar" where it occurs in the Drawings, shall be interpreted in its general sense and not as meaning identical, and all details shall be worked out in relation to their locations and their connection with other parts of the Work.
- d. Materials or work described in words which, so applied, have a well-known technical or trade meaning, shall be held to refer to the recognized technical or trade meaning.
- e. The Contract Documents are complementary, and what is called for by any one shall be as binding as if called for by all. In case of conflicting variance between the Contract Documents, the Specifications shall take precedence over the Drawings, the Special Provisions shall take precedence over the Specifications and the Drawings, and the Agreement shall take precedence over the Special Provisions, the Specifications and the Drawings. Figured dimensions on the plans shall be used in preference to scaling the Drawings. In case of conflict between small and large scale drawings, the large scale drawings shall govern.

2. DISCREPANCIES AND ERRORS

If the Contractor discovers any discrepancies between the Drawings and Specifications and the site conditions or any errors or omissions in the Drawings or Specifications, the Contractor shall at once report them in writing to the Engineer. If the Contractor proceeds with any work that may be affected by such discrepancies, errors, or omissions, after their discovery, but before their correction, such work shall be at the Contractor's risk.

3. COPIES FURNISHED

Except as provided for otherwise, copies of the Drawings and Specifications reasonably necessary for the execution of the Work will be furnished to the Contractor. A limit of five (5) copies each of the Contract Drawings and Specifications will be provided to the Contractor without charge.

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4. DOCUMENTS OF THE JOB

The Contractor shall keep on the site of the project a copy of the Drawings and Specifications including all authorized revisions, and shall at all times give the Town and its authorized representatives access thereto.

5. OWNERSHIP OF DRAWINGS AND SPECIFICATIONS

All Drawings and Specifications and copies thereof furnished by the Town are the property of the Town and shall not be used on other projects. Upon completion of the project, all copies of the Drawings and Specifications except the signed Contract sets shall be returned to the Engineer.

6. SUBMITTALS

- a. The term "submittals", as used herein, shall include fabrications, erection and setting drawings, manufacturers' standard drawings, schedules, descriptive literature, catalogs, brochures, performance and test data, wiring and control diagrams, and other descriptive data pertaining to the materials and equipment as required to demonstrate compliance with the Contract requirements.
- b. The Contractor shall submit for the approval of the Engineer all submittals required by the specifications or requested by the Engineer. All such submissions shall be made so as to cause no delay in the project, allowing reasonable time for review and checking by the Engineer.
- c. Submittals shall be submitted in such number of copies that three copies may be retained by the Engineer after approval. Each submission shall be accompanied by a letter of transmittal in duplicate, listing the contents of the submission and identifying each item by reference to specification section or drawing. All submittals shall be clearly labeled with the name of the project and such information as may be necessary to enable their complete review by the Engineer. Catalog plates and other similar material that cannot be so labeled conveniently shall be bound in suitable covers bearing the identifying data.
- d. Submittals shall be accompanied by all required certifications and other such supporting material, and shall be submitted in such sequence or in such groups that all related items may be checked together. When submittals cannot be checked because a submission is not complete, or because shop drawings on related items have not been received by the Engineer, then such submittals will be returned without action or will be held, not checked, until the missing material is received. Incomplete or defective submittals shall not be considered to have been submitted.
- e. Submittals shall have been reviewed by the Contractor and coordinated with all other related or affected work before they are submitted for approval and shall bear the Contractor's certification that the Contractor has checked and approved them as complying with all relevant information in the Contract Documents. Submittals submitted without such certification and coordination

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will be returned to the Contractor without action and will be considered not a formal submission.

- f. If shop drawings show variations from the Drawings and Specifications because of standard shop practice or other reasons, the Contractor shall make specific mention of such variation in the Contractor's letter of transmittal in order that, if acceptable, suitable action may be taken for proper adjustment; otherwise the Contractor will not be relieved of the responsibility for executing the work in accordance with the Drawings and Specifications even though shop drawings have been approved.
- g. The Engineer shall review the shop drawings with reasonable promptness. Review and/or approval of shop drawings will be general for conformance with the design concept of the Project and compliance with the information given in the Contract Documents, and will not include quantities, detailed dimensions, nor adjustments of dimensions to actual field conditions. Approval shall not be construed as permitting any departure from Contract requirements, as authorization of any increase in price nor as relieving the Contractor of the responsibility for any error in details, dimensions or otherwise that may exist.

7. SAMPLES

The Contractor shall submit, for the approval of the Engineer, all samples required by the specifications or requested by the Engineer. Samples shall be submitted in single units only, unless the Contractor desires additional units for the Contractor's own use. Each sample shall bear a label indicating the material represented the name of the producer and the title of the Project. Approval of a sample shall be only for conformance with the design concept of the Project and compliance with the information given in the Contract Documents, and only for the characteristics or use named in such approval. Such approval shall not be construed to change or modify any Contract requirements or the Contract Price. Materials and equipment incorporated in the Work shall match the approved samples.

8. TESTS

Any specified laboratory tests of materials and finished articles shall be made by bureaus, laboratories or agencies approved by the Engineer and the certified reports of such tests shall be submitted to the Engineer. All costs in connection with the testing shall be borne by the Contractor. Failure of any material to pass the specified tests or any test performed by the Engineer, will be sufficient cause for refusal to consider, under this Contract, any further materials of the same brand or make of that material. Samples of various materials delivered on the site or in place may be taken by the Engineer for testing. Samples failing to meet the Contract requirements will automatically void previous approvals of the items tested.

9. MATERIALS AND EQUIPMENT LIST

- a. At least ten (10) working days before the start of construction the Contractor shall submit to the Engineer for approval a complete list of materials and equipment proposed for use in connection with the project. Partial lists

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submitted from time to time will not be considered.

- b. After any material or piece of equipment has been approved, no change in brand or make will be permitted unless satisfactory written evidence is presented to prove that the manufacturer cannot make scheduled delivery of the approved material, or that material delivered has been rejected and the substitution of a suitable material is an urgent necessity, or that other conditions have become apparent which indicate that approval of such other material is in the best interest of the Town.

10. STANDARDS, SUBSTITUTIONS

- a. Any material specified by reference to the number, symbol or title of a specific standard, such as a Commercial Standard, a Federal Specification, a Trade Association Standard, or other similar standard, shall comply with the requirements in the latest revision of the standards or specification and any amendment or supplement, except as limited to type, class or grade, or as modified in such reference. The standard referred to, except as modified in the Specifications, shall have full force and effect as though printed in the Specifications. The Engineer will furnish, upon request, information as to how copies of the standards referred to may be obtained.
- b. Reference in the Specifications or on the Drawings to any article, device, product, material, fixture, form or type of construction by name, make or catalog number shall be interpreted as establishing a standard of quality and shall not be construed as eliminating from competition other products of equal or better quality by other manufacturers where fully suitable, as approved by the Engineer. Applications for approval of substitutions for the specified items will be considered only upon request of the Contractor, not of individuals, trades or suppliers, and only for a specific purpose; no blanket approvals will be granted. No approval of a substitution shall be valid unless it is in written form and signed by the Engineer.
- c. If any proposed substitution will affect a correlated function, adjacent construction or the work of other contractors, then the necessary changes and modifications to the affected work shall be considered as an essential part of the proposed substitution, to be accomplished by the Contractor without additional expense to the Town, if and when approved. Detail drawings and other information necessary to show and explain the proposed modifications shall be submitted with the request for approval of the substitution.

11. SURVEYS AND CONTROLS

Unless otherwise specified, the Contractor shall establish all baselines for the location of the principal component parts of the Work, establish a suitable number of bench marks adjacent to the Work, and develop all detail surveys necessary for construction. The Contractor shall carefully preserve bench marks, reference points and stakes, and in the case of destruction thereof by the Contractor or due to the Contractor's negligence or the negligence of any subcontractor, the Contractor shall be responsible for expense and damage resulting therefrom and shall be responsible for any mistakes that may be

caused by the loss or disturbance of such bench marks, reference points and stakes.

12. AS-BUILT DRAWINGS

As-built drawings shall be the normal function of the Engineer, unless specified in the Contract Documents to be the responsibility of the Contractor. If so, the Contractor shall mark up one set of prints of the applicable Contract drawings to portray as-built construction. The prints shall be neatly and clearly marked to show all variations between the Work actually provided and that indicated on the Contract Drawings, and all utilities encountered in the Work. All drafting shall conform to good drafting practice and shall include such supplementary notes, legends and details as may be necessary for legibility and clear portrayal of the as-built construction. These drawings shall be marked promptly at the completion of the project and shall be turned over to the Engineer within thirty (30) days of completion of the project.

C. TOWN, ENGINEER, AND CONTRACTOR RELATIONS

1. STATUS OF ENGINEER

The Engineer shall be the Town's representative during the construction period. The Engineer shall have authority to suspend the Work whenever such suspension may be necessary in the responsible opinion of the Engineer to ensure the proper execution of the Contract. The Engineer shall also have authority to reject all work and materials that do not conform to the Contract and to decide questions that arise in the execution of the Work.

2. ENGINEER'S DECISIONS

The Engineer will, within a reasonable time, make decisions on all matters relating to the execution and progress of the Work.

3. DISPUTES

- a. All disputes arising under this Contract or its interpretation, whether involving law or fact or both, or extra work, and all claims for alleged breach of Contract shall be submitted in writing to the Engineer for decision prior to beginning the work on which the claim is based. Such claims must set forth in detail the amount of the claim, and shall state the facts surrounding it in sufficient detail to identify it together with its character and scope.
- b. In any case where the Contractor deems extra compensation is due him for work or materials not clearly covered in the Contract, or not ordered by the Engineer as additional work not specifically included in the Contract Documents, the Contractor shall notify the Engineer in writing of the Contractor's intention to make claim for such extra compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given, or the Engineer is not afforded proper facilities by the Contractor for keeping strict account of actual cost, then the Contractor hereby agrees to waive the claim for such extra compensation.

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- c. Contractual disputes shall be evaluated and decided by the Director of Public Works within 30 days of receipt of the claim or dispute. His decision shall be final unless the Contractor files a claim with the Town Council pursuant to state law. Following the decision of Council on the claim, the Contractor may institute legal action in the Circuit Court.
- d. The Contractor shall not cause a delay in the work pending a decision of the Engineer, Town Manager, Town Council, or court, except by prior written approval of the Engineer.

4. INSPECTION OF WORK

The Engineer and representatives of any public authority having jurisdiction shall, at all times, have access to the Work while in progress. The Contractor shall provide suitable facilities for such access and for proper observation of the Work and shall conduct all special tests required by the specifications, the Engineer's instructions, and any laws, ordinances or the regulations of any public authority applicable to the Work.

5. INSPECTION OF MATERIALS

All articles, materials, and supplies purchased by the Contractor for the Work are subject to inspection by the Engineer upon delivery to the site. The Town reserves the right to return for full credit, at the risk and expense of the Contractor, all or part of the articles, materials, or supplies furnished contrary to specifications and instructions.

6. EXAMINATION OF COMPLETED WORK

If the Engineer requests it, the Contractor, at any time before acceptance of the Work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the Specifications. Should the work thus exposed or examined prove acceptable, then the uncovering or removing, and the replacing of the covering or making good of the parts removed shall be paid for as extra work, but should the work so exposed or examined prove unacceptable, then the uncovering, removing and replacing shall be at the Contractor's expense.

7. SUPERINTENDENCE BY CONTRACTOR

The Contractor shall keep a competent superintendent and any necessary assistants on the Work at all times during its progress and such persons shall be satisfactory to the Engineer. The superintendent shall not be changed except on the Engineer's determination the superintendent is no longer satisfactory or except with the consent of the Engineer where the superintendent proves to be unsatisfactory to the Contractor and ceases to be in the Contractor's employment. The superintendent shall represent the Contractor in the Contractor's absence and all directions given to him shall be as binding as if given to the Contractor. In general, instructions by the Engineer shall be confirmed in writing, and always upon written request from the Contractor. The Contractor shall at all times enforce strict discipline and good order among the workers performing under this Contract, and shall not employ on the Work any person not reasonably proficient in the Work assigned.

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8. LANDS BY TOWN

The Town shall provide the lands shown on the Drawings upon which the Work under the Contract is to be performed and to be used for rights of way and for access. In case all of the lands, rights-of-way or easements have not been obtained as herein contemplated before construction begins, the Contractor shall begin its work on such lands and rights-of-way as the Town may have previously acquired.

9. LANDS BY CONTRACTOR

If the Contractor requires additional land for temporary construction facilities and for storage of materials and equipment other than the areas available on the site or right-of-way, or as otherwise furnished by the Town, the Contractor shall provide such other lands and access thereto entirely at the Contractor's own expense and without liability to the Town. The Contractor shall not enter upon private property for any purpose without written permission.

10. PROTECTION OF WORK AND PROPERTY

- a. The Contractor shall continuously maintain protection of all its work from damage and shall protect the Town's property from damage or loss arising in connection with this Contract. The Contractor shall make good any such damage, or loss, except such as may be caused by agents or employees of the Town.
- b. The Contractor shall not place upon the Work, or any part thereof, any loads which are not consistent with the design strength of that portion of the Work.
- c. The Contractor shall be responsible for the preservation of all public and private property, trees, monuments, etc., along and adjacent to the street and/or right-of-way, and shall use every precaution to prevent damage to pipes, conduits and other underground structures, curbs, pavements, etc., except those to be removed or abandoned in place and shall protect carefully from disturbance or damage all monuments and property marks until an authorized agent has witnessed or otherwise referenced their location and shall not remove them until directed. Any damage which occurs by reason of the operations under this Contract shall be completely repaired by the Contractor at the Contractor's expense.
- d. The Contractor shall shore, brace, underpin, secure, and protect, as may be necessary, all foundations and other parts of existing structures adjacent to, adjoining, and in the vicinity of the site that may be affected in any way by excavations or other operations connected with the work embraced in this Contract. The Contractor shall be responsible for the giving of any and all required notices to any adjoining or adjacent property owned or other party before commencement of any work. The Contractor shall indemnify and save the Town harmless from any damages on account of settlements or loss of all damages for which the Town may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.

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- e. In an emergency affecting the safety of life or of the Work, or of adjoining property, the Contractor, without special instruction or authorization from the Engineer or Town, is hereby permitted to act, at the Contractor's discretion, to prevent such threatened loss or injury, and the Contractor shall so act without appeal, if so instructed or authorized.

11. SEPARATE CONTRACTS

- a. The Town reserves the right to let other contracts in connection with this project. The Contractor shall afford other contractors reasonable opportunity for the delivery and storage of their materials and the execution of their work, and shall properly connect and coordinate its work with the work of other such contractors.
- b. If any part of the Contractor's work depends, for proper execution or results, upon the work of any other contractor, the Contractor shall inspect and promptly report to the Engineer any defects in such work that renders it unsuitable for such proper execution and results. The Contractor's failure to so inspect and report shall constitute an acceptance of the other contractor's work as fit and proper for the reception of the Contractor's work, except as to defects which may develop in other contractor's work after its execution.
- c. If the Contractor or any of the Contractor's subcontractors or employees cause loss or damage to any separate contractor on the Work, the Contractor agrees to settle or make every effort to settle or compromise with such separate contractor. If such separate contractor sues the Town on account of any loss so sustained, the Town shall notify the Contractor, who shall indemnify and save the Town harmless against any expense, claim or judgment arising therefrom, including reasonable attorney's fees.

12. SUBCONTRACTS

- a. The Contractor shall, within fifteen (15) days after execution of the Contract by the Town provide the Engineer, in writing, the names of all subcontractors proposed for the principal parts of the Work and for such others as the Engineer may direct and shall not employ any that the Engineer may, within a reasonable time, object to as incompetent or unfit after an appropriate determination of the subcontractor's ability. No proposed subcontractor will be disapproved except for cause.
- b. The Contractor shall be as fully responsible to the Town for the acts and omissions of the Contractor's subcontractors as the Contractor is for the acts and omissions of persons directly employed by him.
- c. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind subcontractors to the Contractor by the terms of the General Conditions of the Contract, Special provisions and other documents comprising the Contract insofar as such documents are applicable to the work of subcontractors.

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- d. Nothing contained in the Contract shall be construed to create any contractual relation between any subcontractor and the Town, nor shall it establish any obligation on the part of the Town to pay to, or see to the payment of any sums to any subcontractor.

13. ELIMINATED ITEMS

Should any item(s) in the Contract be determined unnecessary for the proper completion of the Work contracted, the Engineer may, upon written notice to the Contractor, eliminate such item(s) from the Contract. Payment will not be made for such item(s) so eliminated; except that the Contractor will be compensated for the actual cost of any work performed for the installation of such item(s) and the net cost of materials purchased before the item(s) was eliminated from the Contract, including freight and tax costs, as evidenced by invoice. No additional compensation will be made for overhead or anticipated profit.

D. MATERIALS AND WORKMANSHIP

1. MATERIALS FURNISHED BY THE CONTRACTOR

Unless otherwise specified, all materials and equipment incorporated in the Work under the Contract shall be new. All workmanship shall be accomplished by persons qualified in the respective trades.

2. MANUFACTURER'S DIRECTIONS

Manufactured articles, material, and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the manufacturer's directions as approved by the Engineer, unless herein specified to the contrary.

3. CUTTING, PATCHING, AND DIGGING

The Contractor shall do all cutting, fitting, or patching of the Contractor's work that may be required to make its several parts come together properly and fit it to receive or be received by work of other contractors as shown upon or reasonably implied by the Drawings and Specifications for the completed project and shall make good after them as the Engineer may direct. The Contractor shall not endanger any work by cutting, digging, or otherwise, and shall not cut or alter the work of any other contract except with the consent of the Engineer.

4. REJECTED WORK AND MATERIALS

- a. All materials which do not conform to the requirements of the Contract Documents, are not equal to samples approved by the Engineer, or are in any way unsatisfactory or unsuited to the purpose for which they are intended, shall be rejected. Any defective work, whether the result of poor workmanship, use of defective materials, damage through carelessness or any other cause shall be removed and the work shall be re-executed by the Contractor. The fact that the Engineer may have previously overlooked such defective work shall not

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constitute acceptance of any part of it.

- b. If the Contractor fails to proceed at once with the replacement of rejected material and/or the correction of defective workmanship, when notified to do so by the Engineer, the Town may, by contract or otherwise, replace such material or correct such workmanship and charge the cost to the Contractor. This clause applies during the Contract Term and during any warranty or guarantee period.
- c. If the Engineer deems it expedient not to require correction of work which has been damaged or not done in accordance with the Contract, an appropriate adjustment to the Contract Price may be made therefor.

E. LEGAL RESPONSIBILITY AND PUBLIC SAFETY

1. DIFFERING SITE CONDITIONS

The Contractor shall, within twenty-four hours after becoming aware of differing site conditions, and before the conditions are disturbed, give a written notice to the Engineer of subsurface or latent physical conditions at the site which differ materially from those indicated in this contract, or previously unknown physical conditions discovered at the site of an unusual nature and which differ materially from those ordinarily expected to be encountered at the site.

The Engineer will investigate the site conditions within twenty-four hours after receiving the notice. If the conditions do materially differ to the extent that an increase or decrease would result in the Contractor's cost of the work, or the time required for performing any part of the work under the contract, an equitable adjustment may be made under this clause and the Contract modified in writing accordingly.

No request by the Contractor for an adjustment to the contract under this clause shall be allowed, unless the Contractor has given the written notice required.

No request by the Contractor for an adjustment to the contract for differing site conditions shall be allowed if made after final payment under the contract.

2. PUBLIC CONVENIENCE

The Contractor shall at all times so conduct its Work as to ensure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the Work. Traffic shall be maintained by use of barricades and flagmen as directed by the Engineer and in accordance with the most current version of the Virginia Work Area Protection Manual. No road or street shall be closed to the public except with the permission of the Engineer and proper governmental authority. Fire hydrants on or adjacent to the Work shall be kept accessible to firefighting equipment at all times. Temporary provisions shall be made by the Contractor to ensure the use of sidewalks and the proper functioning of all gutters, drainage inlets, drainage ditches, and irrigation ditches, which shall not be obstructed except as approved by the Engineer.

3. SAFETY AND ACCIDENT PREVENTION

The Contractor shall comply with, and ensure that the Contractor's personnel and subcontracted personnel comply with, all current applicable local, state and federal policies, regulations and standards relating to safety and health, including, by way of illustration and not limitation, the standards of the Virginia Occupational Safety and Health program of the Department of Labor and Industry for General Industry and for the Construction Industry, the Federal Environmental Protection Agency Standards and the applicable standards of the Virginia Department of Environmental Quality.

The Contractor shall provide, or cause to be provided, all technical expertise, qualified personnel, equipment, tools and material to safely accomplish the work specified to be performed by the Contractor and subcontractor(s).

The Contractor shall identify to the Engineer at least one on-site person who is the Contractor's competent, qualified, and authorized person on the worksite and who is, by training or experience, familiar with policies, regulations and standards applicable to the work being performed. The competent, qualified and authorized person must be capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous or dangerous to employees, shall be capable of ensuring that applicable safety regulations are complied with, and shall have the authority and responsibility to take prompt corrective measures, which may include removal of the Contractor's personnel from the work site.

The Contractor shall provide to the Engineer, at the Engineer's request, a copy of the Contractor's written safety policies and safety procedures applicable to the scope of work. Failure to provide this information within seven (7) days of the Engineer's request may result in cancellation of the award.

The Contractor shall exercise proper precaution at all times for the protection of persons and property and shall be responsible for all injury to persons and damage to property either on or off the site, which occur as a result of the Contractor's prosecution of the Work.

The Contractor shall take or cause to be taken such additional safety and health measures as the Engineer may determine to be reasonably necessary. Machinery, equipment, and all hazards shall be guarded in accordance with the safety provisions of the "Manual of Accident Prevention" published by the Associated General Contractors of America, Inc., to the extent that such provisions are not in conflict with applicable local laws. The Contractor is directed to the "Rules and Regulations Governing Construction, Demolition and All Excavation" and adopted by the Safety Codes Commission of Virginia, 1966, or latest edition, covering requirements for shoring, bracing, and sheet piling of trench excavations.

4. CROSSING UTILITIES

When construction crosses highways, railroads, streets, or utilities under the jurisdiction of State, County, or other public agency, public utility, or private entity, the Contractor shall secure written permission where necessary from the proper authority before executing such new construction. A copy of such written permission must be filed with the Engineer before any work is started. The Contractor shall be required to furnish a release from the proper authority before final acceptance of the Work.

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5. SANITARY PROVISIONS

The Contractor shall provide and maintain such sanitary accommodations for the use of the Contractor's employees and those of its subcontractors as may be necessary to comply with the requirements and regulations of the local and State departments of health and where additional accommodations are necessary to maintain a reasonably sanitary environment, then such additional accommodations shall be made as determined by the Engineer.

6. WARRANTY

All material provided to the Town shall be fully guaranteed by the Contractor against manufacturing defects within the period of the manufacturer's standard warranty. The Contractor shall make available copies of warranties on demand. Such defects shall be corrected by the Contractor at no expense to the Town. All work is guaranteed by the Contractor against defects resulting from the use of inferior or faulty materials or workmanship for one year from the date of final acceptance of the work by the Engineer in addition to and irrespective of any manufacturer's or supplier's warranty. No date other than the date of final acceptance may be established to govern the effective date of the Guaranty, unless that date is agreed upon by the Engineer and the Contractor in a signed writing.

7. INSPECTION, ACCEPTANCE AND TITLE OF MATERIALS

Inspection and acceptance by the Town will be at the work site in Vienna, Virginia and within ten (10) days of delivery unless otherwise provided for in the Contract. The Town will not inspect, accept, or pay for any materials stored off-site by the Contractor. Title and risk of loss or damage to all items shall be the responsibility of the Contractor until acceptance by the Town. The Town's right of inspection shall not be deemed to relieve the Contractor of its obligation to ensure that all articles, materials and supplies are consistent with specifications and instructions and are fit for their intended use. The Town reserves the right to conduct any tests or inspections it may deem advisable to assure that goods or services conform to the specification. The Contractor shall be responsible for maintaining all materials and supplies in the condition in which they were accepted until they are used in the work.

8. CONTRACTOR'S TITLE TO MATERIALS

No materials or supplies for the work shall be purchased by the Contractor or any subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that it has good title to, and that it will require all subcontractors to warrant that they have good title to, all materials and supplies for which the Contractor invoices for payment.

9. WORK SITE DAMAGES

Any damage to finished surfaces resulting from work performed under this Contract shall be repaired to the Engineer's satisfaction at the Contractor's expense.

10. CLEANING UP

The Contractor shall remove and legally dispose of, as frequently as necessary, all refuse, rubbish, scrap materials and debris from the site to the extent they are the result of the Contractor's operations to the end that the site of the work shall present a neat,

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orderly, and workmanlike appearance at all times. At completion of the work, but before final acceptance, the Contractor shall remove and legally dispose of all surplus material, falsework, temporary structures including foundations thereof, and debris of every nature resulting from the Contractor's operations or resulting from any activity on the site related to the Contractor's operations and put the site in a neat, orderly condition; if the Contractor fails to do so, the Town shall have the right to remove and legally dispose of the surplus material, falsework, temporary structures including foundations thereof, and debris, put the site in a neat, orderly condition, and charge the cost to the Contractor.

F. PROGRESS AND COMPLETION OF THE WORK

1. NOTICE TO PROCEED

Within thirty (30) days of execution of the Contract by the Town, the Contractor shall be given written Notice to Proceed with the Work. Such Notice to Proceed shall state the date on which the Work is to be commenced, and every calendar day thereafter shall be counted in computing the actual Time for Completion.

2. TIME FOR COMPLETION

It is hereby understood and mutually agreed by and between the Contractor and the Town that the Commencement Date, the rate of progress, and the Time for Completion of the Work to be done hereunder are essential conditions of the Contract. The Contractor agrees that the Work shall be started promptly upon receipt of a written Notice to Proceed and shall be prosecuted regularly, diligently, and uninterruptedly at a rate of progress that will ensure full completion thereof in the shortest length of time consistent with good workmanship.

3. USE OF COMPLETED PORTIONS

The Town shall have the right to take possession of and use any completed or partially completed portions of the Work, notwithstanding that the time for completing the entire Work or such portions may not have expired; but taking such possession and use shall not be deemed an acceptance of any work not done in accordance with the Contract Documents. If such prior use increases the cost or delays, the completion of remaining work, or causes refinishing of completed work, the Contractor shall be entitled to such compensation or extension of time or both as the Engineer may determine.

G. MEASUREMENT AND PAYMENT

1. PAYMENTS TO CONTRACTOR

The Town will make partial payments to the Contractor on the basis of a written estimate of the work performed during the preceding calendar month as approved by the Engineer.

- a. Lump Sum Contract: The schedule of total prices of lump sum items in the accepted bid shall be used as a basis for preparing the estimates, and each partial payment shall represent the value, proportionate to the total amount of

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each lump sum item, of completed work and materials on the site to be incorporated in the work, less the aggregate of previous payments.

- b. Unit Price Contract: The schedule of unit prices in the accepted bid shall be used as the basis for preparing the estimates and each partial payment shall represent the total value of all units of work completed, computed at the unit prices stated in the Contract, less the aggregate of previous payments.

2. PAYMENTS WITHHELD

The Engineer may withhold or, on account of subsequently discovered evidence, nullify the whole or a part of any certificate for payment to the extent necessary to protect the Town from loss on account of defective work not remedied. Any such withholding shall not result in any liability to the Contractor for damages.

3. CHANGES IN WORK

a. Lump Sum Contract

The Town, without invalidating the Contract, may order extra work or make changes by altering, adding to, or deducting from the Work, the Contract Sum being adjusted accordingly. All such work shall be executed under the conditions of the original Contract, except that any claim for modification of the Contract Time caused thereby shall be adjusted at the time of ordering such change.

- (1) The Engineer shall have authority to make minor changes in the Work by verbal order when such changes do not involve extra cost and are not inconsistent with the purpose of the project. Otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order from the Town signed or countersigned by the Engineer, or a written order from the Engineer, and no claim for an addition to the Contract Sum shall be valid unless so ordered.
- (2) The value of any such extra work or change shall be determined in one or more of the following ways: (a) by estimate and acceptance in a lump sum or (b) by actual cost and fixed fee.
- (3) If none of the aforementioned methods is agreed upon the Contractor shall proceed with the work provided the Contractor receives an order as above. In such case, the Contractor shall keep and present in such form as the Engineer may direct, a correct account of the cost, together with vouchers. The Engineer shall certify to the amount due to the Contractor, including a reasonable lump sum allowance for overhead and profit. Pending final determination of value, payments on account of changes shall be made on the Engineer's certificate. A complete accounting of the extra cost shall be made within fifteen (15) days after completion of the work involved in the claim.

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b. Unit Price Contract

The estimated quantities of work to be done and materials to be furnished under this Contract, shown in any of the documents, including the Proposal, are given only for use in evaluation of bids, and to indicate approximately the total amount of the Contract. The right is expressly reserved, except as may be otherwise specifically limited, to increase or decrease such quantities as may be deemed reasonably necessary or desirable by the Engineer to complete the Work covered by this Contract, and such increase or decrease shall in no way invalidate claims or liability for damages, except as provided for adjustment of the time for performance. The further right is reserved, except as may be otherwise specifically limited, to add work that is not covered by unit prices in the Contract Documents and that may be deemed reasonably necessary or desirable by the Town to complete the Work covered by this Contract. The value of such added work shall be established by one of the methods provided hereinbefore for Lump Sum Contract. The adjustment or time for performance shall be adjusted at the time of ordering the changes.

4. CLAIMS FOR EXTRA COST

If the Contractor claims that any instructions, by drawings or otherwise, involve extra cost under this Contract, the Contractor shall give the Engineer written notice thereof within fifteen (15) days after the receipt of such instruction, and in any event before proceeding to execute the work (except in emergency endangering life or property), and the procedure shall then be as provided for Changes in Work. No such claim shall be valid unless so made.

5. RELEASE OF LIENS

The Town, before making any payment including the final payment, if the Town deems such procedure necessary to protect the Contractor's interests, may require the Contractor to furnish a complete release of all liens arising out of this Contract, or receipts in full in lieu thereof and if required in either case, an affidavit that so far as the Contractor has knowledge or information, the releases and receipts include all the labor and material for which a lien could be filed. The Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the Town, to indemnify him against any lien. If any lien remains unsatisfied after all payments have been made, the Contractor shall refund to the Town all money that the latter may be compelled to pay in discharging such lien. However, the Town may make payments in part or in full to the Contractor without requiring the releases or receipts, and the payments so made shall not impair the obligations of any Surety or Sureties on any bond or bonds furnished under this Contract.

6. STIPULATED PRICES

The term "STIPULATED PRICE ITEM" means and includes an item of Work, unanticipated at the time of issuance of the solicitation for a Bid and determined to be executed, based on the actual field conditions during the progress of Work under the contract, mutually by the Engineer and the Contractor. The Unit Price for the "STIPULATED PRICE ITEM", as identified in the "Stipulated Price Items" section of the Bid Form, is

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predetermined by the Town as the current reasonably workable rate for the Item inclusive of all necessary labor, equipment, materials, overheads (provision and installation), and the contractor's profit. Work on the "STIPULATED PRICE ITEM" shall be carried out either at the written request of the Contractor followed by a written approval by the Engineer or at the written order by the Engineer to the Contractor. The payment for a "STIPULATED PRICE ITEM" shall be made by the Town to the Contractor at the related Unit Price specified in the 'Stipulated Price Items' section of the Bid Form on the same basis as the payment for any other regular Bid Item.

SECTION E

TOWN OF VIENNA GENERAL TERMS AND CONDITIONS

VENDOR: THE GENERAL TERMS AND CONDITIONS WHICH FOLLOW APPLY TO ALL PURCHASES AND BECOME A DEFINITE PART OF EACH FORMAL INVITATION FOR BID, REQUEST FOR PROPOSALS, PURCHASE ORDER AND/OR OTHER AWARD ISSUED BY THE TOWN OF VIENNA, VIRGINIA, UNLESS OTHERWISE SPECIFIED IN THE SOLICITATION DOCUMENTS. BIDDERS/OFFERORS OR THEIR AUTHORIZED REPRESENTATIVES ARE EXPECTED TO FULLY INFORM THEMSELVES AS TO THE CONDITIONS, REQUIREMENTS, AND SPECIFICATIONS BEFORE SUBMITTING BIDS/PROPOSALS; FAILURE TO DO SO WILL BE AT THE BIDDERS/OFFERORS' OWN RISK AND HE CANNOT SECURE RELIEF ON THE PLEA OF ERROR.

SUBJECT TO STATE, COUNTY AND LOCAL LAWS AND ALL RULES, REGULATIONS AND LIMITATIONS IMPOSED BY LEGISLATION OF THE FEDERAL GOVERNMENT, BIDS/PROPOSALS ON ALL SOLICITATIONS ISSUED BY THE PURCHASING OFFICE WILL BIND BIDDERS/OFFERORS TO APPLICABLE CONDITIONS AND REQUIREMENTS HEREIN SET FORTH UNLESS OTHERWISE SPECIFIED IN THE SOLICITATION.

1. **CLARIFICATION OF TERMS:** If any prospective bidder/offeror has questions about the specifications or other solicitation documents, the prospective bidder/offeror should contact the Purchasing Agent or the person whose name appears on the face of solicitation NO LATER THAN SEVEN (7) WORKING DAYS BEFORE opening/closing date. Any revisions to the solicitation will be made only by addendum issued by the Purchasing Agent.
2. **PREPARATION & SUBMISSION:** In order to be considered for selection, the bidder/offeror must submit a complete response to the Invitation For Bid/Request For Proposals. One (1) original and one (1) copy of each bid/proposal must be submitted on the Town of Vienna Bid/Proposal Forms provided. The bid/proposal shall be signed by an authorized representative of the bidders'/offerors' firm and delivered to the proper location by the time and date specified on the cover page.
3. **ENVELOPE IDENTIFICATION:** The signed bids must be returned in a sealed envelope and identified as follows: "SEALED BID", show the IFB number, IFB subject, opening time, opening date, and bidder's name and address. In the case of proposals, the signed proposal cover page and proposal must be returned in a sealed envelope, marked clearly on the outside "SEALED COMPETITIVE NEGOTIATION", show the RFP number, RFP subject, closing time, closing date, and offeror's name and address.

If a bid/proposal is mailed in an envelope, not identified as specified, the bidder/offeror takes the risk that the envelope may be inadvertently opened

and the information compromised which may cause the bid/proposal to be disqualified. The Town reserves the right to declare such a bid/proposal as non-responsive. Bids/proposals may be hand delivered to the designated location.

4. **LATE BIDS/PROPOSALS:** LATE bids/proposals will be returned to bidder/offeror UNOPENED, if the IFB/RFP number and return address is shown on the envelope.
5. **QUOTATIONS TO BE F.O.B. DESTINATION:** Quote F.O.B. DESTINATION for all competitive sealed bids. If otherwise, show exact cost to deliver.
6. **PRICING ERRORS:** In case of an error in price extension, the firm fixed unit price shall govern.
7. **BID/PROPOSAL ACCEPTANCE PERIOD:** Bids shall be binding upon the bidder for sixty (60) days following the bid opening date. Proposals shall be binding upon the offeror for ninety (90) days following the proposal due date. Any bid/proposal on which the bidder/offeror shortens the acceptance period may be rejected.
8. **CORRECTION OR WITHDRAWAL OF BIDS AND CANCELLATION OF AWARDS UNDER COMPETITIVE SEALED BIDDING:** Correction or withdrawal of inadvertently erroneous bids before or after award, or cancellation of awards or contracts based on such bid mistakes, shall be permitted. After bid opening, no changes in bid prices or other provisions of bids prejudicial to the interest of the Town or fair competition shall be permitted. Except as otherwise provided by regulation, all decisions to permit the correction or withdrawal of bids, or to cancel awards or contracts based on bid mistakes, shall be supported by a written determination made by the Purchasing Agent. No bid may be withdrawn when the result would be to award the contract on another bid of the same bidder or of another bidder in which the ownership of the withdrawing bidder is more than five percent (5%). If a bid is withdrawn, the lowest remaining bid shall be deemed to be the low bid. If the Purchasing Agent, the Using Department, or a designee of such, denies the withdrawal of a bid, he shall notify the bidder in writing stating his decision.
9. **TAXES:** The Town of Vienna is exempt from the payment of federal excise or state sales taxes on all tangible, personal property for its use or consumption except taxes paid on materials that will be installed by the bidder and become a part of real property.

If a bidder is bidding on materials that require installation by the bidder and become a part of real property, the applicable taxes shall be included in the lump sum bid price for the installation of the material and not as a separate charge for taxes.

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The taxes shall be an obligation of the successful bidder and not of the Town, and the Town shall be held harmless for same by the successful bidder.

The Purchasing Office will furnish a Tax Exemption Certificate (Form ST-12) upon request and if applicable to this contract.

When a bidder lists a separate tax charge on the Bid Form and the tax is not applicable to the purchase by the Town, the bidder will be allowed to delete the tax from its bid.

10. **USE OF BRAND NAME OR EQUAL:**

- a) Unless otherwise provided in the solicitation, the name of a certain brand, make or manufacturer does not restrict bidders/offers to the specific brand, make or manufacturer named, but conveys the general style, type, character, and quality of the article desired. Any article which the Town of Vienna, in its sole discretion, determines to be equal to that specified, considering quality, workmanship, economy of operation, and suitability for the purpose intended, shall be accepted.
- b) The bidder/offeror is responsible to clearly and specifically indicate the product being offered and to provide sufficient descriptive literature, catalogs and technical details to enable the Town of Vienna to determine if the product offered meets the requirements of the solicitation. This is required even if offering the exact brand, make or manufacturer specified. Normally in competitive sealed bidding only the information furnished with the bid will be considered in the evaluation. Failure to furnish adequate data for evaluation purposes may result in declaring a bid non-responsive. Unless the bidder/offeror clearly indicates in its bid/proposal that the product offered is an "EQUAL" product, such bid/proposal will be considered to offer the brand name product referenced in the solicitation.
- c) It shall be understood that the burden of proof for an "equal" product shall be and remain the sole responsibility of the bidder. The Town's decision of approval or disapproval of a proposed alternate shall be final. Nothing herein is intended to exclude any responsible bidder, its product or service or in any way restrain or restrict competition.

11. **SAMPLES:** Samples, if required, must be furnished free of expense to the Town of Vienna on or before date specified; if not destroyed in examination, they will be returned to bidder, if requested, at his expense. Each sample must be marked with the bidder's name and address, Town's request number and opening date. DO NOT ENCLOSE IN OR ATTACH BID TO SAMPLE.

12. **TRADE SECRETS/PROPRIETARY**

INFORMATION: Trade secrets or proprietary information submitted by an Offeror in response to this Request for Proposal shall not be subject to public disclosure under the Virginia Freedom of Information Act (FOIA); however, the Offeror must invoke the protection of this section prior to or upon submission of data or materials to be protected and state the reasons why protection is

necessary (Section 2.2-4342F of the Code of Virginia).

13. **DELIVERY:** Bids must show number of days required to place material in using agency's receiving area under normal conditions. Proposal must show the number of days required to provide the services/reports as specified.

Failure to state delivery time obligates bidder/offeror to complete delivery in fourteen (14) calendar days or as specified. A five (5) day difference in delivery promise may break a tie bid. An unrealistically short or long delivery promise may cause a bid/offer to be disregarded. Consistent failure to meet delivery promise without valid reason may cause removal from bid list. Delivery shall be made during normal working hours, 8:00 am to 4:30 pm Monday through Friday, unless prior approval for another time period has been obtained from Consignee.

14. **DEFAULT:** In case of failure to deliver goods/services in accordance with the contractual terms and conditions, the Town of Vienna, Virginia, after due oral or written notice, may procure them from other sources and hold the defaulting Contractor responsible for any resulting additional purchase and administrative costs. This remedy shall be in addition to any other remedies which the Town of Vienna may have.

15. **TOWN'S RIGHT TO TERMINATE THE CONTRACT:** The Contract may be terminated by the Town for any one of the following reasons:

- a) If the successful bidder should be adjudged bankrupt, or make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of the successful bidder's insolvency, or if the successful bidder should persistently or repeatedly refuse or should fail, except in cases for which extension of time is provided, to deliver the goods or services within the time specified, or if the bidder otherwise defaults, then the Town may without prejudice to any other right or remedy, and after giving the successful bidder seven (7) calendar days written notice, terminate the employment of the successful bidder and procure such goods or services from other sources. In such event, the successful bidder shall be liable to the Town for any additional cost occasioned by such failure or other default.
- b) In such cases, the successful bidder shall not be entitled to receive any further payment if the expense of finishing the contract requirements, including compensation for additional; managerial and administrative services shall exceed the unpaid balance of the contract price, the successful bidder shall pay the difference to the Town.
- c) If the successful bidder should fail to make prompt payment to Subcontractor(s) for material or labor, persistently disregards laws, ordinances or the instruction of the Town, or otherwise be in substantial violation of any provisions of the Contract;
- d) Failure of the Contractor to promptly make

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- good any defects in materials or work or any defects of any other nature, the correction of which has been directed in writing by the Town;
- e) Substantial evidence of collusion for the purpose of illegally procuring a contract or perpetrating fraud on the Town in the construction of work under contract.
 - f) Prior to termination of the Contract, the successful bidder and his Surety shall be notified in writing by the Town of the condition which makes termination of contract imminent. Ten (10) days after this notice is given, if a satisfactory effort has not been made by the successful bidder or his Surety to correct the conditions, the Town may declare the Contract terminated and notify the successful bidder and his Surety accordingly.
 - g) Upon receipt of notice of contract termination, the successful bidder shall immediately discontinue all operations. The Town may then proceed with the work in any lawful manner that they may elect until the project is final and complete.
 - h) The Town reserves the right to take possession of the premises and of all materials, tools and appliances thereon and finish the work by whatever method is deemed expedient. In such case, the successful bidder shall not be entitled to receive any further payment. If the expense of finishing the work, including compensation for additional managerial and administrative services, shall exceed the unpaid balance of the contract price, the successful bidder shall pay the difference to the Town. The expense incurred by the Town as herein provided, and the damaged incurred through the Contractor's default, shall be certified by the Town.
 - i) Termination of the contract under this section is without prejudice to any rights or remedies of the Town.
 - j) The Town reserves the right to cancel and terminate any resulting contract, in whole or in part, without penalty, upon 60 days written notice to the Contractor/ Consultant. Any contract cancellation notice shall not relieve the Contractor/Consultant of the obligation to deliver and/or perform on all outstanding services performed prior to the effective date of cancellation.
 - k) Notwithstanding anything to the contrary contained in the contract between the Town and the successful bidder, the Town may, without prejudice to any other rights it may have, terminate the contract for convenience and with cause, by giving thirty (30) days written notice to the successful bidder.
 - 1) In the event the Contract is terminated for cause related to the Contractor/Consultant's (or its Subcontractor's) hiring of unauthorized aliens, Contractor/Consultant, Contractor/Consultant hereby waives any claim to lost profits and the Town will proceed in accordance with subsections f) et seq. above.
- 16. **CONDITION OF ITEMS:** All items bid/proposed shall be new and in first class condition, including containers suitable for shipments and storage, unless otherwise indicated in bid invitation/proposal request. Verbal agreements to the contrary will not be recognized.
 - 17. **SUBSTITUTIONS:** No substitutions or cancellations permitted without prior written approval by the Purchasing Agent.
 - 18. **RIGHTS OF THE TOWN OF VIENNA:** The Town reserves the right to accept or reject all or any part of bids/proposals, waive minor technicalities/informalities and award the contract to the lowest responsive and responsible bidder or most qualified and best suited offeror to best serve the interest of the Town.
 - 19. **NEGOTIATION WITH THE LOWEST BIDDER:**
 - a) If all bids received exceed the available funds for the proposed purchase, the Town, pursuant to Town Code provisions, may meet with the lowest responsive and responsible bidder to discuss a reduction in the scope for the proposed purchase and negotiate a contract price within the available funds.
 - b) After bid negotiations, the lowest responsible bidder shall submit an addendum to its bid, which addendum shall include the change in scope for the proposed purchase, the reduction in price and the new contract value.
 - c) If the proposed addendum is acceptable to the Town, the Town may award a contract within funds available to the lowest responsible bidder based upon the bid as amended by the addendum.
 - d) If the Town and the lowest responsible bidder cannot negotiate a contract within available funds, all bids shall be rejected.
 - 20. **CONTRACTOR'S PERFORMANCE:**
 - a) Goods and services must be delivered and rendered strictly in accordance with this bid and shall not deviate in any way from the terms, conditions, prices, quality, quantity, delivery instructions, and specifications of this bid.
 - b) All goods and/or services delivered and/or rendered shall comply with all applicable federal, state, and local laws, and shall not infringe any valid patent or trademark. The successful bidder shall indemnify, keep, save, and hold the Town, its officers and employees, harmless from any liability for infringement and from any and all claims or allegations of infringement by the bidder or the Town, its officers and employees, arising from, growing out of, or in any way involved with the goods delivered or services rendered pursuant to this purchase.
 - c) In the event that suit is brought against the Town, its officers and/or its employees, either independently or jointly with the bidder, the bidder shall defend the Town, its officers and employees, in any such suit at no cost to them. In the event that final judgment is obtained against the Town, its officers, and/or

- its employees, either independently or jointly with the bidder, then the bidder shall pay such judgment, including costs and attorneys fees, if any, and hold the Town, its officers and employees, harmless there from.
- d) The successful bidder shall ensure that its employees shall observe and exercise all necessary caution and discretion so as to avoid injury to person or damage to property of any and all kinds.
 - e) The successful bidder shall not, in its product literature or advertising, refer to this purchase or the use of the bidder's goods or services by the Town of Vienna, Virginia.
 - f) The successful bidder shall cooperate with Town officials in performing the specified work so that interference with the Town's activities will be held to a minimum.
21. **DRUG-FREE WORKPLACE TO BE MAINTAINED BY THE CONTRACTOR** (Code of Virginia Section 2.2-4312): 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 prohibitions, (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 in accordance with the Virginia Public Procurement Act, 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.
- 22. **NO DISCRIMINATION AGAINST FAITH-BASED ORGANIZATIONS:**
The Town of Vienna does not discriminate against faith-based organizations as that term is defined in Virginia Code Section 2.2-4343.1.
 - 23. **ANTI-TRUST:** By entering into a contract, the bidder/offeror conveys, sells, assigns, and transfers to the Town of Vienna all rights, title and interest in and to all causes of the 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 Vienna under said contract. Consistent and continued tie bidding could cause rejection of bids by the Purchasing Agent and/or investigation for Anti-Trust violations.
 - 24. **INDEMNIFICATION:** The Contractor agrees to indemnify, defend and hold harmless the Town of Vienna, Virginia, its officers, agents, and employees from any claim, damages and actions of any kind or nature, whether at law or in equity, arising from or caused by the use of any materials, goods, or equipment of any kind or nature furnished by the contractor or any services of any kind or nature furnished by the contractor, provided that such liability is not attributable to the sole negligence of the using department or to failure of the using department to use the materials, goods or equipment in the manner already and permanently described by the contractor on the materials, goods or equipment delivered. The vendor agrees to protect the Town from claims involving infringement of patent or copyrights.
 - 25. **TIE BIDS:** If there is a tie for low bid and all other considerations are equal, and if the public interest will not permit the delay of re-advertising for bids, the award shall be determined by drawing lots in public.
 - 26. **PROHIBITION AS SUBCONTRACTORS UNDER COMPETITIVE SEALED BIDDING:** No bidder who is permitted to withdraw a bid shall, for compensation, supply any material or labor to or perform any subcontract or other work agreement for the person or firm to whom the contract is awarded or otherwise benefit, directly or indirectly, from the performance of the project for which the withdrawn bid was submitted.
 - 27. **ASSIGNMENT OF CONTRACT:** A contract shall not be assignable by the Contractor, in whole or in part, without the prior written consent of the Town of Vienna, Virginia.
 - 28. **CONTRACT DOCUMENTS:** The contract entered into by the parties shall consist of the Invitation For Bid/Request For Proposal, the signed bid/proposal submitted by the Contractor, the Town of Vienna's standard Purchase Order, the Mandatory/Special Specifications, Terms and Conditions, and the General Terms and Conditions, all of which shall be referred to collectively as the Contract Documents.

If the contractor has a standard contract form, this form shall be submitted with the bid/proposal submittal for the Town's review of its terms and conditions.
 - 29. **LICENSE REQUIREMENT:** All firms doing business in the Town of Vienna are required to be organized or authorized to transact business in the Commonwealth of Virginia or include in its bid or proposal a statement describing why the bidder or offeror is not required to be so authorized. Additionally all firms doing business in the Town of Vienna are required to be licensed in accordance with the Town's "Business, Professional and Occupational Licensing (BPOL) Tax" Ordinance. Wholesale and retail merchants without a business location in the Town are exempt from this requirement. Questions concerning the BPOL Tax should be directed to the Finance Department, Business License Office, Telephone number (703) 255-6321. The BPOL License number must be indicated on the submitted bid form.
 - 30. **AWARD:** The contract shall be awarded to the

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lowest responsive and responsible bidder or the most qualified and best suited offeror.

The Town Council will award all contracts in the amount of ten-thousand dollars (\$20,000.00) or more.

The Purchasing Agent will award all contracts less than ten-thousand dollars (\$20,000.00).

The Purchasing Agent shall sign all contract documents, with the exception of "Construction" contracts, and issue a purchase order to the successful bidder/offeror.

31. **COMPENSATION:**

- a) It is the Town's policy not to pay for any goods or services until the same have been actually received.
- b) Individual contractors shall provide the Purchasing Office their social security numbers and proprietorships, partnerships and corporations shall provide the federal employer identification numbers (Code of Virginia, Section 2.2-4354.2). This information shall be provided in the space indicated on the Bid Form.
- c) The successful bidder shall submit a complete itemized invoice on each item or service, which is delivered under the contract. The successful bidder shall indicate the purchase order number on the front of each invoice and on the outside of each package or shipping container.
- d) Cash discounts shall be deducted in accordance with the terms of the bid.
- e) Payment shall be rendered to the successful bidder for satisfactory compliance with the general terms, conditions and specifications of this bid. The required payment date shall be either: (i) the date on which payment is due under the terms of the contract for the provision of such goods or services; or (ii) if such date is not established by contract, not more than forty-five (45) days after goods or services are received or not more than forty-five (45) days after the invoice is rendered, whichever is later (Code of Virginia, Section 2.2-4352).
- f) Unless otherwise provided under the terms of the contract for the provisions of goods and services, if the Town fails to pay by the payment date, the Town agrees to pay the financial charge assessed by the successful bidder, which does not exceed one percent per month (Code of Virginia, Section 2.2-4354.4).

32. **METHOD OF PAYMENT:** Upon satisfactory delivery of the merchandise and/or satisfactory completion of the services, all invoices and statements shall reference the purchase order number and be submitted to:

Town of Vienna
ATTN: ACCOUNTS PAYABLE
127 Center St., S.
Vienna, VA 22180.

The prices and payments shall be full compensation

for the labor, tools, equipment, transportation and all other incidentals necessary to complete the specified terms and conditions.

33. **SUCCESSFUL BIDDER'S OBLIGATION TO PAY SUBCONTRACTOR:**

a) The successful bidder awarded the contract for this project shall take one of the two following actions within seven (7) days after the receipt of amounts paid to the successful bidder by the Town for work performed by the successful bidder's subcontractor(s) under the contract (Code of Virginia, Section 2.2-4354):

- 1. Pay the subcontractor(s) for the proportionate share of the total payment received from the Town attributable to the work performed by the subcontractor(s) under the contract; or
- 2. Notify the Town and subcontractor(s), in writing, of their intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.

b) The successful bidder shall pay interest to the subcontractor(s) on all amounts owed by the successful bidder that remain unpaid after seven (7) days following receipt by the successful bidder of payment from the Town for work performed by the subcontractor(s) under the contract, except for amounts withheld as allowed in subparagraph a (2) of this section. Unless otherwise provided under the terms of this contract, interest shall accrue at the rate of one percent (1%) per month.

c) The successful bidder shall include in each of its subcontractors a provision requiring each subcontractor to include or otherwise be subject to the same payment and interest requirements with respect to each lower-tier subcontractor(s).

d) The successful bidder's obligation to pay an interest charge to a subcontractor(s) pursuant to the payment clause in this section may not be construed to be an obligation of the Town. A contract modification may not be made for the purpose of providing reimbursement for such interest charge and a cost reimbursement claim may not include any amount for reimbursement for such interest charge.

34. **ANTI-DISCRIMINATION:** By submitting their bids/proposals all bidders/offerors certify to the Town of Vienna that they will conform to the provisions of the Federal Civil Rights Act of 1964, as amended, where applicable, and Section 2.2-4311 of the Virginia Public Procurement Act which provides:

In every contract over \$10,000.00 the provisions in A and B below apply:

a) During the performance of this contract, the contractor agrees as follows:

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 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.

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.

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.

- b) The Contractor will include the provisions of the foregoing paragraphs in every subcontract or purchase order of over \$10,000.00, so that the provisions will be binding upon each subcontractor or vendor.

- 35. **ETHICS IN PUBLIC CONTRACTING:** The provisions contained in Sections 2.2-4367 through 2.2-4377 of the Virginia Public Procurement Act as set forth in the Code of Virginia (1950), as amended, shall be applicable to all contracts solicited or entered into by the Town of Vienna. A copy of these provisions may be obtained from the Purchasing Agent upon written request.

By submitting their bids/proposals, all bidders/offerors certify that their bids/proposals are made without collusion or fraud and that they have not offered or received any kickbacks or inducements from any other bidder/offeror, supplier, manufacturer or subcontractor in connection with their bid/proposal, 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.

- 36. **CRIMINAL SANCTIONS:** The provisions referenced in Item 27 supplement, but do not supersede, other provisions of law including, but not limited to, the State and Local Government Conflict of Interests Act (§§ 2.2-3100 et seq.), the Virginia Governmental Frauds Act (§§ 18.2-498.1 et seq.), and Articles 2 (§§ 18.2-438 et seq.) and 3 (§§ 18.2-446 et seq.) of Chapter 10 of Title 18.2. The provisions apply notwithstanding the fact that the conduct described may not constitute a violation of the State and Local Government Conflict of Interests Act.
- 37. **APPLICABLE LAW AND COURTS:** Any contract resulting from this solicitation shall be governed in all respects by the laws of the Commonwealth of Virginia and any litigation with respect thereto shall be brought in the courts of the Commonwealth. The Contractor shall comply with applicable federal, state and local laws and regulations.

- 38. **LAWS AND REGULATIONS:** The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the work.

The Contractors and Subcontractors shall comply with the Virginia Contractor's Registration Law, Title 54.1, Chapter 11, Code of Virginia (1950), as amended.

All non-resident Contractors and Subcontractors submitting bids on the work described herein shall register with the Department of Labor and Industry under the provisions of Subsection 40.1-30 of the Code of Virginia (1950), as amended.

This contract and all other contracts and subcontracts are subject to the provisions of Articles 3 and 5, Chapter 4, Title 40.1, Code of Virginia (1950), as amended, relating to labor unions and the "right to work", and all Contractors and Subcontractors, whether residents or non-residents of the Commonwealth, who perform work related to the project shall comply with all of said provisions.

The Contractor shall furnish the Owner copies of affidavits upon request giving original dates, renewal dates and expiration dates of all labor contracts related to any phase of the work to be performed on the job site under this contract.

The provisions of all rules and regulations governing safety as adopted by the Safety Codes Commission of the Commonwealth of Virginia, issued by the Department of Labor and Industry under Title 40.1 of the Code of Virginia (1950), as amended, shall apply to all work under this contract.

The Contractor/Consultant shall comply with all laws and regulations of the Commonwealth of Virginia and the United States with respect to the employment of unauthorized aliens. Contractor/Consultant shall not hire or subcontract any portion of the work under this Contract to any individual the Contractor knows or reasonably should know to be an unauthorized alien as defined by 8 U.S.C. §1324a(h)(3). A violation of this provision shall constitute a material breach of the Contract and the Town may, in its sole discretion, terminate the contract.

- 39. **LABELING OF HAZARDOUS SUBSTANCES:** If the items or products requested by this solicitation are "Hazardous Substances" as defined by 3.1-250 of the Code of Virginia (1950), as amended, 42 U.S.C. § 11001 et seq., or 42 U.S.C. § 9601 et seq., then the bidder/offeror, by submitting his bid/proposal, certifies and warrants that the items or products to be delivered under this contract shall be properly labeled as required by the foregoing sections and that by delivering the items or products that the bidder/offer does not violate any of the prohibitions of Sec. 3.1-252 or the Code of Virginia or Title 15 U.S.C. Sec. 1263.
- 40. **MATERIAL SAFETY DATA SHEETS:** Material Safety Data Sheets (MSDS) and descriptive literature shall be provided with the bid/proposal or delivered materials for each chemical and/or compound offered. Failure of the bidder/offeror to

submit such data sheets may be cause for declaring the bid/proposal as non-responsive.

- 41. **DEBARMENT STATUS:** By submitting their bids, Bidders certify that they are not currently debarred by the Commonwealth of Virginia or any Political Subdivision from submitting bids on contracts for the type of services covered by this solicitation, nor are they an agent of any person or entity that is currently so debarred.
- 42. **COOPERATIVE PROCUREMENT:** As authorized in Section 2.2-4304 of the Code of Virginia this procurement is being conducted on behalf of and may be used by public bodies, agencies, institutions and localities of the several states, territories of the United States, and the District of Columbia with the consent of the Contractor.
- 43. **RECORD RETENTION/TOWN AUDITS:**
 - a) The successful bidder shall retain, during the performance of the contract and for a period of three (3) years from the completion of the contract, all records pertaining to the successful bidder's bid and any contract awarded pursuant to this Invitation for Bid. Such records shall include but not be limited to all paid vouchers including those for out-of-pocket expenses; other reimbursement supported by invoices, including successful bidder's copies of periodic estimates for partial payments; ledgers; cancelled checks; deposit slips; bank statements; journals; contract amendments and change orders; insurance documents; payroll documents; timesheets; memoranda; and correspondence. Such records shall be available to the Town on demand and without advance notice during the successful bidder's normal working hours.
 - b) Town personnel may perform in-progress and post-audits of the successful bidder's records as a result of a contract awarded pursuant to this Invitation for Bid. Files would be available on demand and without notice during normal working hours.
- 44. **MODIFICATION OF CONTRACT:** The Town may, upon mutual agreement with the Contractor, issue written modifications to the scope of work of this contract, and within the general scope thereof, except that no modifications can be made which will result in an increase of the original contract price by a cumulative amount of more than \$50,000.00 or twenty-five percent (25%) of the amount of the original contract, whichever is greater, without the advance written approval of the Mayor and the Town Council. (Section 2.2-4309 of Virginia Public Procurement Act).

Should it become necessary, for the best interest of the Town, to make modifications, the same shall be covered by change order. The Contractor shall not begin work on any alteration requiring a change order until the agreement, setting forth the changes/modifications, has been executed in writing by the Town and the Contractor.

If a satisfactory agreement cannot be mutually agreed to for any item requiring a change order, the

Town reserves the right to terminate the contract as it applies to the items in question and make such arrangements as may be deemed necessary to complete the work.

The Town may, in writing, omit from the work any item, other than major items, found unnecessary to the project and such omission shall not be a waiver of any condition of the contract nor invalidate any of the provisions thereof. Major items may be omitted by change order.

The Contractor shall be paid for all work done toward the completion of the item prior to such cancellation, alteration or suspension of the work by the Town.

A major item shall be construed to be any item, the total cost of which is equal to or greater than ten percent (10%) of the total; contract amount for each separate alternate, computed on the basis of the proposed quantity and the contract unit price.

- 45. **SPECIFICATION FAMILIARITY:**
 - a) It is the Bidder's responsibility to examine this entire IFB carefully. If a question arises as to the meaning or intent of these documents, inquiry must be made in writing to the Purchasing Agent.
 - b) The submission of a bid shall indicate that the Bidder thoroughly understands the terms and conditions of the IFB.
- 46. **CONTRACT AND FORMS:**
 - a) Bidders are advised that the Town does not sign standard contract forms that may be used by the bidder. The selected Bidder will be expected to enter into a contract with the Town for the commodities outlined in this IFB. The form of contract will be the Town's Purchase Order and/or Agreement.
 - b) The bid form contains a signature line for the bidder that must be signed when submitting a bid. The signature certifies the bidder is an agent of officer authorized to bind the Contractor to the terms and conditions of the IFB.
- 47. **ADDENDA AND INTERPRETATIONS:** No interpretation of the meaning of these documents will be made to any bidder orally. Any request for an interpretation must be in writing addressed to Town of Vienna, 127 Center Street, South, Vienna, VA 22180, Attention: Purchasing Agent. Faxed inquiries to the Purchasing Department fax number will also be accepted. To be given consideration, requests must be received at least five days prior to the date fixed for the submission of Bids. Any and all such interpretations and any supplemental instructions will be returned in writing to the prospective bidder requesting such interpretations, or will be in the form of written addenda which, if issued, will be sent to all prospective bidders, at the respective addresses furnished for such purpose, not later than three days prior to the date fixed for the submission of Bids. Failure of any bidder to receive any such addenda or interpretations shall not relieve said bidder from any obligation under his Bid as submitted. All addenda so issued shall become part of the Contract Documents.

48. **INSURANCE:** The Contractor shall provide the Purchasing Agent with a Certificate of Insurance PRIOR to the start of any work under the contract and agrees to maintain such insurance until the completion of the contract. The minimum limits of liability shall be:

Workers' Compensation -- Standard Virginia Workers' Compensation Policy

Broad Form Comprehensive General Liability-- \$1,000,000.00.

Combined Single Limit coverage to include:

- Premises - Operations;
- Products/Completed Operations;
- Contractual; Independent Contractors;
- Owners and Contractors
- Protective; Personal Injury (Libel, Slander, Defamation of Character, etc.)

Automobile Liability--\$500,000.00 Combined Single Limit.

The Town of Vienna, Virginia is to be named as an additional insured and this is to be so noted on Certificate of Insurance.

The policy shall be delivered to the Town of Vienna PRIOR to the commencement of any work.

A thirty (30) day written notice of cancellation or non-renewal shall be furnished by certified mail to the purchasing office at the address indicated on the solicitation.

Contractor's signature on this solicitation constitutes certification that, if awarded the contract, Contractor shall obtain the required coverage as specified herein within ten (10) days of notification of award.

49. **WORKER'S COMPENSATION AND EMPLOYER'S LIABILITY:**

- a) The successful Bidder's/Offeror's insurance shall cover the bidder/offeror and its subcontractors of every tier of those sources of liability which would be covered by the latest edition of the standard Worker's Compensation Policy, as filed for use in the Commonwealth of Virginia by the National Council on Compensation Insurance, without restrictive endorsements, but including Broad Form All States Endorsement. In addition to coverage for the Virginia Worker's Compensation Act, where appropriate, coverage is to be included for the United States Longshore and Harbor Worker's Compensation Act, Maritime including Jones Act, Federal Liability Act and any other applicable federal or state law.
- b) Subject to the restrictions of coverage found in the standard Worker's Compensation Policy, there shall be no maximum limit on the amount of coverage for liability imposed by the Virginia Worker's Compensation Act, the United States Longshore and Harbor Worker's Compensation Act, or any other coverage customarily insured under Part One of the standard Worker's Compensation

Policy. The minimum amount of coverage for those coverages customarily insured under Part Two of the standards Worker's Compensation (inclusive of any amounts provided by an umbrella or excess policy) shall be \$1,000,000 bodily injury by accident each accident, \$1,000,000 bodily injury by disease each employee, and \$1,000,000 bodily injury by disease policy limit or aggregate where such aggregate is applicable under the terms of the standard Worker's Compensation Policy.

50. **PROFESSIONAL LIABILITY:**

- a) The successful bidder/offeror shall provide the Town of Vienna with an Errors and Omissions Liability Policy (E&O Policy). The policy shall cover the Town of Vienna for all sources of liability which would be covered by the latest edition of the standard Errors and Omissions Liability Coverage Form, as filed for use in the Commonwealth of Virginia by the Insurance Services Office without the attachment of restrictive endorsements.
- b) The policy shall be endorsed to include the Town of Vienna's officials, officers, agents and employees as insured. The E&O Policy shall include the successful Offeror and the offeror's subcontractors of every tier as the designated in the declarations.
- c) The minimum E&O Policy limits to be provided by the successful Offeror (inclusive of any amounts provided by an umbrella or excess policy) shall be \$1,000,000 per occurrence combined single limit for bodily injury liability and property damage liability. The limits afforded by the E&O Policy (or umbrella or excess policy with respect to it) shall apply only to the Town of Vienna officials, officers, agents and employees and only to claims arising out of or in connection with the work under this contract.

The insurance provided by the successful Offeror pursuant to the resulting contract shall apply on a primary basis and any other insurance or self-insurance maintained by the Town of Vienna or the Town of Vienna official, officer, agent or employee shall be excess of and not contributing with the insurance provided by or on behalf of the Offeror.

The coverages other than Worker's Compensation may be either on an occurrence or a claims-made basis. Provided, however, that claims-made coverage for other than the Products/Completed Operations shall respond to claims arising out of accidents, occurrences, incidents and offenses happening after the commencement of the resulting contract but before the end of the contract completion date provided that the claim is made within five years after the contract completion date.

Prior to commencing work under a resulting contract, the successful Offeror shall furnish the Town of Vienna with a Certificate(s) of

IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION

Insurance naming the Town of Vienna, its officers, employees and agents, as additional insureds, giving a forty-five (45) day notice of cancellation, non-renewal, or change in the insurance coverage, and/or restrictions.

51. **SAFETY:** All contractors and subcontractors performing services for the Town of Vienna are required to comply with OSHA standards and accepted safety rules and regulations.
52. **OWNERSHIP OF PRODUCTS/SERVICES:** All control work, compilation of notes, work sheets, and any and all interim and final products and materials shall be the sole property of the Town of Vienna.
53. **COLLUSION:** By submitting a bid/proposal in response to this solicitation, the Bidder/Offeror represents that in the preparation and submission of this bid/proposal, said Bidder/Offeror did not, either directly or indirectly, enter into any combination or arrangement with any person, Bidder/Offeror or corporation or enter into any agreement, participate in any collusion, or otherwise take any action in the restraint of free, competitive bidding in violation of the Sherman Act (15 U.S.C. Section 1) or Sections 59.1-9.1 through 59.1-9.17 or Sections 59.1-68.6 through 59.1-68.8 of the Code of Virginia.

SECTION F

SUPPLEMENTAL/SPECIAL CONDITIONS

I. PAYMENT FOR MATERIAL STORED OFF-SITE

INTENTIONALLY OMITTED

II. CONSTRUCTION SCHEDULE - BAR CHART

A. SCOPE

1. The following additional scheduling requirements are a part of this Contract.
2. Work under this Section shall consist of furnishing a Construction Schedule showing in detail how the Contractor plans to execute and coordinate the Work. The Contract Schedule shall be based on and incorporate the Contract Milestones and Completion Dates specified in the Owner-Contractor Agreement and shall show the order in which Contractor shall perform the Work, projected dates for the start and completion of separable portions of the Work, and any other information concerning Contractor's Work scheduling as the Owner may request.
3. The Construction Schedule shall be in the form of a bar chart and shall consist of horizontal lines, or bars, plotted along a daily time scale. Each pay item designated in the unit price shall be denominated as a separate activity and represented by a horizontal bar or bars on the chart. The time scale shall indicate all required Milestone and Completion Dates as set forth in the Owner-Contractor Agreement. The horizontal bar(s) shall indicate the start and finish dates as well as the total time period of performance for each pay item activity. The Contractor shall arrange the chart so as to show the pay item activities which are necessary to fulfill each and every Milestone and Completion Date requirement.
4. Each Work item on the bar chart shall be broken into reasonable work segments/activities (where practicable) with individual starting and stopping dates. As a minimum, work shall be segmented to demonstrate its relationship to the various Milestone Dates, if any. The segmented Work activities shall be cost loaded to show its dollar value as a part of the entire pay item. Activity titles shall be self-explanatory; abbreviations shall be shown in the legend.

B. UPDATES AND REVISIONS

1. The chart shall be updated to show actual progress and the effect of modifications, delays and other events. A second bar for each work item, in a contrasting color or pattern, shall be drawn parallel to the proposed schedule to show actual progress and to forecast future progress. The actual start and stop dates shall be entered, as well as the actual dates of the Milestone events. Updates are to be submitted monthly, with and as a part of, the payment requests.
2. The updated Construction Schedule submitted by Contractor shall not show a completion date later than the Contract Time, subject to any time extensions approved by Owner;

provided, however, that if Contractor believes he is entitled to an extension of the Contract under the Contract Documents, Contractor shall submit to Owner, with each update, a separate schedule analysis (entitled "Requested Time Adjustment Schedule") indicating suggested adjustments in the Contract Time which should, in the opinion of the Contractor, be made by time extension, due to changes, delays or conditions occurring during the past month or previously, or which are expected or contemplated by Contractor (whether such conditions are excusable under the Contract or are due to Contractor fault); this separate schedule, if submitted, shall be accompanied or preceded by a formal time extension request as required by the Contract and a detailed narrative justifying the time extension requested. To the extent any time extension requests are pending at the time of any update in the Construction Schedule, the "Requested Time Adjustment Schedule" shall be updated also each month, to reflect any adjustments made by Contractor in the Construction Schedule, or any time extensions previously granted by Owner, and to reflect actual or expected progress. Owner shall not have any obligation to consider any time extension request unless the requirements of the Contract Documents, and specifically, but not limited to these requirements, are complied with; and Owner shall not be responsible or liable to Contractor for any constructive acceleration due to failure of Owner to grant time extensions under the Contract Documents should Contractor fail to substantially comply with the submission requirements and the justification requirements of this Contract for time extension requests. Contractor's failure to perform in accordance with the Construction Schedule shall not be excused, nor be chargeable to Owner, because Contractor has submitted time extension requests or the "Requested Time Adjustment Schedule".

3. Neither the updating of Contractor's work schedule nor the submission, updating, change or revision of any other report or schedule submitted to Owner by Contractor under this Contract nor Owner's review or absence of objection regarding any such report or schedule shall have the effect of amending or modifying, in any way, the Contract Completion Date, Milestone Dates or of modifying or limiting in any way Contractor's obligations under this Contract.
4. All of Contractor's detailed calculations and documents supporting all schedules, reports, and forecasts shall be available to Owner on request.
5. Each updated Construction Schedule submitted by the Contractor shall be accompanied by a narrative report which reflects the following:
 - a. Description of Work accomplished since submission of previous progress schedule;
 - b. Comparison of the actual status of the Work with Contractor's project schedule;
 - c. Status of equipment and material deliveries;
 - d. Personnel staffing schedule;
 - e. Causes of any delays;
 - f. Revision of schedules; and
 - g. Action proposed to restore schedule.

C. SCHEDULE OF OFF-SITE ACTIVITIES

INTENTIONALLY OMITTED

VENDOR NAME _____

SECTION G
FORM OF BID

PROJECT NAME: WOLFTRAP CREEK STREAM RESTORATION

TO: Town of Vienna
Purchasing Agent
127 Center Street South **CONTRACT NUMBER: IFB 17-12**
Vienna, Virginia 22180

FROM:

- A. Having carefully examined the Contract Documents entitled WOLFTRAP CREEK STREAM RESTORATION and having visited the site and examined all conditions affecting the work, the undersigned agrees to furnish all labor and material, equipment and services necessary for the proper and timely completion of the work as required by said documents.

This bid is subject to all terms and conditions set forth in the Bidding Documents, defined in Paragraph A-2 of the Information for Bidders.

The undersigned agrees, if awarded the Contract, to execute and totally complete the work for the stipulated sum of:

BID: _____
_____ Dollars (\$) _____)

(The above total price shall be listed using both words and numbers. In the event the base bid and the extension of unit prices do not agree, the unit prices shall govern. For discrepancies in Lump Sum bids, the written number shall govern over that in figures.)

- B. All formal and written informal bids or proposals shall include the following provisions:
 - 1. Each bidder or offeror shall certify, upon signing a bid or proposal, that to the best of his or her knowledge no Town of Vienna official or employee having official responsibility for the procurement transaction, or member of his or her immediate family, has received or will receive any financial benefit of more than nominal or minimal value relating to the award of this contract. If such a benefit has been received or will be received, this fact shall be disclosed with the bid or proposal or as soon thereafter as it appears that such a benefit will be received. Failure to disclose the information

VENDOR NAME _____

prescribed above may result in suspension or debarment, or rescission of the contract made, or could affect payment pursuant to the terms of the contract.

2. Whenever there is reason to believe that a financial benefit of the sort described in Paragraph 1 has been or will be received in connection with a bid, proposal or contract, and that the contractor has failed to disclose such benefit or has inadequately disclosed it, the Town of Vienna, as a prerequisite to payment pursuant to the contract, or at any other time, may require the contractor to furnish, under oath, answers to any interrogatories related to such possible benefit.
- C. If notified of acceptance of this proposal and contract award within forty-five (45) calendar days after receipt of bids, the undersigned agrees to execute a contract for the above-named project Work and the above-stated consideration on the form required, within fifteen (15) calendar days of such notification. The undersigned hereby designates the office address stated on the first page of this proposal as the address to which a Notice to Award of this construction contract may be delivered and to which all office correspondence and notices may be mailed, or delivered by any means, unless the Owner is otherwise notified in writing.
- D. The undersigned acknowledges receipt of the following addenda, and that the cost, if any, of such revisions has been included in the bid sum:

ADDENDUM RECEIVED (Initial and Date)

Addendum No. 1. _____	Addendum No. 4. _____
Addendum No. 2. _____	Addendum No. 5. _____
Addendum No. 3. _____	Addendum No. 6. _____

- E. Included herein is the required written guarantee, "Contract Bond Certification" form, issued by a surety company licensed to conduct business in Virginia and acceptable to the Owner. This guarantee states that in the event a Contract is awarded to the bidder, the said surety will furnish a Performance Bond and a Labor and Material Payment Bond in an amount required by the Contract Documents in Section A, Information to Bidders, Paragraph A-10.
- F. Included as a part of this Bid are the following documents which are to be submitted on the forms required, pages G-3 through G-12, as applicable.
1. The required Bid Security provided as Cash, Cashier's Check, Certified Bidder's Check, or an acceptable Bid Bond.

The Bidder will ensure that the Bid Bond form contained herein is properly executed by an approved Surety and submitted with the Proposal Form at the time and the place on which bids are scheduled to be received. The failure on the part of a Bidder to enclose an executed copy of the Town of Vienna approved Bid Bond with the Proposal Form or a Certified or Cashier's check or cash may result in the disqualification of the Bid.
 2. A Certified Listing of Safety Violations, in accordance with Paragraph A-23 of the Information for Bidders. Said certification is made on the "Certification of Safety Violations" form and all other forms found in this section (B);
 3. "Acknowledgement of Principal of Bidder..." form;
 4. The statistical "Small and Minority Business Data" form;
 5. The required "Contract Bond Certification" form;
 6. If applicable, the "Bidder's Request for Equal Product or Substitution and Bidder's Representations" form;

VENDOR NAME _____

7. If applicable, the Firm Fixed Price Bid and/or Alternate Bid forms provided at the end of this Section (B).
- G. The undersigned hereby acknowledges that he has read and understands the varied nature of the work, the Drawings and Specifications, Addenda and all other Contract Documents pertaining to this project. The undersigned certifies that the Contract Documents are, in his opinion, adequate, feasible and complete for performing the Work and constructing the Work in a sound and suitable manner for the use specified and intended by the Contract Documents. The undersigned further certifies that he has, or has available, the equipment, personnel, materials, facilities and technical and financial ability necessary to complete the Work in accordance with the Contract Documents and within the time specified therein. The Bidder certifies that he has made allowances for normal inclement weather indigenous to the Project site.
- H. The following information is provided pursuant to the Contract Documents:

1. Legal Name of Firm:

- a. If Firm is a corporation, State that corporation is organized under the laws of the State of _____. Please affix corporate seal to this Form of Bid.
- b. If Firm is a partnership, state names of partners:
- c. If Firm is an individual using a trade name, state name of individual:
2. Virginia Contractor Registration Number: _____; Class: _____
3. Signature of Person or Persons legally authorized to bind Bidder to a Contract. A Bid submitted by an agent shall have a current Power of Attorney attached certifying the agent's authority to bind the Bidder.
- a. Signature: _____ Date: _____
- b. Name (Type): _____
- c. Title: _____

(CORPORATE SEAL)

d. Address: _____

- I. The names and addresses of other persons interested as principals in this proposal are as follows:

VENDOR NAME _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS, That we, _____
(Bidder's Name)

_____ of _____
(Street Address) (City, State, Zip)

hereinafter called the Principal, and _____
(Surety's Name)

a corporation organized and existing under the Laws of the State of _____, and authorized to transact business in the State of Virginia, as Surety, hereinafter called Surety, are held and firmly bound unto the Town of Vienna, Virginia hereinafter called Obligee, in the Penal sum of _____ of the amount bid, good and lawful money of the United States of America, for the payment of which the Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

The Condition of this Obligation is such that, WHEREAS the Principal has submitted a proposal to the Obligee on a contract for **IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION**.

NOW THEREFORE, if the Obligee shall accept the bid of the Principal and the Principal shall enter into a Contract with the Obligee in accordance with the terms of such bid, and give such bond or bonds as may be specified in the Bidding or Contract Documents with good and sufficient surety for the faithful performance of such construction for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Obligee the difference not to exceed the penalty hereof between the amount specified in said bid and such larger amount for which the Obligee may in good faith contract with another party to perform the Work covered by said bid, then this obligation shall be null and void; otherwise to remain in full force and effect.

BID BOND-CONTINUED

In witness whereof, we have hereunto set our signatures and seal this _____ day of _____, _____, all pursuant to due authorization.

Principal (SEAL)

By: _____
Surety

VENDOR NAME _____

By: _____
Attorney-in-Fact in accordance
with the attached Power of Attorney

STATE OF _____)

) ss:

TOWN OF _____)

I, _____, a Notary Public in and for the State and Town aforesaid, do hereby certify that _____, and _____, whose names are signed to the foregoing bond, this day personally appeared before me in my aforesaid State and Town and acknowledged the same.

Given under my hand seal this _____ day of _____, 20 .

Notary Public (SEAL)

My Commission expires:

VENDOR NAME _____

CERTIFICATION OF SAFETY VIOLATIONS

(Described in Article A-23)

I hereby certify that _____
(Name of Bidding Firm)

Located at; _____
(Address of Bidding Firm)

has had the following safety violations described in Article A-23, paragraph A of the Information for Bidders, (if none so state):

By: _____
Principal (SEAL)

State of: _____)

) ss:

Town of: _____)

On this _____ day of _____, before personally came and appeared _____, to me known, who by me duly sworn, did depose and say that he is the _____ of the _____;
_____;

that he has the authority to bind the above named firm; and he represents and certifies the foregoing statements are, to the best of his knowledge, true and complete.

Notary (SEAL)

My Commission Expires: _____

VENDOR NAME _____

ACKNOWLEDGMENT OF PRINCIPAL OF BIDDER, IF A CORPORATION

State of _____)

) ss:

County of _____)

On this _____ day of _____, _____, before me personally came and appeared _____, to me known, who, being by me duly sworn, did depose and say that he resides at:

that he is the _____ of _____, the corporation described in and which executed the foregoing instrument; that he knows the seal of said corporation; that one of the impressions affixed to said instrument is an impression of such seal; that it was so affixed by order of the directors of said corporation; and that he signed his name thereto by like order.

(SEAL)

My Commission Expires: _____

ACKNOWLEDGMENT OF PRINCIPAL OF BIDDER, IF A PARTNERSHIP

State of _____)

) ss:

County of _____)

On this _____ day of _____, _____, before me personally came and appeared, to me known, and known to me to be one of the members of the firm of _____, described in and who executed the foregoing instrument, and he acknowledged to me that he executed the same as and for the act and deed of said firm.

(SEAL)

My Commission Expires: _____

ACKNOWLEDGMENT OF PRINCIPAL OF BIDDER, IF A SOLE PROPRIETORSHIP

State of _____)

) ss:

County of _____)

On this _____ day of _____, _____, before me personally came and appeared, to me known, and known to me to be the person described in and who executed the foregoing instrument and acknowledged that he executed same.

(SEAL)

My Commission Expires: __

VENDOR NAME _____

SMALL AND MINORITY BUSINESS DATA

We hereby provide the following information to the Town of Vienna regarding our firm. We understand that it is provided for statistical purposes only and all firms tendering bids will receive equal consideration for award.

Minority Business Firm: Yes _____; No _____.

Small Business Firm: Yes _____; No _____.

Contractor Subcategory: _____

Federal, State and Town Laws, orders and regulations, require the Town of Vienna to ensure that its procurement practices are non-discriminatory and promote equality of opportunity for Small and Minority Business Enterprises.

DEFINITIONS

The following definitions are to be used to identify Small Businesses, Minority Businesses and Contractor Subcategories:

Small Business: A corporation, partnership, sole proprietorship, or other legal entity formed for the purpose of making a profit, which is independently owned and operated, has either fewer than 100 employees, or less than \$1-Million in annual gross receipts.

Minority Business: A business enterprise that is at least 51-percent owned and controlled by a minority person or persons. Such persons include African Americans, Hispanic Americans, Asian Americans, American Indians, Eskimos and Aleuts; women regardless of race or ethnicity; and persons with a physical or mental impairment that substantially limits one or more of the major life activities of such individual, a record of such impairment, or who are regarded as having such an impairment.

Contractor Subcategories:

- | | |
|--|--|
| A = Woman-Owned | N = Asian American Woman-Owned |
| B = Small (Non-Minority) | O = Small, Asian American Owned |
| C = Small, Woman-Owned | P = Small, Asian American Woman-Owned |
| D = Sheltered Workshop | Q = American Indian Owned |
| E = African American Owned | R = American Indian Woman-Owned |
| F = African American Woman-Owned | S = Small, American Indian Owned |
| G = Small, African American Owned | T = Small, American Indian Woman-Owned |
| H = Small, African American Woman-Owned | U = Eskimo/Aleut Owned |
| I = Hispanic American Owned | V = Eskimo/Aleut Woman-Owned |
| J = Hispanic American Woman-Owned | W = Small, Eskimo/Aleut Owned |
| K = Small, Hispanic American Owned | X = Small, Eskimo/Aleut Woman-Owned |
| L = Small, Hispanic American Woman - Owned | Y = Large, Non-Minority |
| M = Asian American Owned | -- = Non-BML Firms |

VENDOR NAME _____

CONTRACT BOND CERTIFICATION

TO: Town of Vienna
c/c Purchasing Agent
127 Center Street South
Vienna, Virginia 22180

DATE: _____

FROM: (Surety) _____

REFERENCE: Project

Contract No. _____ Project No. _____

Bidder: _____

As surety for the above-named Bidder, the _____
(Surety Name)

hereby certifies that we will promptly furnish the required Performance, Labor and Materials Payment and Guarantee Bonds, in separate instruments, as required by the General Conditions, on behalf of the above named Bidder, in the event that the said firm is determined to be the Successful Bidder and a construction contract is subsequently awarded for this project.

By: _____
Attorney-in-Fact,
in accordance with the attached Power of Attorney

VENDOR NAME _____

BIDDER'S REQUEST FOR EQUAL PRODUCT OR
SUBSTITUTION AND BIDDER'S REPRESENTATIONS

FROM:

In submitting this Bid, the Bidder declares its intention to provide the following equal product or substitution in accordance with Addendum No. ____ and warrants that he has complied with the requirements of Paragraph A-17 of the Information for Bidders.

Description of Product:

The undersigned Bidder hereby represents and certifies the following:

1. He has investigated the proposed equal product or method and determined that it is equal or better in all respects to that specified and that it fully complies with all requirements of the Contract Documents,
2. He has investigated the proposed substitution and has determined that it will satisfy all operational requirements as indicated in Contract Documents,
3. He will meet all contract obligations with regard to this equal products or substitution;
4. He will coordinate installation of accepted equal products or substitutions into the work, making all such changes and any required schedule adjustments, at no additional cost to the Owner, as may be required for the work to be complete in all respects;
5. He waives all claims for additional costs and additional time related to equal products or substitutions which consequently become apparent. He also agrees to hold the Owner harmless from claims for extra costs and time incurred by other subcontractors and suppliers, or additional services which may have to be performed by the A/E, for changes or extra work that may, at some later date, be determined to be necessary in order for the Work to function in the manner intended in the Contract Documents;
6. He will provide the same warranty and guarantee, and perform any work required in accordance therewith, for the equal product or substitution that is applicable to the specified item for which the equal product or substitution is requested;
7. Material will be installed, handled, stored, adjusted, tested, and operated in accordance with the manufacturer's recommendation and as specified in the Contract Documents;

VENDOR NAME _____

8. In all cases new materials shall be used unless this provision is waived by notice from the Owner or his A/E, or unless otherwise specified in the Contract Documents; and
9. All material and workmanship shall in every respect be in accordance with what, in the opinion of the Owner or A/E, is in conformity with approved modern practice.

Bidder _____

By: _____

Title: _____

State of _____)

) to wit:

Town of _____)

On the _____ day of _____, _____ before me personally came and appeared, to me known, who by me duly sworn, did depose and say that he is the _____

_____ of the _____;

that he has the authority to bind the above named firm; and he represents and certifies the foregoing statements are, to the best of his knowledge, true and complete.

(SEAL)

My Commission expires: _____

ATTACHMENT A

RELEASE AND REQUEST FOR FINAL PAYMENT FORM

CONTRACT NUMBER: _____

CONTRACTOR NAME: _____

FINAL PAYMENT AMOUNT: _____

The Contractor hereby requests final payment in the amount indicated on the above referenced Contract. The Contractor agrees that its acceptance of final payment releases and forever discharges the Town of Vienna and its officers, employees, servants and agents from any and all actions, claims, demands and liability of whatever nature now existing or which may hereafter arise as a result of or in connection with the above referenced Contract.

The Contractor certifies that all of the debts for labor, materials, and equipment incurred in connection with the above referenced Contract have been fully paid.

AUTHORIZED SIGNATURE _____

DATE _____

Attachment B

IFB 17-12

Wolftrap Creek Stream Restoration

IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION – PHASE II

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SECTION-01 MOBILIZATION

1. DESCRIPTION

Mobilization shall consist of furnishing, transporting, and stockpiling of all materials for assembling and setting up for the project's operations, including but not limited to, the following:

- A. Initial movement of personnel.
- B. Moving all the construction tools and other related equipment required to complete the work on site. **Equipment must be cleaned (power washed off-site) prior to entering the project site in order to prevent the inadvertent spread/introduction of non-native species.**
- C. All other initial expenses and operations which must be performed before the beginning of the work.
- D. Demobilization.

2. MEASUREMENT AND PAYMENT

Mobilization shall be measured and paid for as a lump sum (LS) item. This price shall include demobilization. No additional payment will be made for demobilization and remobilization because of shutdowns, suspensions of work, or other mobilization activities.

Fifty percent (50%) of the mobilization will be paid on the initial movement of equipment and personnel. Another 25% will be paid midway through the project. The last 25% will be paid at completion of demobilization.

SECTION-02 CONSTRUCTION STAKEOUT

1. DESCRIPTION

This work shall consist of furnishing, transporting and stockpiling of all materials, placing, maintaining construction layout stakes and installing monuments for the purpose of construction and post-construction monitoring efforts, as specified in the Contract Documents or as directed by The Town of Vienna.

- A. The Contractor shall provide and have available to the project, experienced staff which is competent and qualified to set all lines and grades needed to construct the stream restoration.
- B. The Contractor shall make all field measurements necessary to stakeout the baseline of construction and layout the lines and grades called for in the Contract Documents or as directed by the Engineer. As described in Contract Documents, the Contractor shall use the horizontal and vertical survey controls provided by The Town of Vienna to lay out the lines of work, limits of grading, planting, fill placement, and to stake out the location of all proposed structures.
- C. Only those benchmarks established by The Town of Vienna and shown on the drawings shall be used for construction. The Contractor shall furnish the assistance for their preservation after being set. The Contractor shall be held responsible for their preservation. If, in the opinion of The Town of Vienna, the benchmarks are willfully or carelessly disturbed or destroyed by the Contractor or his/her employees, the entire cost of replacing them shall be charged against the Contractor and the cost shall be deducted from the Contractor's final payment.

IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION – PHASE II

- D. The Contractor shall, as part of the construction stakeout operation and before the mandatory pre-construction meeting and commencement of any clearing operations, demarcate the Limit of Disturbance (LOD) and/or wetlands and buffers, Waters of the U.S., and tree protection areas, to the satisfaction of the Town of Vienna. These areas will be verified by The Town of Vienna during the pre-construction meeting.
- E. Trees to be protected during construction will be identified by The Town of Vienna and the Contractor during the pre-construction meeting. All tree protection devices shall be installed before clearing and grubbing commences.
- F. The Contractor shall notify The Town of Vienna once the stakeout or any phase of the stakeout is completed. The Town of Vienna will inspect the construction stakeout prior to the Contractor beginning clearing and grubbing activities. The purpose of the inspection is not to verify the stakeout, but to allow The Town of Vienna an opportunity to assess the lines established by the Contractor, prior to the start of construction. If there are obvious errors with the stakeout, the Contractor shall remedy all errors prior to the Contractor proceeding with construction. **This inspection shall in no way relieve the Contractor of his/her/its responsibilities to construct the site as specified in the Contract Documents.**
- G. The existing elevations and contours shown on the plans, cross sections, stream bottom profiles, and/or bank alignment shown on the Contract drawings were correct when surveyed prior to plan development. However, because of interim stream erosion, sediment accretion, and possible fill, existing elevations and grades may have changed since the original survey was completed. **It is the Contractor's responsibility to confirm existing grades and adjust quantities, earthwork and work efforts as necessary at no additional cost to The Town of Vienna.**
- H. The Contractor shall establish four (4) permanent monuments for post-construction monitoring of stream channel cross-sections as specified in the Contract Documents or as directed by The Town of Vienna. The Contractor shall stakeout and construct permanent monuments at each selected cross section on both sides of the stream channel. Said monuments shall be set perpendicular to the stream channel baseline of construction and a minimum of five (5) feet beyond the top of the bank. The monuments shall be constructed by digging a hole to a depth of at least three (3) feet, installing six (6) inch diameter PVC pipe into the hole as a form, and filling it with concrete. The top of the monument shall be installed no higher than one (1) inch above the surrounding ground surface. Once the concrete has begun to set, the Contractor shall install a six-inch long galvanized bolt, with the top of the bolt set flush with the concrete.

2. CONSTRUCTION

The Contractor will provide the following:

- A. Stream Baseline Stakeout
 - 1. A staked baseline of construction for the proposed location of the stream and tributaries or parallel offset baseline, as depicted on the plans, with the spacing of stations (stakes, nails, crosses, etc.) not to exceed 50 feet in straight sections and 25 feet in curves.
 - 2. Appropriately spaced benchmarks and the necessary references including all points of curvature (P.C.) and points of tangency (P.T.) for the preservation and control of the baseline of construction.

IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION – PHASE II

B. Structure Stakeout

Appropriately spaced benchmarks and the necessary references required to locate all in-stream structures noted in the Contract Documents.

C. Control Markers

The Contractor shall preserve the baseline of construction, working lines, and benchmarks set by the Contractor at the beginning of the project.

D. Control Stakes

For the stream baseline of construction, as specified above, the Contractor shall furnish, set, and preserve stakes at each station along each side of the proposed channel. Additional stakes as needed for horizontal and vertical controls necessary for the correct layout of the work shall be set by the Contractor.

E. Layout

For structures specified in the Contract Documents, the Contractor shall ensure that structures are fully staked at least two (2) days prior to construction in order to allow review by Town of Vienna staff. From the field layouts, the Contractor shall check the proposed structure lengths by electronic distance measurement or chaining. When chaining is used, the measurements shall be compensated for horizontal alignment. The Contractor shall also check the location of the structure to verify its correct location with relation to existing on-site features and conditions that are to remain in the original positions. If any discrepancies are found, the Contractor shall notify The Town of Vienna at once in writing; otherwise, all planned dimensions, grades, and field measures will be deemed correct. All lines established on the ground shall be preserved or referenced, marked, and kept available at all times.

3. MEASUREMENT AND PAYMENT

The lump sum (LS) payment for Construction Stakeout will be full compensation for furnishing, transporting and stockpiling, placing, and maintaining construction layout stakes, post-construction monitoring monuments, flagging of clearing limits and wetlands, and for all material, labor, equipment, stockpiling, tools, transportation and incidentals necessary to complete the work.

SECTION-03 EROSION AND SEDIMENT CONTROL

1. DESCRIPTION

The Contractor shall perform all work for erosion and sediment control in accordance with the *Virginia Erosion & Sediment Control Handbook, Third Edition*, dated 1992, the Contract Documents, or as directed by The Town of Vienna.

2. MEASUREMENT AND PAYMENT

Erosion and Sediment Control will be measured for payment on a linear foot (LF) basis for silt fence, and per each (EA) stabilized construction entrance and temporary stream crossing installed. The payment will be full compensation for furnishing, transporting, stockpiling, installing, maintaining and removing all erosion and sediment control measures shown on the plans, including all materials, labor, equipment, tools, transportation, stockpiling and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-04 SANITARY SEWER PROTECTION AND COORDINATION

1. DESCRIPTION

This work shall consist of furnishing, transporting, maintaining, stockpiling, labor, subcontracting and all activities associated with the protecting of an existing sanitary line in the project limits during construction.

2. MATERIALS

- A. Timber Matting with Mulch, Steel Plates, or suitable alternative
- B. Pump and bypass lines, etc.

3. CONSTRUCTION

A. Installation

- 1. A sanitary sewer bypass pump around the operation shall be installed to convey piped materials around the work area.
- 2. If necessary, trench boxes shall be provided per OSHA and regulatory agency requirements.
- 3. Final grading in the sanitary sewer easement shall be in accordance with the Utility Protection detail and grading plans as specified in the Contract Documents or as directed by The Town of Vienna.

B. Clean-up

- 1. During pipe protection, all areas shall be kept neat, clean and free of all trash and debris, and all reasonable precautions shall be taken to avoid damage to existing plants, turf, structures, and private property.
- 2. The Contractor shall be responsible for off-site removal and disposal of all trash, excess backfill, and any materials incidental to the project and disposing of them off-site at a The Town of Vienna approved location.

4. MEASUREMENT AND PAYMENT

Protection and coordination associated with the sanitary shall be measured and paid for as a lump sum (LS) item. Payment for activities associated with the sanitary protection plan shall be full compensation for furnishing, transporting, maintaining, stockpiling, and installing all materials, labor, subcontracting, equipment, tools, and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-05 GEOTEXTILE FABRIC

1. DESCRIPTION

This work shall consist of furnishing, transporting, maintaining, stockpiling, and properly installing

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geotextile fabric in the stream channel as specified in the Contract Documents, or as directed by The Town of Vienna.

2. MATERIALS

Geotextile fabric shall be non-woven polypropylene geotextile, such as Mirafi 700x, Mirafi 70/20, n060, or The Town of Vienna approved equal. The fabric shall have puncture resistance greater than 100 lbs, apparent opening size greater than U.S. 70 sieve, and 30 lbs. of tensile strength at 20% (maximum).

3. MEASUREMENT AND PAYMENT

Payment for geotextile fabric shall be incidental to the installation of all in-stream structures and bank protection measures as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-06 COIR FIBER MATTING AND BIODEGRADABLE STAKES

1. DESCRIPTION

This work shall consist of furnishing, transporting, maintaining, stockpiling and properly installing coir fiber matting (secured with biodegradable stakes) on all stream bank slopes which will not receive additional stabilization techniques (e.g. stone) and at other locations designated in the Contract Documents, or as directed by The Town of Vienna.

2. MATERIALS

Coir fiber matting shall consist of 100% coconut fiber matting having a weight of at least 700 g/m². Acceptable products are Ecomesh CM700, CF-700 (Coir Fiber Matting 700) by SKB India Co., BioD-Mat70 by Rolanka International, Coir Fiber Mats 700 by Pinelands Nursery, or The Town of Vienna approved equal. Stakes used to secure coir matting shall be 12" biodegradable-type (wooden or plant-based resin) meeting ASTM D6400. Source of coir fiber matting and stakes shall be submitted to The Town of Vienna for review and approval prior to beginning construction. Installation shall be in accordance with the Contract Documents, or as directed by The Town of Vienna. Under no circumstances shall any erosion control matting with polypropylene or any other non-coir netting be used on site.

3. CONSTRUCTION

A. Installation

1. All materials and construction techniques shall be inspected and approved by The Town of Vienna prior to installation.
2. Install in-stream structures, grade stream bed and banks, and place reinforced stream bed material and topsoil to the contours specified in the Contract Documents. After placement of reinforced stream bed material, topsoil, permanent seed mix (**SEED MUST BE SOWN INTO TOPSOIL UNDER MATTING**), and straw mulch, in accordance with the Contract Documents, the Contractor shall install the coir fiber matting as specified in the Contract Documents or as directed by The Town of Vienna.
3. The Contractor shall place coir fiber matting along the stream edge as shown in the Construction Documents or as directed by The Town of Vienna. The coir fiber matting shall be unrolled along the top of bank and across the full width of any bankfull or low flow

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benches, if present. Matting shall be placed in full contact with the soil. All exterior edges (those edges not overlapping with an adjacent coir fiber matting roll) shall be “keyed” into the ground a minimum of 6 inches in such a way that a seamless grade is created (no humps or bulges in fabric will be permitted).

4. Coir fiber matting edges (matting installed side by side at any given elevation) shall be overlapped a minimum of 6 inches and staked down using biodegradable stakes at 2 foot on center.
5. Coir fiber matting ends (where upstream roll abuts downstream roll) shall be placed such that the upstream roll overlaps the downstream roll a minimum of 6 inches and staked down using biodegradable stakes at 2 foot on center.
6. Coir fiber matting ends (matting installed where ends of matting abut in-stream structures) shall be ‘keyed-in’ a minimum of 6 inches in such a way that a seamless grade, or transition, is created. (No humps or bulges will be accepted.) These edge areas shall be staked down using biodegradable stakes at 2 foot on center.
7. Biodegradable stakes shall be arrayed 2 feet on center across coir fiber matting, so that there shall be approximately 2 biodegradable stake pairs per square yard of coir fiber matting.

B. Clean-up

1. During installation of coir fiber matting, all areas shall be kept neat, clean and free of all trash and debris, and all reasonable precautions shall be taken to avoid damage to existing plants, turf, structures, and private property.
2. The Contractor shall be responsible for off-site removal and disposal of all trash, excess backfill and any materials incidental to the project and disposing of them off-site.

4. MEASUREMENT AND PAYMENT

Coir Fiber Matting, including biodegradable stakes, shall be measured and paid for at the Contract unit price per square yard (SY) of matting installed. Payment for coir fiber matting shall be full compensation for furnishing, transporting, maintaining, stockpiling, and properly installing all materials, labor, equipment, tools and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-07 SAFETY FENCE (TREE PROTECTION FENCE)

1. DESCRIPTION

This work shall consist of the installation of safety fence (tree protection fence) in areas specified in the Contract Documents, or as directed by The Town of Vienna. Contractor shall be responsible for maintaining the safety fence throughout the duration of the project. This shall include, but is not limited to, re-securing fallen fence and replacing damaged fence.

2. MATERIALS

- A. Safety fence (tree protection fence) - Fence shall be international orange, high-density polyethylene mesh with a mesh opening of 1.5 inch. The fence shall be 4 feet in height with a roll weight of 20 pounds per roll and roll size of 4 feet by 50 feet.

IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION – PHASE II

- B. Posts - Posts shall be conventional metal "T" or "U" posts.
- C. Ties - Tension wire, zip-ties, or rope.

3. CONSTRUCTION

A. Installation

1. Posts shall be spaced every 6 feet and installed to a minimum of 18 inches deep.
2. Ties shall be wrapped around a horizontal fence strand and post and are for securing the fence to the post.
3. Tension wire or rope shall be used as a top stringer woven through the top row of strands to prevent potential sagging.
4. The safety fence and posts shall be removed (off-site) at the end of the contract and with the approval of The Town of Vienna. The fence and posts shall become the property of the contractor at the completion of the project.

B. Clean-up

1. All areas shall be kept neat, clean and free of all trash and debris, and all reasonable precautions shall be taken to avoid damage to existing plants, turf, structures, and private property.
2. The Contractor shall be responsible for off-site removal and disposal of all trash, excess backfill and any materials incidental to the project and disposing of them off-site.

4. MEASUREMENT AND PAYMENT

Safety Fence shall be measured and paid for at the contract unit price per linear foot (LF) of safety fence installed. The payment will be full compensation for the installation, maintenance, and removal of the fence as shown on the plans, including all materials, labor, equipment, tools, stockpiling, transporting, disposal and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-08 PUMP AROUND/DIVERSION PIPE/DEWATERING

1. DESCRIPTION

This work shall consist of maintaining and diverting stream flow for the purpose of isolating work areas when construction activities take place within the stream channel as specified in the Contract Documents, or as directed by The Town of Vienna.

2. MATERIALS

- A. Sandbags shall consist of materials which are resistant to ultraviolet radiation, tearing, and puncture and woven tightly enough to prevent leakage of fill material (i.e. sand, fine gravel, etc.).
- B. Sheeting shall consist of polyethylene plastic, which is impervious and resistant to puncture and tearing.

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- C. Pump(s) shall be large enough to maintain uninterrupted base flow to the channel downstream of the work area. The pump around shall include a hose suitable to convey water overland to the downstream section. Minimum linear feet of hose required is equivalent to the maximum estimate for one workday provided by the Contractor. The pump shall be shut off at night and base flow shall flow through the completed and stabilized portion of the project into the existing downstream channel unless otherwise noted in the Contract Documents.
- D. Engine driven equipment for bypass pumping equipment shall have “critical grade mufflers.” If equipment is operated between the hours of 8:00 PM and 6:00 AM, this equipment shall also be provided with sound attenuation enclosure consisting of a three sided enclosure with roof constructed of 2 x 4 frame with ½- inch plywood sheathing and 2-inch Styrofoam panels attached to the inside of the entire enclosure. The enclosure shall be portable in order to allow the enclosure to be moved when bypass pumping equipment is moved.
- E. Filter bags made of non-woven geotextile as specified in the Contract Documents shall be used for dewatering the turbid water within the active work area.

3. CONSTRUCTION

- A. Installation of sand bags, sheeting, and pump around shall be in accordance with the approved erosion and sediment control plan in the Contract Documents, or as directed by The Town of Vienna.
- B. The diversion structure shall be installed from upstream to downstream.
- C. The height of the sand bag diversion structure shall be a minimum of base flow depth plus one foot, and a minimum of 2 feet. Further, the sand bag diversion shall be of sufficient height as to provide a pool deep enough to maintain pumping operations.
- D. Sheeting shall overlap the sandbags such that the upstream portion covers the downstream sandbag face with at least an 18 inch overlap.
- E. When dewatering the work area the pump shall discharge into a non-woven geotextile filter bag of adequate size to accommodate the incoming flow as specified in the Contract Documents. The filter bag must be placed within the Limits of Disturbance on a flat surface to allow dewatering without creating erosive conditions in the area of the outfall.

4. MEASUREMENT AND PAYMENT

Pump Around/Diversion Pipe/Dewatering shall be measured and paid for as a lump sum (LS) item. The payment will be full compensation for installing and maintaining stream flow. Payment shall include sand bags, sheeting, filter bags, stream pump around, and any other materials, labor, equipment, tools, transporting, stockpiling, removal of dewatering equipment and materials, and all incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-09 TEMPORARY ACCESS PATH/DECK MATS (TIMBER MATS)

1. DESCRIPTION

This work shall consist of furnishing, transporting, installing, maintaining, removing and disposal of temporary access path constructed of Deck Mats by Carolina Mat Incorporated (or The Town of Vienna approved equal) for the purpose of maintaining a stable access path to active construction areas

IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION – PHASE II

as specified in the Contract Documents, or as directed by The Town of Vienna.

2. MATERIALS

- A. Woven filter fabric as specified in the Contract Documents.
- B. Deck Mats

Deck Mats shall be “Deck Mat” by Carolina Mat Incorporated, or The Town of Vienna approved equal. Deck Mats shall be 4 inches thick by 10 feet in length by 12 feet in width. Each Deck Mat is approximately 1,600 pounds.

- C. Mulch – minimum 6 inch organic mulch shall be placed beneath all mats. See contract documents for detail.

3. CONSTRUCTION

A. Installation

1. Deck Mats shall be installed by the contractor along the temporary access path as depicted in the contract documents or as directed by The Town of Vienna. Deck Mats shall be installed concurrently with tree removal and all construction along the temporary access path, as specified on the Tree Removal Plan and Grading Plan in the Contract Documents, or as directed by The Town of Vienna. Installation of Deck Mats shall be installed concurrently so that equipment used for specified tree removal and all construction activity along the temporary access path shall travel on top of installed Deck Mats.
2. Deck Mats shall be installed according to detail provided in Contract Documents. Woven filter fabric must be installed under the deck mats and extend a minimum of 2 feet on both sides of all mats.
3. Install Deck Mats starting at the point along the access path that is closest to the construction entrance and work in to the project site. Mats shall be placed such that the timbers run parallel with the vehicle tread. Subsequent mats shall be installed such that the ends abut one another.
4. Deck Mats shall in all areas depicted in the Construction Documents (temporary access path, designated stockpile areas, and active cut-ins) and as directed by The Town of Vienna.
5. Deck Mats shall be required over existing gravel road and asphalt trails as shown in Construction Documents, unless conditions change and installation is warranted as determined by the Town of Vienna Inspector.

B. Clean-up

1. Remove Deck Mats starting with the mat farthest into the project site and work back to the construction entrance. The Contractor shall not operate equipment over areas where timber matting is specified without timber matting in place during construction and clean-up activities.
2. As Deck Mats are removed, grade shall be returned to the pre-construction contours and any trails or roads returned to pre-construction conditions or better. The area shall be stabilized and planted according to the planting plan and vegetation schedule provided in the Contract Documents.

4. MEASUREMENT AND PAYMENT

Installation and removal of the Temporary Access Path/Deck Mats shall be measured and paid for as a per square yard (SY) item. The payment will be full compensation for furnishing, installing, maintaining, and removing the Temporary Access Path/Deck Mats. Payment shall include filter fabric and any other materials, labor, equipment, tools, transportation, stockpiling, removal, disposal and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-10 STOCKPILE/STAGING AREAS

1. DESCRIPTION

This work shall consist of transporting, installing, maintaining, and removing stockpile/staging areas for the purpose of maintaining stable materials and equipment storage areas as specified in the Contract Documents, or as directed by The Town of Vienna.

2. MATERIALS

A. Woven filter fabric as specified in the Contract Documents.

B. Deck Mats

Deck Mats shall be “Deck Mat” by Carolina Mat Incorporated, or The Town of Vienna approved equal. Deck Mats shall be 4 inches thick by 10 feet in length by 12 feet in width. Each Deck Mat is approximately 1,600 pounds.

C. Silt fence and/or Super Silt Fence as specified in the Contract Documents.

3. CONSTRUCTION

A. Installation

1. Deck Mats shall be installed according to the detail provided as directed by the Town of Vienna. Filter fabric must be installed under Deck Mats and extend a minimum of 2 feet beyond Deck Mats. Place the deck mats such that the timbers run parallel with the vehicle tread. Subsequent mats shall be installed such that the ends and sides abut one another.
2. Super silt fence shall be installed around the downhill end of the stockpile/staging areas as specified in the Erosion and Sediment Control Plan and Details presented in the Contract Documents, or as directed by The Town of Vienna.
3. Any erodible materials left in stockpile areas shall be mulched or covered prior to rain events.

B. Clean-up

1. Remove deck mats starting with the mat farthest into the stockpile/staging areas and work back to the temporary access path. The Contractor shall not operate equipment over areas where timber matting is specified without timber matting in place during construction and clean-up activities.
2. As mats are removed grade shall be returned to the pre-construction grade and areas of

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vegetation shall be replanted according to the planting plan and vegetation schedule presented in the Contract Documents.

4. MEASUREMENT AND PAYMENT

Installation and removal of the stockpile/staging areas shall be incidental to the Contract price for Temporary Access Path/Deck Mats, Section 9 (above). The payment will be full compensation for installing, maintaining, and removing the stockpile/staging areas as part of the Temporary Access Path/Deck Mats. Payment shall include filter fabric, deck mats, and any other materials, labor, equipment, tools, stockpiling and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by the Town of Vienna.

SECTION-11 CLEARING AND GRUBBING

1. DESCRIPTION

This work shall consist of clearing, grubbing, removing, and disposing of vegetation, debris, and other objects within the construction limits except for vegetation and objects that are designated to be preserved, protected, or removed in accordance with the requirements of other provisions of these specifications.

- A. The Contractor shall be responsible for any and all damage to trees, shrubs, herbaceous plants and wetlands located beyond the limit of disturbance which occurs from his/her operations during the life of the Contract. The Contractor shall fully restore, at his/her own expense, and to the satisfaction of The Town of Vienna, any trees, shrubs, herbaceous plants, and wetlands located outside of the limits of disturbance that have been damaged or destroyed. Wetland restoration shall be in accordance with regulatory agency conditions. The Contractor shall be required to pay a one thousand dollar penalty to the Town of Vienna for each instance of damage caused by the Contractor to trees which are located outside of the limits of disturbance.
- B. Tree removal shall only be done in accordance with Contract Documents or as directed by The Town of Vienna. The Contractor shall only clear and grub as much of the proposed channel and grading areas that the Contractor can complete the construction on and have stabilized in the same day as the clearing and grubbing. The Contractor shall install tree protection fencing and matting, as described in the Contract Documents, prior to any disturbance.

2. MEASUREMENT AND PAYMENT

Clearing and grubbing shall be measured and paid for as a per acre (AC) item. The payment will be full compensation for clearing, grubbing and disposal of cleared and grubbed materials. Payment shall include all materials, labor, equipment, tools, stockpiling and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by the Town of Vienna.

SECTION-12 SALVAGING TOPPSOIL AND PLACEMENT OF TOPSOIL/COMPOST MIXTURE

1. DESCRIPTION

This work shall consist of furnishing and/or salvaging topsoil, combining furnished and/or salvaged

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topsoil with compost (or The Town of Vienna approved equal) and placing furnished and/or salvaged topsoil combined with compost as specified in the Contract Documents, or as directed and approved by The Town of Vienna. The final product shall consist of a 1:3 mixture of compost (1 part) and salvaged and/or furnished topsoil (3 parts).

2. MATERIALS

A. Salvaged Topsoil

1. Salvaged Topsoil shall consist of loam, sandy loam, clay loam, sandy clay loam or loamy sand, and shall be removed from well-drained O and A soil horizons within all areas to be graded, as specified in the Contract Documents or as directed by the Town of Vienna. **B and C soil horizons shall not be used as salvaged topsoil.**
2. Acceptability for use of onsite topsoil and the depth of topsoil to be salvaged shall be determined by The Town of Vienna staff.
3. Unacceptable and/or excess salvaged topsoil shall become the responsibility of the Contractor and shall be completely removed from the project site prior to final site inspection and approval of the project.

B. Furnished Topsoil

1. Furnished topsoil shall be of a loamy texture and have components of sand, silt and clay in percentages that, by definitions from the U.S Department of Agriculture Handbook 18, characterizes a loamy soil. Unacceptable and/or excess furnished topsoil shall become the responsibility of the Contractor and shall be completely removed from the project site prior to final site inspection and approval of the project.
2. Furnished topsoil shall meet acceptable soil test level as specified below. A certificate of soil test analysis (of a representative soil sample from each 5,000 square yards of Furnished Topsoil to be delivered to the site) shall be submitted to the Town of Vienna for review and approval prior to any furnished topsoil delivered to the site for use on the site. Soil tests shall be conducted in a state laboratory or state recognized commercial laboratory.
3. All Furnished topsoil shall be free of stones, lumps, plants, roots and other debris over 1.5". All furnished topsoil shall be free of invasive and/or noxious plants, plant parts and seeds identified by the Virginia Department of Conservation and Recreation Natural Heritage Program, the US Department of Agriculture and the Mid-Atlantic Exotic Pest Plant Council, to include, but not limited to the following:

Annual bluegrass	Corn cockle	Spurred anoda
Bermuda grass	Dodder	Wild garlic
Bindweed	Giant foxtail	Wild onion
Cocklebur	Horse nettle	Johnson grass
Japanese stilt grass	Japanese knotweed	Mile-a-minute
Wavy basket grass	Multiflora rose	
4. Acceptable furnished topsoil analysis results:

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<u>CHARACTERISTIC:</u>	<u>CRITERIA:</u>
pH	From 6.0 to 7.5
Cation-exchange capacity	From 5 to 25 cmol+ /kg (meq/100g)
Organic Matter (OM)	From 5% - 30% by wt. (ODS)
Nutrient content	Normal contents of nitrogen, phosphorus, potassium, calcium, magnesium, sulfur, proper micronutrient levels
Soluble salts	Less than 200 ppm
Contaminants	Shall contain no toxic substances

<u>Sieve Size</u>	<u>Minimum Percent Passing, by Weight</u>
2 inches	100
No. 4	90
No. 10	80

<u>Component</u>	<u>Range</u>	<u>Particle Size</u>
Sand	23%-52%	0.05-2.0 MM
Silt	28%-50%	0.002-0.05 MM
Clay	7%-27%	<0.002 MM

C. Furnished compost (or The Town of Vienna approved equal)

1. The Furnished Compost (or Town approved equivalent) portion of the topsoil mixture, shall be a product derived from controlled biological decomposition of organic material, sanitized through the generation of heat and stabilized to the point that it is beneficial to plant growth. Furnished compost shall contain no substances toxic to plants, and be weed seed and pathogen free, shall be free from State and Federal prohibited noxious weed seeds listed as invasive and/or noxious species by the Virginia Department of Conservation and Recreation Natural Heritage Program, the US Department of Agriculture and the Mid-Atlantic Exotic Pest Plant Council. The Town of Vienna approved equivalent material which matches the following specifications shall be certified through the U.S. Composting Council’s Seal of Testing Assurance Program (STA).

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Furnished Compost shall meet the following criteria:

<u>Characteristic:</u>	<u>Criteria:</u>
Plant Nutrients	
Nitrogen (Total N)	0.6% to 0.8%, wet weight basis
Phosphorus (P ₂ O ₅)	0.1% to 0.3%, wet weight basis
Potassium (K ₂ O)	0.3% to 0.6%, wet weight basis
Calcium (Ca)	0.9% to 1.2%, wet weight basis
Magnesium (Mg)	0.15% to 0.3%, wet weight basis
Moisture Content	30% to 60%, wet weight basis
Organic Matter Content	25% to 65%, dry weight basis
pH	7 to 8.5
Soluble salts	Less than 5 dS/m (mmhos/cm)
Contaminants	Shall contain no toxic substances
Physical Contaminants	< 1%

Grading analysis shall be as follows:

<u>Sieve Size</u>	<u>Min. Percent Passing by Dry Weight</u>
U.S. 3-inch Sieve	100%
U.S. 1-inch Sieve	65% to 100%
US 3/4-inch Sieve	65% to 100%
U.S. 3/8- inch Sieve	65% to 100%

2. Prior to delivery of the compost, contractor shall provide a copy of the lab analysis, performed by a STA certified lab, verifying that the compost meets the product parameters listed above. The lab analysis shall not be more than 90 days old.
3. Unacceptable and/or excess furnished compost shall become the responsibility of the Contractor and shall be completely removed from the project site prior to final site inspection and approval of the project.
4. All Furnished Compost shall be free of stones, lumps, plants, roots and other debris over 1.5". All furnished topsoil shall be free of invasive and/or noxious plants, plant parts and seeds identified by the Virginia Department of Conservation and Recreation Natural Heritage Program, the US Department of Agriculture and the Mid-Atlantic Exotic Pest Plant Council, to include, but not limited to the following:

Annual bluegrass	Corn cockle	Spurred anoda
Bermuda grass	Dodder	Wild garlic
Bindweed	Giant foxtail	Wild onion
Cocklebur	Horse nettle	Johnson grass
Japanese stilt grass	Japanese knotweed	Mile-a-minute
Wavy basket grass	Multiflora rose	

D. Straw Mulch

1. Straw mulch shall be un-rotten small grain straw. All mulch shall be free from State and Federal prohibited noxious weed seeds listed as alien invasive species by the Virginia Department of Conservation and Recreation Natural Heritage Program, the US Department of Agriculture and the Mid-Atlantic Exotic Pest Plant Council.

3. CONSTRUCTION

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A. Salvaging Topsoil

1. When soil or weather conditions are unsuitable (frozen or excessively wet and muddy), the Contractor shall cease topsoil salvage operations until approved by the The Town of Vienna to resume.
2. Salvage Topsoil shall consist of loam, sandy loam, clay loam, sandy clay loam or loamy sand, and shall be removed from O and A soil horizons within all areas to be graded, as specified in the Contract Documents or as directed by the The Town of Vienna. Prior to removing topsoil, the Contractor shall clear, grub and mow or remove all surface vegetation over the areas where topsoil is to be salvaged. Salvage Topsoil shall be removed to a depth of approximately 4 to 10 inches, and shall only consist of O and A soil horizons. Salvaged topsoil shall be screened to remove stones, lumps, plants, plant parts, roots, rock and other debris over 1.5 inches. Acceptability of onsite salvaged topsoil and the total depth of topsoil to be salvaged for reuse onsite shall be determined by The Town of Vienna staff. All acceptable salvaged topsoil shall be used onsite as a component of the Soilmate and Salvaged Topsoil Mixture, as specified in the contract documents. All unacceptable salvaged topsoil shall become the responsibility of the Contractor and shall be completely removed from the project site prior to inspection and approval of the project.
3. Storage areas for salvaged topsoil shall be constructed on well drained land, away from streams, in specified stockpile areas. Prior to stockpiling, the Contractor shall install silt fence around the perimeter of the stockpile area and maintain the silt fence until the stockpile is removed. Salvaged Topsoil shall be kept in neat and separate piles from other excavated material.
4. Salvaged Topsoil stockpiles shall NOT be seeded. Salvaged Topsoil stockpiles shall be immediately and thoroughly covered with wood cellulose or straw mulch, or other approved erosion control measures. The piles shall be occasionally re-mulched in order to maintain a consistent cover until they are removed or re-spread.

B. Placing Compost and Salvaged and/or Furnished Topsoil Mixture

1. Compost and Salvaged and/or Furnished Topsoil Mixture shall be placed on all areas specified to be graded within the limits of disturbance, except where reinforced bed material and asphalt is installed. Compost and Salvaged Topsoil Mixture shall be mixed onsite and consist of a 1:3 ratio of compost(1) to salvaged topsoil (3). **All acceptable salvaged topsoil from the graded areas within the limits of disturbance shall be utilized onsite as a component of the compost and Salvaged Topsoil Mixture.** If there is an insufficient amount of acceptable salvaged topsoil available onsite, then furnished topsoil shall be used. The Compost and Furnished Topsoil Mixture may be mixed onsite or offsite and shall consist of a 1:3 ratio of Compost (1) to Furnished Topsoil (3). **Compost and Salvaged and/or Furnished Topsoil Mixture shall be evenly and thoroughly mixed prior to placement.** Compost and Salvaged Topsoil Mixture may be mixed with Compost and Furnished Topsoil Mixture prior to placement.
2. Verify that all utilities have been field located and/or installed and accepted.
3. Verify that all required soil tests have been submitted and accepted by The Town of Vienna.
4. Do not handle the Compost and Salvaged and/or Furnished Topsoil Mixture if it is wet or frozen.

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5. The Contractor shall completely prepare and finish the subsoil surface of all areas to be covered with Compost and Salvaged and/or Furnished Topsoil Mixture as specified in the Contract Documents.
6. Immediately prior to being covered with Compost and Salvaged and/or Furnished Topsoil Mixture the sub grade shall be mechanically loosened and scarified to a minimum 3-inch depth, and be free from rocks and all materials other than soil that are 3 inches or greater in diameter.
7. Once subgrade is prepared by mechanically loosening and scarified, ensure that no equipment traffic occurs to detrimentally affect compaction of the subgrade.
8. Prior to the start of placing Compost and Salvaged and/or Furnished Topsoil Mixture, all grass, weeds, brush, stumps, and other objectionable material shall be removed from the Compost and Salvaged and/or Furnished Topsoil Mixture.
9. Compost and Salvaged and/or Furnished Topsoil Mixture shall be placed, spread, and maintained over the designated areas to a depth of at least 6 inches, so that after settlement the completed work shall be in conformance with the thickness, lines, grades, and elevations specified in the Contract Documents.
10. Seeding of Compost and Salvaged and/or Furnished Topsoil Mixture with temporary and permanent seed mixes shall be carried out immediately following placement of Salvaged and/or Furnished Topsoil and Compost Mixture. Contractor shall be responsible for stabilizing all stream banks with temporary seeding, permanent herbaceous seeding (riparian/wetland seed mix), straw mulch, and coir fiber matting immediately after the completion of grading.
11. Contractor shall prevent equipment traffic over and compaction of the final grade of the Compost and Salvaged and/or Furnished Topsoil Mixture.

4. MEASUREMENT AND PAYMENT

Salvaging Topsoil shall not be measured and the cost shall be incidental to the Contract price for Regular Excavation (or Earthwork). It is assumed that there is sufficient topsoil on-site to salvage and place to the depths indicated on the construction plans. Should the contractor feel that Furnished Topsoil is needed, the Contractor shall include the quantity and price as part of the bid. Placing Furnished Topsoil shall be measured and paid for as a per cubic yard (CY) item. Payment shall be full compensation for stockpiling, subgrade improvement, placement of topsoil, fine grading and for all material, labor, equipment, tools, and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by the Town of Vienna.

SECTION-13 REGULAR EXCAVATION, STRUCTURAL FILL (OR EARTHWORK)

1. DESCRIPTION

Earthwork shall consist of performing all operations necessary to excavate and transport all material, furnish, process material as required, stockpile, deposit, place, and compact material in accordance with the grades as shown on the plans or as directed by The Town of Vienna. Such earthwork shall include the excavation, loosening, removing, loading, transporting, stockpiling, depositing, furnishing, disposing and compacting in its final location of all materials wet and dry, as required for the purposes of completing the work.

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2. MATERIALS

- A. Local borrow shall consist of material excavated within the limits of the project and in accordance with the grading plan and is subject to approval by The Town of Vienna.
- B. Select earth fill material shall consist of material obtained within the limits of the project and used to raise the site elevations to those specified in the grading plan. If sufficient satisfactory soil materials for use as earth fill are not available from onsite excavations it shall be the contractor's responsibility to provide suitable earth fill material. Soils sufficient for use as earth fill include ASTM D 2487 Soil Classification Groups CL, GC, ML, CH and SC, a combination of these groups, or as approved by The Town of Vienna. Earth fill shall be free of rock greater than 3 inches, debris, waste, frozen materials, vegetation, invasive species, pathogens, and any other deleterious matter.
- C. For clay plugs and streambanks in areas of fill, as specified in the grading plan, the Contractor shall place clayey material, composted of cohesive materials classified as ML, CL, or CH per ASTM D-2487 (Subject to Town of Vienna approval).

3. CONSTRUCTION

- A. The existing elevations and contours shown on the plans, cross sections, and profiles were surveyed prior to plan development. Existing elevations and grades may have changed since the original survey was completed due to stream erosion, sediment accretion, or fill. It is the Contractor's responsibility to confirm existing grades and adjust earthwork as necessary at no additional cost to The Town of Vienna.
- B. All earthwork shall be performed in accordance with permit requirements.
- C. All erosion and sediment control devices shall be in place prior to onset of earthwork activities.
- D. Erosion and sediment control devices and measures shall be maintained in a functional condition at all times. Temporary and permanent erosion and sedimentation control measures shall be inspected after each rainfall and at least daily during periods of prolonged rainfall. Deficiencies shall be immediately corrected.
- E. Grading operations shall be conducted so that material outside construction limits will not be disturbed.
- F. Local borrow shall be stockpiled in the stockpile/staging areas depicted in the Contract Documents. All stockpile areas will require appropriate sediment control (silt fence or as is otherwise necessary) in order to prevent erosion and sediment transport throughout the duration of storage. The Town of Vienna reserves the right to require other temporary measures not specifically described herein to correct an erosion or siltation condition.
- G. Fill areas shall be placed as maximum 1foot thick lifts and compacted using the equipment bucket and tracks, or other equipment necessary, to achieve a density of no less than 85% of the maximum dry density at a moisture content of + or – two percentage points of the optimum moisture content in accordance with ASTM D698.
- H. Topsoil/compost and reinforced stream bed material shall be installed as described in the Construction Documents, or as directed by The Town of Vienna, to bring surface to final grades as shown in the Construction Documents. Final grade shall be as specified within the Construction Tolerances section of these specifications.

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- I. Material shown on the plans as suitable material but found at time of construction to be unsuitable shall be disposed of as unsuitable material at no additional cost to The Town of Vienna.
- J. Loose rock 3 inches or larger shall be removed from the surface of cut slopes.
- K. The Contractor shall be responsible for stabilizing all stream banks with temporary seeding, permanent herbaceous seeding (riparian/wetland seed mix), straw mulch, and coir fiber matting immediately after the completion of grading. The Contractor shall perform all care and remediation work required to maintain stable stream banks during construction, including erosion and sediment control.
- L. All unsuitable, unacceptable, or excess material shall be removed from the site at no additional cost to The Town of Vienna.
- M. Where constructing clay plugs in the upstream and downstream ends of abandoned channel areas, as specified in the Contract Documents, structural fill material shall be used. The structural fill material shall be composed of cohesive materials classified as ML, CL, or CH per ASTM D-2487 (subject to Town of Vienna approval) installed in one foot lifts to a density of no less than 85% of the maximum dry density at a moisture content of + or – two percentage points of the optimum moisture content in accordance with ASTM D698. The extent of clay plug fill in upstream and downstream end of abandoned meander areas shall be a minimum of 20' long (beyond bankfull of main channel) and shall cover the full width (top of bank to top of bank) of the abandoned channel.
- N. Where constructing streambanks in areas of fill, the bankfull limits (toe of bank to top of bank) and all areas beyond the bankfull limits shall be constructed of select earth fill and installed in one foot lifts to a density of no less than 85% of the maximum dry density at a moisture content of + or – two percentage points of the optimum moisture content in accordance with ASTM D698, unless otherwise directed by The Town of Vienna. Select earth fill material shall consist of material obtained within the limits of the project and used to raise the site elevations to those specified in the grading plan. If sufficient satisfactory soil materials for use as select earth fill are not available from onsite excavations, it shall be the contractor's responsibility to provide acceptable select earth fill material. Soils acceptable for use as select earth fill include ASTM D 2487 Soil Classification Groups CL, GC, ML, CH and SC, or combination of these groups. Select earth fill shall be free of rock greater than 3-inch diameter, debris, frozen materials, vegetation, invasive species, pathogens, and any other deleterious matter.

4. MEASUREMENT AND PAYMENT

Regular Excavation (which includes Salvaged Stream Bed Material, separate specification) shall be measured and paid for as a per cubic yard (CY) item. Payment shall be full compensation for the excavation, transport, stockpiling, and placement, and for all material, labor, equipment, tools and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by the Town of Vienna.

SECTION-14 REINFORCED STREAM BED MATERIAL

1. DESCRIPTION

This work shall consist of furnishing, transporting, stockpiling, processing, mixing, placing, maintaining and placing reinforced stream bed material (RBM) to be utilized for construction of the proposed channel and protection of in-stream structures and at other locations as specified in the Contract Documents or as directed by The Town of Vienna. Stream bed material shall be placed along

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the full length of the stream channel and tributaries unless otherwise indicated in the Contract Documents, and along the width of the channel and tributaries as indicated in the Contract Documents, or as directed by The Town of Vienna. Salvaged Stream bed material shall be used to supplement reinforced stream bed material, as specified in the Construction Documents, or as directed by The Town of Vienna.

2. MATERIALS

- A. Reinforced stream bed material shall consist of natural field rock, natural river rock, crushed stone, coarse sand, bank run gravel and topsoil. Additional details on the components of the Reinforced stream bed material are included in the footnotes below. The stream bed material shall be sound, tough, dense, resistant to the action of air and water, and suitable in all respects for the purpose intended.
- B. Source of stream reinforced bed material shall be from an approved mining operation with up-to-date regulatory permits. Stream bed material shall NOT be indiscriminately mined from active streams and rivers.
- C. Reinforced stream bed material (Main stem)¹ shall be a mixture containing approximately the following size distribution:

- >50% 6 inch diameter cobble
- 35% 2-6 inch diameter cobble
- 15% fines

Class A1 riprap may be used as a component of the mix to meet design particle distribution.

- D. All reinforced stream bed material shall meet the approval of The Town of Vienna. While no specific gradation is required, the various sizes of the rock shall be equally distributed within the required size range. The size of an individual rock particle shall be determined by measuring its diameter across the intermediate axis.
- E. Samples of reinforced stream bed material shall be delivered to project site for approval by The Town of Vienna, prior to its use in the project. Additional inspection for approval may be performed throughout the construction. Any unsuitable material shall be removed at the Contractor's expense.

3. CONSTRUCTION

The Contractor shall install reinforced stream bed material to a minimum depth of 18-24 inches (as specified on profile and details) in restored channel areas unless otherwise specified in the Contract Documents, and as directed by The Town of Vienna. Reinforced stream bed material shall be used to supplement the use of acceptable salvaged stream bed material. Salvaged Stream bed material (described in Section 15-Salvaged Stream Bed Material) shall be used to top-dress the furnished reinforced stream bed material and to top dress the mixture of furnished reinforced stream bed material and salvaged stream bed material, as specified in the Contract Documents and as directed by The Town of Vienna. The contractor shall adhere to the following hierarchy of bed material usage:

1. The existing stream bed material shall be used in areas where the existing stream bed is within 6 inches of the proposed grade, and shall be amended with furnished reinforced stream bed material as needed to meet elevations specified in the Contract Documents.

¹ Unless specified otherwise, the reinforced bed shall be a minimum of 24" in depth in all restoration areas on the main stem. See longitudinal profile for location and thickness.

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2. Stream bed in areas of fill and/or realignment:
 - a. Salvaged stream bed material shall be used as specified in the Contract Documents if the existing stream bed material is determined to be acceptable by The Town of Vienna, and as directed by The Town of Vienna. Salvaged stream bed material shall not be stockpiled for later use. The salvaged stream bed material shall be harvested from the existing channel and placed within the proposed channel in the same day of harvest.
OR
 - b. Use furnished Reinforced Stream Bed Material as specified in the Contract Documents if no acceptable salvaged stream bed material is available.
3. Supplemental use of Reinforced Stream Bed Material
 - a. Reinforced Stream Bed Material shall be used if there is an insufficient amount of acceptable salvaged streambed material. Reinforced Stream Bed Material shall supplement the use of acceptable salvaged stream bed material to meet the quantity of streambed material needed to install “reinforced bed material” “reinforced bed mixture”, “reinforced bed”, “reinforced bed and/or salvaged bed material” and “salvaged cobble/gravel/sand substrate”, as specified in the Contract Documents and as directed by The Town of Vienna.

4. MEASUREMENT AND PAYMENT

Payment for reinforced stream bed material shall be measured and paid for as a cubic yard (CY) item. Payment shall be full compensation for the excavation, furnishing, transport, stockpiling, and placement, and for all material, labor, equipment, tools, disposal and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna. The quantity of reinforced stream bed material to be installed shall be affected by the actual conditions that occur during the construction of the project. Such variations in quantity shall not be considered as alterations in the details of construction or a change in the character of the work.

SECTION-15 SALVAGED STREAM BED MATERIAL

1. DESCRIPTION

This work shall consist of salvaging and placing salvaged existing stream bed material as specified in the Contract Documents, and as directed by The Town of Vienna.

2. MATERIALS

Salvaged stream bed material shall consist of boulders, cobbles, gravels, sands, and fines excavated from the existing stream channel areas shown in the Contract Documents and as directed in the field by The Town of Vienna.

3. CONSTRUCTION

- A. Salvaged stream bed material shall be excavated and placed on the same construction day. If the contractor believes salvaged streambed material needs to be stockpiled, prior approval shall be obtained from The Town of Vienna.

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- B. Salvaged stream bed material shall be excavated and staged within the stream channel, immediately downstream of the active construction area and inside the pump around/diversion pipe/de-watering location, and placed within the new channel as described in the Construction Documents and as directed by The Town of Vienna.
- D. Salvaged stream bed material shall be excavated from point bars and riffles as shown in the Contract Documents and as directed by The Town of Vienna.
- E. Salvaged stream bed material shall be used as a component of the stream bed material (along with furnished reinforced stream bed material) needed to install the “Reinforced Stream Bed Material”, “reinforced bed material” “reinforced bed mixture”, “reinforced bed”, “reinforced bed and/or salvaged bed material” and “salvaged cobble/gravel/sand substrate”, as described in the Contract Documents and as directed by The Town of Vienna. Salvaged stream bed material shall also be used to top-dress the furnished reinforced stream bed material as shown in the Contract Documents and as directed by The Town of Vienna. The contractor shall adhere to the following hierarchy of bed material usage:
 - 1. The existing stream bed material shall be used in areas where the existing stream bed is within 6 inches of the proposed grade
 - 2. Stream bed in areas of fill and/or realignment:
 - a. Salvaged stream bed material shall be used as specified in the Contract Documents if the existing stream bed material is determined to be acceptable by The Town of Vienna, and as directed by The Town of Vienna. Salvaged stream bed material shall not be stockpiled for later use. The salvaged stream bed material shall be harvested from the existing channel and placed within the proposed channel in the same day of harvest.
OR
 - b. Use Reinforced Stream Bed Material as specified in the Contract Documents if no acceptable salvaged stream bed material is available.
 - 3. Supplemental use of Reinforced Stream Bed Material
 - a. Reinforced Stream Bed Material shall be used if there is an insufficient amount of acceptable salvaged stream bed material. Reinforced Stream Bed Material shall be used to supplement the use of acceptable salvaged stream bed material to meet the quantity of streambed material needed to install “reinforced bed material” “reinforced bed mixture”, “reinforced bed”, “reinforced bed and/or salvaged bed material” and “salvaged cobble/gravel/sand substrate”, as specified in the Contract Documents and as directed by The Town of Vienna.

4. MEASUREMENT AND PAYMENT

Salvaging existing stream bed material shall not be measured and the cost shall be incidental to the Contract price for Regular Excavation, Structural Fill (or Earthwork) Section.

SECTION-16 ROCK

1. DESCRIPTION

This work shall consist of furnishing, transporting, stockpiling, maintaining, disposing, and placing of rock for step pools, armored step pools, rock steps, modified cross vanes, imbricated rock walls, stone toe, class 1 rip rap, boulder riffles, boulder pools, all in-stream woody debris, soil lifts, root wads, in-stream habitat logs, splash rocks and other structures as specified in the Contract Documents, or as directed by The Town of Vienna.

2. MATERIALS

- A. Rock shall consist of angular flat rock of appropriate color (e.g., green/gray, brown/gray, dark gray, and/or dark brown in color) obtained from an approved source. Rock shall not be harvested from streams or rivers outside a commercial quarry operation. All rock shall be free from laminations, weak cleavages and shall not disintegrate from the action of air, salt water and in handling and placing. Granular sedimentary rock shall generally be unacceptable. Concrete shall not be considered as an alternative for rock. White rock is not acceptable.
- B. Rock sizes shall be as specified in the Contract Documents for step pools, rock steps, modified cross vanes, imbricated rock walls, stone toe, boulder riffles, in-stream habitat logs, in-stream woody debris, log j-hooks, and other structures. Rock sizes are shown in the table below.
- C. The rock shall have a minimum unit weight of 160 lbs. per cubic foot.
- D. The Contractor shall obtain from the quarry and submit to The Town of Vienna a certificate verifying the following:
 - 1. Rocks provided are per dimensions given in the Rock Size Requirements table.
 - 2. Weight per cubic foot.
 - 3. Weight of rock being supplied.

Rock Size Requirements:

Structure Rock Size Specification Table			
Structure	Minimum X-axis Dimension (ft)	Minimum Y-axis Dimension (ft)	Minimum Z-axis Dimension (ft)
Boulder Vane	3.00	3.00	2.50
Log Vane Boulder	3.00	3.00	2.50
Pinch Boulder	2.50	2.50	2.50

- E. Samples shall be delivered to project site for approval by The Town of Vienna, prior to its use in the project. Any unsuitable material shall be removed at the Contractor’s expense.
- F. The Contractor shall not be granted an extension of time or extra compensation due to delay caused by sampling, testing, approval or disapproval of rock protection material under the requirements of these Specifications.
- G. Due to the anticipated quarry preparatory time, and/or demand for the rock as specified in the contract documents, it shall be the Contractor’s responsibility to make all necessary arrangements with the source of supply in a timely fashion, so that the Contractor shall maintain an adequate supply of rock material and that work shall not be unnecessarily delayed due to insufficient supply.

4. CONSTRUCTION

The Contractor shall install rock in accordance with the Contract Documents.

4. MEASUREMENT AND PAYMENT

Payment for Rock shall be incidental to the installation of step pools, armored step pools, rock steps, modified cross vanes, imbricated rock walls, stone toe, boulder riffles, all in-stream woody debris, rootwads, j-hooks, in-stream habitat logs, and all other structures as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-17 TREE SAVE BENCH / TREE PIT

1. DESCRIPTION

This work shall consist of all grading work associated with the creation of Tree Save Bench or Tree Save Pit features, as specified in the Contract Documents or as directed by The Town of Vienna. Special care shall be taken while working in the specified areas to avoid damage to existing root structure.

2. MATERIALS

A. Reinforced Stream Bed Material

Reinforced Stream bed material shall meet the Specifications for ‘Reinforced Stream Bed Material’ contained in the Contract Documents.

- B.** Select earth fill material shall consist of material obtained within the limits of the project and used to raise the site elevations to those specified in the grading plan. If sufficient satisfactory soil materials for use as earth fill are not available from onsite excavations it shall be the contractor’s responsibility to provide suitable earth fill material. Soils sufficient for use as earth fill include ASTM D 2487 Soil Classification Groups CL, GC, ML, CH and SC, a combination of these groups, or as approved by The Town of Vienna. Earth fill shall be free of rock greater than 3 inches, debris, waste, frozen materials, vegetation, invasive species, pathogens, and any other deleterious matter.

3. MEASUREMENT AND BASIS OF PAYMENT

Grading associated with Tree Save Bench/Pits shall not be measured and the cost shall be incidental to the Contract price for Regular Excavation (or Earthwork). Payment shall be full compensation for all fine grading, materials, transporting, labor, equipment, tools, stockpiling, disposal and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-18 BOULDER VANE RIFFLE

1. DESCRIPTION

This structure serves to establish grade control and to provide varied flow vectors throughout a riffle

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section. It also forces the flow away from the bank and creates a meandering low flow channel by the installation of alternating vane arms. Footer boulders are placed beneath the header boulders on the first and last vane arm for each structure at the invert elevations specified in the design documents.

2. MATERIALS

All structural stone shall meet the requirements of boulders and select material as outlined in the detail.

3. CONSTRUCTION

Build the Boulder Constructed Riffle by first shaping the bankfull channel to the grades specified. Next, excavate enough bed material to place the boulders and cobble/gravel for the upstream most Boulder Constructed Riffle vane arm at the head of the riffle. Placement of boulders for the Boulder Constructed Riffle should start at the center of the stream, or invert, and proceed outward to the banks. Place boulders at the channel invert, and check the elevations of the inverts in accordance with the profile. The degree of finish for invert elevations shall be within 0.1 foot of the grades and elevations indicated. Once the inverts have been established, the remainder of the boulders shall be placed across the channel as shown on the details, minimizing voids. Refer to the construction plans for exact installation guide and locations of Boulder Constructed Riffle to be installed. Footer boulders shall only be used on the first and last vane arm. Gaps shall be filled with stone as indicated in the detail. The vane shall slope as depicted in the detail from the bed elevation at the head of the vane to the inner berm elevation. No boulders shall be exposed above the inner berm elevation. Filter fabric will only be used on structures that are located in a fill situation or in fine bed materials as determined by the Engineer. Refer to the detail, which specifies the structures that require filter fabric. A boulder sill shall be placed according to the plans to eliminate the possibility of stream flow diverting around them. The contractor is responsible for making sure all installation activities will not interfere with any utilities prior to installation. The area between the streambank and the vane on the upstream side of the structure will be backfilled with natural sorted substrate.

4. MEASUREMENT AND PAYMENT

Measurement for Boulder Constructed Riffle shall be per each, satisfactorily installed. Structural boulders, select native materials, and filter fabric shall be calculated by the contractor based on the design details and plans.

The labor, equipment, placing, handling, fitting, and any incidentals necessary to install the Boulder Constructed Riffle, measured as provided above, will be paid for at the contract unit price under "Boulder Vane Riffle."

SECTION-19 WOOD TOE WITH COIR WRAPPED SOIL LIFTS

1. DESCRIPTION

A woody debris toe protection is a structure, consisting of natural materials, to reinforce the outer channel bank along a meander. The layering of coarse woody material, live stakes, and topsoil create a stable interlocking matrix. The structure shall be built with suitable materials and to the dimensions shown on the detail. A layer of topsoil with riparian plantings and live stakes are installed on top. Woody debris toe protection structure shall be installed in locations as shown in the plan set. The quantity of woody debris toe protection may be increased, decreased, or eliminated entirely at the direction of the Town of Vienna. Such variations in quantity will not be considered as alterations in the details of construction or a change in the character of the work.

2. MATERIALS

Materials for the “coarse woody debris” shall consist of root wads, footer logs, and woody material.

Unless variations are approved by the Owner and Engineer, the materials shall meet the following specifications. Tree species for root wads used in woody debris toe protection shall be hardwoods with the tree trunk, stump, and root mat in one single piece. No invasive tree species shall be used. The trunk of the root wad shall be of sufficient length to allow for a minimum embedded length of 10 feet, not including the root ball. The root wad shall have a minimum trunk diameter of 18 inches, measured at a distance of 24 inches above the root base. All limbs and branches shall be removed from the trunk segment. All root wads shall be relatively solid (hard) and visibly free from decay, breakage or other damages.

Footer logs shall be hardwoods with a tree trunk minimum diameter of 18 inches, a minimum length of 12 feet, maximum length of 16 feet, and free of limbs, branches and root ball. No invasive species shall be used. All footer logs shall be relatively solid (hard) and visibly free from decay, breakage, or other damages.

Tree species for the filler material used along the top of the woody debris toe protection shall be hardwoods. No invasive species shall be used. Wood material shall include limbs, small logs, tree tops, brush and woody shrubs. Limbs may be a variety of sizes with or without leaves/needles depending on the season. Leaves and/or needles not attached to a tree limb (i.e., bundles, piles, etc.) are not allowed.

Woody material shall be gathered from onsite trees and woody plants taken during the clearing and grubbing process or be brought in from offsite at the approval of the Owner and Engineer.

IT SHALL BE THE CONTRACTOR’S RESPONSIBILITY TO MAKE ALL NECESSARY ARRANGEMENTS TO SAVE THIS ON-SITE MATERIAL DURING THE CLEARING AND GRUBBING PROCESS AND MAINTAIN AN ADEQUATE SUPPLY OF LOG MATERIAL AND THAT WORK SHALL NOT BE UNNECESSARILY DELAYED DUE TO INSUFFICIENT SUPPLY.

Coir fiber matting shall meet the requirements outlined under Section “Coir Fiber Mat.”

Variables used to compute elevations for this structure include:

D_{RW}	=	Diameter of Root Wad
D_{FOOT}	=	Diameter of Footer Log
EL_{NRIF}	=	Elevation of Next Downstream Riffle
EL_{NIB}	=	Elevation of Next Downstream Inner Berm
H	=	Maximum Height above Next Downstream Riffle

3. CONSTRUCTION

- A. Excavate the extents of the structure down to the bottom elevation of the rootwad logs shown in the detail. This elevation shall be $EL_{NRIF}+H-D_{RW}$. Contractor shall ensure all logs are no more than H above EL_{NRIF} .
- B. Next, excavate trenches for placement of the footer and sill logs. Depth of trench excavation shall be D_{FOOT} . Footer logs shall be placed in trenches such that the top of the log is flush with the excavated surface for the rootwad logs. Note that the footer logs are pointed in a generally downstream orientation and sill logs are nearly perpendicular to the flow, as shown in the detail.
- C. Place rootwad logs as shown in the detail. Note the general orientation is in the upstream direction. The elevation of the top of the rootwad log shall be approximately 0.5’ below the invert

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of the immediate downstream riffle (EL_{NRIF}). Place filler material (small logs, limbs tree tops, and brush) and fill voids with native soil.

- D. No logs shall be placed parallel to the flow of water, unless directed by the Engineer. Logs shall be placed in a crossing pattern or weave such that each log is anchored by another log.
- E. Small/fine woody debris mixed with native soil shall be placed above and in between the coarse woody debris with the largest material being placed first and the smallest material placed last.
- F. All woody debris shall be compacted with the excavator bucket in order to reduce the presence of voids in the small/fine woody debris layer. Counter-weights may be necessary to hold structure in place during construction prior to placement of soil on top of structure.
- G. Once logs, limbs, and wood debris have been installed, the top elevation of the face log should be equal to the inner berm elevation of the next downstream riffle. Filter fabric shall be placed above the limbs and woody debris to prevent soil from washing through the matrix of wood.
- H. Coir fiber erosion control matting shall be installed on top of the wood debris (beneath the soil material) to allow for wrapping of the overlying soil.
- I. If installing soil lifts:
 - 1. Maximum lift height shall be maintained as shown in drawings.
 - 2. Outer layer of soil lift shall consist of woven erosion control coir matting as shown in drawings.
 - 3. Inner layer of soil lift shall consist of non-woven (continuous weave) coir matting as shown in drawings.
 - 4. Customized coir matting consisting of a woven exterior and non-woven interior specifically designed for soil lifts may be used with Engineer's and Owner's approval.
 - 5. Soil shall be seeded and mulched before final wrapping.
 - 6. Wrap coir fiber matting as shown on the detail and key in upper layer of matting as shown.
 - 7. Install live branches/cuttings between lifts as shown on the drawings using the species designated.
- J. If placing sod mats:
 - 1. Contractor shall ensure sod mats include sufficient soil to preserve root matrix of transplanted plants and meet the grades shown in the drawings
 - 2. Contractor shall backfill as necessary to ensure soil lifts reach design elevation.
- K. The contractor is responsible for making sure all installation activities will not interfere with any utilities prior to installation.

4. MEASUREMENT AND PAYMENT

Woody material shall be gathered from onsite trees and woody plants or from offsite and approved by the Engineer. Unless approved by the Owner and Engineer, no invasive species may be used. Coir fiber matting will be paid for under Section "Coir Fiber Mat." All other materials necessary to complete the installation of this structure as shown in the Plans will be considered incidental for woody debris toe protection. Woody debris toe protection shall be paid for on a linear foot basis. Measurement shall be made along the bank where structure is installed (not centerline).

The quantity of woody debris toe protection structure to be paid for will be measured in linear feet of bank where woody debris toe protection has been properly installed and approved by the Engineer. Live branches, coarse woody material, wrapped earth lifts and all tools needed for installation will be

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incidental. Woody debris toe protection structure shall be placed in locations as shown on the plan sheets.

SECTION-20 LOG RIFFLE

1. DESCRIPTION

This structure serves to establish grade control and to provide varied flow vectors throughout a riffle section. It also forces the flow away from the bank and creates a meandering low flow channel by the installation of alternating vane arms. Footer boulders are placed beneath the header boulders on the first and last vane arm for each structure at the invert elevations specified in the design documents

2. MATERIALS

A. Log Source

Logs shall consist of on-site hardwood trees harvested during the clearing and grubbing process. Contractor should take care during clearing and grubbing to preserve the integrity of suitable logs in order to avoid delays associated with inadequate supply. **It shall be the Contractor's sole responsibility to ensure that these materials are properly harvested and stockpiled and a sufficient quantity of on-site logs is not guaranteed.** The full burden of any additional costs associated with the need for import of logs to the project site shall be borne by the contractor.

B. Suitable Trees and Condition

Toe logs shall be branchless, hardwood logs harvested during site clearing or imported from off site.

3. CONSTRUCTION

Build the Log Riffle by first shaping the bankfull channel to the grades specified. Next, excavate enough bed material to place the logs for the upstream most riffle vane arm at the head of the riffle. Refer to the construction plans for exact installation guide and locations of the Log Riffle to be installed.

4. MEASUREMENT AND PAYMENT

Logs will be measured and paid for at the Contract unit price per each (EA) toe log riffle installed. Payment will be full compensation for furnishing, transporting, stockpiling, installing, and maintaining toe log structures, and for all material, labor, equipment, tools, disposal and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-21 LOG VANE

1. DESCRIPTION

This work shall consist of furnishing, stockpiling, transporting, installing and maintain log cross vanes within the stream channel as specified in the contract documents or as directed by the Town of Vienna.

2. MATERIALS

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C. Log Source

Logs shall consist of on-site hardwood trees harvested during the clearing and grubbing process. Contractor should take care during clearing and grubbing to preserve the integrity of suitable logs in order to avoid delays associated with inadequate supply. **It shall be the Contractor's sole responsibility to ensure that these materials are properly harvested and stockpiled.** The full burden of any additional costs associated with the need for import of logs to the project site shall be borne by the contractor.

D. Suitable Trees and Condition

Toe logs shall meet the Specification for 'Logs' contained in the Contract Documents. Branchless, hardwood logs harvested during site clearing shall be used.

3. CONSTRUCTION

- A. Using sandbag diversions, pump around techniques, or a combination of both, the stream shall be diverted and the construction area dewatered.
- B. Begin grading according to the Contract Documents accounting for proper subgrade excavation necessary for the placement of the vane logs. Salvage the existing channel bed material within the limits of excavation.
- C. The footer logs shall be installed by excavating a trench to accommodate both the footer logs and a 2-foot area upstream. In the event that bedrock is present in the area of installation, footer logs shall still be required unless approval for elimination of footer logs is obtained from The Town of Vienna.
- D. Root wads are installed below the top log and protrude into the pool.
- E. Geotextile fabric shall be placed in the bottom and upstream side of the trench to the bankfull width. Anchor rocks and logs shall be placed at the bottom and downstream side of the trench so that a minimum of 1-foot of geotextile fabric lies under the rock and logs. The anchor rocks shall abut one another. Anchor rocks shall be placed upon the downstream end of the header log. The top elevation of the anchor rock placed at the upstream end of the log vane, on top of the top logs, shall either be placed flush with the proposed stream grade, or so that the protrusion height above the proposed stream grade shall be no greater than 1/3 the smallest dimension (z-axis) of the anchor rocks. Log vanes shall be firmly embedded into the upstream edge of the trench bottom, and anchor rocks placed within the trench shall be embedded firmly against the log vanes and the downstream edge of the trench.
- F. In the event where installation of the log vane may damage tree roots, excavation may be minimized, at the direction and approval of The Town of Vienna. This may include reducing the length of the vane or eliminating trenching for anchor rocks and logs and stream bed material. This decision shall be field determined and authorized by The Town of Vienna.
- G. Vane logs will transition from bed to bank at a steady linear grade such that a minimum of five (5) feet of the log is beneath the specified bed elevation. The vane logs shall be pushed into the bank a minimum of five (5) feet and set to the locations and elevations provided in the structure location tables for each structure. If bank material prevents pushing the vane logs into the bank at the discretion of the Engineer, a trench may be excavated to set the log using the smallest bucket possible. The trench width should be no more than six inches greater than the log diameter. After installation of the log vane within bank trench, the trench shall be backfilled with a maximum of 1.5 foot soil lifts, compacted to 90% proctor density, to meet the grades shown in the Construction Documents and as directed by The Town of Vienna.

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- H. The trench shall be backfilled with reinforced stream bed material. Reinforced bed material shall be placed along the entire restored channel upstream and downstream of the log vanes, with geotextile fabric between the stream bed material and anchor rocks and log vanes to the proposed invert elevation shown in the Contract Documents.
- I. Any unsuitable material shall be removed at the Contractor's expense.
- J. The Contractor shall not be granted an extension of time or extra compensation due to delay caused by sampling, testing, approval or disapproval of log material under the requirements of these Specifications.
- K. If logs are not available on-site, off-site material will be brought with no additional cost to the Town of Vienna.

4. MEASUREMENT AND BASIS OF PAYMENT

Logs will be measured and paid for at the Contract unit price per each (EA) log vane structure installed. Payment will be full compensation for furnishing, transporting, stockpiling, installing, and maintaining toe log structures, and for all material, labor, equipment, tools, disposal and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-22 FLOODPLAIN WOOD ASSEMBLAGE

1. DESCRIPTION

This structure is composed of trees, root wads, and logs (including some that may not be suitable for in-stream structures), which are assembled together on the floodplain to increase overbank roughness and create upland heterogeneity. The assemblages are intended to mimic and recreate terrestrial habitat that occur around natural woody debris found on floodplains. The various different logs will be keyed in to the ground in a manner that resists mobilization during flood events. The assemblage will be configured in a variety of different orientations, based on the materials available and site specific conditions.

2. MATERIALS

All wood and material shall be sourced from native, non-invasive tree species with approximate sizes identified on the details and approved by the on-site.

3. CONSTRUCTION

The contractor shall first finalize the floodplain grading around the installation area, prior to placement of any logs. Second the contractor shall identify the "key logs" and "pile logs" for each assemblage, and stockpile adjacent to the installation area. The location and orientation upstream most key log shall be staked out by the on-site engineer. A small trench (1/2*log diameter), shall be dug along the length of the log prior to placement. Any additional "key logs" shall be oriented and placed such that the root wad (or thickest end) overlaps the upstream "key log," with the tail end buried (~ 1.5-2*log diameter). A minimum of 2 "pile logs" per "key log" shall be driven into the ground to create an overlapping matrix, resistant to mobilization.

4. MEASUREMENT AND BASIS OF PAYMENT

Measurement for Floodplain Wood Assemblage shall be per structure.

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The labor, equipment, placing, handling, fitting, and any incidentals necessary to install the Outlet Protection, measured as provided above, will be paid for at the contract unit price under “Floodplain Wood Assemblage.”

SECTION-23 CONSTRUCTION TOLERANCES

1. DESCRIPTION

All stream work shall be performed such that the finished product adheres to the stream restoration construction tolerances contained herein. The contractor is solely responsible for ensuring the finished product meets the tolerances. Should the project be subject to third party oversight, the third party reviewer is responsible for advising the contractor of compliance or deviation from design drawings, documenting the installation of plan elements, and communicating the details of construction progress to The Town of Vienna. Third party oversight in no way relieves the contractor of the duties associated with checking grades and ensuring all aspects of the restored stream meet the specified tolerances. Only The Town of Vienna staff can issue final approval and acceptance.

2. SPECIFICATIONS

- A. During construction, the Contractor shall adhere to the construction grading tolerances noted as follows:
1. Locations, elevations, and dimensions of all STRUCTURES and all associated structure stakeout points shall be as follows:
 - Vertical tolerance: +/- 0.1' maximum; and,
 - Horizontal tolerance: +/- 0.5' maximum:
 - a. In channel areas of low slope, deviation from design (even if within the above specified tolerances) shall not create conditions which prevent positive drainage (stream flow) in the downstream direction. (i.e. Structure inverts must drop in elevation when progressing in the downstream direction unless specifically noted otherwise in the Contract Documents.)
 2. Locations, elevations, and dimensions of all channel features (as specified on the grading plan, longitudinal profile, geometry plan, and detailed cross sections) shall be as follows in 2.a. Further, the typical riffle cross section dimensions apply to all channel areas, (i.e. all areas are subjected to the tolerances) not just the specific stations where the detailed cross sections are shown.
 - a. For all channels:
 - Vertical tolerance: +/- 0.2' maximum; and,
 - Horizontal tolerance: +/- 0.5' maximum:
- B. Should the Contractor encounter a situation where they believe tolerances overlap and/or conflict, the contractor shall request clarification of the tolerance priority from The Town of Vienna staff (or their designated representative) at least one (1) week prior to working in any area which may be affected by the tolerance in question.
- C. It is recognized that field conditions may warrant adjustments to design elements (such an adjustment requires the prior written approval of The Town of Vienna staff). In addition, certain

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design elements that fail to meet the above listed tolerances may be acceptable. Such acceptance shall be on a case-by-case basis, and determined by the Town of Vienna.

If a structure is adjusted all points within a given structure and/or cross section must be shifted equally to maintain dimensional integrity. The restored dimensions shall not vary from the design dimensions beyond the values specified below without prior written approval of Town of Vienna staff:

- Restored stream bank slopes do not exceed 3:1, unless otherwise noted;
- Cross section width remains within 10% of the design;
- Riffle depth remains within 10% of the design;
- Restored riffle slopes remain within 1% of design (and maintains positive drainage);
- Vane arm slopes remain between 2% and 7%;
- Vane arm deflection angles remain between 20° and 30°;
- Pool depths remain within 10% of the design depth;

Any such change shall be noted on the final as-built drawing as well as on the preliminary as-built forms with justification for the change. Acceptance of field changes and/or areas outside of tolerances does not relieve the contractor of liability for the structures or channel features during the warranty period.

Adherence to the tolerances shall be documented as specified in the ‘Stream Restoration Certification As-Built Survey’ section of this document.

SECTION-24 PLANTING TREES AND SHRUBS

1. DESCRIPTION

- A. This work shall consist of furnishing, transporting, storing, and installing trees and shrubs to complete the work for the planting plan as specified in the Contract Documents, or as directed by The Town of Vienna.
- B. Prior to start of work, the Contractor shall submit a proposed planting schedule, including species and quantities, anticipated planting dates, and the source of plant material to The Town of Vienna for approval. No planting work shall be performed until this information has been reviewed and approved by The Town of Vienna.
- C. The Town of Vienna may request the Contractor to stake and adjust the location of individual plants within the approved Planting Zones.
- D. Contractor shall provide a three (3) day notice of intended plant delivery date in order for owner representative to be on-site to review plant material prior to planting.
- E. Prior to installation of trees and shrubs, all areas disturbed by construction shall be amended, brought to specified grades shown in the Contract Documents, and the seed bed prepared per the Salvaging and/or Furnishing and Placing Topsoil and Placing Furnished Compost, Earthwork sections of these specifications.

2. MATERIALS

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A. Plant Material

1. All plant material shall conform to the current issue of the American Standard for Nursery Stock published by the American Association of Nurserymen.
2. Plant materials must be selected from certified nurseries that have been inspected by state and/or federal agencies. Nursery inspection certificates shall be furnished to The Town of Vienna upon request.
3. The nursery supply source shall certify that the origin of the seeds from which the trees and shrubs were produced is Hardiness Zone 7, east of the Mississippi River. Stock from colder zones may be accepted, subject to Town of Vienna approval.
4. Plant material collected from the wild is prohibited.
5. Container grown stock shall have been grown in a container long enough for the root system to have developed sufficiently to hold its soil. Roots shall visibly extend to the inside face of the growing container. All container grown plants shall be grouped and kept moist and cool until they are planted. Plants left to dry in the sun prior to planting may be rejected on-site by the Inspector.
6. The Town of Vienna may reject plants damaged in handling or transportation and that do not meet the specifications described in the Contract Documents.
7. No plants shall be installed unless The Town of Vienna approves the plant species, condition of the plantings and the process of installation.

B. Substitute Plant Material

1. **Contractor shall provide planting submittals two months (min.) prior to the scheduled planting date.** Substitutions will only be permitted with adequate justification. The Town of Vienna must approve all plant substitutions.
2. If a substitute is selected, it must be native to The Town of Vienna and of the same size, value, quantity and quality as the original plant.

C. Water

1. Water used in the establishment or caring of plants and seed shall be free from any substance that is injurious to plant life.

D. Fertilizer

1. No broadcast fertilization shall be permitted on stream restoration projects unless specifically noted in Contract Documents.
2. Fertilize each bare root, plug, tuber, and pint container plant with a 5 gram tablet of controlled release fertilizer. Fertilize each quart container with a 10 gram tablet of controlled release fertilizer. Fertilize each 1 gallon and 2 gallon container with a 20 gram tablet of controlled release fertilizer. Generally for each 12 to 18 inches of plant height or for each ½” of tree diameter at the base, use 20 grams for slow growing plants or 40 grams for fast growing plants or poor soil conditions. Said fertilizer tablets shall be Agriform 20-10-5 or approved equivalent, applied in accordance with manufacturer’s recommendations.

E. Mycorrhizal Fungi

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All bare root seedlings shall be treated with root dip absorbent polymers and mycorrhizal root dip inoculates in accordance with the manufacturer's recommendations. Root Dip shall be Mycortree™ Root Dip or The Town of Vienna approved equal.

F. Root Growth Hormone

All live stake plantings shall be treated with Root Growth Hormone prior to installation.

G. Straw Mulch

Straw mulch shall be free of rot, mildew, and noxious weed seed and shall be of a small grain such as wheat, barley, or oat.

3. CONSTRUCTION

A. Installation

1. All areas disturbed by construction shall be planted in accordance with the composition and planting schedules for each designated planting zone. Areas within designated planting zones not disturbed by construction shall be supplemented with trees and shrubs to meet the acre quantities specified in the composition schedule.
2. The Contractor shall refer to the planting plan, vegetation schedule, planting details and notes in the Construction Documents for specific spacing requirements.
3. The Contractor shall use the overall spacing requirements, spacing diagrams, and the Planting Notes and Details in the Construction Documents to determine the spacing between each species of vegetation and among the same species vegetation.
4. Immediately after site preparation and approval, trees and shrubs shall be planted. Bare Root and any containerized plants shall be installed between September 30 and March 31, or as directed by The Town of Vienna. Live stakes shall only be planted between February 1 and March 31 (when stock is dormant). Tubelings shall be planted between September 30 and March 31. **No planting shall occur when soil is frozen.**
5. Root stock of the plant material shall be kept moist during transport, from the source, to the job site and until planted.
6. The Contractor may be required to flag and label individual planting pits at specific locations. Upon to planting a typical area within each planting zone, the Contractor shall have The Town of Vienna inspect and approve plant spacing and planting techniques before proceeding.
7. All planting pits shall be dug by hand. Walls of planting pits shall be dug so that they are vertical or sloping outward in heavy soils. Scarify the walls of the pit after digging.
8. Excavate the planting pit to a depth of 1 foot plus the container depth in which the plant was grown and 2 feet wider than the container.
9. Planting holes for bare root trees and shrubs shall be 1-2" deeper than the root collar (i.e. 1-2" deeper than they were growing in the nursery). Bare root trees and shrubs shall be installed with the use of a "sharpshooter shovel", "dibble bar", or similar implement. Bare root trees and shrubs shall be installed such that the roots are not bunched, crowded or bent upwards. Bare root trees and shrubs shall be installed so that all roots are in contact with topsoil

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10. Remove all non-organic debris from the pit and tamp loose soil in the bottom of the pit by hand.
11. Remove the plant either by cutting or inverting the container.
12. DO NOT handle the plant by the branches, leaves, trunk or stem.
13. Place the plant straight in the center of the planting pit, carrying the plant by the root mass. Never lift or carry a plant by the trunk or branches.
14. Place controlled release fertilizer in the planting hole in accordance with Section 24.2.D of these specifications (above).
15. Treat all bare root seedlings with root dip absorbent polymers and mycorrhizal root dip inoculates in accordance with the manufacturer's recommendations as specified in Section 24.2.E of these specifications (above).
16. Treat all live stake plantings with Root Growth Hormone prior to installation.
17. Backfill planting pit with existing soil and hand tamp as pit is being backfilled to completely fill all voids and air pockets. Do not over compact soil. Make sure plant remains straight during backfilling/tamping procedure.
18. Do not cover the top of the root mass with soil.
19. An additional 18 inch diameter area of compost shall be placed around each tree and shrub. Compost shall be 2 inches thick.
20. Water plants thoroughly immediately after planting, unless otherwise directed by The Town of Vienna.
21. Town staff reserves the right to require supplemental watering during construction or during the first growing season after substantial completion, at their sole discretion. Supplemental watering shall be done using a submersible-style pump to pump water from an adjacent pool whenever possible in order to avoid damage associated with vehicular access. Such watering may be required, for example, if plant materials are installed outside the approved planting window or in areas where vegetative establishment does not provide 85% min. survival of trees and shrubs and 85% aerial coverage of herbaceous vegetation. Under such conditions watering shall be at the Contractor's expense. If planted within the approved planting window and deemed otherwise acceptable by Town of Vienna staff at the time of planting, supplemental watering necessitated by drought conditions will be subject to the provisions outlined in the Vegetation Watering Allowance section of these specifications.
22. The Contractor shall leave no open planting pits at the close of each day.
23. Remove all tags, labels, strings and wire from the plant materials, unless otherwise directed by The Town of Vienna.

B. Clean Up

1. During installation of trees and shrubs, all areas shall be kept neat, clean and free of all trash and debris, and all reasonable precautions shall be taken to avoid damage to existing plants, turf, structures, and private property.

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2. The Contractor shall be responsible for off-site removal and disposal of all trash, excess backfill and any materials incidental to the project and disposing of them off-site.

4. WARRANTY

- A. The warranty period of care and replacement shall begin after final inspection and approval of the installation of all plants, with inspections during the growing season prior to the end of the warranty period to determine areas where reseeding is necessary. It shall include a full growing season following the final inspection beginning with the date of final planting inspection and approval.
- B. Herbaceous permanent seeding warranty replacements shall be performed in accordance with the Contract Documents.
- C. Tree and Shrub warrant replacements shall be performed in accordance with the Contract Documents.

5. MEASUREMENT AND PAYMENT

Planting trees and shrubs shall be measured and paid for at the Contract unit price per each (EA) plant in accordance with the plant schedule and planting plan. Payment for planting trees and shrubs shall be full compensation for furnishing, transporting, installing, maintenance and warranty, including all materials, labor, equipment, stockpiling, tools, disposal and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-25 HERBACEOUS PERMANENT SEEDING

1. DESCRIPTION

- A. This work shall consist of furnishing, transporting, storing, and installing all herbaceous permanent seeding for the Planting Zones as specified in the Contract Documents, or as directed by The Town of Vienna.
- B. Prior to start of work on this item, the Contractor shall submit all herbaceous permanent seeding paperwork, to include shipping invoices, seed bag tickets for the herbaceous permanent seed mixes to be installed and the source of the seed to The Town of Vienna for review. No work shall be performed until the seeding paperwork is approved by The Town of Vienna.
- C. Prior to seeding, all areas disturbed by construction shall conform to the grades specified in the Contract Documents, amended and the seed bed prepared per the Salvaging and/or Furnishing and Placing Topsoil and Placing Furnished Compost, Earthwork sections of these specifications.

2. MATERIALS

- A. Seed Mix

Seed Mix shall consist only of the varieties specified in the vegetation schedule and planting plan sheets of the Contract Documents for all planting zones.

Seed shall be certified that the Pure Live Seed (PLS) percentage is equal to or greater than that which is specified on the Plant Schedules. If the PLS is less than specified, the Contractor shall increase the seeding rate to compensate for the PLS difference at the Contractor's own expense.

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All Seed Mix shall be free of invasive and/or noxious plants, plant parts and seeds identified by the Virginia Department of Conservation and Recreation Natural Heritage Program, the US Department of Agriculture and the Mid-Atlantic Exotic Pest Plant Council, to include, but not limited to the following:

Annual bluegrass	Corn cockle	Spurred anoda
Bermuda grass	Dodder	Wild garlic
Bindweed	Giant foxtail	Wild onion
Cocklebur	Horse nettle	Johnson grass
Japanese stilt grass	Japanese knotweed	Mile-a-minute
Wavy basket grass	Multiflora rose	

B. Straw Mulch

Straw mulch shall be free of rot, mildew, and noxious weed seed and shall be of a small grain such as wheat, barley, or oats.

C. Water

Water used in the establishment or caring of plants and seed shall be free from any substance that is injurious to plant life.

D. Fertilizer

Herbaceous seeding areas shall not be fertilized.

E. Limestone

Limestone shall not be applied to any areas receiving herbaceous seeding.

3. CONSTRUCTION

A. Installation

1. No work shall begin without having the specified (approved by The Town of Vienna) seed mixes on site. If seed supply runs out, no further work shall be done until seed supply is replenished.
2. Seeds other than those specified for use within the Contract Document shall not be delivered to or used on the project site. Seed bags found on site containing seed other than that specified in the Contract Documents shall be immediately removed and are subject to confiscation by Town of Vienna inspection personnel.
3. All areas disturbed by construction shall be seeded in accordance with the planting plans and schedules. The herbaceous permanent seeding is specified on the composition and planting schedules in the Contract Documents. Areas not disturbed, shall not be seeded.
4. The Contractor shall supply the content analysis seed tag from each seed bag to The Town of Vienna for approval prior to seeding.
5. All areas to be seeded shall conform to the finished grades as specified on the plans and be free of all weeds, trash, debris, brush, clods, loose rocks and other foreign materials larger than 3 inches in diameter or length that would interfere with seeding. All gullies, washes or disturbed areas that develop subsequent to final dressing shall be repaired prior to seeding.

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6. Seeding shall be accomplished by using a broadcast spreader. Any alternative seeding methods must be approved by The Town of Vienna, prior to Bid Submittal. All seeding equipment shall be calibrated before application to the satisfaction of The Town of Vienna so that the material is applied accurately and evenly to avoid misses and overlaps. The broadcast spreader used shall be capable of placing seed at the specified rate.
7. The specified herbaceous permanent seed mix shall be thoroughly mixed with Species Group 9 (temporary seed) and seeded using a broadcast seeder at the rates specified in the Contract Documents. Seed shall be applied to the top of the Compost and topsoil mixture in two different directions. Following the placement of the topsoil and herbaceous permanent seed mix, the Contractor shall hand rake the seeded areas to mix herbaceous permanent seed mix into the first one (1) inch of the soil mate and topsoil mixture.
8. Permanent herbaceous and temporary seed shall be sown immediately following fine grading of an area, as construction progresses, in order to achieve rapid stabilization. After seeding and raking, the Contractor shall cover the seeded areas with straw mulch on overbank areas and shall cover seeded areas with straw mulch and coir matting along the stream banks, as indicated in the Contract documents. **No seed shall be spread on top of straw or coir matting.**
9. At the sole discretion of Town staff, additional seeding may be required in areas where poor vegetative establishment is observed (less than 85% surface coverage). Additional seeding may be requested at any time prior to substantial completion or in association with planting inspections during the two year warranty period. Additional seeding shall be considered within the original contract scope and shall not be subject to change order request.

B. Clean-up

The Contractor shall be responsible for the removal of all trash and any other materials incidental to the project and disposing of them off-site.

4. WARRANTY

- D. The warranty period of care and replacement shall begin after final inspection and approval of the installation of all plants, with inspections during the growing season prior to the end of the warranty period to determine areas where reseeding is necessary. It shall include a full growing season following the final inspection beginning with the date of final planting inspection and approval.
- E. Herbaceous permanent seeding warranty replacements shall be performed in accordance with the Contract Documents and these specifications.

5. MEASUREMENT AND PAYMENT

Herbaceous permanent seeding shall be measured and paid for at the contract unit price per acre (AC) of area seeded. Payment will be full compensation for furnishing, transporting and incorporating all seed, including all maintenance and warranty, materials, labor, equipment, tools, disposal and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-26 VEGETATION WATERING ALLOWANCE

1. BIDDERS SHALL INCLUDE AN ALLOWANCE FOR VEGETATION WATERING

- A. The purpose of the Vegetation Watering Allowance is to provide for watering of the proposed *trees, shrubs, and container plants* during extended unseasonably hot or dry conditions, as directed by The Town of Vienna.
- B. The allowance price shall include watering twice a week for the duration of June 15 through September 15 for the duration of the landscape warranty period (two years), that is, a total of 48 visits.
- C. The allowance price shall be broken down into a Per Application (PA), unit cost.
- D. During June 15 through September 15, The Town of Vienna will notify the contractor when Vegetation Watering is required.
- E. If, for any reason, the warranty period encompasses more than the specified durations (timing, delayed completion, delayed plant replacement, etc.), The Town of Vienna may, at their sole discretion, require additional watering visits.

2. SUBMITTALS

- A. The contractor shall include a Vegetation Watering plan as a submittal for approval by The Town of Vienna.
- B. The Vegetation Watering plan submittal shall be approved by The Town of Vienna prior to planting any *trees, shrubs, or herbaceous permanent seeding*.
- C. With the understanding that the stream may be low or dry during the summer months, the contractor shall include in the Vegetation Watering plan submittal alternate methods for providing water including: pumping water from the stream, adjacent fire hydrants, or water trucks.

3. MEASUREMENT AND PAYMENT

- A. Payment shall be measured and paid on a unit price Per Application (PA). Payment will be on a per unit basis as needed and as directed by The Town of Vienna. Payment shall constitute full compensation for all furnishing and transporting all materials, labor, transportation, stockpiling, equipment, tools, and all incidentals necessary to complete the work as described herein, in the Contract Documents and as directed by The Town of Vienna.

SECTION-27 STREAM RESTORATION CERTIFICATION AS-BUILT SURVEY

1. DESCRIPTION

Survey and preparation of the final certified as-built documents shall be prepared by others and delivered under a separate contract. The certified as-built survey of the completed stream restoration construction will fully illustrate all completed construction within the established LOD. This does not relieve the Contractor of daily non-certified as-built survey obligations/grade check notes and notifications as described in the Construction section below.

The Contractor shall prepare and submit weekly, non-certified, as-built surveys and field construction notes for all in-stream structures, longitudinal profiles and channel dimensions at each proposed cross section. The daily, non-certified, as-built survey and construction notes shall include the as-built location (stationing) and elevation compared to the proposed as-built location and elevation for all in-stream structures, longitudinal profiles and channel dimensions at each proposed cross section.

2. MATERIALS

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- A. During construction, the Contractor shall adhere to tolerances noted in the “Stream Construction Tolerances” section of this document.
- B. The certified as-built survey shall be a reproducible mylar copy of the approved Contract Documents (existing base files to be obtained electronically from The Town of Vienna). The as-built survey shall be certified by a Land Surveyor licensed to practice in the Commonwealth of Virginia. The as-built survey shall include the following features:
 - 1. Verification of information in geometry plan and notation of any changes.
 - 2. Verification of information in structure tables to include horizontal and vertical as-built condition of all in-stream structures, including location and elevation of each structure point described in the structure stakeout table for each in-stream structure, as described within the Contract Documents. The difference between the proposed and as-built vertical and horizontal condition.
 - 3. Topographic as-built survey over the extent of all constructed bank stabilization and grading. Shots shall be sampled and reported at no less density than 50’ grid, and sufficient to show break lines and grade changes at 1foot contour intervals.
 - 4. Vertical as-built survey of the proposed longitudinal profile of the stream thalweg (or design centerline alignment) at grade breaks to show the as-built riffle, run, pool, and glide elevations of the restored channel, as shown in the proposed longitudinal profile and cross sections, and at design stations and locations of revisions approved during construction.
 - 5. Horizontal and vertical as-built survey of each proposed cross section, to include all proposed in-channel grading and structures, top of bench and bench limits (if in bench section), top of stream bank, and all topographic features outside of the stream channel extended to the LOD on both sides of the channel at the station of every proposed cross section and at a minimum of every fifty (50) feet along the proposed stream stationing.

3. CONSTRUCTION

- A. The Contractor shall provide daily, non-certified, as-built surveys in the form of “Construction Foreman’s GRADE CHECK NOTES” to the Town of Vienna Construction Inspector and/or Town of Vienna Staff on site. The GRADE CHECK NOTES shall show the as-built elevations are in conformance (within specified tolerances) with the proposed elevations at all structure points shown in the structure tables, and at all proposed in-channel grading (centerline/thalweg, active channel toe, top of bench, back of bench, top of stream bank, and all proposed topographic features outside of the stream channel extended to the LOD on both sides of the channel, as shown in the grading plans, proposed cross sections and longitudinal profile.
- B. The Contractor shall notify The Town of Vienna a minimum of 2 weeks prior to completion of construction activities.
- C. The Contractor shall document (via work performed by others, under separate contract) the certified as-built condition of the constructed design, concurrent with construction, so that the certified as-built survey is completed weekly and submitted to The Town of Vienna for review and approval of the Contractor’s work. All as-built survey shall be reviewed and approved prior to Contractor demobilization, and no longer than four (3) weeks following substantial completion of construction activities.
- D. Any errors or omissions found during the course of the as-built survey and determined by The Town of Vienna, who shall be the sole judge, to have occurred during construction shall be

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repaired by the Contractor to the satisfaction of The Town of Vienna at no additional expense to the Town of Vienna. The Contractor shall make any necessary repairs or corrections required by The Town of Vienna including grading, adjustment of stream restoration structures, etc. Upon completion of corrective action, the Town of Vienna (or the Town of Vienna's agent) shall re-survey the problem area showing the original as-built information and any modification highlighted and noted. A Land Surveyor licensed to practice in the Commonwealth of Virginia shall also seal the re-survey.

- E. Final acceptance of the project by The Town of Vienna shall not occur until the certified as-built has been completed for the entire project and approved by The Town of Vienna.

4. MAINTENANCE

- A. The Contractor will be held fully responsible for maintaining the project during the course of the construction including the period of the as-built certification.
- B. The Contractor shall be held responsible for maintaining the integrity of the project until final acceptance of the as-built survey and a determination by The Town of Vienna that no errors or omissions have been made by the Contractor during the course of construction. The Town of Vienna shall make every effort to notify the Contractor within 3 weeks of The Town of Vienna's receipt of the as-built survey as to the acceptability or rejection of the construction of the stream restoration project; however, lapse of this time frame does not relieve the Contractor of responsibility for maintaining the integrity of the project or for correcting any errors/omissions until final acceptance of the certified as-built for the entire stream restoration project.

5. MEASUREMENT AND PAYMENT

Measurement and payment shall not be made for the Contractor to prepare and submit weekly, non-certified, as-built surveys and field construction notes for all in-stream structures, longitudinal profiles and channel dimensions at each proposed cross section, and shall be incidental to installation of all instream structures and earthwork. Certified as-built survey shall be proved by a separate contractor under a separate contract.

SECTION-28 MAINTENANCE OF TRAFFIC

1. DESCRIPTION

Maintenance of Traffic shall be conducted as shown in the Contract Documents and in accordance with the most recent *Virginia Department of Transportation Virginia Work Area Protection Manual Standards and Guidelines for Temporary Traffic Control*.

2. MEASUREMENT AND PAYMENT

Maintenance of traffic will be measured and paid for as a lump sum (LS) item. The payment will be full compensation for all furnishing and transport of all material, labor, equipment, stockpiling, tools, disposal and incidental costs necessary to complete the work specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-29 TRAIL MANAGEMENT

1. DESCRIPTION

This work shall consist of furnishing, transporting, installing, and maintaining pedestrian barricades, and trail detour signage, as well as clearing and maintaining trail detour paths for the duration of construction as specified in the Contract Documents, or as directed by the Town of Vienna.

2. MATERIALS

- A. Pedestrian Barricades – as specified in the Contract Documents
- B. Trail Detour Signage
Signage shall be provided by the Contractor and shall be approved by the Town of Vienna prior to pre-construction meeting.

3. CONSTRUCTION

- A. Installation
 - 1. Prior to pre-construction meeting, Contractor shall have trail detour signage approved by the Town of Vienna and installed as specified in the Contract Documents.
 - 2. Contractor shall be responsible for maintaining all trail detour signage and pedestrian barricades for the duration of construction as specified in the Contract Documents.
- B. Clean-up
 - 1. Following construction, Contractor shall construct final trail configuration as specified in the Contract Documents.
 - 2. Following construction, Contractor shall seed all decommissioned trails according to the Planting Plan and details specified in the Contract Documents.
 - 3. The Contractor shall be responsible for off-site removal and disposal of all trash, pedestrian barricades, trail detour signage, and all materials incidental to the project and disposing of them off-site.

4. MEASUREMENT AND PAYMENT

Trail Management shall be measured and paid for as Lump Sum (LS) per the Contract unit price. Payment shall be full compensation for the transport of all materials, excavation, storage, stockpiling, installation, and maintenance, and for all material, labor, equipment, tools, and incidentals necessary to complete the work as specified in the Contract Documents, or as directed by the Town of Vienna.

SECTION-30 RESPONSIBLE LAND DISTURBER CERTIFICATION

1. DESCRIPTION

The Contractor shall prepare and submit the Responsible Land Disturber Certification. The contractor shall follow all the requirements of the Responsible Land Disturber Certification, Virginia Erosion and Sediment Control Law and associated amendments to the Virginia Erosion and Sediment Control Law

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§ 10.1-563 and § 10.1-566 of the Code of Virginia, *Virginia Erosion & Sediment Control Handbook, Third Edition*, dated 1992, the Contract Documents, or as directed by The Town of Vienna.

2. MEASUREMENT AND PAYMENT

Payment for the Responsible Land Disturber Certification shall be incidental to Erosion and Sediment Control Section, and shall be full compensation for furnishing, transporting, installing, maintaining and removing all erosion and sediment control measures shown on the plans, including all materials, labor, equipment, tools, hauling, stockpiling, inspecting and incidental costs necessary to complete the work specified in the Contract Documents, or as directed by The Town of Vienna.

SECTION-31 A/E SERVICES DURING CONSTRUCTION

1. DESCRIPTION

Construction shall be inspected by both the Town of Vienna staff and the Engineering/Architecture firm which produced the project design plan set, Stantec. The Contractor shall not restrict Stantec's access to the project area for the purpose of inspection, data collection and documentation, surveying, as-built survey review, inspection meetings, and all other activities required to fulfill their separate contract, and as directed by the Town of Vienna. As part of their inspections, Stantec staff will evaluate seeding coverage, and if inspectors find seeding to be inadequate in certain areas, seed may be added by the inspector, with additional seed expenses covered as Reimbursable Expenses. Stantec shall comply with the Contractor's safety program. Stantec shall report construction inspection observations to the Town of Vienna. The Contractor shall only take directions from the Town of Vienna (or their designee) regarding all aspects of construction, compliance with the Contract Documents, and any potential changes or adjustments to the Contract Documents.

2. MEASUREMENT AND PAYMENT

A/E services during construction shall be performed under a separate contract, and shall not be a pay item paid to the Contractor.

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ATTACHMENT C
QUESTIONNAIRE AND REFERENCES

PROJECT EXPERIENCE

Applicant shall demonstrate conformance to the experience requirements of this solicitation and provide the following:

1. On a separate sheet(s), list all construction projects your organization has in progress, giving the name of project, scope, owner, design engineer/architect, contract amount, percent complete and scheduled completion date.
2. On a separate sheet(s), list all projects similar to the work herein being performed or performed during the past seven (7) years, giving the name of project, owner, design engineer/architect, contract amount, and date of completion and project scope description. Please verify prior to submission that all contact information is accurate and current.
3. Provide on the following pages (attachment C1, C2, and C3) the details of three (3) similar stream restoration projects for governmental, institutional, or private owners for which the Applicant has acted as a General Contractor and completed within the past seven (7) years with an original contract value of \$1,500,000 or more.

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ATTACHMENT C
QUESTIONNAIRE AND REFERENCES

**ATTACHMENT C1
SIMILAR PROJECTS
PROJECT 1**

DETAILS OF PROJECT

1. Applicant Name: _____
Project Manager Name: _____
Superintendent Name: _____

2. Name of Project: _____
Contract No. _____ Project Number _____

3. Owner Name: _____
Address: _____
Contact Person: _____
Telephone Number: () _____

4. Engineer/Architect: _____
Address: _____
Contact Person: _____
Telephone Number: () _____

5. Contract Dates - Attach additional information if project was not on schedule.
Started: _____
Original Contractual Completion: _____
Final Contractual Completion: _____
Actual Completion: _____

6. Description of the project: _____

7. Original Contract Value \$ _____
Final Contract Value \$ _____

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ATTACHMENT C
QUESTIONNAIRE AND REFERENCES

Value of Change Orders to Date \$ _____

Value of Outstanding Claims to Date \$ _____

8. Name of Bonding Company _____

Address: _____

Contact Person: _____

Telephone Number: () _____

9. Major Subcontractor{s}

Name: _____

Address: _____

Contact Person: _____

Telephone Number: () _____

Role In Project: _____

Name: _____

Address: _____

Contact Person: _____

Telephone Number () _____

Role In Project: _____

Name: _____

Address: _____

Contact Person: _____

Telephone Number () _____

Role in Project: _____

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ATTACHMENT C
QUESTIONNAIRE AND REFERENCES

**ATTACHMENT C2
SIMILAR PROJECTS
PROJECT 2**

DETAILS OF PROJECT

1. Applicant Name: _____
Project Manager Name: _____
Superintendent Name: _____

2. Name of Project: _____
Contract No. _____ Project Number _____

3. Owner Name: _____
Address: _____
Contact Person: _____
Telephone Number: () _____

4. Engineer/Architect: _____
Address: _____
Contact Person: _____
Telephone Number: () _____

5. Contract Dates - Attach additional information if project was not on schedule.
Started: _____
Original Contractual Completion: _____
Final Contractual Completion: _____
Actual Completion: _____

6. Description of the project: _____

7. Original Contract Value \$ _____
Final Contract Value \$ _____
Value of Change Orders to Date \$ _____

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ATTACHMENT C
QUESTIONNAIRE AND REFERENCES

Value of Outstanding Claims to Date \$ _____

8. Name of Bonding Company _____

Address: _____

Contact Person: _____

Telephone Number: () _____

9. Major Subcontractor{s}

Name: _____

Address: _____

Contact Person: _____

Telephone Number () _____

Role In Project: _____

Name: _____

Address: _____

Contact Person: _____

Telephone Number () _____

Role In Project: _____

Name: _____

Address: _____

Contact Person: _____

Telephone Number () _____

Role in Project: _____

IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION
ATTACHMENT C
QUESTIONNAIRE AND REFERENCES

**ATTACHMENT C3
SIMILAR PROJECTS
PROJECT 3**

DETAILS OF PROJECT

1. Applicant Name: _____
Project Manager Name: _____
Superintendent Name: _____

2. Name of Project: _____
Contract No. _____ Project Number _____

3. Owner Name: _____
Address: _____
Contact Person: _____
Telephone Number: () _____

4. Engineer/Architect: _____
Address: _____
Contact Person: _____
Telephone Number () _____

5. Contract Dates - Attach additional information if project was not on schedule.
Started: _____
Original Contractual Completion: _____
Final Contractual Completion: _____
Actual Completion: _____

6. Description of the project: _____

7. Original Contract Value \$ _____
Final Contract Value \$ _____
Value of Change Orders to Date \$ _____

IFB 17-12 WOLFTRAP CREEK STREAM RESTORATION
ATTACHMENT C
QUESTIONNAIRE AND REFERENCES

Value of Outstanding Claims to Date \$ _____

8. Name of Bonding Company _____

Address: _____

Contact Person: _____

Telephone Number () _____

9. Major Subcontractor{s}

Name: _____

Address: _____

Contact Person: _____

Telephone Number () _____

Role In Project: _____

Name: _____

Address: _____

Contact Person: _____

Telephone Number () _____

Role In Project: _____

Name: _____

Address: _____

Contact Person: _____

Telephone Number () _____

Role in Project: _____