



**ARLINGTON COUNTY, VIRGINIA
OFFICE OF THE PURCHASING AGENT
SUITE 500, 2100 CLARENDON BOULEVARD
ARLINGTON, VA 22201**

AGREEMENT NO. 24-DES-ITBPW-487

THIS AGREEMENT is made, on March 6, 2024, between Demolition Services, Inc., 16377 Bennett Road, Culpeper, Virginia 22701 ("Contractor") a Virginia corporation authorized to do business in the Commonwealth of Virginia, and the County Board of Arlington County, Virginia ("County"). The County and the Contractor, for the consideration hereinafter specified, agree as follows:

1. CONTRACT DOCUMENTS

The Contract Documents consist of:

- Agreement No. 24-DES-ITBPW-487, and all modifications properly incorporated into the Agreement.
- Exhibit A – DES General Conditions and Supplementary Conditions
- Exhibit B – Specifications, Drawings and Construction Notes
- Exhibit C – Virginia Department of Labor and Industry Wage Determination Decision
- Exhibit D – Price Bid of Contractor
- Exhibit E – Contractor Performance Evaluation Form
- Exhibit F – Hazmat Survey Report
- Arlington County Invitation to Bid No. 24-DES-ITBPW-487, is incorporated by reference.

Where the terms and provisions of this Agreement vary from the terms and provisions of the other Contract Documents, the terms and provisions of this Agreement will prevail over the other Contract Documents, and the remaining Contract Documents will be complementary to each other. If there are any conflicts, the most stringent terms or provisions will prevail.

The Contract Documents set forth the entire agreement between the County and the Contractor. The County and the Contractor agree that no representative or agent of either party has made any representation or promise with respect to the parties' agreement that is not contained in the Contract Documents. The Contract Documents may be referred to below as the "Contract" or the "Agreement".

2. SCOPE OF WORK

The Contractor will furnish all labor, materials, and equipment for the demolition of 3108 Columbia Pike building, to include removal of hazardous materials, demolish existing building, regrade as necessary, pave and stripe extended parking lot area, and provide landscaping (the "Project") and all other work shown, described, and required by the Contract Documents (hereinafter "the Work").

The Work shall be performed according to the standards established by the Contract Documents read together as a single specification. It shall be the Contractor's responsibility, at solely the Contractor's cost, to provide sufficient services to fulfill the purposes of the Work. Nothing in the Contract Documents shall be construed to limit the Contractor's responsibility to manage the details and execution of its Work.

3. PROJECT OFFICER

The performance of the Contractor is subject to the review and approval of the County Project Officer identified in Notices, unless the Contractor is otherwise notified in writing.

4. TIME FOR COMPLETION

Work under this Agreement shall achieve Substantial Completion no later than one hundred eighty-two (182) consecutive calendar days after the commencement date given in a Notice to Proceed provided by the County to the Contractor, subject to any modifications made as provided for in the Contract Documents. This one hundred eighty-two (182) day period shall be the Period of Performance for Substantial Completion. No Work shall be deemed Substantially Complete until it meets the requirements of Substantial Completion set forth in the General Conditions. Final Completion of the Work shall be completed no later than forty-five (45) calendar days after the date of acceptance of Substantial Completion by the County Project Officer. Work will not reach Final Completion until it meets the requirements set forth in the General Conditions. Unless otherwise provided, no claims for early completion are allowed.

5. CONTRACT AMOUNT

The County will pay the Contractor in accordance with the terms of the Progress Payments and Retainage and Payment Terms sections below and at the prices shown in Exhibit D, but not more than \$624,750 for the Contractor's completion of the Work as required by the Contract Documents provided the Work is performed to the satisfaction of and is accepted by the Project Officer. The Contractor will complete the Work for the total amount specified in this section ("Contract Amount") unless such amount is modified as provided in this Agreement. The Contract Amount includes all of the Contractor's costs and fees (profit) and is inclusive of all anticipated or known site conditions, anticipated or known materials, labor, and equipment costs, or any other costs which should reasonably have been expected by the Contract Documents.

6. PROGRESS PAYMENTS AND RETAINAGE

The County will make monthly progress payments to the Contractor upon written application by the Contractor, on the basis of a written estimate of the work performed during the preceding calendar month as approved by the Project Officer. However, 5% of each progress payment will be retained by the County until Final Completion and acceptance of all Work covered by the Agreement.

All material and work covered by partial payments will become the property solely of the County at the time the partial payment is made. However, the Contractor will have the sole responsibility, care and custody for all materials and work upon which payments have been made until Substantial Completion.

When calculating payment for materials on-site, the County shall not pay for materials which are not scheduled for incorporation into the Work within sixty (60) days from the date of application for payment.

7. PAYMENT TERMS

The Contractor must submit invoices to the County's Project Officer, who will either approve the invoice or require corrections. The County will pay the Contractor within 45 days after approval of an invoice for

completed work which is reasonable and allocable to the Contract. All payments will be made from the County to the Contractor via ACH. The number of the County Purchase Order pursuant to work has been performed must appear on all invoices.

The Contractor also must submit to the County's Project Officer its W-9 Form, which will include its Federal Employer Identification Number ("FEIN") or Social Security Number ("SSN"), whichever is applicable, before the County can process payment to the Contractor under the Contract.

8. PAYMENT OF SUBCONTRACTORS

The Contractor is wholly responsible for the entire amount owed to any subcontractor with which the Contractor contracts in the performance of this Agreement, regardless of whether the Contractor has received payment from the County.

If the Contractor has not received payment from the County for work completed by a subcontractor under this Contract, the Contractor must pay the subcontractor within 60 days of receipt of an invoice from the subcontractor following satisfactory completion of the work. The Contractor is not liable for amounts that are not owed as a result of the subcontractor's noncompliance with the terms of the Contract, in which case the Contractor must notify the subcontractor, in writing within 50 days of receipt of an invoice from the subcontractor for the work, of its intention to withhold payment, in full or in part, and the reason for doing so. The notice must specify the contractual noncompliance, the dollar amount being withheld and the lower-tier subcontractor responsible for the contractual noncompliance, if applicable.

The Contractor is obligated to take one of the two following actions within seven days after receipt of payment by the County for work performed by any subcontractor under this Contract:

- a. Pay the subcontractor for the proportionate share of the total payment received from the County attributable to the work performed by the subcontractor under this Contract; or
- b. Notify the County and the subcontractor, in writing, of the Contractor's intention to withhold all or a part of the subcontractor's payment with the reason for nonpayment.

The Contractor is obligated to pay interest to the subcontractor on all amounts owed by the Contractor to the subcontractor that remain unpaid after seven days following receipt by the Contractor of payment from the County for work performed by the subcontractor under this Contract, except for amounts withheld as allowed in subsection b., above. Unless otherwise provided under the terms of this Contract, interest will accrue at the rate of 1% per month.

The Contractor must include in each of its subcontracts, if any are permitted, 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.

The Contractor's obligation to pay an interest charge to a subcontractor pursuant to this section may not be construed to be an obligation of the County. A Contract modification may not be made for the purpose of providing reimbursement for such interest charge. A cost reimbursement claim may not include any amount for reimbursement for such interest charge.

9. PREVAILING WAGE CONTRACT REQUIREMENTS

- A. Section 4-104 of the Arlington County Purchasing Resolution (regarding “Prevailing Wage”) applies to this Contract. All employees of the Contractor and any subcontractors shall be paid wages, salaries, benefits, and other remuneration at or above the craft or trade category prevailing wage rate indicated by Virginia Commissioner of Labor and Industry (DOLI) and as listed in the contract.

The Contractor and its subcontractors shall submit all certified payrolls and statements of compliance weekly through the [eComply website](#). If the Contractor or any subcontractor does not have an eComply profile, a one-time registration process immediately following the Notice of Award or Notice of Intent to Award and training on system functionality are required for each non-registered entity. The Contractor shall also be responsible for reviewing subcontractor payrolls and ensuring that contract requirements are met.

In addition to applying the prevailing wage rates to its own employees, the Contractor shall include the provisions of this Article 4-104 in every subcontract so that such provisions will be binding upon each subcontractor. The Contractor agrees to assume the obligation that the wage requirements will be observed in fulfilling the requirements of the Contract. The appropriate enforcement sanctions will be invoked against the Contractor and any such subcontractor in the event of such subcontractor’s failure to comply with any of the provisions of this Article 4-104.

All wage rates to be used are listed in this Contract in Exhibit C. While DOLI maintains a list of wage determinations online for reference purposes, only the wage determinations made in an official Wage Determination Decision, sent by DOLI to Arlington County, can be used to ascertain the exact rates to be paid for this Contract.

All rates are determined by DOLI and any appeals of specific classification may be made through the Wage Determination Appeal form available at <http://www.doli.virginia.gov/wp-content/uploads/2021/04/Appeal-for-Wage-Determination-Clarification.pdf>.

- B. Upon award of the Contract, the Contractor shall certify, under oath, to the Virginia Commissioner of Labor and Industry and to the County Prevailing Wage Compliance Manager, the pay scale for each craft and trade to be employed for, or to provide labor for, in the Work by the Contractor and any subcontractors. The Contractor’s certification shall include all information required by the Code of Virginia § 2.2-4321.3G.
- C. The Contractor shall ensure that each individual providing labor as a mechanic, laborer, worker or equivalent shall be accurately classified in confirmation with the Wage Determination.
- D. The Contractor shall post the prevailing wage rate for each craft and classification involved as determined by DOLI, including the effective date, in a prominent and easily accessible place at the work site during the time work is being performed. The posting must be in English and any other language that is primarily spoken by the individuals at the work site. Within 10 days of such posting the Contractor shall certify to the County Prevailing Wage Compliance Manager and DOLI its compliance with this subsection at https://www.doli.virginia.gov/wp-content/uploads/2021/04/PW_Posting_Compliance_Form.pdf;

- E. The Contractor must fully cooperate with the County Prevailing Wage Compliance Manager to ensure contract compliance requirements, including but not limited to site visits, wage rate signage, contractor employee interviews, and the submission of certified payroll records.
- F. The Contractor must submit to the County Prevailing Wage Compliance Manager and DOLI, within five (5) working days of the end of each month, certification for each craft or trade employed on the project, specifying the total hourly amount paid to employees, including wages and applicable fringe benefits using the Pay Scale Certification Form at <https://www.doli.virginia.gov/wp-content/uploads/2021/04/DOLI-Pay-Scale-Certification-for-Public-Works-Projects.pdf>. The certification must itemize the amount paid in wages and each applicable benefit and list the names and addresses of any third party fund, plan or program to which benefit payments will be made on behalf of employees.
- G. The Contractor shall indemnify and hold harmless the County from any fines, demands, claims, suits, and damages, including attorney's fees, resulting from the Contractor's or any subcontractor's failure to pay the Prevailing Wage.
- H. The Contractor and its subcontractors shall keep, maintain, and preserve (i) records relating to the wages paid to and hours worked by each individual performing the work of any mechanic, laborer, or worker; and (ii) a schedule of the occupation or work classification at which each individual performing the work of any mechanic, laborer, or worker on the construction project is employed each workday and week. The Contractor and its subcontractors shall make such records available to the Prevailing Wage Compliance Manager within 10 days of a request or per a regular schedule established in the Contract and shall certify that records reflect the actual hours worked and the amount paid to its workers for whatever time period is requested. The Contractor and its subcontractors must preserve these records for a period of six (6) years after the expiration or earlier termination of the applicable contract.
- I. Any Contractor or subcontractor who pays any mechanic, laborer, or worker for services under this Contract less than the Prevailing Wage shall be liable to such individuals for the payment of all wages due, plus interest at an annual rate of eight percent (8%) from the dates wages were due; and shall be disqualified from bidding on public contracts with any public body until the Contractor or subcontractor has made full restitution. A willful violation of Article 4-104 is a Class I misdemeanor.
- J. For questions regarding Prevailing Wage, please email prevailingwage@arlingtonva.us.

10. RELEASE AND REQUEST FOR FINAL PAYMENT

In order to receive final payment upon Final Completion of the Project and before Final Acceptance, the Contractor must submit to the Project Officer a signed original notarized copy of the Arlington County Release and Request for Final Payment form per the General Conditions.

11. LIQUIDATED DAMAGES

Time is of the essence under this Contract. The Work must be completed within the Time for Completion. The County and the Contractor agree that damages for failure to achieve Substantial Completion of the Work by the date specified under Time for Completion are not susceptible to exact determination but that \$2,092.45 per calendar day is in proportion to the actual loss that the County would suffer from such delay. Therefore, the Contractor will pay the County as liquidated damages \$2,092.45per day for each and

every day beyond the time for Substantial Completion that the County determines Substantial Completion has not achieved. The County and the Contractor also agree that damages for failure to achieve Final Completion of the Work by the date specified under Time for Completion are not susceptible to exact determination but that \$2,092.45 per calendar day is in proportion to the actual loss the County would suffer from such delay. Therefore, the Contractor will pay the County as liquidated damages \$2,092.45 per day for each and every day beyond the time for Final Completion until Final Completion is achieved.

The County will be entitled to deduct liquidated damages against any sums owed by the County to the Contractor under this Contract. The Contractor hereby waives any defense as to the validity of any liquidated damages on grounds that such liquidated damages are void as penalties or are not reasonably related to actual damages.

12. PERFORMANCE OF WORK BY THE CONTRACTOR

The Contractor shall perform on site, and with its own organization, at least twenty percent (20%) of the total direct labor and at least twenty percent (20%) of the total work in place to be performed under the Contract. Prior to award, the Contractor must demonstrate to the Project Officer's satisfaction that both of these standards will be met during contract performance. Labor and work to be counted when determining whether the Contractor has met the self-performance requirement shall not include any work that the Contractor performs under the supervision of a subcontractor.

The self-performance percentage or requirement may be reduced by an Amendment to the Contract, if during performance of the Work, the Contractor requests a reduction, and the Project Officer determines that the reduction would be to the advantage of the County.

13. NON-APPROPRIATION

All payments by the County to the Contractor pursuant to this Contract are subject to the availability of an annual appropriation for this purpose by the County Board of Arlington County, Virginia ("Board"). In the event that the Board does not appropriate funds for the goods or services provided under this Contract, the County will terminate the Contract, without termination charge or other liability to the County, on the last day of the fiscal year or when the previous appropriation has been spent, whichever occurs first.

14. ESTIMATED QUANTITIES/NON-EXCLUSIVITY OF CONTRACTOR

This Contract does not obligate the County to purchase a specific quantity of items or services during Contract Term. Any quantities that are included in the Contract Documents are the present expectations of the County for the period of the Contract; and the County is under no obligation to buy that or any amount as a result of having provided this estimate or of having had any normal or otherwise measurable requirement in the past. The County may require more goods and/or services than the estimated annual quantities, and any such additional quantities will not give rise to any claim for compensation other than at the unit prices and/or rates in the Contract.

The County does not guarantee that the Contractor will be the exclusive provider of the goods or services covered by this Contract. The items or services covered by this Contract may be or become available under other County contract(s), and the County may determine that it is in its best interest to procure the items or services through those contract(s).

15. COUNTY PURCHASE ORDER REQUIREMENT

County purchases are authorized only if the County issues a Purchase Order in advance of the transaction, indicating that the ordering County agency has sufficient funds available to pay for the purchase. If the Contractor provides goods or services without a signed County Purchase Order, it does so at its own risk and expense. The County will not be liable for payment for any purchases made by its employees that are not authorized by the County Purchasing Agent.

16. LIEN

It is expressly agreed that after any payment has been made by the County either to the Contractor for work done, or labor or material supplied under the Contract, the County will have a lien upon all material delivered to the site either by the Contractor, or for the Contractor, which is to be used in the performance of the Contract.

17. VALUE ENGINEERING PROPOSAL (VEP)

Unless otherwise provided, the Contractor may submit to the County a written VEP for modifying the plans, specifications, or other requirements of the Agreement covering the work (Contract) for the purpose of reducing the total cost of the Contract without reducing the design capacity or quality of the finished product. If the VEP is accepted by the County, the net savings will be equally divided by the County and the Contractor.

Each VEP shall result in a net savings over the Contract cost without impairing essential functions and characteristics of the item(s) or of any other part of the project, including, but not limited to, service life, reliability, economy of operation, ease of maintenance, aesthetics, and safety. At least the following information shall be submitted with each VEP:

- (a) a statement that the proposal is submitted as a VEP;
- (b) a statement concerning the basis for the VEP, benefits to the County, and an itemization of the Contract items and requirements affected by the VEP;
- (c) a detailed estimate of the cost under the existing Contract and under the VEP;
- (d) proposed specifications and recommendations as to the manner in which the VEP changes are to be accomplished; and
- (e) a statement as to the time by which a Contract Amendment adopting the VEP must be issued so as to obtain the maximum cost-effectiveness.

The County will process the VEP in the same manner as prescribed for any other proposal that would necessitate issuance of an Amendment. The County may accept a VEP in whole or part by issuing an Amendment that will identify the VEP on which it is based. The County will not be liable to the Contractor for failure to accept or act on any VEP submitted pursuant to these requirements or for delays in the work attributable to any VEP. Until a VEP is put into effect by an Amendment, the Contractor shall remain obligated to the terms and conditions of the existing Agreement. If an executed Amendment has not been issued by the date on which the Contractor's proposal specifies that a decision should be made or such other date as the Contractor may subsequently have specified in writing, the VEP shall be deemed rejected.

The Amendment effecting the necessary modification of the Contract will establish the net savings agreed on, provide for adjustment of the contract prices, and indicate the net savings. The Contractor shall absorb all costs incurred in preparing a VEP. Reasonably incurred costs for reviewing and administering a VEP will be borne by the County. The County may establish any reasonable conditions it deems appropriate for consideration, approval, and implementation of the VEP. The Contractor's 50 percent share of the net savings shall constitute full compensation to it, including by way of illustration and not limitation compensation for time, for effecting all changes pursuant to the Amendment.

Unless specifically provided for in the Amendment authorizing the VEP, acceptance of the VEP and performance of the work thereunder will not change the Contract Term limit.

The County may adopt a VEP for general use in contracts administered by the County if it determines that the VEP is suitable for application to other contracts. A VEP identical with or similar to a previously submitted VEP will be eligible for consideration and compensation under these provisions if it has not been previously adopted for general application to other contracts administered by the County. When a VEP is adopted for general use, compensation pursuant to these requirements will be applied only to those awarded contracts for which the VEP was submitted prior to the date of adoption of the VEP.

If a VEP is based on or is similar to a change in the plans, specifications, or special provisions adopted by the County prior to submission of the VEP, as determined by the County, the County will not accept the VEP.

The County will be the sole judge of the acceptability of a VEP. The requirements herein apply to each VEP initiated, developed, and identified as such by the Contractor at the time of its submission to the County. However, nothing herein shall be construed as requiring the County to consider or approve a VEP, and the decision to enter into an Amendment to the contract to accommodate a VEP shall be in the County's sole discretion.

Subject to the provisions contained herein, the County, or any other public agency with the County's permission, shall have the right to use all or part of an accepted VEP without obligation or compensation of any kind to the Contractor.

If a VEP is accepted by the County, any provisions herein that pertain to the adjustment of contract unit prices attributable to alterations of contract quantities will not apply to the items adjusted or deleted as a result of putting the VEP into effect by an Amendment.

18. EMPLOYMENT DISCRIMINATION BY CONTRACTOR PROHIBITED

During the performance of its work pursuant to this Contract:

- A. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, color, sex, sexual orientation, gender identity, national origin, age, disability or on any other basis prohibited by state law. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.

- B. Notices, advertisements and solicitations placed in accordance with federal law, rule or regulation will be deemed sufficient for meeting the requirements of this section.

- C. The Contractor will state in all solicitations or advertisements for employees that it places or causes to be placed that such Contractor is an Equal Opportunity Employer.
- D. The Contractor will comply with the provisions of the Americans with Disabilities Act of 1990 ("ADA"), which prohibits discrimination against individuals with disabilities in employment and mandates that disabled individuals be provided access to publicly and privately provided services and activities.
- E. The Contractor must include the provisions of the foregoing paragraphs in every subcontract or purchase order of more than \$10,000.00 relating to this Contract so that the provisions will be binding upon each subcontractor or vendor.

19. EMPLOYMENT OF UNAUTHORIZED ALIENS PROHIBITED

In accordance with §2.2-4311.1 of the Code of Virginia, as amended, the Contractor must not during the performance of this Contract knowingly employ an unauthorized alien, as that term is defined in the federal Immigration Reform and Control Act of 1986.

20. DRUG-FREE WORKPLACE TO BE MAINTAINED BY CONTRACTOR

During the performance of this Contract, the Contractor must: (i) provide a drug-free workplace for its 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 violating such prohibition; (iii) state in all solicitations or advertisements for employees placed by or on behalf of the Contractor that the Contractor maintains a drug-free workplace; and (iv) include the provisions of the foregoing clauses in every subcontract or purchase order of more than \$10,000.00 relating to this Contract so that the provisions will be binding upon each subcontractor or vendor.

For the purposes of this section, "workplace" means the site(s) for the performance of the work required by this Contract.

21. *SEXUAL HARASSMENT POLICY

If the Contractor employs more than five employees, the Contractor shall (i) provide annual training on the Contractor's sexual harassment policy to all supervisors and employees providing services in the Commonwealth, except such supervisors or employees that are required to complete sexual harassment training provided by the Department of Human Resource Management, and (ii) post the Contractor's sexual harassment policy in (a) a conspicuous public place in each building located in the Commonwealth that the Contractor owns or leases for business purposes and (b) the Contractor's employee handbook.

22. PROJECT STAFF

The County has the right to reasonably reject staff or subcontractors whom the Contractor assigns to the Project. The Contractor must then provide replacement staff or subcontractors satisfactory to the County in a timely manner and at no additional cost to the County. The day-to-day supervision and control of the Contractor's employees and its subcontractors is the sole responsibility of the Contractor.

23. FAILURE TO DELIVER

If the Contractor fails to deliver goods or services in accordance with the Contract terms and conditions, the County, after notice to the Contractor, may procure the goods or services from other sources and hold

the Contractor responsible for any resulting additional purchase and administrative costs. The County shall be entitled to offset such costs against any sums owed by the County to the Contractor. However, if public necessity requires the use of nonconforming materials or supplies, they may be accepted at a reduction in price to be determined solely by the County.

24. UNSATISFACTORY WORK

If any of the work done, or material, goods, or equipment provided by the Contractor, is unsatisfactory to the County the Contractor must, upon notice from the County, immediately remove at the Contractor's expense such unsatisfactory work, material, goods, or equipment and replace the same with work, material, goods, or equipment satisfactory to the County. If the Contractor fails to do so after fifteen (15) days the County shall have the right to remove or replace the rejected work, material, goods, or equipment at the expense of the Contractor and offset the expense and administrative costs against any

sums owed to the Contractor. This provision applies during the Contract term and during any warranty or guarantee period. At the Project Officer's discretion, rather than correction or replacement of the work, an appropriate adjustment to the Contract Amount may be made.

25. TERMINATION

The County may terminate this Contract at any time as follows: (1) for cause, if, as determined by the County, the Contractor is in breach or default or has failed to perform the Work satisfactorily; or (2) for the convenience of the County.

Upon receipt of a notice of termination, the Contractor must not place any further orders or subcontracts for materials, services or facilities; must terminate all vendors and subcontracts, except as are necessary for the completion of any portion of the Work that the County did not terminate; and must immediately deliver all documents related to the terminated Work to the County.

Any purchases that the Contractor makes after the notice of termination will be the sole responsibility of the Contractor, unless the County has approved the purchases in writing as necessary for completion of any portion of the Work that the County did not terminate.

If any court of competent jurisdiction finds a termination for cause by the County to be improper, then the termination will be deemed a termination for convenience.

A. TERMINATION FOR CAUSE, INCLUDING BREACH AND DEFAULT; CURE

1. Termination for Unsatisfactory Performance. If the County determines that the Contractor has failed to perform satisfactorily, then the County will give the Contractor written notice of such failure(s) and the opportunity to cure them within 15 days or any other period specified by the County ("Cure Period"). If the Contractor fails to cure within the Cure Period, the County may terminate the Contract for failure to provide satisfactory performance by providing written notice with a termination date. Upon such termination, the Contractor may apply for compensation for Contract services that the County previously accepted ("Termination Costs"), unless payment is otherwise barred by the Contract. The Contractor must submit any request for Termination Costs, with all supporting documentation, to the County Project Officer within 30 days after the expiration of the Cure Period. The County may accept or reject the request for Termination Costs, in whole or in part, and may notify the Contractor of its decision within a reasonable time.

In the event of termination by the County for failure to perform satisfactorily, the Contractor must continue to provide its services as previously scheduled through the termination date, and the County must continue to pay all fees and charges incurred through the termination date.

2. Termination for Breach or Default. If the County terminates the Contract for default or breach of any Contract provision or condition, then the termination will be immediate after notice of termination to the Contractor (unless the County provides for an opportunity to cure), and the Contractor will not be permitted to seek Termination Costs.

Upon any termination pursuant to this section, the Contractor will be liable to the County for costs that the County must expend to complete the Work, including costs resulting from any related delays and from unsatisfactory or non-compliant work performed by the Contractor or its subcontractors. The County will deduct such costs from any amount due to the Contractor; or if the County does not owe the Contractor, the Contractor must promptly pay the costs within 15 days of a demand by the County. This section does not limit the County's recovery of any other damages to which it is entitled by law.

Except as otherwise directed by the County, the Contractor must stop work on the date of receipt the notice of the termination.

B. TERMINATION FOR THE CONVENIENCE OF THE COUNTY

The County may terminate this Contract in whole or in part whenever the Purchasing Agent determines that termination is in the County's best interest. The County will give the Contractor at least 15 days' notice in writing. The notice must specify the extent to which the Contract is terminated and the effective termination date. The Contractor will be entitled to Termination Costs, as defined above, plus any other reasonable amounts that the parties might negotiate; but no amount will be allowed for anticipatory profits.

Except as otherwise directed by the County, the Contractor must stop work on the date of receipt of the notice of the termination.

26. INDEMNIFICATION

The Contractor covenants for itself, its employees and its subcontractors to save, defend, hold harmless and indemnify the County and all of its elected and appointed officials, officers, current and former employees, agents, departments, agencies, boards and commissions (collectively the "County Indemnitees") from and against any and all claims made by third parties for any and all losses, damages, injuries, fines, penalties, costs (including court costs and attorneys' fees), charges, liability, demands or exposure resulting from, arising out of or in any way connected with the Contractor's acts or omissions, including the acts or omissions of its employees, vendors, delivery drivers and/or subcontractors, in performance or nonperformance of the Contract. This duty to save, defend, hold harmless and indemnify will survive the termination of this Contract. If the Contractor fails or refuses to fulfill its obligations contained in this section, the Contractor must reimburse the County for any and all resulting payments and expenses, including reasonable attorneys' fees. The Contractor must pay such expenses upon demand by the County, and failure to do so may result in the County withholding such amounts from any payments to the Contractor under this Contract.

The Contractor agrees to defend, indemnify, and hold harmless County from any and all damages, costs, claims, expenses, suits, losses, liabilities, or obligations of any kind including without limitation, environmental assessments, evaluations, remediations, fines, penalties, and clean-up costs which may be asserted against or imposed upon, or incurred by County arising from Contractor's discharge or disposal of any hazardous or toxic materials, trash, debris, refuse, waste or other materials ("Materials") related in any way to contractor's operations herein.

27. INTELLECTUAL PROPERTY INDEMNIFICATION

The Contractor warrants and guarantees that in providing services under this Contract neither the Contractor nor any subcontractor is infringing on the intellectual property rights (including, but not limited to, copyright, patent, mask and trademark) of third parties.

If the Contractor or any of its employees or subcontractors uses any design, device, work or material that is covered by patent or copyright, it is understood that the Contract Amount includes all royalties, licensing fees, and any other costs arising from such use in connection with the Work under this Contract.

The Contractor covenants for itself, its employees and its subcontractors to save, defend, hold harmless, and indemnify the County Indemnitees, as defined above, from and against any and all claims, losses, damages, injuries, fines, penalties, costs (including court costs and attorneys' fees), charges, liability or exposure for infringement of or on account of any trademark, copyright, patented or unpatented invention, process or article manufactured or used in the performance of this Contract. This duty to save, defend, hold harmless and indemnify will survive the termination of this Contract. If the Contractor fails or refuses to fulfill its obligations contained in this section, the Contractor must reimburse the County for any and all resulting payments and expenses, including reasonable attorneys' fees. The Contractor must pay such expenses upon demand by the County, and failure to do so may result in the County withholding such amounts from any payments to the Contractor under this Contract.

28. COPYRIGHT

By this Contract, the Contractor irrevocably transfers, assigns, sets over and conveys to the County all rights, title and interest, including the sole exclusive and complete copyright interest, in any and all copyrightable works created pursuant to this Contract. The Contractor will execute any documents that the County requests to formalize such transfer or assignment.

The rights granted to the County by this section are irrevocable and may not be rescinded or modified, including in connection with or as a result of the termination of or a dispute concerning this Contract.

The Contractor may not use subcontractors or third parties to develop or provide input into any copyrightable materials produced pursuant to this Contract without the County's advance written approval and unless the Contractor includes this Copyright provision in any contract or agreement with such subcontractors or third parties related to this Contract.

29. OWNERSHIP AND RETURN OF RECORDS

This Contract does not confer on the Contractor any ownership rights or rights to use or disclose the County's data or inputs.

All drawings, specifications, blueprints, data, information, findings, memoranda, correspondence, documents or records of any type, whether written, oral or electronic, and all documents generated by the Contractor or its subcontractors as a result of this Contract (collectively "Records") are the exclusive

property of the County and must be provided or returned to the County upon completion, termination, or cancellation of this Contract. The Contractor will not use or willingly cause or allow such materials to be used for any purpose other than performance of this Contract without the written consent of the County.

The Records are confidential, and the Contractor will neither release the Records nor share their contents. The Contractor will refer all inquiries regarding the status of any Record to the Project Officer or to his or her designee. At the County's request, the Contractor will deliver all Records, including hard copies of electronic records, to the Project Officer and will destroy all electronic Records.

The Contractor agrees to include the provisions of this section as part of any contract or agreement related to this Contract into which it enters with subcontractors or other third parties. The provisions of this section will survive any termination or cancellation of this Contract.

30. CONFIDENTIAL INFORMATION

The Contractor and its employees, agents and subcontractors will hold as confidential all County information obtained under this Contract. Confidential information includes, but is not limited to, nonpublic personal information; personal health information (PHI); social security numbers; addresses; dates of birth; other contact information or medical information about a person; and information pertaining to products, operations, systems, customers, prospective customers, techniques, intentions, processes, plans and expertise. The Contractor must take reasonable measures to ensure that all of its employees, agents and subcontractors are informed of and abide by this requirement.

31. ETHICS IN PUBLIC CONTRACTING

This Contract incorporates by reference Article 9 of the Arlington County Purchasing Resolution, as well as all state and federal laws related to ethics, conflicts of interest or bribery, including the State and Local Government Conflict of Interests Act (Code of Virginia § 2.2-3100 et seq.), the Virginia Governmental Frauds Act (Code of Virginia § 18.2-498.1 et seq.) and Articles 2 and 3 of Chapter 10 of Title 18.2 of the Code of Virginia, as amended (§ 18.2-438 et seq.). The Contractor certifies that its bid was made without

collusion or fraud; that it has not offered or received any kickbacks or inducements from any other offeror, supplier, manufacturer or subcontractor; and that it has not conferred on any public employee having official responsibility for this procurement 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.

32. COUNTY EMPLOYEES

No Arlington County employee may share in any part of this Contract or receive any benefit from the Contract that is not available to the general public.

33. FORCE MAJEURE

Neither party will be held responsible for failure to perform the duties and responsibilities imposed by this Contract if such failure is due to a fire, riot, rebellion, natural disaster, war, act of terrorism or act of God that is beyond the control of the party and that makes performance impossible or illegal, unless otherwise specified in the Contract, provided that the affected party gives notice to the other party as soon as practicable after the force majeure event, including reasonable detail and the expected duration of the event's effect on the party.

34. AUTHORITY TO TRANSACT BUSINESS

The Contractor must, pursuant to Code of Virginia § 2.2-4311.2, be and remain authorized to transact business in the Commonwealth of Virginia during the entire term of this Contract. Otherwise, the Contract is voidable at the sole option of and with no expense to the County.

35. RELATION TO THE COUNTY

The Contractor is an independent contractor, and neither the Contractor nor its employees or subcontractors will be considered employees, servants or agents of the County. The County will not be responsible for any negligence or other wrongdoing by the Contractor or its employees, servants or agents. The County will not withhold payments to the Contractor for any federal or state unemployment taxes, federal or state income taxes or Social Security tax or for any other benefits. The County will not provide to the Contractor any insurance coverage or other benefits, including workers' compensation.

36. ANTITRUST

The Contractor conveys, sells, assigns and transfers to the County all rights, title and interest in and to all causes of action under state or federal antitrust laws that the Contractor may have relating to this Contract.

37. REPORT STANDARDS

The Contractor must submit all written reports required by this Contract for advance review in a format approved by the Project Officer. Reports must be accurate and grammatically correct and should not contain spelling errors. The Contractor will bear the cost of correcting grammatical or spelling errors and inaccurate report data and of other revisions that are required to bring the report(s) into compliance with this section.

38. AUDIT

The Contractor must retain all books, records and other documents related to this Contract for at least five (5) years, unless otherwise specified in the Contract, or such period of time required by the County's funding partner(s), if any, whichever is greater, after the final payment and must allow the County or its authorized agents to examine the documents during this period and during the Contract Term. The Contractor must provide any requested documents to the County for examination within 15 days of the request, at the Contractor's expense. Should the County's examination reveal any overcharging by the Contractor, the Contractor must, within 30 days of County's request, reimburse the County for the overcharges and for the reasonable costs of the County's examination, including, but not limited to, the services of external audit firm and attorney's fees; or the County may deduct the overcharges and examination costs from any amount that the County owes to the Contractor. If the Contractor wishes to destroy or dispose of any records related to this Contract (including confidential records to which the County does not have ready access) within five (5) years after the final payment, unless otherwise specified in the Contract, or such period of time required by the County's funding partner(s), if any, whichever is greater, the Contractor must give the County at least 30 days' notice and must not dispose of the documents if the County objects.

The Purchasing Agent may require the Contractor to demonstrate that it has the necessary facilities, ability, and financial resources to comply with the Contract and furnish the service, material or goods specified herein in a satisfactory manner at any time during the term of this Contract.

39. ASSIGNMENT

The Contractor may not assign, transfer, convey or otherwise dispose of any award or any of its rights, obligations or interests under this Contract without the prior written consent of the County.

40. AMENDMENTS

This Contract may not be modified except by written amendment executed by persons duly authorized to bind the Contractor and the County.

41. ARLINGTON COUNTY PURCHASING RESOLUTION AND COUNTY POLICIES

Nothing in this Contract waives any provision of the Arlington County Purchasing Resolution, which is incorporated herein by reference, or any applicable County policy.

42. DISPUTE RESOLUTION

All disputes arising under this Agreement or concerning its interpretation, whether involving law or fact and including but not limited to claims for additional work, compensation or time, and all claims for alleged breach of contract must be submitted in writing to the Project Officer as soon as the basis for the claim arises. In accordance with the Arlington County Purchasing Resolution, claims denied by the Project Officer may be submitted to the County Manager in writing no later than 60 days after the final payment. The time limit for a final written decision by the County Manager is 30 days. Procedures concerning contractual claims, disputes, administrative appeals and protests are contained in the Arlington County Purchasing Resolution. The Contractor must continue to work as scheduled pending a decision of the Project Officer, County Manager, County Board or a court of law.

43. APPLICABLE LAW, FORUM, VENUE, AND JURISDICTION

This Contract is governed in all respects by the laws of the Commonwealth of Virginia; and the jurisdiction, forum and venue for any litigation concerning the Contract or the Work is in the Circuit Court for Arlington County, Virginia, and in no other court.

44. ARBITRATION

No claim arising under or related to this Contract may be subject to arbitration.

45. NONEXCLUSIVITY OF REMEDIES

All remedies available to the County under this Contract are cumulative, and no remedy will be exclusive of any other at law or in equity.

46. NO WAIVER

The failure to exercise a right provided for in this Contract will not be a subsequent waiver of the same right or of any other right.

47. SEVERABILITY

The sections, paragraphs, clauses, sentences, and phrases of this Contract are severable; and if any section, paragraph, clause, sentence or phrase of this Contract is declared invalid by a court of competent jurisdiction, the rest of the Contract will remain in effect.

48. ATTORNEY'S FEES

In the event that the County prevails in any legal action or proceeding brought by the County to enforce any provision of this Contract, the Contractor will pay the County's reasonable attorney's fees and expenses.

49. SURVIVAL OF TERMS

In addition to any statement that a specific term or paragraph survives the expiration or termination of this Contract, the following sections also survive: INDEMNIFICATION; INTELLECTUAL PROPERTY INDEMNIFICATION; RELATION TO COUNTY; OWNERSHIP AND RETURN OF RECORDS; AUDIT; COPYRIGHT; DISPUTE RESOLUTION; APPLICABLE LAW AND JURISDICTION; ATTORNEY'S FEES, AND CONFIDENTIAL INFORMATION.

50. HEADINGS

The section headings in this Contract are inserted only for convenience and do not affect the substance of the Contract or limit the sections' scope.

51. AMBIGUITIES

The parties and their counsel have participated fully in the drafting of this Agreement; and any rule that ambiguities are to be resolved against the drafting party does not apply. The language in this Agreement is to be interpreted as to its plain meaning and not strictly for or against any party.

52. NOTICES

Unless otherwise provided in writing, all legal notices and other formal communications required by this Contract are deemed to have been given when either (a) delivered in person; (b) delivered by an agent, such as a delivery service; or (c) deposited in the United States mail, postage prepaid, certified or registered and addressed as follows:

TO THE CONTRACTOR:

Ronald L Feather
Demolition Services, Inc.
16377 Bennett Rd.
Culpeper, VA 22701
Phone: (540) 825-4321
Email: rfeather@demoservicesinc.com

TO THE COUNTY:

Valerie Maislin, Project Officer
DES-Facilities Design and Construction
1400 N. Uhle Street, Suite 403
Arlington, Virginia 22201
Phone: (703) 216-6555
Email: vmaislin@arlingtonva.us

AND

Dr. Sharon T. Lewis, LL.M, MPS, VCO, CPPB
Purchasing Agent
Arlington County, Virginia
2100 Clarendon Boulevard, Suite 500
Arlington, Virginia 22201
Phone: (703) 228-3294
Email: slewis1@arlingtonva.us

TO COUNTY MANAGER'S OFFICE (FOR PROJECT CLAIMS):

County Manager
Arlington County, Virginia
2100 Clarendon Boulevard, Suite 318
Arlington, Virginia 22201

53. NON-DISCRIMINATION NOTICE

Arlington County does not discriminate against faith-based organizations.

54. INSURANCE, PAYMENT, AND PERFORMANCE BONDS

The Contractor shall maintain the required insurance coverage and payment and performance bonds as set forth in the Invitation to Bid through completion of the Contract, including all warranty and guarantee periods.

55. MATERIAL CHANGES

The Contractor shall notify Purchasing Agent within seven days of any material changes in its operation that relate to any matter attested regarding certifications on its bid form.

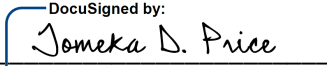
64. CONTRACTOR PERFORMANCE EVALUATION

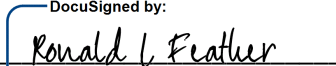
Arlington County will perform written evaluations of the Contractor's performance at various intervals throughout the term of this Contract. The evaluations will address, at a minimum, the Contractor's work/performance, quality, cost controls, schedule, timeliness and sub-contractor management. The Project Officer shall be responsible for completing the evaluations and providing a copy to the Contractor and County Procurement Officer.

WITNESS these signatures:

THE COUNTY BOARD OF ARLINGTON
COUNTY, VIRGINIA

DEMOLITION SERVICES, INC.

AUTHORIZED
SIGNATURE: 

AUTHORIZED
SIGNATURE: 

NAME Tomeka D. Price

NAME: Ronald L Feather

TITLE: Procurement Officer

TITLE: President

DATE: 3/13/2024

DATE: 3/6/2024

EXHIBIT A
ARLINGTON COUNTY CONSTRUCTION GENERAL CONDITIONS

TABLE OF CONTENTS

<u>A.</u>	<u>INTRODUCTION TO TERMS</u>	20
<u>B.</u>	<u>DRAWINGS, SPECIFICATIONS, RELATED DATA AND RECORDS KEEPING</u>	22
1.	<u>INTENT OF THE DRAWINGS AND SPECIFICATIONS</u>	22
2.	<u>DISCREPANCIES AND ERRORS</u>	23
3.	<u>DIFFERING SITE CONDITIONS</u>	23
4.	<u>COPIES FURNISHED</u>	24
5.	<u>USE OF CADD FILES</u>	24
6.	<u>DOCUMENTS ON THE JOBSITE</u>	24
7.	<u>OWNERSHIP OF DRAWINGS AND SPECIFICATIONS</u>	24
8.	<u>SUBMITTALS</u>	24
9.	<u>SAMPLES</u>	26
10.	<u>TESTS</u>	26
11.	<u>MATERIALS AND EQUIPMENT LIST</u>	26
12.	<u>STANDARDS, SUBSTITUTIONS</u>	27
13.	<u>SURVEYS AND CONTROLS</u>	27
14.	<u>AS-BUILT DRAWINGS</u>	27
15.	<u>WEB BASED RECORDS DOCUMENTATION</u>	27
<u>C.</u>	<u>COUNTY, COUNTY PROJECT OFFICER, AND CONTRACTOR RELATIONS</u>	28
1.	<u>STATUS OF COUNTY PROJECT OFFICER OR DESIGNEE</u>	28
2.	<u>LIMITATION ON COUNTY'S RESPONSIBILITIES</u>	28
3.	<u>DISPUTES</u>	28
4.	<u>INSPECTION OF WORK</u>	29
5.	<u>INSPECTION OF MATERIALS</u>	29
6.	<u>EXAMINATION OF COMPLETED WORK</u>	29
7.	<u>RIGHT TO SUSPEND WORK</u>	29
8.	<u>RIGHT TO CARRY OUT THE WORK</u>	29
9.	<u>CONTRACTOR MANAGEMENT PERSONNEL</u>	30
10.	<u>DRUG-FREE POLICY</u>	30
11.	<u>LANDS BY COUNTY</u>	30
12.	<u>LANDS BY CONTRACTOR</u>	31
13.	<u>PROTECTION OF WORK AND PROPERTY</u>	31
14.	<u>SEPARATE CONTRACTS</u>	32
15.	<u>SUBCONTRACTS</u>	33
16.	<u>ELIMINATED ITEMS</u>	34
17.	<u>COUNTY ORDINANCES</u>	34
<u>D.</u>	<u>MATERIALS AND WORKMANSHIP</u>	34
1.	<u>MATERIALS FURNISHED BY THE CONTRACTOR</u>	34
2.	<u>IBC AND VUSBC REQUIREMENTS</u>	34
3.	<u>ADA COMPLIANCE</u>	34
4.	<u>MANUFACTURER'S DIRECTIONS</u>	35
5.	<u>WARRANTY</u>	35
6.	<u>INSPECTION AND ACCEPTANCE OF MATERIALS</u>	35
7.	<u>CONTRACTOR'S TITLE TO MATERIALS</u>	36
8.	<u>TITLE TO MATERIALS AND WORK COVERED BY PARTIAL PAYMENTS</u>	36
9.	<u>CONNECTING WORK</u>	36

10.	<u>REJECTED WORK AND MATERIALS</u>	36
11.	<u>PROHIBITION AGAINST ASBESTOS CONTAINING MATERIALS</u>	37
<i>E.</i>	<i><u>LEGAL RESPONSIBILITY AND PUBLIC SAFETY</u></i>	37
1.	<u>SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK</u>	37
2.	<u>PUBLIC CONVENIENCE</u>	38
3.	<u>SAFETY AND ACCIDENT PREVENTION</u>	39
4.	<u>HAZARDOUS MATERIALS</u>	39
5.	<u>HAZARDOUS WASTE</u>	40
6.	<u>ASBESTOS</u>	40
7.	<u>CROSSING UTILITIES</u>	40
8.	<u>OVERHEAD HIGH VOLTAGE LINES SAFETY ACT</u>	41
9.	<u>SANITARY PROVISIONS</u>	41
10.	<u>SITE CLEAN-UP AND WASTE DISPOSAL</u>	41
11.	<u>STORMWATER POLLUTION PREVENTION PLAN (SWPPP)</u>	42
<i>F.</i>	<i><u>PROGRESS AND COMPLETION OF THE WORK</u></i>	42
1.	<u>NOTICE TO PROCEED</u>	42
2.	<u>TIME FOR COMPLETION</u>	42
3.	<u>SCHEDULE OF COMPLETION</u>	42
4.	<u>CONDITIONS FOR COMPLETION</u>	42
5.	<u>USE OF COMPLETED PORTIONS</u>	44
<i>G.</i>	<i><u>MEASUREMENT AND PAYMENT</u></i>	44
1.	<u>PAYMENTS TO CONTRACTOR</u>	44
2.	<u>PAYMENT FOR STORED MATERIALS</u>	45
3.	<u>PAYMENTS WITHHELD</u>	46
4.	<u>COUNTY ORDERED CHANGES IN WORK</u>	46
5.	<u>FORCE ACCOUNT WORK</u>	48
6.	<u>CLAIMS FOR EXTRA COST</u>	52
7.	<u>DAMAGES FOR DELAY; EXTENSION OF TIME OTHER THAN FOR WEATHER</u>	52
8.	<u>TIME EXTENSIONS FOR WEATHER</u>	54
9.	<u>RELEASE OF LIENS</u>	55
10.	<u>FINAL PAYMENT</u>	55
	<u>RELEASE AND REQUEST FOR FINAL PAYMENT</u>	56

A. INTRODUCTION TO TERMS

- 1) The term "Agreement" means the completed and signed Form of Contract Agreement.
- 2) The term "Award Date" means the date of execution of the Agreement by the Purchasing Agent.
- 3) The term "Business Day" shall refer to any day that the County is open for general business.
- 4) The term "Calendar Day" means any day of twenty-four hours measured from midnight to the next midnight. Included are weekends and holidays. When the term "Day" is used it shall be assumed to refer to a Calendar Day unless otherwise specified.
- 5) The term "Change Order" means a written order to the Contractor, signed by the Project Officer and the Contractor, which authorizes a change in the Work, and/or adjustment to the Contract Amount and/or an adjustment to the Time for Completion. A Change Order once signed by all the parties is incorporated into and becomes part of the Contract.
- 6) The term "Commencement Date" means the date on which the Time for Completion will commence for the Contractor to begin to perform his obligations under the Contract Documents as provided in the Notice to Proceed.
- 7) The term "Construction Change Directive" means a written order issued by the County directing a change in the Work prior to agreement on adjustment, if any, in the Contract Amount or Contract Time, or both.
- 8) The term "Contract Documents" means the Agreement and all the documents and Exhibits and/or Attachments identified therein which shall include the Drawings and the Specifications, and all modifications including amendments and subsequent Change Orders thereto properly incorporated in the Contract.
- 9) The terms "County" 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.
- 10) The term "Critical Path Method or CPM" means a step-by-step project management technique for process planning that defines critical and non-critical tasks with the goal of preventing time-frame problems and process bottlenecks. An activity on the critical path cannot be started until its predecessor activity has been completed. is delayed then the entire project is delayed.
- 11) The term "Delay" means an event or condition that results in a work activity starting or being completed later than originally planned.
- 12) The term "Drawings" means all drawings pertaining to the Contract, including the Contract Drawings and Construction Notes which show and describe the locations, character, dimensions, and details of the Work to be performed under the contract.
- 13) The term "Field Order" is a written order to the Contractor, authorized by the Project Officer, which acknowledges a change in the Work that does not adjust the Contract Amount and does not adjust the Time for Completion.

- 14) The term "Final Acceptance" shall mean the date on which the County issues the final payment for the Work.
- 15) The term "Final Completion" shall mean the condition when the County agrees that all the Work has been fully completed in accordance with the Contract Documents and is acceptable. The date of the Final Completion of the Work under the Contract is the date on which Final Completion is accomplished.
- 16) The term "Float" shall represent the amount of time that a task in a project network or sequence can be delayed without causing a delay to: subsequent tasks ("free Float") or project completion date ("total Float"). Float shall belong to the County and shall be used for the successful completion of the Project within the Time for Completion.
- 17) The term "Limits of Disturbance (LOD)" shall represent the area within which land disturbing activities take place. Land disturbing activities include all actions that expose bare soil during construction.
- 18) The term "Limits of Work (LOW)" shall represent the area within which construction activities take place, including but not limited to the Limits of Disturbance area.
- 19) The term "Notice to Proceed" shall mean a written notice issued by the County to the Contractor stating the Commencement Date. The Notice to Proceed will specify the Time for Completion of the Contract.
- 20) The term "Project" means the entire proposed construction to be executed as stipulated in the Contract Documents
- 21) The term "Project Officer" means the County Project Officer assigned by the Director of the County Department responsible for the project, or the Director's designee. When a designee to act on behalf of the Project Officer is used by the County, the name of the designee and the duties and authority of such designee will be identified in the Contract Documents or in a written notice to the Contractor from the Project Officer responsible for the project. The designee may be a professional architect or engineer or other person employed by the County to perform construction services administration, design services, or project oversight.
- 22) The term "Punch List" means unfinished items of the construction of the Project, which unfinished items of construction are minor or insubstantial details of construction, mechanical adjustment or decoration remaining to be performed, the non-completion of which would not materially affect use of the Project, and which are capable of being completed within the time specified for Final Completion after Substantial Completion has been achieved.
- 23) The term "Request for Information" (RFI) means a request originated by the Contractor requesting clarification or additional information from the Project Officer and/or Architect/Engineer concerning information in the construction documents where the Contractor believes there is insufficient information or a conflict in the documents. RFI's shall be submitted by the Contractor sufficiently in advance of the Work to provide time for assessment and response without delay of the Work. Responses to RFI's shall not be construed as authorization for a Change Order.

- 24) The term "Schedule of Values" means a listing of the Contractor's total contract value by Construction Specifications Institute (CSI) divisions, including Division 1, Contractor's General Conditions.
- 25) The term "Site" refers to that portion of the property on which the Work is to be performed or which has otherwise been set aside for use by the Contractor.
- 26) The terms "Special Conditions" mean the written statements modifying or supplementing the Technical Specifications or General Conditions for requirements or conditions peculiar to the Contract.
- 27) The term "Specifications" means and shall include the Technical Specifications, the Special Conditions and all written agreements and instructions pertaining to the performance of the Work.
- 28) When used, the term "Stipulated Price Item" means and includes an item of Work, unanticipated or of unknown quantity 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. The Unit Price for the "Stipulated Price Item", as identified in the "Stipulated Price Items" section of the Bid Form, is predetermined by the County 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.
- 29) The term "Subcontractor", 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.
- 30) The term "Substantial Completion" shall mean the condition when the County agrees that the Work, or a specific portion thereof, is sufficiently complete, in accordance with the Contract Documents, so that it can be utilized by the County for the purposes for which it was intended. The date of Substantial Completion of the Work under the Contract is the milestone date on which Substantial Completion condition is accomplished.
- 31) 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.
- 32) The term "Time for Completion" shall mean the time period set forth in the Agreement.
- 33) 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 Project specified in the Contract Documents.

B. DRAWINGS, SPECIFICATIONS, RELATED DATA AND RECORDS KEEPING

1. INTENT OF THE DRAWINGS AND SPECIFICATIONS
 - 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, 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 or other instructions deemed necessary by the Project Officer or designee will be furnished to the Contractor when required for the Work and shall be incorporated into the Contract Documents.
- c. Where "as shown", "as indicated", "as detailed", or words of similar import are used, it shall be understood that direction, requirements, permission, or review of Project Officer or designee is intended unless stated otherwise. As used herein, "provide" shall be understood to mean "provide complete in place", that is, "furnish and install."
- d. 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.
- e. Materials or work described in words which, so applied, have a well-known technical, construction industry, or trade meaning, shall be held to refer to the recognized technical or trade meaning.
- f. The Contract Documents are complementary, and what is called for by any one document shall be as binding as if called for by all documents. In case of conflicting variance between the Contract Documents, the Order of Precedence stated in the Agreement shall govern. Figured dimensions on the plans shall be used; drawings shall not be scaled.
- g. Unless otherwise specifically noted, construction tolerances shall be to the numerical precision presented in the Contract Drawings.

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, but in no event later than three calendar days after discovery of the discrepancy or error, report them in writing to the Project Officer or designee. If the Contractor proceeds with any work that may be affected by such discrepancies, errors, or omissions, after their discovery, but before a clarification is provided, such work shall be at the Contractor's risk and expense. Issues affecting critical path activities shall be made known to the Project Officer or designee within one business day after discovery.

3. DIFFERING SITE CONDITIONS

The Contractor shall immediately, and before the conditions are further disturbed, give notice to the Project Officer 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. Such notice shall be followed by a written notice provided within 48 hours of discovery.

The Project Officer will investigate the site conditions promptly 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. If the Contractor proceeds with any work that may be affected by such differing site conditions before giving notice to the Project Officer as set forth herein, such work shall be at the Contractor's sole risk and expense.

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.

4. 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. One electronic copy of the Contract Drawings and Specifications will be provided by the Project Officer or designee to the Contractor.

5. USE OF CADD FILES

The Contractor may request Electronic CADD files related to the Work or the Project. The CADD files will be provided by the County only if the Contractor completes the Arlington County Electronic CADD Drawing Release Form, which form is then incorporated by reference into this Contract. Use of CADD files is at the Contractor's own risk and in no way alleviates Contractor's responsibility for the Work to conform to the Plans and Specifications.

6. DOCUMENTS ON THE JOBSITE

The Contractor shall keep on the site of the Project a copy of the Drawings and Specifications updated to include all authorized revisions and RFI responses and shall at all times give the County and its authorized representatives access thereto. The Contractor shall mark up the Drawings on a daily basis in red. The As-Built Drawings shall be submitted to the County at Substantial Completion as the Final As-Built Drawings.

7. OWNERSHIP OF DRAWINGS AND SPECIFICATIONS

All Drawings and Specifications and copies thereof furnished by the County are the property of the County and shall not be used on other projects. All copies of the Drawings and Specifications except the signed Contract sets shall be returned to the Project Officer or designee at Final Completion.

8. 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. Unless other specified in the Specifications the Contractor shall submit for the review of the Project Officer or designee a listing of all submittals required by the Specifications or requested by the Project Officer or designee within fifteen (15) calendar days after receipt of the Notice to Proceed. This listing shall include due dates for each required submittal, coordinated with the project schedule such that adequate time is allotted for review and potential resubmittals, fabrication and delivery without causing delay. The Contractor bears all risk for delay associated with submittals not received in a timely manner.
- c. Submittals shall be submitted in such number of copies as established in the Specifications. Each submission shall be accompanied by a letter of transmittal, 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 Project Officer or designee. 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 sequence or groups that all related items can be checked together. When submittals cannot be checked because a submission is not complete, or because submittals on related items have not been received by the Project Officer or designee, 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. Failure to deliver submittals within the specified time will not be grounds for additional time or compensation.
- e. Submittals shall have been reviewed by the Contractor and coordinated with all other related or affected work before they are submitted for review and acceptance 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 will be returned to the Contractor without action and will not be considered as 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 accepted.
- g. The Project Officer or designee shall review the shop drawings with reasonable promptness. Review and/or acceptance 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. Acceptance 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. Review is not intended to relieve the contractor of full responsibility for the accuracy and completeness of the plans and calculations, or for the complete compliance with the contract documents.

Contractor is solely responsible for the means and methods of the construction, including temporary items proposed for use.

9. SAMPLES

The Contractor shall submit to the Project Officer or designee, all samples required by the Specifications or requested by the Project Officer or designee. 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 what the material represented, the name of the producer and the title of the Project. Acceptance 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 acceptance. Such acceptance 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 accepted samples. The Contractor shall be responsible for researching the availability of the specified product in the dimensions and colors specified at no additional cost to the County. Failure of the Contractor to identify specified products that are not commercially produced within the time required for submittal transmittal in order to meet the project schedule shall not be entitled to additional time or compensation.

10. TESTS

Any specified tests of materials and finished articles shall be made by bureaus, laboratories or agencies approved by the Project Officer or designee and the certified reports of such tests shall be submitted to the Project Officer or designee. All tests shall be in compliance with the Specifications. All costs in connection with the testing and test failures shall be borne by the Contractor. Failure of any material to pass the specified tests or any test performed by the Project Officer or designee, 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 Project Officer or designee for testing. Samples failing to meet the Contract requirements will automatically void previous acceptance of the items tested. The Contractor will not be compensated for additional time and/or cost incurred in finding an acceptable replacement or the removal and replacement of the defective item.

11. MATERIALS AND EQUIPMENT LIST

- a. Unless otherwise specified in the Specifications, within thirty (30) days of the Commencement Date the Contractor shall submit to the Project Officer or designee a complete list of materials and equipment proposed for use in connection with the Project. Partial lists submitted from time to time will not be considered unless specifically approved by the Project Officer or designee.
- b. After any material or piece of equipment has been approved through submittal process, 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 accepted 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 acceptance of such other material is in the best interest of the County. The Contractor is solely responsible for the cost and time required to obtain and install a suitable replacement.

12. 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.
- 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 approved manufacturers. Otherwise, applications for acceptance 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 acceptance will be granted. No acceptance of a substitution shall be valid unless it is in written form and signed by the Project Officer or designee.
- 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 County or an extension of the contract time, if and when accepted. Detail drawings and other information necessary to show and explain the proposed modifications shall be submitted with the request for acceptance of the substitution.

13. 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 benchmarks adjacent to the Work, and develop all detail surveys necessary for construction by a professional land surveyor licensed in the Commonwealth of Virginia. The Contractor shall carefully preserve benchmarks, 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 or supplier, 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 benchmarks, reference points and stakes. The Contractor shall within 30 days of NTP perform a full site survey to verify all control points shown on the drawings against existing conditions within the site limits. Any discrepancies found during this effort shall be made known immediately to the Project Officer. Failure to perform this survey and provide proof and acceptance of Project datum, control points, and existing benchmarks will not give rise to any extensions to contract time or amount. The cost of all necessary surveying services shall be considered incidental to the work and, unless otherwise specified, shall be included in the cost of the Work.

14. AS-BUILT DRAWINGS

As-Built Drawings shall be the responsibility of the Contractor. The Contractor shall maintain and mark up one set of prints of the applicable Contract Drawings to portray as-built construction. The prints shall be neatly and clearly marked in red 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 upon any approved change to the Work or discovery of any undocumented utility or obstruction and shall be submitted to the Project Officer or designee in sufficient time to be approved no later than thirty (30) calendar days after the Substantial Completion Date. The final As-Built Drawings approved by the Project Officer or designee shall be submitted in paper copy and .pdf format electronic files prior to Final Completion. Unless otherwise required under the Contract Documents, incorporation of red-lined changes into CADD format shall be the responsibility of the Architect and/or Engineer of Record, with the exception being any documents prepared by the Contractor in CADD, the record version of which shall also be provided to the County in CADD format by the Contractor. Final payments will be held until the complete set of red-line drawings are submitted to and approved by the Project Officer.

15. WEB BASED RECORDS DOCUMENTATION

Unless instructed otherwise, the Contractor shall use the web based construction management tool, e-Builder for, but not limited to, submittals, record keeping and document storage of all construction files including, invoices, pay applications, RFIs, approved shop drawings, change orders, construction progress meeting minutes, warranties, equipment specifications and brochures, record drawings, automated alerts and reminders for all functions, and Operation and Maintenance (O&M) Manuals.

C. COUNTY, COUNTY PROJECT OFFICER, AND CONTRACTOR RELATIONS

1. STATUS OF COUNTY PROJECT OFFICER OR DESIGNEE

The Project Officer or designee shall be the County's representative during the construction period. All Contractor instructions or requests shall be issued from or submitted through the Project Officer or designee. The Project Officer or designee shall have authority to suspend the Work whenever such suspension may be necessary in the responsible opinion of the Project Officer or designee to ensure the proper execution of the Contract. The Project Officer or designee 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. The County Project Officer or designee will, within a reasonable time, make decisions on all matters relating to the execution and progress of the Work.

2. LIMITATION ON COUNTY'S RESPONSIBILITIES

The County shall not supervise, direct, or have control or authority over, nor be responsible for: The Contractor's means, methods, techniques, sequences or procedures of construction; the safety precautions and programs related to safety, or the Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.

3. DISPUTES

a. All disputes or claims 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 Project Officer or designee as set forth in these General Conditions. 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. Claims denied by the Project Officer shall be processed in accordance with the procedures outlined in Sections 7-107, Contractual Disputes and 7-108, Legal Actions of the Arlington County Purchasing Resolution and the Dispute Resolution paragraph in the Agreement.
- c. The Contractor shall not cause a delay in the work pending a decision of the Project Officer or designee, County Manager, County Board, or court, except by prior written approval of the Project Officer or designee.

4. INSPECTION OF WORK

The Project Officer or designee 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 Project Officer or designee's instructions, and any laws, ordinances or the regulations of any public authority applicable to the work. Nothing in this section shall abrogate or otherwise limits or relieves the Contractor's independent duty to inspect the Work.

5. INSPECTION OF MATERIALS

All articles, materials, and supplies purchased by the Contractor for the Work are subject to inspection upon delivery to the site and during manufacturing or fabrication. The County 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. Nothing in this section shall abrogate or otherwise limit or relieve the Contractor's independent duty to inspect materials.

6. EXAMINATION OF COMPLETED WORK

If the Project Officer or designee 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. RIGHT TO SUSPEND WORK

The County shall have the authority to suspend the Work, in whole or in part, for such periods and such reasons as the County may deem necessary or desirable. Any such suspension shall be in writing to the Contractor and the Contractor shall obey such order immediately and not resume the Work until so ordered in writing by the County. No such suspension of the Work shall be the basis for a claim by the Contractor for any increase in the Contract Amount provided that the suspension is for a reasonable time under the circumstances then existing. If the suspension of Work is caused by the County's belief that non-conforming work is being installed, and subsequent investigation proves that the Work was non-conforming, the Contractor shall not be awarded additional time or costs.

8. RIGHT TO CARRY OUT THE WORK

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a 10-day period after receipt of written notice from the County or

such shorter time as may be reasonable under the circumstances, to commence and continue correction of such default or neglect with diligence and promptness, the County may, without prejudice to other remedies the County may have, correct such deficiencies. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the reasonable cost of correcting such deficiencies, including the County's expenses, and any additional architect or engineering costs necessary by Contractor's default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the County upon demand.

9. CONTRACTOR MANAGEMENT PERSONNEL

The Contractor shall keep a competent superintendent and any necessary assistants on the Site at all times during progress of the Work and such persons shall be satisfactory to the Project Officer or designee. The superintendent or project manager shall not be changed except with the Project Officer or designee's consent. If the Project Officer determines that the superintendent or project manager is no longer satisfactory, then the superintendent or project manager must be replaced within 15 days of the Project Officer's written notice with a replacement superintendent or project manager with equal or superior qualifications and subject to Project Officer approval.

The superintendent and project manager shall represent the Contractor and all directions given to such persons shall be as binding as if given to 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. Persons permitted to perform Work under Contractor, or any subcontractor, or sub-subcontractor, shall meet all employment eligibility, safety training, security or drug/alcohol testing requirements required by law or by the County. Any person not complying with all such requirements shall be immediately removed from the Site.

The Contractor shall have a qualified and experienced person who can clearly communicate technical matters regarding the subject project. This person shall be available via phone to respond to emergency situations on the project 24 hours a day.

10. DRUG-FREE POLICY

The Contractor is responsible for ensuring that the Site remains a drug-free site. Contractor will require that employees undergo random drug/alcohol screening on a quarterly interval. Any employee who fails the test must be removed from the Site immediately. Random screening shall be performed by a third party licensed to do so in the Commonwealth of Virginia. The Contractor shall provide its random testing policy and schedule to the Project Officer within 30 days of Notice to Proceed. The Contractor will include this provision in every subcontract relating to this Contract. Any infraction by an employee of the Drug-Free policy shall be reported to the Project Officer within 24 hours.

11. LANDS BY COUNTY

The County shall provide access to 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 the lands, rights-of-way or easements have not been obtained as herein contemplated before construction begins, then the Contractor shall begin its work on such lands and rights-of-way that the County has acquired access to. No additional time or compensation shall be awarded to the

Contractor for modifying work location and sequence provided other locations are available for work.

Contractor shall verify the acquisition of all off-site easements and Rights-of-Way prior to the start of off-site construction. Restore all off-site easements to the conditions existing prior to the start of work.

The Contractor shall confine all activities at the site associated with construction activities, to include storage of equipment and or materials, access to the work, formwork, etc. to within the designated Limits of Disturbance (LOD).

12. LANDS BY CONTRACTOR

If the Contractor requires additional land or lands 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 County, then the Contractor shall provide such other lands and access thereto entirely at the Contractor's own expense and without liability to the County. The Contractor shall not enter upon private property for any purpose without prior written permission of all of the persons and entities who own the property. The Contractor shall provide copies of all agreements to the County and shall include language in the agreement indemnifying and holding the County harmless for any damages, repairs, restoration or fees associated with the use of the property. Upon termination of the agreement, the Contractor shall provide to the County a fully executed release from the property owner.

13. PROTECTION OF WORK AND PROPERTY

- a. The Contractor shall continuously maintain and protect all of its Work from damage and shall protect the County's property from damage or loss arising in connection with this Contract until Substantial Completion. After Substantial Completion, the maintenance or protection of any incomplete or remedial Work identified on the punch list that requires maintenance or protection in order to allow for the final completion and acceptance of such Work shall be the responsibility of the Contractor until Final Completion. The Contractor shall make good any such damage or loss, except such as may be caused by agents or employees of the County. Failure to adequately protect the Work shall not be grounds for additional compensation for any maintenance and/or repairs to such Work.
- 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, whether shown or not on the approved construction plans, shall be completely repaired or replaced to the County's satisfaction by the Contractor at the Contractor's expense. The Contractor shall be responsible for all damages caused by their construction activities.

- d. Prior to commencing construction activity at the Site, the Contractor shall videotape the Site and an additional fifty (50) feet outside the perimeter of the Site. Contractor shall submit a copy of high-resolution digital recording on a DVD or flash drive to the County. The recording shall be stable, continuous, and contain all items within the limits of Work. Submission of the DVD to the County shall be a condition precedent to any obligation of the County to consider an Application for Payment. The DVD shall be the property of the County, and the County shall be permitted to reproduce such DVD's and use the same for any purpose without limitation or claim of ownership or compensation from any party. Contractor shall incorporate the cost of the preconstruction survey in the bid amount or the unit prices of the bid items, as applicable. No additional payment will be made by the County.
- e. 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 required under this Contract. The Contractor shall be responsible for giving any and all required notices to owners or occupants of any adjoining or adjacent property or other relevant parties before commencement of any work. Contractor shall provide all engineering (signed and sealed) for items listed in this section per the Specifications. The Contractor shall indemnify and hold the County harmless from any damages on account of settlements or loss of all damages for which the County may become liable in consequence of such injury or damage to adjoining and adjacent structures and their premises.
- f. 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 Project Officer or designee, or the County, 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.
- g. The Contractor shall contact "Miss Utility" at 811 for marking the locations of existing underground utilities (i.e. Water, sewer, gas, telephone, electric, and cable tv) at least 72 hours prior to any excavation or construction. The Contractor is required to identify and protect all other utility lines found in the work site area belonging to other owners that are not members of "Miss Utility". Private water and/or sewer laterals will not be marked by "Miss Utility" or the County. The Contractor shall locate and protect these services during construction.

14. SEPARATE CONTRACTS

- a. The County reserves the right to let other contracts in connection with this Project. The Contractor shall afford other contractors' reasonable access to the Project including 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 Project Officer or designee 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 County on account of any loss so sustained, the County shall notify the Contractor, who shall indemnify and save the County harmless against any expense, claim or judgment arising therefrom, including reasonable attorney's fees.
- d. In case of a dispute arising between two or more separate contractors engaged on adjacent work as to the respective rights of each under their respective contracts, the Project Officer shall determine the rights of the parties.

15. SUBCONTRACTS

- a. Unless otherwise specified, the Contractor shall, within fifteen (15) calendar days after the execution of the Contract by the County, provide to the Project Officer or designee, in writing, the names of all subcontractors proposed for the principal parts of the Work and for such others as requested by the Project Officer or designee, and shall not employ any subcontractors that the Project Officer or designee may 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 make no substitutions for any subcontractor previously selected/approved unless first submitted to the County for approval.
- c. The Contractor shall be as fully responsible to the County for the acts and omissions of the Contractor's subcontractors as the Contractor is for the acts and omissions of persons directly employed by the Contractor.
- d. 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 Contract Documents comprising the Contract insofar as such documents are applicable to the work of subcontractors.
- e. Nothing contained in the Contract shall be construed to create any contractual relation between any subcontractor and the County, nor shall it establish any obligation on the part of the County to pay to or see to the payment of any sums to any subcontractor. The County will not discuss, negotiate or otherwise engage in any contractual disputes with any subcontractor.
- f. If requested by the County, the Contractor shall replace any subcontractor at no cost to the County within 30 days of the Project Officers written notice or as otherwise specified. No additional time or compensation will be provided in the event a subcontractor is removed due to non-compliance of the requirements outlined within the Contract.

16. ELIMINATED ITEMS

If any item(s) in the Contract are determined to be unnecessary for the proper completion of the Work contracted, the Project Officer or designee 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 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. The County will receive the full unit price credit for work eliminated prior to production or installation.

17. COUNTY ORDINANCES

The Contractor shall comply with all applicable County ordinances, including but not limited to: the *Noise Control, Erosion & Sediment Control, Storm Water Management, and Chesapeake Bay Preservation ordinances (Chapters 15, 57, 60, and 61 of the County Code)*.

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 work shall be accomplished by persons qualified in the respective trades.

2. IBC AND VUSBC REQUIREMENTS

The Contractor certifies that all material supplied or used under this Contract meets all current International Building Code (IBC) requirements and the requirements of the Virginia Uniform Statewide Building Code (VUSBC); and further certifies that, if the material delivered or used in the performance of the work is found to be deficient in any of the applicable state or national code requirements, all costs necessary to bring the material into compliance with the requirements shall be borne by the Contractor. The County shall be entitled to offset such costs against any sums owed by the County to the Contractor under this Contract.

3. ADA COMPLIANCE

The Contractor shall ensure that all Work performed under this Agreement is completed in accordance with the Contract Documents, including Work intended to meet the accessibility requirements of the Americans with Disabilities Act (ADA).

The Contractor is not required to ascertain whether the Contract Documents meet ADA design standards and guidelines. However, should the Contractor discover any non-conformity with such requirements, the Contractor shall immediately inform the County and its design consultant, if applicable, to allow for corrective action.

The Contractor shall defend and hold the County harmless from any expense or liability arising from the Contractor's non-compliance in meeting its obligations herein. The Contractor shall be responsible for all costs related to permitting delays, redesign, corrective Work, and litigation relating to such non-compliance.

4. 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 accepted by the Project Officer or designee, unless herein specified to the contrary.

5. WARRANTY

All material provided to the County shall be fully guaranteed by the Contractor against manufacturing defects within the period of the manufacturer's standard warranty. Such defects shall be corrected by the Contractor at no expense to the County. The Contractor shall provide all manufacturers' warranties to the Project Officer by the date of Final Completion.

All Work is guaranteed by the Contractor against defects resulting from the use of inferior or faulty materials. The Contractor warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects or inferior or faulty workmanship or work not in accordance with the Contract Documents for one (1) year from the date of Substantial Completion or as set forth in the Specifications of the work by the County in addition to and irrespective of any manufacturer's or supplier's warranty.

No date other than Substantial Completion or as set forth in the Specifications shall govern the effective date of the Warranty unless that date is agreed upon by the County and the Contractor in advance and in a signed writing.

The Contractor shall promptly correct any defective work or materials after receipt of a written notice from the County to do so. If the Contractor fails to proceed promptly or use its best efforts and due diligence to complete such compliance as quickly as possible, the County may have the materials or work corrected and the Contractor and its Sureties shall be liable for all expenses and costs incurred by the County.

Nothing contained in this section shall be construed to establish a period of limitations with respect to other obligations the Contractor may have under this Contract.

6. INSPECTION AND ACCEPTANCE OF MATERIALS

Inspection and acceptance by the County will be at the work site in Arlington County, Virginia and within ten (10) calendar days of delivery unless otherwise provided for in the Contract Documents. The County will not inspect, accept, or pay for any materials stored or delivered off-site by the Contractor, except as provided by the Payment for Stored Materials clause of these General Conditions and other requirements of the Contract Documents. The County'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 County reserves the right to conduct any tests or inspections it may deem appropriate before acceptance. 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.

The Contractor is to coordinate its work and request inspections in such a manner as to minimize the cost to the County without impacting the overall schedule of the Project within reason. All costs associated with re-inspection shall be borne by the Contractor.

7. 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. The County may request proof of title or payment prior to acceptance of the Contractors invoice.

8. TITLE TO MATERIALS AND WORK COVERED BY PARTIAL PAYMENTS

All material and work covered by partial payments made by the County will become the property solely of the County at the time the partial payment is made. However, risk of loss or damage to all items shall be the responsibility of the Contractor until Final Acceptance by the County. This provision will not be construed as relieving the Contractor from having sole responsibility for all materials and work upon which payments have been made and for the restoration of any damaged work or replacement or repair at the County's option of any damaged materials. This provision will not be construed as a waiver of the County's right to require fulfillment of all terms of the Agreement, including full rights under the terms of the Warranty provisions of the Agreement, nor shall payment indicate acceptance of the materials or work.

9. CONNECTING WORK

The Contractor shall do all cutting, patching, or digging 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 Project Officer or designee may direct. This work will be performed in a workmanlike manner utilizing proper care and equipment to achieve proper line and grade. The Contractor shall not endanger any work by cutting, patching, or digging, or otherwise, and shall not cut or alter the work of any other contract except with the prior written consent of the Project Officer or designee.

10. REJECTED WORK AND MATERIALS

a. Any of the Work or materials, goods, or equipment which do not conform to the requirements of the Contract Documents or are not equal to samples accepted by the Project Officer or designee or are in any way unsatisfactory or unsuited to the purpose for which they are intended, shall be rejected and replaced immediately so as not to cause delay to the Project or work by others. 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 at the Contractor's expense. The fact that the Project Officer or designee may have previously overlooked such defective work shall not constitute acceptance of any part of it.

a. 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 Project Officer or designee, the County 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 and during any warranty or guarantee period.

c. The Contractor shall be responsible for managing, addressing within a timely manner, and formally closing out all notices of non-compliance issued by the inspector of record, Arlington

County Inspection Services, or the Design Team. The Contractor shall be solely liable for any costs or time associated with the corrective action to address any notices of non-compliance. The Contractor must work directly with the entity issuing the notice of non-compliance.

- d. If the Project Officer or designee 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.

11. **PROHIBITION AGAINST ASBESTOS CONTAINING MATERIALS**

No goods or equipment provided to the County or construction material installed shall contain asbestos. If a Contractor or supplier provides or installs any goods, equipment, supplies, or materials that contain asbestos in violation of this prohibition, the Contractor shall be responsible for all costs related to the immediate removal and legal disposal of the goods, equipment or materials containing asbestos and replacement with County-approved alternate. The Contractor shall be responsible for all goods, equipment, supplies or materials installed or provided by any of its employees, agents or subcontractors in connection with the work under this contract. The Contractor shall also reimburse to the County all costs of such goods, equipment, supplies or materials installed if not corrected by the Contractor.

E. LEGAL RESPONSIBILITY AND PUBLIC SAFETY

1. **SITE INVESTIGATION AND CONDITIONS AFFECTING THE WORK**

The Contractor acknowledges that it has taken steps reasonably necessary to ascertain the nature and locations of the work of the Contract, and that it has investigated and satisfied itself as to the general and local conditions and factors which can affect the Work or its cost, including but not limited to:

- a. conditions bearing upon transportation, disposal, handling, and storage of materials;
- b. the availability of labor, water, electric power, and roads;
- c. uncertainties of weather, river stages, tides, or similar physical conditions at the site;
- d. the information and conditions of the ground; and
- e. the character of equipment and facilities needed before and during work performance.

The Contractor, by executing the Contract, represents that it has reviewed and understands the Contract Documents and has notified the County of and obtained clarification of any discrepancies which have become apparent during the bidding period. During the Contract, the Contractor must promptly notify the County in writing of any apparent errors, inconsistencies, omissions, ambiguities, construction impracticalities or code violations discovered as a result of the Contractor's review of the Contract Documents including any differences between actual and indicated dimensions, locations and descriptions, and must give the County timely notice in writing of same and of any corrections, clarifications, additional Drawings or Specifications, or other information required to define the Work in greater detail or to permit the proper progress of the Work. The Contractor must provide similar notice with respect to any variance between its review of the Site and physical data and Site conditions observed. If the Contractor performs any Work involving an apparent error, inconsistency, ambiguity, construction impracticality, omission or code violation in the Contract Documents of which the Contractor is aware, or which could reasonably have been discovered, without prompt written notice to the County and request for correction, clarification or additional information, as appropriate, the Contractor does so at its own risk and expense and all related claims are specifically waived.

The Contractor also acknowledges that it has satisfied itself as to the character, quality, and quantity of surface and subsurface materials or obstacles to be encountered insofar as this information is reasonably ascertainable from an inspection of the site, including all exploratory work done by the County, as well as from the Drawings and Specifications made a part of this Contract. Unless otherwise specified, all existing structures, materials and obstructions that interfere with the new construction shall be removed and disposed of as part of this Contract. Any failure of the Contractor to take the actions described and acknowledged in this paragraph will not relieve the Contractor from responsibility for estimating properly the difficulty and cost of successfully performing the Work without additional expense to the County.

The locations of existing utilities, including underground utilities, which may affect the Work, are indicated on the Drawings or in the Specifications insofar as their existence and location were known at the time of preparation of the drawings. However, nothing in these Drawings or Specifications shall be construed as a guarantee that such utilities are in the location indicated or that they actually exist, or that other utilities are not within the area of the operations. The Contractor shall make all necessary investigations to determine the existence and locations of such utilities. Should uncharted or incorrectly charted utilities be encountered during performance of the Work, notify the Project Officer or designee immediately for instructions. The Contractor will be held responsible for any damage to and maintenance and protection of existing utilities and structures, of both public and private ownership. However, if it is determined that such existing utility lines or structures require relocation or reconstruction or any other work beyond normal protection, then such additional work will be ordered under the terms of the clause entitled "Changes in Work." At all times, cooperate with the County and utility companies to keep utility services and facilities in operation.

The County assumes no responsibility for any conclusions or interpretations made by the Contractor based on the information made available by the County. The County assumes no responsibility for any understanding reached or representation made concerning conditions which can affect the Work by any of its officers or agents before the execution of this Contract, unless that understanding, or representation is expressly stated in this Contract.

2. PUBLIC CONVENIENCE

The Contractor shall at all times so conduct its Work as to ensure the least possible obstruction to traffic (vehicular, bicycle and pedestrian) and inconvenience to the general public, County employees, and the residents in the vicinity of the Work. Traffic shall be maintained in accordance with the approved Maintenance of Traffic (MOT) plan. No road, street or sidewalk shall be closed to the public except with the permission of the Project Officer or designee and or 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 and included in the cost of the Work to ensure the use of sidewalks, trails, and transit facilities compliant with all applicable ADA and other regulations, as well as the proper functioning of all gutters, drainage inlets, drainage ditches, and irrigation ditches, which shall not be obstructed except as approved by the Project Officer or designee.

The Contractor is responsible for securing its work area for safety and security. The Contractor shall confine its construction and presence to the Limits of Work, unless otherwise approved by the County Project Officer.

3. SAFETY AND ACCIDENT PREVENTION

The Contractor shall comply with, and ensure that the Contractor's employees and subcontractors 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 U.S. Department of Labor's Occupational Safety and Hazard Administration (OSHA) Construction Industry Regulations, 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 County Project Officer at least one on-site person who is the Contractor's competent, qualified, and authorized safety officer on the worksite and who is, by training or experience, familiar with and trained in 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 County, within 7 days of issuance of the Notice to Proceed, a copy of the Contractor's written safety policies and safety procedures applicable to the scope of work. Failure to provide this information within may result in cancellation of the Contract.

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 County may determine to be reasonably necessary. Machinery, equipment, and all hazards shall be guarded in accordance with the safety provisions of the current version of "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. HAZARDOUS MATERIALS

Arlington County is subject to the Hazard Communication Standard, 29 CFR §1910.1200 (Standard). The Contractor agrees that it will provide or cause to be provided Safety Data Sheets (SDS) required under the Standard for all hazardous materials supplied to the County or used in the performance of the work. Such SDS shall be delivered to the County no later than the time of actual delivery of any hazardous materials to the County or use of such material in the performance of work under the Contract by the Contractor or its subcontractors, whichever

occurs first. Container labeling meeting the requirements of the Standard shall be appropriately affixed to the shipping or internal containers. The County reserves the right to refuse shipments of hazardous materials not appropriately labeled, or when SDS have not been received prior to or at the time of receipt of the shipment for use by the County or for use by the Contractor in the performance of the Contract, or whenever the material is delivered in a manner inconsistent with any applicable law or regulation. Any expenses incurred due to the refusal or rejection of SDS are the responsibility of the Contractor. The Contractor shall comply with all federal, state, and local laws governing the storage, transportation, and use of toxic and hazardous materials. The Contractor shall maintain onsite an up to date SDS binder for all material used and delivered to the Project. The County Project Officer or his designee shall be allowed access to the SDS book at all times.

5. HAZARDOUS WASTE

Hazardous Waste Generator/Hazardous Waste Disposal: The County Board of Arlington County, Virginia and the Contractor shall be listed as Co-generators. The Contractor shall assume all the duties pertaining to the Waste Generator, including signing the Waste Shipment Record ("WSR") and manifest. The Contractor shall supply the County Project Officer with the executed original Owner's Copy of the WSR, as required by applicable regulatory agencies within 35 days from the time the waste was accepted by the initial waste transporter, and prior to request for final payment. A separate WSR shall be submitted for each shipment to the disposal site.

Delayed Waste Shipment Records: The Contractor shall report in writing to the EPA Region III office within 45 days if an executed copy of the WSR is not received from the operator of the disposal site. The report to the EPA regional office shall include a copy of the original WSR and a cover letter signed by the Contractor stating the efforts taken to locate the hazardous waste shipment and the results of those efforts.

Temporary Hazardous Waste Storage Prohibited: The Contractor shall not temporarily store hazardous waste unless pre-approved by the County in writing. If so approved, hazardous waste stored off-site in a temporary facility shall be monitored and records shall be kept on the number of containers, size, and weight. The Contractor shall inform the County when the hazardous waste is to be transported to the final disposal site. The County has the right to inspect the temporary site at any time. The Contractor shall submit copies of all relevant manifests, Waste Shipment Record(s), and landfill receipts to the County Project Officer prior to the request for final payment. All paperwork shall be signed by the Contractor and disposal site operator as required.

6. ASBESTOS

Whenever and wherever during the course of performing any work under this Contract the Contractor discovers the presence of asbestos or suspects that asbestos is present, the Contractor shall stop work immediately, secure the area, notify the County Project Officer immediately and await positive identification of the suspect material. During the downtime in such a case, the Contractor shall not disturb any surrounding surfaces but shall protect the area with suitable dust covers. Work shall not proceed without an Asbestos-Related Work Authorization executed by the County Asbestos Program Manager.

7. CROSSING UTILITIES

When construction crosses highways, railroads, streets, waterways, or utilities under the jurisdiction of State, County, City, 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 County before any work is started. The Contractor shall be required to furnish a release from the proper authority before Final Acceptance of the Work.

8. OVERHEAD HIGH VOLTAGE LINES SAFETY ACT

If any work required herein will be performed within ten feet of an overhead high voltage line, the provisions of Virginia Statute 59.1-406, et. seq., "Overhead High Voltage Line Safety Act" (Act) shall apply. The "person or contractor responsible for the work to be done", as that term is used in the Act, will be interpreted to mean the Contractor. The Contractor shall notify the owner or operator of the high voltage line in the manner prescribed in Section 59.1-411 of the Act in sufficient time prior to the time work is to be commenced to avoid any delays in the work. The County will not pay for lost time, profits, or permit any extension of the work for any delays caused by the failure of the Contractor to make such arrangements in a timely manner. All costs for the work shall be paid by the Contractor. The County shall reimburse the Contractor for the actual reasonable cost paid to the owner or operator of the high voltage line by the Contractor on presentation to the County by the Contractor of original invoices from the owner or operator of the high voltage line in the same manner as for other Contractor invoices submitted for work performed. Retention, if applicable to the Contract, shall not be withheld from the payment to the Contractor by the County for this work. No processing, administrative, or other charges above the actual amount charged by the owner or operator of the high voltage line shall be paid to the Contractor by the County.

9. 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 OSHA and of the local and State departments of health.

10. SITE CLEAN-UP AND WASTE DISPOSAL

The Contractor shall frequently remove and properly dispose of all refuse, rubbish, scrap materials, and debris from the site resulting from the Contractor's operations during the performance of this contract. The Contractor shall ensure the work site presents a neat and orderly appearance at all times. The Contractor shall isolate any and all dumpsters, trash cans and recycling bins provided for the Project from public use until Final Acceptance.

Unless otherwise stated, the Contract Amount and any unit prices shall include all costs and fees for removal and disposal of all waste and debris, whether disposed of at a County site or at any other location.

The Contractor shall remove all surplus material, false work, temporary structures including foundations thereof, and debris resulting from the Contractor's operations at work completion and before Final Acceptance. The County shall reserve the right to remove the surplus material, false work, temporary structures including foundations and debris. The County will restore the site to a neat, orderly condition if the Contractor fails to do so. The County shall be entitled to offset such cost against any sums owed by the County to the Contractor under this Contract.

11. STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

When the Project includes an approved SWPPP, the Contractor shall strictly abide by this plan which includes: a Pollution Prevention (P2) Plan, an Erosion and Sediment Control (E&S) Plan, and a Stormwater Management Plan. If the Contractor proposes to deviate from this approved plan, it shall be the Contractor's responsibility to coordinate and obtain approval from the County Project Officer prior to implementing any changes.

No separate payment shall be made by the County for SWPPP implementation, with the exception of E&S items as specified on the E&S plans or listed as pay items. The Contractor shall not be entitled to any additional payment for changes to the SWPPP which are the result of the Contractor's work schedule or resource allocation, weather delays, or other factors not controlled by the County.

F. PROGRESS AND COMPLETION OF THE WORK

1. NOTICE TO PROCEED

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 County 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 in accordance with the accepted schedule. The Work shall be prosecuted regularly, diligently, and uninterruptedly at a rate of progress that will ensure full completion of the Project within the Time for Completion specified in the Contract Documents.

3. SCHEDULE OF COMPLETION

Unless otherwise specified, the Contractor shall within 10 business days after the Award Date, or prior to the pre-construction meeting, whichever occurs first, submit schedules which show the order in which the Contractor proposes to carry on the Work, with dates for starting and completing the various activities of the Work. The Contractor shall submit an updated schedule monthly with the request for partial payment. Review and acceptance by the County of the Contractor's schedule of completion shall in no way relieve the Contractor of its responsibility to complete the Work within the contract time. If the Work falls behind the schedule, the County may require the Contractor to prepare and submit, at no extra cost to the County, a recovery schedule indicating by what means the Contractor intends to regain compliance with the schedule. The recovery schedule must be submitted to the County for review by the date indicated in the County's written demand.

4. CONDITIONS FOR COMPLETION

a. **SUBSTANTIAL COMPLETION:** The Work will be considered Substantially Complete when all of the following conditions have been met and accepted by the Project Officer, and a Certificate of Substantial Completion has been issued:

1. The Contractor has provided formal notice that the Work is substantially complete, and the Project Officer has agreed that the condition of the Work warrants a Substantial Completion inspection;
 2. The Contractor has provided a Punch List and that list has been reviewed and approved by the Project Officer. Failure to include an item on the Punch List does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents;
 3. Final test reports as required by the Contract and certificates of inspection and approval required for use and occupancy;
 4. Fire Marshal's report, if applicable;
 5. Approval forms and transfer documents for all utilities;
 6. All life safety systems, including fire alarms, visual and audios alarms, fire detectors and fire alarm annunciator system, sprinkler systems, and all mechanical and electrical systems are complete and working in an automatic mode, and the County has been adequately trained in the operation of the systems;
 7. The HVAC system Testing and Balancing Report and build air quality test results as required for LEED certification have been accepted by the Project Officer;
 8. Operation and Maintenance Manuals have been submitted for review;
 9. All documents and verification of training required in accordance with any Commissioning Plan;
 10. Mark-ups of construction drawings showing the As-Built or "Record" condition have been submitted for review and approval by the Project Officer;
 12. Entrances and egress pathways have been constructed and can remain clear of construction activities;
 13. A Certificate of Occupancy has been issued for the space by the County's Inspection Services Division;
 14. All Commissioning has performed and completed to the satisfaction of the Project Officer; and
 15. Schedule to complete the Punch List and value of Work not yet complete.
- b. Upon the Contractor providing notice that the Work is substantially complete, the Project Officer or designee will invite all relevant parties to perform an inspection of the Work, and any noted deficiencies or incomplete items not indicated on the Contractor's punch list will be added. All punch list items, whether generated by the Contractor or any other party on behalf of the County, shall be completed within thirty (30) days of the date of Substantial

Completion, unless otherwise agreed to by the County due to seasonal or other extenuating circumstances.

c. FINAL COMPLETION: The Work will be considered Finally Complete when all of the following conditions have been met and accepted and a Final Completion Notice has been issued by the Project Officer:

1. The Contractor has provided formal notice that the Work is complete, and the Project Officer has agreed that the condition of the Work warrants a Final Completion inspection;
2. All construction deficiencies and punch list items have been closed and all construction deficiencies corrected and accepted by the Project Officer;
3. All spare parts and attic stock have been delivered, stored in an orderly manner in a space designated by the Project Officer and a complete inventory list has been verified and accepted by the Project Officer;
4. All warranties and manufacturer certificates and contact information for parties providing warranties have been delivered and accepted by the Project Officer;
5. All final Operating and Maintenance manuals have been delivered and approved and accepted by the Project Officer;
6. All final As-Built Drawings in .pdf format on a CD delivered and accepted by the Project Officer;
7. All commissioning has been completed and any open construction items in the commissioning agent's report have been closed and accepted by the Project Officer; and
8. All LEED documents and submittals, if applicable, to be provided by the Contractor or sub-contractors have been submitted and accepted by the Project Officer.

5. USE OF COMPLETED PORTIONS

The County 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 the Contractor claims that such prior use increases the cost or delays, the completion of remaining work, or causes refinishing of completed work, the Contractor may submit a claim for compensation or extension of time, or both.

G. MEASUREMENT AND PAYMENT

1. PAYMENTS TO CONTRACTOR

The County will make partial payments, less retainage, to the Contractor monthly on the basis of the Contractor's written estimate of the work performed during the preceding calendar month as approved by the Project Officer or designee.

The Contractor's application for payment shall indicate the amount of work completed to date in a format consistent with the accepted bid and as indicated below:

- a. Lump Sum: For lump sum contracts, the Contractor shall provide to the Project Officer a Schedule of Values, and the application for payment will reflect the Schedule of Values and the amount of work completed in those units.

For contracts that include multiple lump sum line items, the application for payment shall reflect the percentage of work completed for each lump sum item. If requested by the Project Officer, the Contractor shall provide a Schedule of Values for each lump sum line item in the contract.

- b. Unit Price: 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.

At the discretion of the Project Officer, payments may alternatively be based on actual quantities and site measurements taken in the field by County staff using the Contract Unit Prices.

If Stipulated Price Items are included in the contract, Work on such Stipulated Price Items shall be carried out only upon written order by the Project Officer. The payment for a Stipulated Price Item shall be made by the County 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.

In addition to the amount of work completed to date, the application for payment shall indicate the aggregate of all previous payments for each line item, the retainage previously withheld, and the total payment requested this period.

The Contractor's application for payment will not be reviewed or processed unless an updated schedule is attached. The pay application shall also contain a certification by the Contractor that due and payable amounts have been paid by the Contractor, including payments to subcontractors, for work which previous payment was received by the Contractor from the County.

2. PAYMENT FOR STORED MATERIALS

When requested in writing by the Contractor, payment allowances may be made for material secured for use on the Project and secured at the project site. Such payments will only be made for materials scheduled for incorporation into the work within sixty (60) days.

Payment for materials stored offsite may be considered at the discretion of the Project Officer. Any such request shall be made in writing, and the Contractor shall provide photographs of materials stored offsite, bills of sale, and proof of insurance on the premises at which off-site materials are stored with the application for payment. Payment for stored materials may also be subject to additional requirements contained elsewhere in the Contract Documents.

3. PAYMENTS WITHHELD

The Project Officer or designee 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 County from loss on account of defective work not remedied or withhold payment for violation of any contract term or condition not remedied after sufficient notice given to the Contractor.

Any such withholding shall not result in any liability to the Contractor for damages.

4. COUNTY ORDERED CHANGES IN WORK

The County, without invalidating the Contract, may order extra Work or make changes by addition, deletion or revision in the Work, with the total Contract Amount being adjusted accordingly if applicable. All such work shall be executed under the conditions of the original Contract, except that modification of the Time for Completion caused thereby shall be made at the time of approving such change.

- a. Changes in the Work which do not involve extra cost and are not inconsistent with the purpose of the Project can be directed by means of a Field Order. Otherwise, except in an emergency endangering life or property, no extra Work or change shall be made unless in pursuance of a written Construction Change Directive or Change Order and no claim for an addition to the Contract Amount or Contract Time shall be valid unless so ordered.
- b. The Contractor shall review any County requested or directed change and shall respond in writing within 14 days after receipt of the proposed change stating the effect of the proposed change upon Contractor's work, including any increase or decrease in Contract time and price. The Contractor shall furnish the County an itemized breakdown of the quantities and prices used in computing the proposed change. The Contractor shall also furnish any sketches, drawings, and or pictures to properly explain the change or impact to the Project Officer. It is the sole responsibility of the Contractor to provide adequate change order backup to satisfy the Project Officer.
- c. The value of any such extra work or change shall be proposed by the Contractor in one or more of the following ways: (a) by estimate in a lump sum; (b) by cost and fixed fee; (c) by unit price additions or deletions of quantities stated in the unit price contract; or (d) by any other method permitted under the Arlington County Purchasing Resolution. The Project Officer will determine the method appropriate based on the nature of the changes.
- d. If none of the aforementioned methods is agreed upon the Contractor shall proceed with the work without delay under force account, provided the Contractor receives a Construction Change Directive. In such case, the Contractor shall keep and present in such form as the Project Officer or designee may direct, a correct account of the cost, together with vouchers. The Project Officer or designee shall be permitted to verify such records on a daily basis and may require such additional records as are necessary to determine the cost of the change to the Work. The Project Officer or designee shall certify to the amount due to the Contractor, including a reasonable lump sum allowance for overhead and profit. A complete accounting of the extra cost shall be made within 14 days after completion of the work involved in the claim. Refer to Paragraph G.5, *Force Account Work*, below for a description of allowable costs when work is performed under force account.

- e. A cost proposal for a change in the Work shall provide a complete breakdown itemizing the estimated quantities and costs of labor, materials, and equipment (base cost) required in addition to any markup used. The allowable percentage markups for overhead and profit for a non-force account change to the Work performed by the Contractor's own forces or performed by the Subcontractor shall be negotiated based on the nature, size, and complexity of the Work involved but shall not exceed the percentages for each category listed below.
 - 1) Subcontractor's markup for overhead and profit for the work it performs in a change to the Work shall be a maximum of fifteen (15%).
 - 2) Contractor's markup for overhead and profit on the Subcontractor's base cost in a change to the Work shall be a maximum of ten percent (10%).
 - 3) Contractor's markup for overhead and profit (including bonds and insurance) for work it performs in a change to the Work shall be a maximum of fifteen percent 15%.
 - 4) The markup for overhead and profit of a sub-subcontractor at any tier on a change to the Work it performs shall be a maximum of fifteen percent (15%). The Contractor and all intervening tiers of subcontractors' markup on such sub-subcontractor's base cost in the change to the Work shall not exceed a total of ten percent (10%).
- f. Base Cost is defined as the total of labor, material, and equipment costs, it does not include markup for overhead and profit. The labor costs include only the costs of employees directly constructing or installing the change in the Work and exclude the costs of employees coordinating or managing the work.
- g. The allowable percentage markups for overhead and profit stated above shall compensate the Contractor, subcontractor, and sub-subcontractor for all other costs associated with or relating to the change to the Work including by way of illustration and not limitation, general conditions, supervision, field engineering, coordination, insurance, bond(s), use of small tools, incidental job costs, and all other general and administrative home and field office expenses.
- h. Allowable costs for changes in the Work shall not include home office expenses including payroll costs for the Contractor's officers, executives, administrators, project managers, estimators, clerks' timekeepers, and other administrative personnel employed by the Contractor, whether at the Site or in the Contractor's principal or branch office for general administration of the Work. These costs are deemed overhead included in the percentage markups in Subsection (e) above.
- i. If the change to the Work also changes the Time for Completion by adding days to perform the Work, an itemized accounting of the following Site direct overhead expenses for the change to the time may be considered as allowable costs for compensation in addition to the base cost indicated above:
 - 1) site superintendent's pro-rata salary
 - 2) temporary site office trailer expense
 - 3) temporary site utilities including basic telephone service, electricity, heat, water, and sanitary/toilet facilities.

All other direct and indirect overhead expenses are considered covered by and included in Subsection (e) markups above. In no case shall subcontractor extended overhead be submitted or considered. The County does not have a direct contractual relationship with any subcontractor or supplier and therefore will not direct, discuss or negotiate with subcontractors employed by the Contractor.

- j. If Contractor requests an extension to the Time for Completion due to changes in the Work it must provide to the Project Officer adequate documentation substantiating its entitlement for the time extension. The documentation must demonstrate an anticipated actual increase in the time required to complete the Work beyond that allowed by the Contract as adjusted by prior changes to the Work, not just an increase or decrease in the time needed to complete a portion of the total Work. In the event a Critical Path Method (CPM) schedule is required by the Contract, no extension to the Time for Completion shall be granted unless the additional or change to the Work increases the length of the critical path beyond the Time for Completion as demonstrated on the approved CPM schedule or bar chart schedule. Any Float belongs to Arlington County. A written statement in addition to a CPM analysis shall be prepared explaining how no other sequence of work activities could have been performed to decrease the impact or eliminate the impact altogether. If requested by the Project Officer, the Contractor must provide alternate documentation detailing the claim to the County's satisfaction.
- k. Any change that will increase the Contract Amount more than 10% will require notice to sureties and require that Performance and Payment Bonds be increased by the Contractor. The increased Performance and Payment Bonds must be sent to the County's Office of the Purchasing Agent within 15 calendar days of the County's approval of such change.

5. FORCE ACCOUNT WORK

A Force Account may be used at the County's discretion and only when either 1) agreement on the valuation of a change cannot be made using the methods described in the preceding paragraph, *County Ordered Changes in the Work*, or 2) the County cannot firmly establish an applicable and acceptable estimate for the cost of the work because the level of effort necessary to perform and complete the work cannot be reasonably estimated or anticipated but can only be determined by performing the work. Because of the significant burden on the County to monitor and control the work, Force Account work is not a preferred method, and it shall be the responsibility of the Contractor to provide all necessary documentation and justification of costs. The rates for labor, equipment and materials to be used in cases of work performed on a force account basis will be compensated as documented below. No costs other than those explicitly listed below shall be allowed:

- a. Labor: Before any Force Account work begins, the Contractor shall submit for approval to the Project Officer the proposed hourly rates and associated labor costs (benefits and payroll burden) for all laborers and forepersons to be engaged in the work. The number of laborers and forepersons engaged in the work will be subject to regulation by the Project Officer and shall not exceed the number that the Project officer deems most practical and economical for the work. For all labor and forepersons in direct charge of the force account work, excluding general superintendence, compensation will be as follows:

- 1) Certified Pay Rate: The Contractor will receive the actual rate of wage or scale as set forth in his most recent payroll for each classification of laborers, and forepersons who are in direct charge of the specific operation. The time allowed for payment will be the number of hours such workers are actually engaged in the work. If overtime work is authorized by the County, payment will be at the normal overtime rate set forth in the Contractor's most recent payroll.
- 2) Benefits: The Contractor will be entitled to receive the actual cost for any fringe benefits that are regularly provided to the classes of laborers and forepersons engaged in the work and that are not included in the certified pay rate.
- 3) Payroll Burden: The Contractor will be entitled to receive the actual cost for all costs associated with required payroll taxes and payroll benefits not covered in 2) above, including:
 - Social Security Tax
 - Medicare Tax
 - Unemployment Tax
 - Worker's Compensation Insurance
 - Contractor's Public Liability Insurance
 - Contractor's Property Damage Liability Insurance
- 4) If the Contractor is unable to provide the necessary documentation for Benefits and Payroll Burden as identified above, the Contractor will be entitled to an additive of 20% of the Certified Hourly Pay Rate as full and final compensation for Benefits and Payroll Burdens
- 5) Overhead and Profit: The Contractor will be entitled to an additive of 10% on all properly documented and approved costs established in paragraphs 1), 2), 3), and 4) above for all administrative, overhead, and profit associated with labor costs.
- 6) Subsistence and lodging allowances may be allowed by the Project Officer at the actual and documented costs for lodging and meals if the following conditions are met and the applicable rates and authorization for such costs are established prior to beginning the work. No additives for overhead, administrative, profit, or any other costs will be permitted for subsistence and lodging.
 - i. The specific Force Account work is outside the scope of the original contract, requires mobilization of a separate crew not intended to be used on the original contract, and the Contractor's base location is more than 50 miles from the work site, or
 - ii. Forces which have been working on the Contract will be used for the Force Account work and have been routinely staying overnight during the life of the Project, and the Force Account Work will warrant an extension of the contract time, and the distance from the Contractor's base location to the work site is more than 50 miles

- b. **Materials:** The Contractor will receive the actual cost of materials accepted by the Project Officer that are delivered and used for the work including taxes, transportation, and handling charges paid by the Contractor, not including labor and equipment rentals as herein set forth, to which 15 percent (15%) of the cost will be added for administration and profit. The Contractor shall make every reasonable effort to take advantage of trade discounts offered by material suppliers. Any discount received shall pass through to the County. Salvageable temporary construction materials will be retained by the County, or their appropriate salvage value shall be credited to the County, at the County's discretion.
- c. **Equipment:** For all equipment other than small tools, the Contractor will be entitled to rental rates as established herein, and agreed to in writing before the work is begun. Transportation costs directly attributable to Force Account work will be as stated below. Small tools will be considered any equipment which has a new cost of \$1000 or less and will not be eligible for any compensation. The Contractor shall provide the Project Officer a list of all equipment to be used in the work. For each piece of equipment, the list shall include the serial number; date of manufacture; location from which equipment will be transported; and, for rental equipment, the rental rate and name of the company from which it is rented. The number and types of equipment engaged in the work will be subject to regulation by the Project Officer as deemed to be the most practical and economical for the work. No compensation will be allowed for equipment which is inoperable due to mechanical failure. Compensation for equipment shall be as follows:
- 1) **Hourly Base Equipment Rental Rates (Owned Equipment)** – For equipment authorized for use in the Force Account work that is owned by the Contractor, the Contractor shall be entitled to an Hourly Base Rental Rate as detailed in the following paragraphs. The Hourly Base Rental Rate for Contractor owned equipment will not exceed 1/176 of the monthly rates of the schedule shown in the *Rental Rate Blue Book* modified in accordance with the *Rental Rate Blue Book* rate adjustment tables that are current at the time the force account is authorized. The rates for equipment not listed in the *Rental Rate Blue Book* schedule shall not exceed the hourly rate being paid for such equipment by the Contractor at the time of the force account authorization. In the absence of such rates, prevailing rates being paid in the area where the authorized work is to be performed shall be used.
 - 2) **Hourly Base Equipment Rental Rates (Rented Equipment)** – If the Contractor does not possess or have readily available equipment necessary for performing the force account work and such equipment is rented from a source other than a company that is an affiliate of the Contractor, payment will be based on actual invoice rates when the rates are reasonably in line with established rental rates for the equipment in question and are approved by the Project Officer.
 - 3) **Hourly Operating Rates** – Hourly Operating Rates shall be as established in the Blue Book estimated operating cost per hour. This operating cost will be full compensation for fuel, lubricants, repairs, servicing (greasing, fueling, and oiling), small tools, and any and all incidentals. If rental rates for the equipment being used in the work are not listed in the Blue Book or otherwise readily available, the Hourly Operating Cost will be 15% of the established Hourly Base Rental Rate. If invoices for Rental Equipment include the furnishing of fuel, lubricants, repair, and servicing, then the Contractor will not be entitled to any Hourly Operating costs for that equipment.

- 4) Equipment Usage - Equipment usage will be measured by time in hours of actual time engaged in the performance of the work. The Contractor shall be entitled to the applicable Hourly Base Equipment Rental Rate and Hourly Operating Rate for all approved Equipment Usage.
- 5) Equipment Standby – Standby time is defined as the period of time equipment authorized for Force Account work by the Project Officer is available on-site for the work but is idle for reasons not the fault of the Contractor or normally associated with the efficient and necessary use of that equipment in the overall operation of the work at hand. Hourly rates for Contractor owned equipment on standby, will be at 50 percent (50%) of the rate paid for equipment performing work. Operating costs will not be allowed for equipment on Standby. When equipment is performing work less than 40 hours for any given week and is on standby, payment for standby time will be allowed for up to 40 hours, minus hours performing work. Payment for Standby will be allowed only for working days. Payment for Standby will not be made for the time that equipment is on the Project in excess of 24 hours prior to its actual performance in the force account work.
- 6) Transporting Costs – When it is necessary to obtain equipment exclusively for Force Account work from sources beyond the Project limits and the Project Officer authorizes the transporting of such equipment to the Project site, the cost of transporting the equipment will be allowed as an expense. Where the transport requires the use for a hauling unit, the allowable expense will consist only of the actual cost incurred for the use of the hauling equipment, or the applicable Blue Book cost, whichever is less. When equipment is transferred under its own power, the allowable Transporting cost shall be 50% of the Hourly Base Equipment Rental Rate.
- 7) Overhead and Profit – The Contractor shall be entitled to an additive of 10% on all appropriate and approved Equipment Rental, Operating, and Transporting costs as defined above.
- d. Subcontracting: The Contractor shall receive the cost of work performed by a subcontractor as determined in (a), (b), and (c) above. In addition, the Contractor will be allowed an allowance per the schedule below for administrative costs and profit.

Total Cost of Subcontract Work:	Rate Schedule
\$0 - \$10,000	10%
> \$10,000	\$1,000 + 5 % above \$10,000

- e. Other Costs: The Contractor shall not be entitled to any costs associated with Force Account Work other than those specifically identified in this section.
- f. Statements: Payments will not be made for work performed on a force account basis until the Contractor has furnished the Project Officer duplicate itemized statements of all costs of such work detailed as follows:
 - 1. Payroll indicating name, classification, date, daily hours, total hours, rate, and extension of each laborer, foreperson

2. Designation, dates, daily hours, total hours, rental rate, and extension for each unit of equipment
3. Quantities of materials, prices, and extensions
4. Transportation of materials
5. Statements shall be accompanied and supported by invoices for all materials used and transportation charges. However, if materials used on the Force Account work are not specifically purchased for such work but are taken from the Contractor's stock, then in lieu of the invoices, the Contractor shall furnish an affidavit certifying that such materials were taken from his stock; that the quantity claimed was actually used; and that the price, transportation, and handling claimed represented his actual cost.

6. CLAIMS FOR EXTRA COST

If the Contractor claims that any event will give rise to a claim for an increase in the Contract Amount or that any instructions from the Project Officer, by drawings or otherwise, will incur him extra cost under the Contract, then, except in emergencies endangering life or property, it shall give the Project Officer written notice thereof no later than three (3) days of the event or instruction. The Contractor thereafter must provide to the Project Officer a full cost proposal within 14 days detailing the amount of additional compensation claimed, together with the basis therefore and documentation supporting the claimed amount. No such claims shall be valid unless so made. If the Project Officer agrees that such event or instructions involve extra cost to the Contractor, any additional compensation will be determined by one of the methods provided in the Changes in Work paragraph of these General Conditions as selected by the Project Officer. All pricing and supporting documentation requirements of the Changes in the Work clause shall apply to claims for extra cost deemed valid under this paragraph.

7. DAMAGES FOR DELAY; EXTENSION OF TIME OTHER THAN FOR WEATHER

- a. Excusable Non-Compensable Delays: If and to the extent that the Contractor is delayed at any time in the progress of the Work by a Force Majeure event or other causes outside of the County's control or the Contractor's control and which the Contractor could not have reasonably foreseen, the Contractor may request an extension of the Time for Completion. To be considered for an extension of the Time for Completion, the Contractor shall give the Project Officer timely written notice at the inception of the delay. The Contractor thereafter must provide to the Project Officer a full claim within 14 calendar days of the cessation of the delay and demonstrate that the delay affected the critical path of the accepted schedule, and any Float has been consumed. If the Project Officer agrees with the existence and impact of the delays, the Project Officer shall extend the Time for Completion for the length of time that the Time for Completion was actually delayed thereby. The Contractor shall not be due compensation or damages of any kind as a result of such delay. Delays caused by weather are addressed in Section G.8.
- b. Excusable Compensable Delays: If and to the extent that the Contractor is unreasonably delayed at any time in the progress of the Work by any act or omission of the County, its agents or employees, due to causes within the County's control, the Contractor may request an extension of the Time for Completion and/or additional compensation. The Contractor shall give notice to the Project Officer immediately at the time of the occurrence giving rise to the delay and shall give written notice no later than five (5) calendar days after the inception of the delay. The Contractor's written notice shall specify the nature of the delay claimed, the cause of the delay, and the impact of the delay on the Contractor's schedule.

Thereafter the Contactor shall provide to the Project Officer a full claim within 14 calendar days of the cessation of the delay. The claim must detail the amount of additional contract time or compensation claimed, together with the basis therefor along with itemized documentation supporting the claim. The itemized documentation must demonstrate that the claimed delay directly affected the critical path of the accepted schedule, and any Float has been consumed and the time and/or costs incurred by the Contractor are directly attributable to the delay in the work claimed. The Contractor shall be entitled to additional compensation only if the delay was caused solely by acts or omission of the County, its agents or employees, or due to causes within their control.

If the Contractor is entitled to compensation, an itemized accounting of the following direct site overhead expenses will be considered as allowable costs to be used in determining the compensation due the Contractor: the site superintendent(s) (as identified at the inception of the work) pro rata salary, temporary site facilities, temporary site office expense, and temporary site utilities including basic telephone service, electricity, heat, water, and sanitary/toilets. A fifteen percent (15%) markup of these expenses will be allowed to compensate the Contractor for home office and other direct or indirect overhead.

Furthermore, compensation for the delay shall be calculated from the contractual Time for Completion, as adjusted by Change Order, and shall not be calculated based on any early completion planned or scheduled by the Contractor.

- c. Non-Excusable Non-Compensable Delays: The Contractor shall not be entitled to an extension of the Time for Completion or to any additional compensation for delays if and to the extent they are caused by acts, omissions, fault, or negligence of the Contractor or its subcontractors, agents, or employees or due to foreseeable causes within their control, including, but not limited to, delays resulting from defective work, including workmanship and/or materials, from rejected work which must be corrected before dependent work can proceed, from defective work or rejected work for which corrective action must be determined before like work can proceed, from incomplete, incorrect, or unacceptable Submittals or samples, or from the failure to furnish enough properly skilled workers, proper materials or necessary equipment to diligently perform the work in a timely manner in accordance with the Project schedule.
- d. No extension of time or additional compensation shall be given for a delay if the Contractor failed to give notice in the manner and within the time prescribed herein. Furthermore, no extension of time or additional compensation shall be given for any delay unless a full claim is made to the Project Offer within 14 days of the end of the delay. Failure to give written notice or failure to present a timely claim shall constitute a waiver of any claim for extension or additional compensation based upon that cause.
- e. If the Contractor submits a claim for damages pursuant to this Section, the Contractor shall be liable to the County for a percentage of all costs incurred by the County in investigating, analyzing, negotiating and litigating the claim, which percentage shall be equal to the percentage of the Contractor's total delay claim that is determined through litigation to be false or to have no basis in law or fact (Virginia Code §2.2-4335).

- f. Any change in the Time for Completion or additional compensation shall be accomplished only by the issuance of a Change Order.

8. TIME EXTENSIONS FOR WEATHER

The Contractor's sole relief on any claims for delay which is caused by abnormal weather shall be an extension of the Time for Completion provided the Contractor gave the Project Officer written notice no later than five (5) calendar days after the onset of such delay and provided the weather affected the Critical Path. A fully documented claim for a time extension under this Section must be submitted no later than thirty (30) calendar days after the cessation of the delay. It shall be the Contractor's responsibility to provide the necessary documentation to satisfy the Project Officer that the weather conditions claimed were encountered, which may include daily reports by the Contractor, copies of notification of weather days to the Project Officer, NOAA backup, and pictures from each day claimed.

The Time for Completion will not be extended due to inclement weather conditions which are normal, as defined below, for Arlington County. The Time for Completion includes an allowance for workdays (based on five (5) day workweek) which according to historical data may not be suitable for construction work. The Contractor may request extension to the Time for Completion if it can demonstrate unusual and disruptive weather conditions per the requirements below:

- a. That one or more of the Weather Conditions listed below was encountered; and,
- b. The occurrence of the Weather Condition(s) resulted in an inability to prosecute work which would have otherwise been performed on the day(s) the Weather Condition(s) occurred; and,
- c. The work which was not able to be completed was on the Critical Path and could not be completed **only** due to the Weather Condition(s) claimed.

The Project Officer will determine the Contractor's entitlement to an extension of the Time for Completion. A time extension of no more than one (1) day will be granted for one (1) day of lost work which satisfies the requirements above, regardless of the number of Weather Conditions encountered. The Contractor's sole relief shall be an extension of the Time for Completion and no claim for an increase in Contract Amount will be allowed.

The Weather Conditions listed below will be the only basis for consideration by the County, based upon the requirements listed above, as an extension of the Time for Completion due to inclement weather or weather-related site conditions.

Weather Condition #1: Unusually Heavy Precipitation - Figure 1 illustrates the anticipated monthly inclement weather due to precipitation (Rain Days). If the number of days with precipitation in excess of 0.10", as recorded at Washington Reagan National Airport, exceeds the anticipated Rain Days, the Contractor will be entitled to an extension of one (1) day on the Time for Completion for every day in excess of the Rain Days illustrated in Figure 1. The anticipated value of Rain Days for partial months at the beginning and end of the Contract shall be evaluated on a pro-rated basis.

FIGURE 1

Average days with precipitation of 0.1" or more

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
7	6	7	6	8	6	7	6	6	5	6	6

Weather days are not exclusive to the individual months that they represent in Figure 1. If weather days are not used in a previous month(s) they can be used to offset weather delays in subsequent months. This will be reviewed on a case by case basis and is subject to reconciliation at the end of the Project.

Condition #2: Temperature – The Contractor may be entitled to an additional day for every day that the recorded high temperature at Washington Reagan National Airport is 32 degrees Fahrenheit or less, that has not already been incurred under Weather Condition #1 above. This condition does not apply to vertical construction as defined by the Arlington County Vertical Construction Standards.

9. RELEASE OF LIENS

The County, before making final payment, shall require the Contractor to furnish a complete release of all liens arising out of this Contract. The Contractor may, if any subcontractor refuses to furnish a release or receipt in full, furnish a bond satisfactory to the County, to indemnify him against any lien. If any lien remains unsatisfied after all payments have been made, the Contractor shall refund to the County all money that the latter may be compelled to pay in discharging such lien. However, the County 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.

10. FINAL PAYMENT

After the Contractor has completed all work and corrections to the satisfaction of the Project Officer or designee and delivered all maintenance and operating instructions, schedules, quantities, bonds, certificates of inspection, maintenance records, As-Built Drawings, and other items required as final payment submittal documents, the Contractor may make application for final payment following the procedure for progress payments. The Final Application for Payment shall be accompanied by all documents required in the Contract, including a complete and signed and notarized copy of the Final Payment Release Form as follows:

RELEASE AND REQUEST FOR FINAL PAYMENT

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 Arlington County 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: _____

The date of Final Acceptance is the date on which the County issues the final payment for the work performed.

COMMONWEALTH OF VIRGINIA

COUNTY OF ARLINGTON

On this the ____ day of _____, 20__, before me, personally appeared _____, who acknowledged himself/herself to be _____ in the above instrument, and that he/she, as such _____, being authorized so to do, executed the foregoing instrument for the purposes therein contained, by signing his/her name by himself/herself as _____.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

Notary Public

My Commission Expires: _____

EXHIBIT A
SUPPLEMENTARY CONDITIONS
(CONTINUED)

1. Permits

The County shall obtain the Demolition, Land Disturbance, and VPDES Construction General Permit (VAR10) Permits. The County obtained permits and responsibilities shall be transferred to the Contractor within fourteen (14) days of Notice to Proceed. All other permits, including trade permits, road closure shall be obtained and paid for by Contractor.

The Contractor shall coordinate all permit required inspections and provide the County with copies of all trade permits and final inspection approvals. The permits shall be properly displayed on-site to comply with regulations.

The Contractor shall complete the work, address the punch list, obtain final inspection approvals on or before Substantial Completion.

2. Responsible Land Disturbance Certificate

Within three (3) days of Notice to Proceed, the Contractor shall complete the Responsible Land Disturber Certification providing the name of an individual holding a certificate of competence (Virginia Professional Engineer, Virginia Land Surveyor, Virginia Landscape Architect, Virginia Architect, Combined Erosion and Sediment Control Administrator, Erosion and Sediment Control Administrator, Erosion and Sediment Control Plan Reviewer, Erosion and Sediment Control Inspector, Erosion and Sediment Control Contractor, Responsible Land Disturber) issued by the Department of Conservation and Recreation (DCR) who will be responsible for carrying out the land disturbing activity. This person shall be responsible for ensuring that all aspects of the Erosion and Sediment control plan are enforced in accordance with the approved site plan and Virginia Erosion and Sediment Control Law.

3. Utility Disconnect

The County shall submit the utility disconnect letters as part of the demolition permit.

The Contractor shall permanently cap-off of the sanitary lateral at the public sewer main. The first permit to be obtained, a plumbing permit, and excavation of right-of-way permits are required to cap-off the sewer in the street.

4. Neighborhood Notification

The Contractor shall provide site signage to notify the neighborhood about the project. Project notification letter will be provided by the County for the Contractor to distribution to adjacent neighbors.

5. Site Protection

Any damage to existing site features which are not part of the work to be completed under this Contract (i.e., curb and gutter, sidewalks, asphalt pavement, turf, etc.) shall be repaired or replaced to its original condition by the Contractor, at his expense and to the satisfaction of the County.

All disturbed turf areas resulting from the work performed, as part of this contract will be graded smooth and finished to match the existing grade, seeded and mulched per specifications.

6. Project Records

The Contractor shall establish and maintain an electronic system for reporting status and distribution of Contractor-developed documents. The reporting system shall list submittals, requests for information (RFI's), proposed change orders (PCO's), construction schedules and approved change orders. The reporting system shall be revised to show current status and provided at each construction progress meeting, listing applicable details for each schedule change, submittal, RFI and PCO. The Contractor shall provide continuous access to the reporting system through an internet connection available to the County, Architect and other parties designated by the Project Officer.

7. Site Utilization

The Contractor may use the property outside the Limits of Disturbance for parking, staging materials and supplies, and site office. The Contractor shall maintain and keep clean these areas.

The Contractor shall submit for approval a Site Utilization Plan identifying parking, material and supplies storage, refuge containers, and site office within fourteen (14) days after Notice to Proceed.

8. Material Storage

The Contractor shall be responsible for securing the storage area. No material shall be staged on the sidewalks or block access to the site.

9. Perimeter security protection

The Contractor shall provide 6" high chain link fence (outside) and barricades (inside) around work areas for protection and to prevent unauthorized personal in the construction area. Before leaving the site at the end of the day, the Contractor shall replace any/and all sections of the security fence or barricade moved or removed during work hours. In addition, provide and install board for displaying permits, signage, etc.

The Contractor shall provide continuous cleaning of the work areas and minimize dust and debris in the work area near or adjacent to the neighboring buildings.

The Contractor shall maintain the roadways, parking lot, parking lot aisles, and sidewalk used to access the construction area. Contractor shall clean and repair damaged surfaces, roads and sidewalks caused by construction or by use of temporary protection. All damage to existing roadways, sidewalks and surface caused by the Contractor and their subcontractors shall be repaired by the Contractor at their expense.

10. Temporary Utilities and Toilets

The Contractor shall be responsible for providing metered water, electric and sanitary facilities as required for the duration of this work, including temporary toilet facilities. The Contractor shall not use the County's existing facilities or utilities.

The Contractor shall apply to Dominion Power and to Arlington, Water, Sewer, Street, in the event it is necessary and required for the Contractor site-office.

The Contractor shall provide their own toilet facilities. The Contractor shall be responsible and provide daily cleaning and maintenance of their toilets including daily disinfection/sanitations.

11. Existing Utilities

The Contractor shall be responsible for notifying all utility companies through MISS UTILITY at 811 to ensure all utility lines in the work area are located and marked for reference. The Contractor shall engage a private utility locator to locate private on-site utilities that MISS UTILITY does not locate or mark. The Contractor shall ensure that all utility lines have been field located prior to commencing the work. The Contractor shall notify the County immediately if utilities are found to be other than shown on the plans.

12. Construction Schedule

The Contractor shall submit for approval a Construction Schedule with 3 days of Notice to Proceed. The Construction Schedule shall show in detail how the Contractor plans to execute and coordinate. The Construction Schedule will show the order in which the Contractor will perform the Work, projected dates for the start and completion of separable portions of the Work, and any other information concerning the Contractor's Work scheduling as the County may request.

The Construction Schedule will be in the form of a bar chart. Each pay item designated in the Contractor's Schedule of Values will be denominated as a separate activity represented by a horizontal bar or bars on the chart. The time scale will indicate all required Milestone from Notice to Proceed to Final Completion. The horizontal bar(s) will indicate the start and finish dates as well as the total time period of performance for each pay item activity. The Contractor will arrange the chart to show the pay item activities, which are necessary to fulfill each and every Milestone and Completion Date requirement.

The Contractor shall also provide 2-week look ahead describing the progress of the current and following week's schedule. The report shall be provided during scheduled progress meeting. No payment request will be honored without updated progress schedule.

The Contractor will be solely responsible for expediting the delivery of all material to be furnished by the Contractor to maintain the Construction Schedule in effect.

13. Regulations

All work shall conform to applicable County, State, Federal, Safety regulations.

14. Construction Program Management System

The Contractor shall utilize a web-based Construction Management Program System such as Primavera, Constructware, Prolog, Procore, Oracle, etc. with prior Project Officer approval. The web-based Construction Management Program will be used to distribute all project documents i.e. submittals, RFI, shop drawings, weekly reports, weekly photos, application for payments, meeting agendas, meeting minutes, potential change orders, schedules and updated schedules etc. No project documents shall be transmitted via email.

15. Progress Meetings

Progress meetings shall be held bi-weekly and shall be attended by the Contractor and their sub-contractors when required. The Contractor shall provide schedule updates as well as discuss issues that will impact work and complete schedule. The Contractor shall be responsible for maintaining and distribution of the meeting minutes.

16. Project sign

A Project sign is not required. However, the Contractor may install a temporary project sign that shall conform to the signage policy stated below.

The Contractor shall apply for signage permit and install the project sign per following requirements.

- Color: BLACK or BLUE lettering on WHITE background.
- Imagery: Imagery information, Content and Format will be given only to selected General Contractor, if needed.
- Size: 4' x 8'
- Material: Painted plywood sheet; sign shall not be illuminated Location:
- Installation: To be installed during mobilization
- Location: Close to the public site boundary, facing the public right of way, and centered within the site boundary
- Temporary project sign must be approved by the Project Officer. The Contractor will be responsible for maintaining the sign and removal at project completion.

17. Subcontractor acceptance

As required by General Conditions, Paragraph 15, the Contractor shall provide the names of proposed subcontractors for review by the Project Officer. The Project Officer may object for cause if a proposed subcontractor is deemed unfit or incompetent.

18. Traffic control

The Contractor shall provide a traffic control plan and devices including qualified flagman during hauling and delivery periods. If needed, apply for traffic control permit. Refer to Specifications.

19. Safety

The Contractor shall ensure that all personnel working and visiting any construction site and areas are issued and wear the appropriate safety equipment (hard hat, safety vest and harness when applicable).

20. Cranes

The Contractor shall secure all permitting and control of crane arrival, set up, operation, and departure from site. Crane size, number, and positions shall be determined as required to permit erection without damage to structures, roadways, and surroundings. The Contractor shall not swing the crane(s) over any occupied adjacent buildings nor playground areas/roads/streets that are not closed. Crane operation shall not impact nor make streets impassable.

21. Work Hours and Noise Control

The Contractor shall perform the construction activity in accordance with the current edition of the Virginia Department of Transportation Road and Bridge Specifications (Section 107.16(b) (3)) to reduce the impact of construction noise on the surrounding community. All construction operations shall comply with the Arlington County Noise Control Ordinance.

22. Controlling Dust and Maintaining Traffic

The Contractor shall take whatever steps are necessary to ensure that dirt is not tracked onto the streets and to control dust at all times during the construction period and to maintain traffic in an approved manner, for which no additional payment shall be made. Dirt tracked onto the roadway shall be cleaned up daily.

The Contractor shall maintain cleanliness of the construction entrance during his operations. Public roadways leading to and from the site will be cleaned of mud, loose dirt, and construction debris at the end of each day. Provide water truck, as needed, to prevent dust from exiting the site. Maintenance of traffic warning signs and lighted barriers, flagmen etc. shall be the responsibility of the contractor during all stages of construction.

23. Protection Of Site

The Contractor shall be responsible for providing facilities and services as necessary to effectively protect the Project from losses, and persons from injury during construction. This includes fire protection.

24. Graffiti

Any and all graffiti discovered on the construction work associated with this project will be removed at the Contractor's expense within twenty-four (24) hours of its discovery.

25. Temporary Air Quality Impacts (Air Pollution)

The Contractor shall assure that construction activity be performed in accordance with the Virginia State Air Pollution Control Law and Rules of the Virginia Department of Environmental Quality. Specific attention is made to the compliance with the air regulations governing fugitive dust and cutback asphalt. Open burning of any type is not allowed. Pesticide or herbicide use is not allowed.

26. Correlation And Intent of The Construction Documents

The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

Since the Contract Documents are complementary, before starting each portion of the Work, the Contractor shall carefully study and compare the various Drawings and other Contract Documents relative to that portion of the Work, as well as the information furnished by the County, shall take field measurements of any existing conditions related to that portion of the Work and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, any errors, inconsistencies or omissions discovered by the Contractor shall be reported promptly to the Architect and County as a request for information in such form as the Architect and County may require. For the purposes of bid in the event of a conflict the greater quantity, better quality, or most stringent of the requirements shall be provided without change in the Contract Sum.

**EXHIBIT D
PRICE BID OF CONTRACTOR**

**FURNISH ALL LABOR, MATERIALS AND EQUIPMENT FOR THE CONSTRUCTION OF
3108 COLUMBIA PIKE DEMOLITION PROJECT
IN ARLINGTON, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES/FACILITIES DESIGN AND CONSTRUCTION**

PLEASE PROVIDE PRICES IN ALL CELLS HIGHLIGHTED IN BLUE (The price for all Items must be entered)

SECTION A. PROJECT NOT TO EXCEED COST ITEMS

ITEM NO.	CSI DIVISION	ITEM	PRICE
1	1	GENERAL REQUIREMENT (including TEMPORARY SITE UTILITIES)	\$ 15,000
2	2	EXISTING CONDITIONS (DEMOLITION incl. FOUNDATION, REMOVAL OF DEMO MATERIAL, SITE CLERANCE, UTILITY REMOVAL)	\$ 120,750
2a		Hazardous Material Remediation	\$ 85,500
3	26	ELECTRICAL	\$ 33,500
4	32	EXTERIOR IMPROVEMENTS	\$ 237,000
5	33	UTILITIES	\$ 121,000
6	0	PERFORMANCE BONDS & INSURANCE	\$ 12,000
TOTAL BID PRICE			\$ 624,750

EXHIBIT E
CONTRACTOR PERFORMANCE EVALUATION FORM

ARLINGTON COUNTY GOVERNMENT

Contractor Performance Evaluation Form

Contractor Name: _____ Contract No.: _____

Date: _____ Project/Contract Name: _____

Interim Evaluation ____ Final Evaluation ____

Scope of Work/Services Provided:

Contract Start Date: ____/____/____ Contract End Date: ____/____/____ Actual Completion Date: ____/____/____

Please rate the effectiveness of the Contractor's performance on the Contract/Project across the following dimensions:

Evaluation Criteria: Unacceptable Poor Satisfactory Excellent

Written comments to explain assigned ratings are required for any performance ratings below "satisfactory" or an "excellent" in any category.

Evaluation Questions

1. Quality of Workmanship

Rate the quality of the Contractor's workmanship. Were there quality-related or workmanship problems on the Contract? Was the Contractor responsive to remedial work required?

____ Unacceptable ____ Poor ____ Satisfactory ____ Excellent ____ N/A

2. Problem Solving and Decision Making

Rate the Contractor's ability to provide effective and creative problem solving, coordination and fair decision making on Contract/Project.

____ Unacceptable ____ Poor ____ Satisfactory ____ Excellent ____ N/A

3. Project Schedule

Rate the Contractor's performance with regard to adhering to contract schedules. Did the Contractor meet the contract schedule, or the schedule as revised by approved change orders? If not was the delay attributable to the Contractor?

Unacceptable Poor Satisfactory Excellent N/A

4. Subcontractor Management

Rate the Contractor's ability, effort and success in managing and coordinating subcontractors (if no subcontractors rate the Contractor's overall project management). Was the Contractor able to effectively resolve problems?

Unacceptable Poor Satisfactory Excellent N/A

5. Safety

Rate the Contractor's safety procedures on this Contract/Project? Were there any OSHA violations or serious safety accidents?

Unacceptable Poor Satisfactory Excellent N/A

6. Environmental Compliance

Did the Contractor comply with local, state, and federal environmental standards in the performance of the Contract? Did the Contractor comply in good faith with local erosion and sedimentation control requirements and/or any Stormwater Pollution Prevention Plan?

Unacceptable Poor Satisfactory Excellent N/A

7. Change Orders

Did the Contractor unreasonably claim change orders or extras? Were the Contractor's prices on change orders and extra work reasonable?

Unacceptable Poor Satisfactory Excellent N/A

8. Paperwork Processing

Rate this Contractor's performance in completing and submitting required project paperwork (i.e. change orders, submittal, drawings, invoices, workforce reports, etc.) Did the Contractor submit the required paperwork promptly and in proper form?

Unacceptable Poor Satisfactory Excellent N/A

9. Supervisory Personnel

Rate the general performance of this Contractor's supervisory personnel. Did they have the knowledge, management skills and experience to run a project of this size and scope?

___ Unacceptable ___ Poor ___ Satisfactory ___ Excellent ___ N/A

10. Expertise, Knowledge and Experience

Rate this Contractor's personnel. Were they dedicated, experienced and qualified for the duration of project.

___ Unacceptable ___ Poor ___ Satisfactory ___ Excellent ___ N/A

11. Project/Contract Closeout

Rate the Contractor's performance on timeliness and quality of closeout deliverables such as As-Built Drawings, Operation and Maintenance Manuals, and training. Did the Contractor complete the tasks or Project on schedule; was the punch list completed within the allotted time?

___ Unacceptable ___ Poor ___ Satisfactory ___ Excellent ___ N/A

12. Level of Overall Performance

___ Unacceptable ___ Poor ___ Satisfactory ___ Excellent ___ N/A

Based on these comments, would you recommend this Contractor for comparable work in the future?

Yes No

Please provide any comments regarding the Contractor's performance or the quality of its work. The Contractor can also provide any comments or clarification on the evaluation in the box below.

(Project Officer or Contractor, use additional sheets, if Necessary):

Signatures and Certifications:

1. The information contained in this evaluation form represents, to the best of my knowledge, a true and accurate analysis of the Contractor's performance record on this Contract; and,
2. The contents on the evaluation form and the ratings were not negotiated with the Contractor or its representative for any reason.

Evaluator's Signature: _____ Date: _____

Evaluator's (PjO) Printed Name _____ Evaluator's Title: _____

Contractor's signature below acknowledges receipt and the opportunity to respond:

Contractor Signature: _____ Date: _____

Contractor Printed Name: _____ Title: _____

EVALUATION RATINGS DEFINITIONS

Rating	Definition	Notes
Excellent	Performance meets contractual requirements and exceeds many to the County's benefit. The contractual performance of the element or sub-element being evaluated was accomplished with few minor problems for which corrective actions taken by the contractor were highly effective.	To justify an Exceptional rating, identify multiple significant events and state how they were of benefit to the County. A singular benefit, however, could be of such magnitude that it alone constitutes an Exceptional rating. Also, there should have been NO significant weaknesses identified.
Satisfactory	Performance meets contractual requirements. The contractual performance of the element or sub-element contains some minor problems for which corrective actions taken by the contractor appear or were satisfactory.	To justify a Satisfactory rating, there should have been only minor problems, or major problems the contractor recovered from without impact to the contract/order. There should have been NO significant weaknesses identified. A fundamental principle of assigning ratings is that contractors will not be evaluated with a rating lower than Satisfactory solely for not performing beyond the requirements of the contract/order.
Poor	Performance does not meet some contractual requirements. The contractual performance of the element or sub-element being evaluated reflects a serious problem for which the contractor has not yet identified corrective actions. The contractor's proposed actions appear only marginally effective or were not fully implemented.	To justify poor performance, identify a significant event in each category that the contractor had trouble overcoming and state how it impacted the County. A poor rating should be supported by referencing the management tool that notified the contractor of the contractual deficiency (e.g., management, quality, safety, or environmental deficiency report or letter).

Unacceptable	Performance does not meet most contractual requirements and recovery is not likely in a timely manner. The contractual performance of the element or sub-element contains a serious problem(s) for which the contractor's corrective actions appear or were ineffective.	To justify an Unsatisfactory rating, identify multiple significant events in each category that the contractor had trouble overcoming and state how it impacted the County. A singular problem, however, could be of such serious magnitude that it alone constitutes an unsatisfactory rating. An Unsatisfactory rating should be supported by referencing the management tools used to notify the contractor of the contractual deficiencies (e.g., management, quality, safety, or environmental deficiency reports, or letters).
Not Applicable (N/A)	N/A (not applicable) should be used if the ratings are not going to be applied to a particular area for evaluation.	

END

PROJECT MANUAL

3108 Columbia Pike Demolition

3108 Columbia Pike
Arlington VA, 22204



ARLINGTON COUNTY CONTRACT NUMBER: 22-DES-RFP-19b
DEWBERRY PROJECT NUMBER 50156517

ISSUED FOR BID

NOVEMBER 10, 2023

VOLUME 1 DIVISIONS 1 thru 33

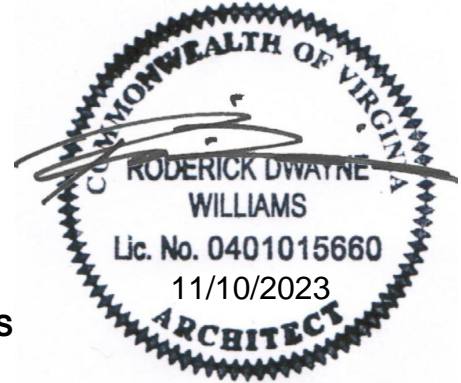
DEPARTMENT OF ENVIRONMENTAL SERVICES
DESIGN AND CONSTRUCTION DIVISION
ARLINGTON COUNTY GOVERNMENT
1400 N. UHLE ST., ARLINGTON, VA 22201



Architect of Record:
Dewberry Architects Inc.
8401 Arlington Blvd.
Fairfax, VA 22031
Phone: 703.849.0100



Civil Engineer and Landscape
Architect of Record:
Dewberry Engineers Inc.
8401 Arlington Blvd.
Fairfax, VA 22031
Phone: 703.849.0100



3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

TABLE OF CONTENTS

SECTION NUMBER AND TITLE	PAGES
DIVISION 0 – PROCUREMENT AND CONTRACTING REQUIREMENTS (NOT INCLUDED IN MANUAL)	
DIVISION 1 -GENERAL REQUIREMENTS	
010010	SUMMARY OF WORK6
012500	SUBSTITUTION PROCEDURES4
012600	CONTRACT MODIFICATION PROCEDURES.....4
012900	PAYMENT PROCEDURES.....6
013100	PRECONSTRUCTION CONFERENCE AND SUBMITTALS2
013119	PROGRESS MEETINGS AND PHOTOGRAPHS2
013216	ACTIVITIES SCHEDULE10
013300	SUBMITTAL PROCEDURES10
013523	SAFETY AND SECURITY4
013543	HAZARDOUS MATERIALS REMEDIATION2
014100	COORDINATION, FIELD ENGINEERING & REGULATORY REQUIREMENTS4
014516	CONTRACTOR QUALITY CONTROL (CQC)14
015200	TEMPORARY FACILITIES, UTILITIES, ACCESS & CONSTRUCTION AIDS4
015700	VDPPS, SWPPP & E&S CONTROLS2
015719	ENVIRONMENTAL PROTECTION4
016000	PRODUCT REQUIREMENTS8
017300	EXECUTION6
017419	CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL6
017800	PROJECT CLOSEOUT AND CLOSEOUT SUBMITTALS8
017839	AS-BUILT DOCUMENTATION4
018800	ACCESSIBILITY2
DIVISION 2 – EXISTING CONDITIONS	
024116	STRUCTURE DEMOLITION8
DIVISION 26 – ELECTRICAL	
NOT USED	
DIVISION 31 – EARTHWORK	
311000	SITE CLEARING.....4
311020	EROSION AND SEDIMENT CONTROL.....6
312000	EARTHWORK.....8
312319	DEWATERING.....2
315000	EXCAVATION SUPPORT AND PROTECTION.....6

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

DIVISION 32 – EXTERIOR IMPROVEMENTS

321216	ASPHALT PAVING.....	6
321313	CONCRETE PAVING.....	6
3217 23	PAVEMENT MARKINGS.....	2
329113	SOIL PREPARATION.....	10
329200	TURF AND GRASSES.....	6
329300	PLANTS.....	10

DIVISION 33 – UTILITIES

334200	STORMWATER CONVEYANCE.....	8
--------	----------------------------	---

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 01 0010 - SUMMARY OF WORK

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

A. Section Includes:

1. Project location.
2. Scope of Work
3. Notice to Proceed.
4. Construction Operations
5. Sequencing
6. Construction phasing and staging plan
7. Specifications, standards and construction documents
8. Items furnished to contractor
9. Permit requirements
10. Sources

B. Related Requirements:

1. Section 013516 "Alteration Project Procedures" for procedure during alteration work.
2. Section 013523 "Safety and Security" for construction site safety and security requirements.
3. Section 015200 "Temporary Facilities, Utilities, Access and Construction Aids" for limitations and procedures governing temporary use of Owner's facilities.

1.03 PROJECT LOCATION

- A. The project is located at 3108 Columbia Pike, Arlington VA 22204.

1.04 SCOPE OF WORK

- A. The project scope is to remove hazardous materials, demolish the existing building, regrade as necessary, pave and stripe the area where the building was located, and provide landscaping. The site is 0.9858 acres and is presently occupied by a three-story building with a mezzanine, approximately 15,200 sf above grade with an additional 2,400 sf basement.
- B. The scope of Work described herein is an overall summary of the responsibilities of the Contractor and his relation to the Owner. The summary is not meant to be a comprehensive, detailed or exhaustive description of the work and shall not be construed to supersede the specific requirements of the Contract Documents.
- C. Work and equipment provided by Owner: The Owner may furnish certain items of equipment to Contractor for installation under this Contract. These items shall be as indicated on the drawings and numbered for identification purposes. Contractor shall provide in the contract price a sum sufficient to cover the cost of such installation which includes roughing in, unloading, uncrating, storing, protection, assembling, setting in place and making final connections to equipment furnished by the Owner.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.05 NOTICE TO PROCEED

- A. The Notice to Proceed will be issued by Arlington County upon approval of the required preconstruction submittals and completion of the preconstruction conference. Failure to comply with the requirements of this Section and Section 013216 may be grounds for a determination by Arlington County that the Contractor is not prosecuting the work with sufficient diligence to guarantee contract completion within the time specified. Upon such determination, Arlington County may terminate the Contractor's right to proceed with the work, or any separable part thereof, in accordance with the Contract Documents.

1.06 CONSTRUCTION OPERATIONS

- A. On-Site Work Hours: Limit work to normal business working hours in accordance with Arlington County regulations as follows, unless otherwise indicated.
1. Weekday Hours: 7:00am to 9:00pm Monday through Friday.
 2. Weekend Hours: 8:00am to 5:00pm.
- B. Existing Utility Interruptions: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging for temporary utility services according to requirements indicated:
1. Notify Owner not less than two days in advance of proposed utility interruptions.
 2. Obtain Owner's written permission before proceeding with utility interruptions.
- C. Noise, Vibration, Dust, and Odors: Coordinate operations that may result in high levels of noise and vibration, dust, odors, or other disruption to Owner occupancy with Owner.
1. Notify Owner not less than two days in advance of proposed disruptive operations.
 2. Obtain Owner's written permission before proceeding with disruptive operations.
- D. Employee Identification: Provide identification tags for Contractor personnel working on Project site. Require personnel to use identification tags at all times.
- E. Employee Screening: Comply with Owner's requirements for background screening of Contractor personnel working on Project site.
- F. Maintain list of approved screened personnel with Owner's representative
- G. Rock Blasting: No blasting is allowed on the project

1.07 SEQUENCING

- A. Submit preconstruction submittals and attend a Preconstruction Conference within 30 calendar days of effective date of Owner-Contractor Agreement (See Section 013100 and 017300).
- B. Constraints on Contractor's Activities: The contractor maintains safe working conditions in and around the site. Construction traffic and parking will be restricted within the limits of disturbance as identified on the construction drawings.

1.08 CONSTRUCTION PHASING AND STAGING PLAN:

- A. The contractor shall give the utmost attention to the safety of all neighbors, including but not limited to the critical need of allowing safe pedestrian and vehicular access to all adjacent neighbors and/or all neighbors effected by the construction on site and off site throughout the course of construction. Provide appropriate access to Arlington County Police and Arlington

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

County Fire and Rescue to allow uninterrupted emergency response services to the site and the community throughout the course of construction. Provide two weeks prior notice including plan of action and scheduling of activities for owner's review and approval prior to construction disturbance.

- B. The contractor shall prepare a draft Construction Phasing and Staging Plan (CPSP) for discussion at the Preconstruction Conference. This portion of the meeting shall include representatives from Arlington County, the Arlington County Police and Arlington County Fire and Rescue and the Architect/Engineer. The CPSP shall be coordinated with all appropriate requirements including but not limited to the following Specification Sections:
1. 013216 - Activities Schedule and Progress Payments
 2. 014100 - Coordination, Field Engineering, and Regulatory Requirements
 3. 015200 - Temporary Facilities, Utilities, Access and Construction Aides
- C. After the initial discussion of the draft CPSP, the final CPSP will be developed by the Contractor incorporating feedback from the parties at the Preconstruction Conference. Owner shall review and finally approve CPSP plan.
- D. The CPSP shall also include the following:
1. The CPSP shall recognize inclusion of 6'-0" high secure chain link temporary construction fence provided by contractor to physically separate the adjacent neighbors from the construction disturbance area.
 2. The CPSP shall also recognize the importance of maintaining clear paths of travel for egress and ingress for emergency vehicles on site and off site relative to the construction work area.
 3. The CPSP shall also designate adequate parking (minimum 6 spaces) in the area adjacent to temporary trailer for Arlington County field staff and owner/users/consultants etc.
 4. The CPSP shall designate parking areas to be provided within construction site for construction workers who shall not be allowed to park in the surrounding residential community and on Church Street.
 5. The CPSP shall identify a construction route(s) through Arlington County to the project site for delivery of construction materials.
- E. Trash removal should be considered as part of the CPSP.
- F. Arlington County, site owners/users and Contractors recognize good communication and a "team attitude" is necessary by all parties to facilitate and accommodate smooth on-going construction activities throughout the project.

1.09 SPECIFICATIONS, STANDARDS AND CONTRACT DOCUMENTS

- A. The latest edition, at the time of award, of specifications or standards referenced in this specification apply as though wholly incorporated herein, unless otherwise noted. In case of differences between the referenced specifications and standards, and these specifications and accompanying drawings, these specifications and accompanying drawings shall govern. The Contractor is responsible for providing the necessary references, if needed for clarification during the course of the contract. For this project, please note that the existing conditions may differ from what is shown on the plans. The Contractor is to verify existing conditions, relative to underground utility locations.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Maintain two complete sets of the contract (including drawings and specifications) at the jobsite in the Contractor's Job Superintendent's office.

1.10 ITEMS FURNISHED TO CONTRACTOR

- A. Drawings and Specifications: One (1) set of full-size stamped permit drawings will be provided. One (1) compiled set of conformed drawings and specifications will be provided electronically. Publications incorporated into the technical provisions by reference will not be provided. Compare all contract drawings with the site and verify the dimensions and conditions at the site before laying out the work and preparing shop drawings.
- B. Any changed documents due to a contract modification will be provided to the Contractor electronically.
- C. One copy of all forms referred to herein will be provided to the Contractor for reproduction as necessary.

PART 2 - MATERIALS - NOT USED

PART 3 - EXECUTION

3.01 PERMIT REQUIREMENTS (ARLINGTON COUNTY)

- | | | |
|----|-----------------------------------|--|
| A. | Zoning Permit | Provided by Arlington County |
| B. | Demolition Permit | Provided by Arlington County |
| C. | Right-of-Way Permit: | Contractor Responsibility
Provided by Arlington County |
| D. | Building Permit: | Provided by Arlington County |
| E. | Grading Permit: | Provided by Arlington County |
| F. | Responsible Land Disturber: | Contractor Responsibility
Source: Commonwealth of Virginia State Water Control Board |
| G. | Blasting Permit: | NO BLASTING ALLOWED |
| H. | Pit Burn Permit: | NO BURNING ALLOWED |
| I. | Tank Removal Permit: | Contractor Responsibility
Source: Arlington County Fire Marshal's Division |
| J. | Tank Installation Permit: | Contractor Responsibility
Source: Arlington County Fire Marshal's Division |
| K. | Water Supply Construction Permit: | Contractor Responsibility
Source: Arlington County Department of Public Works |
| L. | Electrical Permit: | Contractor Responsibility
Source: Arlington County Department of Building & Development |
| M. | Gas Permit: | Contractor Responsibility |
| N. | Occupancy Permit: | Contractor Responsibility |

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

Source: Arlington County Department of Building & Development

- O. Business License: Contractor Responsibility
Required for all firms doing business in the County
- P. Trailer Permit: Provided by Arlington County
Contractor Responsibility
Required for all office trailers on site
- Q. Temporary Sign Permit: Provided by Arlington County
Contractor Responsibility
- R. VDOT Permit(s): Contractors Responsibility
Contractor to submit appropriate bonds to VDOT

3.02 SOURCES

- A. DES, Facilities Design and Construction
Arlington County
1400 N Uhle St. Suite 403
Arlington, VA 22201 703-216-6555
- B. Department of Planning and Zoning
Arlington County
2100 Clarendon Blvd. Suite 100
Arlington Blvd., VA 20176 (703) 703-228-3883
- C. Arlington County
Permit Arlington Center
First Floor, 2100 Clarendon Blvd.,
Arlington, VA 22201 (703)-228-3800
- D. Arlington County
Fire Marshal
1020 N. Hudson St.
Arlington, VA (703) 771-5440
- E. Virginia Department of Transportation (VDOT)
4975 Alliance Drive
Fairfax VA 22030 (800)-367-7623

END OF SECTION 010010

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 012500 - SUBSTITUTION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for substitutions.
- B. Related Requirements:
 - 1. General Conditions and Invitation for Bid Documents.
 - 2. Section 016000 "Product Requirements" for requirements for submitting comparable product submittals for products by listed manufacturers.

1.3 DEFINITIONS

- A. Substitutions: Changes in products, materials, equipment, and methods of construction from those required by the Contract Documents.
 - 1. Substitutions for Cause: Changes proposed by Contractor that are required due to changed Project conditions, such as unavailability of product, regulatory changes, or unavailability of required warranty terms.
 - 2. Substitutions for Convenience: Changes proposed by Contractor or Owner that are not required to meet other Project requirements but may offer advantage to Contractor or Owner.

1.4 ACTION SUBMITTALS

- A. Substitution Requests: Submit documentation identifying product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Substitution Request Form: Use form acceptable to Construction Manager.
 - 2. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified product or fabrication, or installation method cannot be provided, if applicable.
 - b. Coordination of information, including a list of changes or revisions needed to other parts of the Work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitutions with those of the Work specified. Include annotated copy of applicable Specification Section.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

Significant qualities may include attributes, such as performance, weight, size, durability, visual effect, sustainable design characteristics, warranties, and specific features and requirements indicated. Indicate deviations, if any, from the Work specified.

- d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. Certificates and qualification data, where applicable or requested.
 - g. List of similar installations for completed projects, with project names and addresses as well as names and addresses of architects and owners.
 - h. Material test reports from a qualified testing agency, indicating and interpreting test results for compliance with requirements indicated.
 - i. Research reports evidencing compliance with building code in effect for Project, from ICC-ES.
 - j. Detailed comparison of Contractor's construction schedule using proposed substitutions with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating date of receipt of purchase order, lack of availability, or delays in delivery.
 - k. Cost information, including a proposal of change, if any, in the Contract Sum.
 - l. Contractor's certification that proposed substitution complies with requirements in the Contract Documents, except as indicated in substitution request, is compatible with related materials and is appropriate for applications indicated.
 - m. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
3. Construction Manager Action: If necessary, Construction Manager will request additional information or documentation for evaluation within seven days of receipt of a request for substitution. Construction Manager will notify Contractor of acceptance or rejection of proposed substitution within 15 days of receipt of request, or seven days of receipt of additional information or documentation, whichever is later.
- a. Forms of Acceptance: Change Order, Request for Proposal, or Field Order for minor changes in the Work.
 - b. Use product specified if Architect does not issue a decision on use of a proposed substitution within time allocated.

1.5 QUALITY ASSURANCE

- A. Compatibility of Substitutions: Investigate and document compatibility of proposed substitution with related products and materials. Engage a qualified testing agency to perform compatibility tests recommended by manufacturers.

1.6 PROCEDURES

- A. Coordination: Revise or adjust affected work as necessary to integrate work of the approved substitutions.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.7 SUBSTITUTIONS

- A. Substitutions for Cause: Submit requests for substitution immediately on discovery of need for change, but not later than 15 days prior to time required for preparation and review of related submittals.
 - 1. Conditions: Architect will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Architect will return requests without action, except to record noncompliance with these requirements:
 - a. Requested substitution is consistent with the Contract Documents and will produce indicated results.
 - b. .
 - c. Substitution request is fully documented and properly submitted.
 - d. Requested substitution will not adversely affect Contractor's construction schedule.
 - e. Requested substitution has received necessary approvals of authorities having jurisdiction.
 - f. Requested substitution is compatible with other portions of the Work.
 - g. Requested substitution has been coordinated with other portions of the Work.
 - h. Requested substitution provides specified warranty.
 - i. If requested substitution involves more than one contractor, requested substitution has been coordinated with other portions of the Work, is uniform and consistent, is compatible with other products, and is acceptable to all contractors involved.
- B. Substitutions for Convenience: Not allowed unless otherwise indicated.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012500

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 012600 - CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract modifications.
- B. Related Requirements:
 - 1. Section 012500 "Substitution Procedures" for administrative procedures for handling requests for substitutions made after the Contract award.

1.3 MINOR CHANGES IN THE WORK

- A. Architect will issue through Construction Manager supplemental instructions authorizing minor changes in the Work, not involving adjustment to the Contract Sum or the Contract Time, on web-based Project management software.

1.4 PROPOSAL REQUESTS

- A. Owner-Initiated Proposal Requests: Construction Manager will issue a detailed description of proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 1. Work Change Proposal Requests issued by Construction Manager are not instructions either to stop work in progress or to execute the proposed change.
 - 2. Within time specified in Proposal Request or 20 days, when not otherwise specified, after receipt of Proposal Request, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - b. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - c. Include costs of labor and supervision directly attributable to the change.
 - d. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.

- e. Quotation Form: Use form provided as part of web-based Project management software.
- B. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to the Construction Manager.
- 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.
 - 2. Include a list of quantities of products required or eliminated and unit costs, with total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
 - 3. Indicate applicable taxes, delivery charges, equipment rental, and amounts of trade discounts.
 - 4. Include costs of labor and supervision directly attributable to the change.
 - 5. Include an updated Contractor's construction schedule that indicates the effect of the change, including, but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - 6. Comply with requirements in Section 012500 "Substitution Procedures" if the proposed change requires substitution of one product or system for product or system specified.
 - 7. Proposal Request Form: Use form provided as part of web-based Project management software.

1.5 CHANGE ORDER PROCEDURES

- A. On Owner's approval of a Work Change Proposal Request, Construction Manager will issue a Change Order for signatures of Owner and Contractor on form provided as part of web-based Project management software.

1.6 CONSTRUCTION CHANGE DIRECTIVE

- A. Construction Change Directive: Construction Manager may issue a Construction Change Directive on form provided as part of web-based Project management software. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Construction Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Construction Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.7 WORK CHANGE DIRECTIVE

- A. Work Change Directive: Construction Manager may issue a Work Change Directive on form provided as part of web-based Project management software. Work Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. Work Change Directive contains a complete description of change in the Work. It also designates method to be followed to determine change in the Contract Sum or the Contract Time.
- B. Documentation: Maintain detailed records on a time and material basis of work required by the Work Change Directive.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012600

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 012900 - PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements necessary to prepare and process Applications for Payment.
- B. Related Requirements:
 - 1. Section 012600 "Contract Modification Procedures" for administrative procedures for handling changes to the Contract.
 - 2. Section 013216 "Activities Schedule" for administrative requirements governing the preparation and submittal of the Contractor's construction schedule.

1.3 DEFINITIONS

- A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the schedule of values with preparation of Contractor's construction schedule.
 - 1. Coordinate line items in the schedule of values with items required to be indicated as separate activities in Contractor's construction schedule.
 - 2. Submit the schedule of values to Architect through Construction Manager at earliest possible date, but no later than seven days before the date scheduled for submittal of initial Applications for Payment.
 - 3. Subschedules for Phased Work: Where the Work is separated into phases requiring separately phased payments, provide subschedules showing values coordinated with each phase of payment.
 - 4. Subschedules for Separate Elements of Work: Where the Contractor's construction schedule defines separate elements of the Work, provide subschedules showing values coordinated with each element.
 - 5. Subschedules for Separate Design Contracts: Where the Owner has retained design professionals under separate contracts who will each provide certification of payment requests, provide subschedules showing values coordinated with the scope of each design services contract, as described in Section 011000 "Summary."

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

- B. Format and Content: Use Project Manual table of contents as a guide to establish line items for the schedule of values. Provide at least one line item for each Specification Section.
1. Identification: Include the following Project identification on the schedule of values:
 - a. Project name and location.
 - b. Owner's name.
 - c. Owner's Project number.
 - d. Name of Architect.
 - e. Architect's Project number.
 - f. Contractor's name and address.
 - g. Date of submittal.
 2. Arrange schedule of values consistent with format of AIA Document G703.
 3. Arrange the schedule of values in tabular form, with separate columns to indicate the following for each item listed:
 - a. Related Specification Section or division.
 - b. Description of the Work.
 - c. Name of subcontractor.
 - d. Name of manufacturer or fabricator.
 - e. Name of supplier.
 - f. Change Orders (numbers) that affect value.
 - g. Dollar value of the following, as a percentage of the Contract Sum to nearest one-hundredth percent, adjusted to total 100 percent. Round dollar amounts to whole dollars, with total equal to Contract Sum.
 - 1) Labor.
 - 2) Materials.
 - 3) Equipment.
 - 4) Shop Drawings and Submittals
 - 5) LEED Submittals
 4. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Provide multiple line items for principal subcontract amounts in excess of five percent of the Contract Sum.
 5. Provide a separate line item in the schedule of values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored off-site.
 6. Allowances: Provide a separate line item in the schedule of values for each allowance. Show line-item value of unit-cost allowances, as a product of the unit cost, multiplied by measured quantity. Use information indicated in the Contract Documents to determine quantities.
 7. Purchase Contracts: Provide a separate line item in the schedule of values for each Purchase contract. Show line-item value of Purchase contract. Indicate Owner payments or deposits, if any, and balance to be paid by Contractor.
 8. Overhead Costs, Separate Line Items: Show cost of temporary facilities and other major cost items that are not direct cost of actual work-in-place as separate line items.
 9. Temporary Facilities: Show cost of temporary facilities and other major cost items that are not direct cost of actual work-in-place as separate line items.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

10. Closeout Costs. Include separate line items under Contractor and principal subcontracts for Project closeout requirements in an amount totaling five percent of the Contract Sum and subcontract amount.
11. Schedule of Values Revisions: Revise the schedule of values when Change Orders or Construction Change Directives result in a change in the Contract Sum. Include at least one separate line item for each Change Order and Construction Change Directive.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment following the initial Application for Payment shall be consistent with previous applications and payments, as certified by Architect and Construction Manager and paid for by Owner.
- B. Payment Application Times: Submit Application for Payment to Architect by the last day of the month. The period covered by each Application for Payment is one month, ending on the last day of the month.
 1. Submit draft copy of Application for Payment five days prior to due date for review by Architect.
- C. Application for Payment Forms: Use AIA Document G702 and AIA Document G703 as form for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Architect and Construction Manager will return incomplete applications without action.
 1. Entries shall match data on the schedule of values and Contractor's construction schedule. Use updated schedules if revisions were made.
 2. Include amounts for work completed following previous Application for Payment, whether or not payment has been received. Include only amounts for work completed at time of Application for Payment.
 3. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 4. Indicate separate amounts for work being carried out under Owner-requested project acceleration.
- E. Stored Materials: Include in Application for Payment amounts applied for materials or equipment purchased or fabricated and stored, but not yet installed. Differentiate between items stored on-site and items stored off-site.
 1. Provide certificate of insurance, evidence of transfer of title to Owner, and consent of surety to payment for stored materials.
 2. Provide supporting documentation that verifies amount requested, such as paid invoices and photographs. Match amount requested with amounts indicated on documentation; do not include overhead and profit on stored materials.
 3. Provide summary documentation for stored materials indicating the following:
 - a. Value of materials previously stored and remaining stored as of date of previous Applications for Payment.
 - b. Value of previously stored materials put in place after date of previous Application for Payment and on or before date of current Application for Payment.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- c. Value of materials stored since date of previous Application for Payment and remaining stored as of date of current Application for Payment.
- F. Transmittal: Submit one signed and notarized original copies of each Application for Payment to Construction Manager by a method ensuring receipt. One copy shall include waivers of lien and similar attachments if required.
 1. Transmit each copy with a transmittal form listing attachments and recording appropriate information about application.
- G. Waivers of Mechanic's Lien: With each Application for Payment, submit waivers of mechanic's lien from entities lawfully entitled to file a mechanic's lien arising out of the Contract and related to the Work covered by the payment.
 1. Submit partial waivers on each item for amount requested in previous application, after deduction for retainage, on each item.
 2. When an application shows completion of an item, submit conditional final or full waivers.
 3. Owner reserves the right to designate which entities involved in the Work must submit waivers.
 4. Submit final Application for Payment with or preceded by conditional final waivers from every entity involved with performance of the Work covered by the application who is lawfully entitled to a lien.
 5. Waiver Forms: Submit executed waivers of lien on forms acceptable to Owner.
- H. Initial Application for Payment: Administrative actions and submittals that must precede or coincide with submittal of first Application for Payment include the following:
 1. List of subcontractors.
 2. Schedule of values.
 3. Contractor's construction schedule (preliminary if not final).
 4. Combined Contractor's construction schedule (preliminary if not final) incorporating Work of multiple contracts, with indication of acceptance of schedule by each Contractor.
 5. Products list (preliminary if not final).
 6. Sustainable design action plans, including preliminary project materials cost data.
 7. Schedule of unit prices.
 8. Submittal schedule (preliminary if not final).
 9. List of Contractor's staff assignments.
 10. List of Contractor's principal consultants.
 11. Copies of building permits.
 12. Copies of authorizations and licenses from authorities having jurisdiction for performance of the Work.
 13. Initial progress report.
 14. Report of preconstruction conference.
 15. Certificates of insurance and insurance policies.
 16. Performance and payment bonds.
 17. Data needed to acquire Owner's insurance.
- I. Application for Payment at Substantial Completion: After Architect issues the Certificate of Substantial Completion, submit an Application for Payment showing 100 percent completion for portion of the Work claimed as substantially complete.
 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- a. Complete administrative actions, submittals, and Work preceding this application, as described in Section 017800 "Project Closeout and Closeout Submittals."
 2. This application shall reflect Certificate(s) of Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: After completing Project closeout requirements, submit final Application for Payment with releases and supporting documentation not previously submitted and accepted, including, but not limited, to the following:
1. Evidence of completion of Project closeout requirements.
 2. Certification of completion of final punch list items.
 3. Insurance certificates for products and completed operations where required and proof that taxes, fees, and similar obligations were paid.
 4. Updated final statement, accounting for final changes to the Contract Sum.
 5. AIA Document G706.
 6. AIA Document G706A.
 7. AIA Document G707.
 8. Evidence that claims have been settled.
 9. Final meter readings for utilities, a measured record of stored fuel, and similar data as of date of Substantial Completion or when Owner took possession of and assumed responsibility for corresponding elements of the Work.
 10. Final liquidated damages settlement statement.
 11. Proof that taxes, fees, and similar obligations are paid.
 12. Waivers and releases.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 012900

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 013100 - PRECONSTRUCTION CONFERENCE AND PRECONSTRUCTION SUBMITTALS

PART 1 - GENERAL

1.01 PRECONSTRUCTION CONFERENCE

- A. The Contractor, and major subcontractors as deemed necessary by the Contractor or Arlington County, shall attend a Preconstruction Conference (Precon) within 30 days of the effective date of the Owner – Contractor Agreement and prior to the issuance of Notice to Proceed.
- B. At the Precon, the Contractor, the Owner and the other attendees will discuss contract administration matters, the proposed Activities Schedule (013216), the List of Technical Submittals (013300), the timing and approval of submittals and any technical questions or recommendations. All attendees will receive drafted minutes of the Precon for review and agreement.

1.02 PRECONSTRUCTION SUBMITTALS

- A. The Precon will not be held, nor will Arlington County issue the Notice to Proceed, accept requests for partial payments or allow for on-site mobilization until the Precon submittals have been received and accepted. Thirty (30) calendar days have been allowed for completion of the Preconstruction Conference. All Precon submittals must be received a minimum of seven calendar days prior to the Precon meeting and shall be sent to Arlington County Construction Manager and the A/E.
- B. Early submission of the submittals is required, for our common goal is a "reasonable" submittal package that can be approved (or approved subject to corrections) at the Precon. If the submittals are poorly prepared, incomplete or inaccurate, they may be returned to the Contractor, and the Precon and the Notice to Proceed (NTP) may be delayed. The contract completion time may be reduced by the number of days that the NTP is delayed due to poorly prepared, incomplete or inaccurate Precon submittals.
- C. Precon Submittal List: Provide all preconstruction submittals to Arlington County's Construction Manager and the A/E no later than seven days before the Precon. Submit electronically an original letter of transmittal and copies of the following submittal enclosures to Arlington County's Construction Manager and the A/E via email:
 - 1. Detailed Schedule of Values
 - 2. Activities Schedule (See Section 013216).
 - 3. An environmental protection plan (See Section 015719).
 - 4. Project organization diagram for Contractor's project management personnel, outlining areas of responsibility for Contractor's management personnel, and showing the Contractor's organization and the flow of information between the Contractor and Arlington County. Indicate who is responsible for submittal review and Field Quality Assurance. Provide after-hours point of contact. Include the names and after-hours phone number of the Contractor's project manager and superintendent. Update this information by re-submitting this diagram whenever key personnel change.
 - 5. Resumes of the Project Manager, Superintendent, and Quality Control Manager. Resumes must demonstrate ten (10) years' of closely related experience in similar sizes and types of projects as the Project contained herein. Resumes should include the following as a minimum:
 - A. Biographical sketch, education, and construction related certifications and licenses related to the type of work they will be performing. The Quality Control Manager must

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

have at the time of submission a U.S Army Corps of Engineers certification for Construction Quality Control Management for Contractors or equivalent. The Superintendent must have at the time of submission an OSHA 30-hour certification.

- B. Project list that includes a description of the project, role related to the project, completion date of the project and final construction cost of the project to demonstrate ten (10) years of closely related experience in similar sizes and types of projects to the plans and specification contained herein.
- 6. Qualifications of Quality Control Firms/Individuals (see Section 014516).
- 7. Complete register (list) of technical submittals as required by the contract documents including identification of those critical technical submittals with long lead time requiring early submittal (See Section 013300). The register shall be provided by the Contractor in the Excel template format required and provided to the Contractor by Arlington County.
- 8. Any technical questions or recommendations which may require a change in the specifications or drawings shall be presented, in writing.
- 9. Copy of Responsible Land Disturber Certificate
- 10. Contractors Safety Plan
- 11. List of planned Pre-Installation Conference(s)
- 12. Update - Demolition Plan
- 13. Construction Phasing and Staging Plan (CPSP) to identify location of jobsite trailer, storage, site access, etc. (See Section 010010)
- 14. Insurance Certificate (See General Conditions)
- 15. Performance Bond (See IFB)
- 16. Payment Bond (See IFB)

1.03 NOTICE TO PROCEED

- A. The Notice to Proceed will be issued by Arlington County upon approval of the required Precon submittals and completion of the Preconstruction Conference. Failure to comply with the requirements of this Section and Section 013216 may be grounds for a determination by Arlington County that the Contractor is not prosecuting the work with sufficient diligence to guarantee contract completion within the time specified. Upon such determination, Arlington County may terminate the Contractor's right to proceed with the work, or any separable part thereof, in accordance with the Contract Documents.

PART 2 - MATERIALS - NOT USED

PART 3 - EXECUTION - NOT USED

END OF SECTION 013100

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 013119 - PROGRESS MEETINGS AND PHOTOGRAPHS

PART 1 - GENERAL

1.01 PRECONSTRUCTION CONFERENCE (Refer to Section 013100)

1.02 PROGRESS MEETINGS

- A. Progress meetings shall be held at the jobsite every two weeks, and additionally as requested by Arlington County or Contractor. Arlington County shall schedule the meeting dates. The second meeting each month shall be coordinated with preparation of the payment request.
- B. Attendees: At a minimum regular attendee are the Owner, Construction Manager, A/E and General Contractor.
- C. Administration: The Architect/Engineer shall prepare the agenda and distribute written notice and agenda of each meeting to all attendees two days in advance of the meeting date. The Architect or Arlington County Construction Manager will preside at these meetings.
- D. The minimum agenda shall include the following items of discussion:
 - 1. Review, correct and approve minutes of the previous progress meeting.
 - 2. Review Contractor's Activities Schedule: Review progress since the last meeting and review Contractor's proposed minimum 2-Week Look-Ahead schedule. Determine where each activity is in relation to the Contractor's Activities Schedule, whether on time or ahead or behind schedule. Discuss whether schedule revisions are required to ensure activities will be completed within the Contract Time.
 - 3. Identify other items of significance that could affect progress such as open RFI's, RFP's, CO's, submittal log etc.
 - 4. Discuss other topics appropriate to the current status of the project.
 - a. Verify Status of Record Drawings.
 - b. Daily Work Hours
 - c. Utilities Status
 - d. Deficiency Logs Review
 - 5. Review the present and future needs of each entity present, including such items as:
 - a. Sequences.
 - b. Deliveries.
 - c. Site utilization.
 - d. Temporary facilities and services.
 - e. Hours of Work.
 - f. Hazards and risks.
 - g. Housekeeping.
 - h. Quality and Work standards.
 - i. Change Orders.
 - j. Documentation of information for payment requests.
- E. The AE shall record minutes of the meeting and shall distribute copies to all attendees. Meeting minutes will be recorded and distributed electronically.
- F. Revise the Activities Schedule after each progress meeting where revisions to the schedule have been made. Issue the revised schedule concurrently at the last meeting of each month. See Section 013216 for additional requirements for the Activities Schedule.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.03 PREINSTALLATION CONFERENCES

- A. Contractor shall conduct a pre-installation conference at the site before each construction activity that requires coordination with other construction. The installer and representatives of manufacturers and fabricators involved in or affected by the installation, and its coordination or integration with other materials and installations that have preceded or will follow, shall attend the meeting. Advise Arlington County Construction Manager and AE of scheduled meeting dates. Arlington County and AE shall be included as optional attendees for these meetings.
- B. Review the progress of other construction activities and preparations for the particular activity under consideration at each pre-installation conference, including requirements for:
 - 1. Contract Documents.
 - 2. Related Change Orders.
 - 3. Purchases.
 - 4. Deliveries.
 - 5. Shop Drawings, Product Data and quality control Samples.
 - 6. Possible conflicts.
 - 7. Time schedules.
 - 8. Weather limitations.
 - 9. Manufacturer's recommendations.
 - 10. Compatibility of materials.
 - 11. Acceptability of substrates.
 - 12. Temporary facilities.
 - 13. Space and access limitations.
 - 14. Governing regulations.
 - 15. Safety.
 - 16. Inspection and testing requirements.
 - 17. Required performance results.
 - 18. Recording requirements.
 - 19. Protection.
- C. The Contractor shall record significant discussions and agreements and disagreements of each conference, along with the approved schedule. Distribute the record of the meeting to everyone concerned including Arlington County Construction Manager and the AE.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 PROGRESS AND FINAL PHOTOGRAPHS

- A. Progress and final photographs shall be furnished electronically by the Contractor. Identify all photographs with project name, contractor's name, location and date taken. Locations for photos shall be approved by Arlington County Construction Manager.
- B. Progress photographs shall be taken each week until the project is completed. Photographs shall best illustrate the work accomplished during the previous month.

END OF SECTION 013119

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

SECTION 013216 - ACTIVITIES SCHEDULE

PART 1 GENERAL

1.01 REFERENCE:

1.02 SUBMITTALS (See General Conditions)

- A The Contractor shall within twenty (20) days after the effective date of the Owner- Contactor Agreement, prepare and submit to the A/E and Owner for review, a reasonably practicable and feasible Construction Schedule showing the method by which the Contractor will comply with the Contract Milestone and Completion date requirements as set forth in the Owner-Contractor Agreement.
- B The schedule must be updated by the Contractor monthly with each progress payment application and submitted to the Owner and A/E for review with the progress payment application. Owner shall not be required to process and review the Contractor's Application for Payment if Contractor has failed or refused to provide the scheduling update information required herein.
- C If an extension or contraction of any Milestone or Completion Date is authorized by any Change Order, the Contractor shall revise his Construction Schedule, Milestone and Completion Dates accordingly.
- D If, in the opinion of the Owner, the Construction Schedule does not accurately reflect the actual progress and sequence of the Contractor's performance of the Work, the Contractor shall revise the Construction Schedule, upon the Owner's request, and submit a revised Construction Schedule that accurately represents the progress and sequence of the Contractor's performance of the Work.

1.03 SCHEDULE PREPARER

- A Designate an authorized representative to be responsible for the preparation of the schedule and all required updating (activity status) and preparation of reports. The authorized representative shall be experienced in schedule, have previously developed, created and maintained at least two (2) electronic schedules for project similar in nature and complexity to this project and shall be experienced in the use of the scheduling software that meets the requirements of this specification.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 GENERAL REQUIREMENTS

- A Prepare a Project Schedule, as specified herein, pursuant to the Contract terms and conditions. Show in the schedule the sequence in which the Contractor proposes to perform the work and dates on which the Contractor contemplates starting and completing all schedule activities. The schedule of the entire project, including the design (as applicable) and construction sequences, is required. The scheduling of design (as applicable) and construction sequences is the responsibility of the Contractor. Contractor management personnel shall actively participate in its development. Designers (as applicable), Subcontractors and Suppliers working on the project shall also contribute in developing and maintaining an accurate Project Schedule. Provide a schedule that is a forward planning as well as a project monitoring tool.
- B PROJECT SCHEDULE: Use the Project Schedule to measure the progress of the work and to aid in evaluating time extensions. Make the schedule activity coded. An acceptable schedule update must be submitted concurrently with each progress payment. If the Contractor fails to submit any schedule

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

within the time prescribed, Arlington County shall not be required to process and review Contractor's application for payment.

- C SCHEDULE STATUS REPORT: Provide a Schedule Status Report on at least a monthly basis. If, in the opinion of Arlington County's Construction Manager, the Contractor falls behind the approved schedule, take steps necessary to improve its progress including those that may be required by Arlington County's Construction Manager, without additional cost to Arlington County. In this circumstance, Arlington County's Construction Manager may require the Contractor to increase the number of shifts, overtime operations, days of work, and/or the amount of construction plant, and to submit for approval any supplementary schedule or schedules as Arlington County's Construction Manager deems necessary to demonstrate how the acceptable rate of progress will be regained.
- D DEFAULT TERMS: Failure of the Contractor to comply with the requirements of Arlington County's Construction Manager shall be grounds for a determination, by Arlington County's Construction Manager, that the Contractor is not prosecuting the work with sufficient diligence to ensure completion within the time specified in the contract. Upon making this determination, the Contracting Officer may terminate the Contractor's right to proceed with the work, or any separable part of it, in accordance with the terms and conditions of the contract.

3.02 PROJECT SCHEDULE DETAILED REQUIREMENTS

- A The computer software system utilized to produce and update the Project Schedule shall be capable of meeting all requirements of this specification. Arlington County has the use of Microsoft Project and Primavera P6 computer software systems and recommends the Contractor utilize one of these products in the development and management of the Project Schedule. Should the Contractor choose to utilize a computer software system not listed herein, then the Contractor will be required to provide a software license to Arlington County for the purposes of reviewing the Contractor's Project Schedule through the life the Project.
- B CRITICAL PATH METHOD: Use the Critical Path Method (CPM) of network calculation to generate the Project Schedule. Prepare the Project Schedule using the Precedence Diagram Method (PDM).
- C LEVEL OF DETAIL REQUIRED: Develop the Project Schedule to an appropriate level of detail. Failure to develop the Project Schedule to an appropriate level of detail, as determined by Arlington County's Construction Manager, will result in its disapproval. Arlington County's Construction Manager will consider, but is not limited to, the following characteristics and requirements to determine the appropriate level of detail
- D ACTIVITY DURATIONS: Reasonable activity durations are those that allow the progress of ongoing activities to be accurately determined between update periods. Less than two (2) percent of all non-procurement activities shall have Original Durations (OD) greater than 20 work days or 30 calendar days. Procurement activities are defined herein.
- E DESIGN AND PERMIT ACTIVITIES: Where applicable, include design and permit activities with the necessary conferences and follow-up actions and design submission dates. Include the design schedule in the project schedule, showing the sequence of events involved in carrying out the project design tasks within the specific contract period. This shall be at a detailed level of scheduling sufficient to identify all major design tasks, including those that control the flow of work. The schedule shall include review and correction periods associated with each item.
- F PROCUREMENT ACTIVITIES: The schedule must include activities associated with the submittal, approval, procurement, fabrication and delivery of long lead materials, equipment, fabricated assemblies and supplies. Long lead procurement activities are those with an anticipated procurement sequence of over ninety (90) calendar days. A typical procurement sequence includes the string of activities: submit, approve, procure, fabricate, and deliver.
- G MANDATORY TASKS: The following tasks must be included and properly scheduled:

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

1. Notice to Proceed (NTP) Milestone
2. Submission, review and acceptance of design packages (as applicable).
3. Submission and approval of Operations & Maintenance (O&M) Manuals.
4. Submission and approval of as-built drawings and specifications.
5. Other systems testing, if required.
6. Systems Trainings.
7. Issuance of a Certificate of Occupancy (prior to Substantial Completion).
8. Contractor's pre-final inspection.
9. Correction of punchlist from Contractor's pre-final inspection.
10. Arlington County's pre-final inspection. All activities except "Correction of punchlist from Arlington County's pre-final inspection," "Substantial Completion Milestone," "Final Inspection," and "Final Completion Milestone" shall be statuses one-hundred percent (100%) before Arlington County's pre-final inspection occurs.
11. Correction of punchlist from Arlington County's pre-final inspection.
12. Substantial Completion Milestone.
13. Final Inspection
14. Final Completion Milestone

H ARLINGTON COUNTY ACTIVITIES: Show Arlington County and other government agency activities that could impact progress. These activities include, but are not limited to: approvals, design reviews (as applicable), environmental permit approvals by State regulators, inspections, utility tie-in, FF&E and Notice to Proceed (NTP) for phasing requirements.

I ACTIVITY RESPONSIBILITY CODING (RESP): Assign responsibility Code for all activities to the Prime Contractor, Subcontractor or Government agency responsible for performing the activity. Activities coded with a Government Responsibility code include but are not limited to: Arlington County approvals, Arlington County design reviews (as applicable), environmental permit approvals by State regulators, Arlington County furnished FF&E and Notice to Proceed (NTP) for phasing requirements. Code all activities not coded with a Government Responsibility Code to the Prime Contractor or Subcontractor responsible to perform the work. Activities shall not have more than one Responsibility Code. Examples of acceptable activity code values are: DOR (for the designer of record); ELEC (for the electrical subcontractor); MECH (for the mechanical subcontractor); and CONTY (for Arlington County). Unacceptable code values are abbreviations of the names of subcontractors.

J ACTIVITY WORK AREA CODING: Assign Work Area code to activities based upon the work area in which the activity occurs. Define work areas based on resource constraints or space constraints that would preclude a resource, such as a particular trade or craft work crew, from working in more than one work area at a time due to restraints on resources or space. Examples of Work Area Coding include different areas within a floor of a building, different floors within a building, and different buildings within a complex of buildings. Activities shall not have more than one Work Area Code. Not all activities are required to be Work Area Coded. A lack of a Work Area coding will indicate the activity is not resource or space constrained.

K CONTRACT CHANGES/REQUESTS FOR EQUITABLE ADJUSTMENT CODING: Assign Activity code to any activity or sequence of activities added to the schedule as a result of a Contract Modification, when approved by Arlington County's Construction Manager, with a Contract Change

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

Order. Key all Code values to Arlington County's PCO Number. Any activity or sequence of activities added to the schedule as a result of alleged constructive changes made by Arlington County may be added to a copy of the current schedule, subject to the approval of Arlington County's Construction Manager. Assign Activity Codes for these activities with a PCO Number. Key the code values to the Contractor's numbering system.

Approval to add these activities does not necessarily mean Arlington County accepts responsibility and, therefore, liability for such activities and any associated impacts to the schedule, but rather Arlington County recognizes such activities are appropriately added to the schedule for the purposes of maintaining a realistic and meaningful schedule. Such activities shall not be Responsibility Coded to Arlington County unless approved. An activity shall not have more than one PCO Number assigned to it.

- L PHASE OF WORK CODING (PHAS): Assign Phase of Work Code to all activities based upon the phase of work in which the activity occurs. Code activities to either a Design Phase (as applicable) or a Construction Phase. If the contract specifies construction phasing with separately defined performance periods, identify a Construction Phase Code to allow filtering and organizing the schedule accordingly. Each activity shall be identified with a single phase and have only one Phase of Work code.
- M SCHEDULED PROJECT COMPLETION AND ACTIVITY CALENDARS: The Schedule interval shall extend from NTP date to the required contract completion date. The contract completion activity (End Project) shall finish based on the required contract duration in the accepted contract proposal, as adjusted for any approved contract time extension. The first scheduled work period shall be the day after NTP is received by the Contractor. Schedule activities on a calendar to which the activity logically belongs. Activities may be assigned to a seven (7) day calendar when the contract assigns calendar day durations for the activity such as a Arlington County Acceptance activity. If the Contractor intends to perform physical work less than seven days per week, schedule the associated activities on a calendar with non-work periods identified including weekends and holidays. Original durations must account for anticipated normal adverse weather. Arlington County will interpret all work periods not identified as non-work periods on each calendar as meaning the Contractor intends to perform work during those periods.
1. PROJECT START DATE: The schedule shall start no earlier than the date on which the NTP was acknowledged. Include as the first activity in the project schedule an activity called "Start Project" (or NTP). The "Start Project" activity shall have an Early Start "ES" constraint date equal to the date that the NTP was acknowledged, and a zero day duration.
 2. SCHEDULE CONSTRAINTS AND OPEN LOGIC: Constrain completion dates in the schedule by the contract completion dates. Schedule calculations shall result in negative float when the calculated early finish date of the last activity is later than the contractual completion dates. Include as the last activity in the project schedule an activity called "End Project" or "Final Completion." The "End Project" or "Final Completion" activity shall have a Late Finish "LF" constraint date equal to the contract completion date for the project, and with a zero day duration or by using the "project must finish by" date in the scheduling software. The schedule shall have no constrained dates other than those specified in the contract. The use of artificial float constraints such as "zero free float" or "zero total float" are typically prohibited. There shall only be two (2) open ended activities: Start Project (or NTP) with no predecessor logic and End Project (of Final Completion) with no successor logic.
 3. EARLY PROJECT COMPLETION: In the event the Initial Project schedule calculates an early completion date of the last activity prior to the contract completion date, identify

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

those activities that it intends to accelerate and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. The last activity shall have a late finish constraint equal to the contract completion date and the schedule will calculate positive float. Arlington County will not accept an early completion schedule with zero float on the longest path. Arlington County is under no obligation to accelerate activities for which it is responsible to support a proposed early contract completion.

- N INTERIM COMPLETION DATES:** Constrain contractually specified interim completion dates to show negative float when the calculated early finish date of the last activity in that phase is later than the specified interim completion date.
- 1. START PHASE:** Include as the first activity for a project phase an activity called "Start Phase X" where "X" refers to the phase of work. The "Start Phase X" activity shall have an "ES" constraint equal to the date on which the NTP was acknowledged, and a zero day duration.
 - 2. END PHASE:** Include as the last activity for a project phase an activity called "End Phase X" where "X" refers to the phase of work. The "End Phase X" activity shall have an "LF" constraint date equal to the specified completion date for that phase and a zero day duration.
 - 3. PHASE "X" HAMMOCK:** Include a hammock type activity for each project phase called "Phase X" where "X" refers to the phase of work. The "Phase X" hammock activity shall be logically tied to the earliest and latest activities in the phase.
- O DEFAULT PROGRESS DATA DISALLOWED:** Do not automatically update Actual Start and Finish dates with default mechanisms that may be included in the scheduling software. Activity Actual Start (AS) and Actual Finish (AF) dates assigned during the updating process shall match those dates provided from the Contractor's Daily Construction Reports. Failure of the Contractor to document the AS and AF dates on the Contractor's Daily Construction Reports for every in-progress or completed activity, and failure to ensure that the data contained on the Contractor's Daily Construction Report is the sole basis for schedule updating shall result in the disapproval of the Contractor's updated schedule and the inability of Arlington County's Construction Manager to evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Disable program features which calculate one of these parameters from the other.
- P OUT-OF-SEQUENCE PROGRESS:** Activities that have progressed before all preceding logic has been satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case basis subject to the approval by Arlington County's Construction Manager. Proposed logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule. Correct out of sequence progress that continues for more than two (2) update cycles by logic revision, as approved by Arlington County's Construction Manager.
- Q NEGATIVE LAGS AND START TO FINISH RELATIONSHIPS:** Lag durations contained in the project schedule shall not have a negative value. Do not use Start to Finish (SF) relationships.
- R CALCULATION MODE:** Schedule Calculations shall retain the logic between predecessor and successors even when the successor activity starts and the predecessor activity has not finished. Software features that in effect sever the tie between predecessor and successor activities when the successor has started and the predecessor logic is not satisfied ("progress override") will not be allowed.

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

S MILESTONES: The schedule must include milestone activities for each significant project event including, but not limited to: milestone activities for each design package released for construction (when applicable); design complete (when applicable); foundations/substructure construction complete; superstructure construction complete; building dry-in or enclosure complete to allow the initiation of finish activities; permanent power completion; and building systems commissioning complete.

3.03 PROJECT SCHEDULE SUBMISSIONS: Provide the submissions described below:

A INITIAL PROJECT SCHEDULE SUBMISSIONS: Submit the Initial Project Schedule (Baseline Schedule), defining the Contractor's planned operations through Project Completion within twenty (20) calendar days of NTP acknowledgement. It must be early start and late finish constrained and logically tied as previously specified. The schedule shall demonstrate a reasonable and realistic sequence of activities which represent all work through the entire contract performance period. The Initial Schedule shall be at a reasonable level of detail as determined by Arlington County's Construction Manager.

B PERIODIC SCHEDULE UPDATES: Submit periodic schedule updates monthly. The data date for each periodic schedule update shall be the last day of the current month or the first day of the following month. These submissions will enable Arlington County's Construction Manager to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgment of Arlington County's Construction Manager or authorized representative is necessary for verifying the Contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment will be made.

C SUBMISSION REQUIREMENTS: All schedule submissions shall be done through digital media. Submit the following items for the Initial Schedule and every Periodic Schedule Update throughout the life of the project:

1. DATA CD'S: Provide one (1) set of data CD's containing the project schedule in the native file format. Each CD shall also contain all previous schedules (in native file format) and a digital copy of the Narrative Report. File medium shall be CD. Label each CD indicating the type of schedule (Initial or Update), full contract number, Data Date and file name. Each schedule shall have a unique file name as determined by the Contractor.
2. NARRATIVE REPORT: Provide a Narrative Report with the Initial Project Schedule and each Periodic Update of the Project Schedule, as the basis of the progress payment request. The Narrative Report shall include: a description of activities along the two (2) most critical paths where the total float is less than or equal to ten (10) work days, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The Narrative Report is expected to communicate to Arlington County, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis. Identify and explain why any activities that, based their calculated late dates, should have either started or finished during the update period, but did not.
3. APPROVED CHANGES VERIFICATION: Include only those project schedule changes in the schedule submission that have been previously approved by the Contracting Offices. The Narrative Report shall specifically reference, on an activity-by- activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes.
4. SCHEDULE REPORTS: Typical reports shall contain: Activity Numbers, Activity Descriptions, Original Duration, Remaining Duration, Early Start Date, Early Finish Date,

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

Late Start Date, Late Finish Date, Total Float, Actual Start Date, Actual Finish Date, and Percent Complete. The following lists typical reports that will be requested. One or all of these reports may be requested for each schedule submission:

- a. **ACTIVITY REPORT:** A list of all activities sorted according to activity number.
 - b. **LOGIC REPORT:** A list of detailed predecessor and successor activities for every activity in ascending order by activity number.
 - c. **TOTAL FLOAT REPORT:** A list of all incomplete activities sorted in ascending order of total float. List activities which have the same amount of total float in ascending order of Early Start Dates. Do not show completed activities on this report.
5. **GANTT CHART:** The gantt chart is required for the Preliminary, Initial and Periodic Updates. The gantt chart shall depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. Arlington County's Construction Manager will use, but is not limited to, the following conditions to review compliance with this paragraph:
- a. **CONTINUOUS FLOW:** Diagrams shall show a continuous flow from left to right with no arrows from right to left. Show the activity number, description, duration, total float, and percentage complete on the diagram.
 - b. **PROJECT MILESTONE DATES:** Show dates on the diagram for start of project, and contract required interim completion dates, and contract completion dates.
 - c. **CRITICAL PATH:** Clearly show the critical path.
 - d. **BANDING:** Organize activities as directed to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility.

3.04 PROJECT SCHEDULE UPDATE MEETINGS:

- A** Conduct periodic schedule update meetings for the purposes of reviewing the Contractor's proposed out of sequence corrections, determining cause for delay, correcting logic, maintaining schedule accuracy and determining earned value. Meetings shall occur at least monthly within five (5) days of the proposed schedule data date and after the Contractor has updated the schedule with Arlington County concurrence respecting actual start dates, actual finish dates, remaining durations and percent complete for each activity it intends to status. Provide a computer with the scheduling software loaded and a projector during the meeting which allows all meeting participants to view the proposed schedule update during the meeting. The meeting and resultant schedule update shall be a condition precedent to a formal submission of the update as described in SUBMISSION REQUIREMENTS and to the submission of an invoice for payment. The meeting will be a working interactive exchange which will allow Arlington County and the Contractor the opportunity to review the updated schedule on a real time and interactive basis. The Contractor's authorized scheduling representative will organize, sort, filter and schedule the update as requested by Arlington County. The meeting will last no longer than four (4) hours. A rough draft of the proposed activity logic corrections and narrative report shall be provided to Arlington County forty-eight (48) hours in advance of the meeting. The Contractor's Project Manager and Authorized Scheduler shall attend the meeting with the Authorized Representative of Arlington County.
- B** **UPDATE SUBMISSION FOLLOWING PROGRESS MEETING:** Submit a complete update of the project schedule containing all approved progress, revisions and adjustments, pursuant to paragraph SUBMISSION REQUIREMENTS not later than four (4) working days after the periodic schedule update meeting, reflecting only those changes made during the previous update meeting.

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

C STATUS OF ACTIVITIES: Update information, including Actual Start Dates (AS), Actual Finish Dates (AF), Remaining Durations (RD), and Percent Complete shall be subject to the approval of Arlington County prior to the meeting. As a minimum, address the following items on an activity- by-activity basis during each progress meeting.

1. START AND FINISH DATES: Accurately show the status of the AS and/or AF dates for each activity currently in-progress or completed since the last update. Arlington County may allow an AF date to be assigned with the percent complete less than 100 percent to account for the value of work remaining, but not restraining successor activities. Only assign AS dates when actual progress occurs on an activity.
2. REMAINING DURATION: Update the estimated RD for all incomplete activities independent of Percent Complete. Remaining Durations may exceed the activity OD or may exceed the activity's prior update RD if Arlington County considers the current OD or RD to be understated based on current progress, insufficient work crews actually manning the job, unrealistic OD or deficiencies that must be corrected that restrain successor activities.
3. PERCENT COMPLETE: Update the percent complete for each activity started, based on the realistic assessment of earned value. Activities which are complete but for remaining minor punch list work and which do not restrain the initiation of successor activities may be declared 100 percent complete.
4. LOGIC CHANGES: Specifically identify and discuss all logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, Contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, and other changes that have been made pursuant to contract provisions. Arlington County will only allow logic revisions for the purpose of keeping the schedule valid in terms of its usefulness in calculating a realistic completion date, correcting erroneous logic ties, and accurately sequencing the work.
5. OTHER CHANGES: Other changes required due to delays in completion of any activity or group of activities include:
 - a. Delays beyond the Contractor's control (force majeure delays), such as strikes and unusual weather.
 - b. Delays encountered due to submittals, Government Activities, deliveries or work stoppages which make re-planning the work necessary.
 - c. Changes required to correct a schedule that does not represent the actual or planned prosecution and progress of the work.

3.05 REQUESTS FOR TIME EXTENSION

A In the event the Contractor believes it is entitled to an extension of the contract performance period, completion date, or any interim milestone date, furnish the following for a determination by Arlington County's Construction Manager: justification, project schedule data, and supporting evidence as Arlington County's Construction Manager may deem necessary. Submission of proof of excusable delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is a condition precedent to any approvals by Arlington County. In response to each Request for Proposal issued by Arlington County, submit a schedule impact analysis demonstrating whether or not the change contemplated by Arlington County impacts the critical path.

B JUSTIFICATION OF DELAY: The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request. Arlington County's

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

Construction Manager's determination as to the number of allowable days of contract extension shall be based upon the project schedule updates in effect for the time period in question, and other factual information. Actual delays that are found to be caused by the Contractor's own action, which result in a calculated schedule delay, will not be cause for an extension to the performance period, completion date, or any interim milestone dates.

- C **SUBMISSION REQUIREMENTS:** Submit a justification for each request for a change in the contract completion date based upon the most recent schedule update at the time of the NTP or constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:
1. A list of affected activities, with their associated project schedule activity number.
 2. A brief explanation of the causes of the change.
 3. An analysis of the overall impact of the changes proposed.
 4. A sub- network of the affected areas.

Identify activities impacted in each justification for change by a unique activity code contained in the required data field.

- D **ADDITIONAL SUBMISSION REQUIREMENTS:** Arlington County's Construction Manager may request an interim update with revised activities for any requested time extension. Provide this information within four (4) days of the Construction Manger's request.
- E **DIRECTED CHANGES:** If the NTP is issued for changes prior to settlement of price and/or time, submit proposed schedule revisions to Arlington County's Construction Manager within two (2) weeks of the NTP being issued. Arlington County's Construction Manager will approve proposed revisions to the schedule prior to inclusion of those changes within the Project Schedule. If the contractor fails to submit the proposed revisions, Arlington County's Construction Manager may furnish the Contractor with suggested revisions to the project schedule. Include these revisions in the project schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to the revisions furnished by Arlington County's Construction Manager, advise Arlington County's Construction Manager within two (2) weeks of receipt of the revisions. Regardless of the objections, continue to update the schedule Arlington County's Construction Manager's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions with two (2) weeks of receipt of Arlington County's Construction Manager's proposed revisions, the Contractor will be deemed to have concurred with Arlington County's Construction Manager's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.
- F **OWNERSHIP OF FLOAT:** Float available in the schedule, at any time, shall not be considered for the exclusive use of either Arlington County or the Contractor.

END OF SECTION 013216

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 013300 - SUBMITTAL PROCEDURES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Submittal schedule requirements.
- 2. Administrative and procedural requirements for submittals.

B. Related Requirements:

- 1. Section 013216 "Activities Schedule" for submitting schedules and reports, including Contractor's construction schedule.
- 2. Section 013119 "Progress Meetings and Photographs" for submitting preconstruction photographs, periodic construction photographs, and Final Completion construction photographs.
- 3. Section 014516 "Contractor Quality Control" for submitting test and inspection reports, and schedule of tests and inspections.
- 4. Section 017800 "Close-Out and Warranty Performance" for submitting closeout submittals and maintenance material submittals.
- 5. Section 017823 "Operation Maintenance and Warranty Manuals" for submitting operation and maintenance manuals.
- 6. Section 017839 "As-Built Documentation" for submitting record Drawings, record Specifications, and record Product Data.
- 7. Section 017900 "Equipment Demonstration and Instruction" for submitting video recordings of demonstration of equipment and training of Owner's personnel.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information and physical samples that require Architect's and Construction Manager's responsive action. Action submittals are those submittals indicated in individual Specification Sections as "action submittals."
- B. Informational Submittals: Written and graphic information and physical samples that do not require Architect's and Construction Manager's responsive action. Submittals may be rejected for not complying with requirements. Informational submittals are those submittals indicated in individual Specification Sections as "informational submittals."

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.4 SUBMITTAL SCHEDULE

- A. Submittal Schedule: Submit, as an action submittal, a list of submittals, arranged in chronological order by dates required by construction schedule. Include time required for review, ordering, manufacturing, fabrication, and delivery when establishing dates. Include additional time required for making corrections or revisions to submittals noted by Architect and Construction Manager and additional time for handling and reviewing submittals required by those corrections.
1. Coordinate submittal schedule with list of subcontracts, the schedule of values, and Contractor's construction schedule.
 2. Initial Submittal Schedule: Submit concurrently with startup construction schedule. Include submittals required during the first 60 days of construction. List those submittals required to maintain orderly progress of the Work and those required early because of long lead time for manufacture or fabrication.
 3. Final Submittal Schedule: Submit concurrently with the first complete submittal of Contractor's construction schedule.
 - a. Submit revised submittal schedule as required to reflect changes in current status and timing for submittals.
 4. Format: Arrange the following information in a tabular format:
 - a. Scheduled date for first submittal.
 - b. Specification Section number and title.
 - c. Submittal Category: Action; informational.
 - d. Name of subcontractor.
 - e. Description of the Work covered.
 - f. Scheduled date for Architect's and Construction Manager's final release or approval.
 - g. Scheduled dates for purchasing.
 - h. Scheduled date of fabrication.
 - i. Scheduled dates for installation.
 - j. Activity or event number.

1.5 SUBMITTAL FORMATS

- A. Submittal Information: Include the following information in each submittal:
1. Project name.
 2. Date.
 3. Name of Architect.
 4. Name of Construction Manager.
 5. Name of Contractor.
 6. Name of firm or entity that prepared submittal.
 7. Names of subcontractor, manufacturer, and supplier.
 8. Unique submittal number, including revision identifier. Include Specification Section number with sequential alphanumeric identifier and alphanumeric suffix for resubmittals.
 9. Category and type of submittal.
 10. Submittal purpose and description.
 11. Number and title of Specification Section, with paragraph number and generic name for each of multiple items.
 12. Drawing number and detail references, as appropriate.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

13. Indication of full or partial submittal.
14. Location(s) where product is to be installed, as appropriate.
15. Other necessary identification.
16. Remarks.
17. Signature of transmitter.

- B. Options: Identify options requiring selection by Architect/Engineer.
- C. Deviations and Additional Information: On each submittal, clearly indicate deviations from requirements in the Contract Documents, including minor variations and limitations; include relevant additional information and revisions, other than those requested by Architect and Construction Manager on previous submittals. Indicate by highlighting on each submittal or noting on attached separate sheet.
- D. Electronic Submittals: Prepare submittals as PDF package, incorporating complete information into each PDF file. Name PDF file with submittal number.
- E. Submittals Utilizing Web-Based Project Software: Prepare submittals as PDF files or other format indicated by Project management software.

1.6 SUBMITTAL PROCEDURES

- A. Prepare and submit submittals required by individual Specification Sections. Types of submittals are indicated in individual Specification Sections.
 1. Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project management software website. Enter required data in web-based software site to fully identify submittal.
 - a. The contractor will be required to utilize construction management software. All construction documentation produced throughout the duration of the construction will be documented in the web based software.
 - b. Software: TBD
 - c. The General Contractor will not be required to purchase any license or pay any fees related to the web based software.
 - d. Arlington County will establish the project platform levels of access to the data.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 2. Submit all submittal items required for each Specification Section concurrently unless partial submittals for portions of the Work are indicated on approved submittal schedule.
 3. Submit action submittals and informational submittals required by the same Specification Section as separate packages under separate transmittals.
 4. Coordinate transmittal of submittals for related parts of the Work specified in different Sections, so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Architect and Construction Manager reserve the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- C. Processing Time: Allow time for submittal review, including time for resubmittals, as follows. Time for review shall commence on Architect's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
1. Initial Review: Allow 14 days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Architect will advise Contractor when a submittal being processed must be delayed for coordination.
 2. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 3. Resubmittal Review: Allow 14 days for review of each resubmittal.
 4. Sequential Review: Where sequential review of submittals by Architect's consultants, Owner, or other parties is indicated, allow 14 days for initial review of each submittal.
 5. Concurrent Consultant Review: Where the Contract Documents indicate that submittals may be transmitted simultaneously to Architect and to Architect's consultants, allow 14 days for review of each submittal. Submittal will be returned to Architect before being returned to Contractor.
 - a. Submit one copy of submittal to concurrent reviewer in addition to specified number of copies to Architect.
- D. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
1. Note date and content of previous submittal.
 2. Note date and content of revision in label or title block, and clearly indicate extent of revision.
 3. Resubmit submittals until they are marked with approval notation from Architect's action stamp.
- E. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers, authorities having jurisdiction, and others as necessary for performance of construction activities. Show distribution on transmittal forms.
- F. Use for Construction: Retain complete copies of submittals on Project site. Use only final action submittals that are marked with approval notation from Architect's action stamp.

1.7 SUBMITTAL REQUIREMENTS

- A. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
1. If information must be specially prepared for submittal because standard published data are unsuitable for use, submit as Shop Drawings, not as Product Data.
 2. Mark each copy of each submittal to show which products and options are applicable.
 3. Include the following information, as applicable:
 - a. Manufacturer's catalog cuts.
 - b. Manufacturer's product specifications.
 - c. Standard color charts.
 - d. Statement of compliance with specified referenced standards.
 - e. Testing by recognized testing agency.
 - f. Application of testing agency labels and seals.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- g. Notation of coordination requirements.
 - h. Availability and delivery time information.
 4. For equipment, include the following in addition to the above, as applicable:
 - a. Wiring diagrams that show factory-installed wiring.
 - b. Printed performance curves.
 - c. Operational range diagrams.
 - d. Clearances required to other construction, if not indicated on accompanying Shop Drawings.
 5. Submit Product Data before Shop Drawings, and before or concurrently with Samples.
- B. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data unless submittal based on Architect's digital data drawing files is otherwise permitted.
 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Identification of products.
 - b. Schedules.
 - c. Compliance with specified standards.
 - d. Notation of coordination requirements.
 - e. Notation of dimensions established by field measurement.
 - f. Relationship and attachment to adjoining construction clearly indicated.
 - g. Seal and signature of professional engineer if specified.
 2. Shop Drawing Sheet Size: Except for templates, patterns, and similar full-size Drawings, submit Shop Drawings on sheets at least 8-1/2 by 11 inches (215 by 280 mm), but no larger than 30 by 42 inches (750 by 1067 mm).
 3. BIM Incorporation: Develop and incorporate Shop Drawing files into BIM established for Project.
 - a. Architect will furnish the contractor the BIM model for use in preparing Shop Drawings and Project Record Drawings.
 - b. Digital Drawing Software Program: Autodesk Revit Version 2019.
 - c. Contractor shall execute a Dewberry Standard BIM Transfer Agreement.
 - d. Contractor is responsible for exporting files to AutoCAD as needed.
- C. Samples: Submit Samples for review of type, color, pattern, and texture for a check of these characteristics with other materials.
 1. Transmit Samples that contain multiple, related components, such as accessories together in one submittal package.
 2. Identification: Permanently attach label on unexposed side of Samples that includes the following:
 - a. Project name and submittal number.
 - b. Generic description of Sample.
 - c. Product name and name of manufacturer.
 - d. Sample source.
 - e. Number and title of applicable Specification Section.
 - f. Specification paragraph number and generic name of each item.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3. Web-Based Project Management Software: Prepare submittals in PDF form, and upload to web-based Project software website. Enter required data in web-based software site to fully identify submittal.
 4. Disposition: Maintain sets of approved Samples at Project site, available for quality-control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
 - a. Samples that may be incorporated into the Work are indicated in individual Specification Sections. Such Samples must be in an undamaged condition at time of use.
 - b. Samples not incorporated into the Work, or otherwise designated as Owner's property, are the property of Contractor.
 5. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units, showing the full range of colors, textures, and patterns available.
 - a. Number of Samples: Submit **one** full set(s) of available choices where color, pattern, texture, or similar characteristics are required to be selected from manufacturer's product line. Architect will return submittal with options selected.
 6. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture, and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three sets of Samples. Architect will retain one Sample sets; remainder will be returned. Mark up and retain one returned Sample set as a project record Sample.
 - 1) Submit a single Sample where assembly details, workmanship, fabrication techniques, connections, operation, and other similar characteristics are to be demonstrated.
 - 2) If variation in color, pattern, texture, or other characteristic is inherent in material or product represented by a Sample, submit at least **three** sets of paired units that show approximate limits of variations.
- D. Product Schedule: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location. Include the following information in tabular form:
1. Type of product. Include unique identifier for each product indicated in the Contract Documents or assigned by Contractor if none is indicated.
 2. Manufacturer and product name, and model number if applicable.
 3. Number and name of room or space.
 4. Location within room or space.
- E. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, contact information of architects and owners, and other information specified.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- F. Design Data: Prepare and submit written and graphic information indicating compliance with indicated performance and design criteria in individual Specification Sections. Include list of assumptions and summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Number each page of submittal.
- G. Certificates:
1. Certificates and Certifications Submittals: Submit a statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity. Provide a notarized signature where indicated.
 2. Installer Certificates: Submit written statements on manufacturer's letterhead, certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
 3. Manufacturer Certificates: Submit written statements on manufacturer's letterhead, certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
 4. Material Certificates: Submit written statements on manufacturer's letterhead, certifying that material complies with requirements in the Contract Documents.
 5. Product Certificates: Submit written statements on manufacturer's letterhead, certifying that product complies with requirements in the Contract Documents.
 6. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of AWS B2.1/B2.1M on AWS forms. Include names of firms and personnel certified.
- H. Test and Research Reports:
1. Compatibility Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for substrate preparation and primers required.
 2. Field Test Reports: Submit written reports indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
 3. Material Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
 4. Preconstruction Test Reports: Submit reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
 5. Product Test Reports: Submit written reports indicating that current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
 6. Research Reports: Submit written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project. Include the following information:
 - a. Name of evaluation organization.
 - b. Date of evaluation.
 - c. Time period when report is in effect.
 - d. Product and manufacturers' names.
 - e. Description of product.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- f. Test procedures and results.
- g. Limitations of use.

1.8 DELEGATED-DESIGN SERVICES

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are insufficient to perform services or certification required, submit a written request for additional information to Architect.
- B. Delegated-Design Services Certification: In addition to Shop Drawings, Product Data, and other required submittals, submit digitally signed PDF file of certificate, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.
- C. BIM Incorporation: Incorporate delegated-design drawing and data files into BIM established for Project.
 - 1. Prepare delegated-design drawings in the following format: Same digital data software program, version, and operating system as original Drawings.
 - a. Architect will furnish the contractor the BIM model for use in preparing Shop Drawings and Project Record Drawings.
 - b. Digital Drawing Software Program: Autodesk Revit Version 2018.
 - c. Contractor shall execute a Dewberry Standard BIM Transfer Agreement.
 - d. Contractor is responsible for exporting files to AutoCAD as needed.

1.9 CONTRACTOR'S REVIEW

- A. Action Submittals and Informational Submittals: Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting to Architect and Construction Manager.
- B. Contractor's Approval: Indicate Contractor's approval for each submittal with a uniform approval stamp indication in web-based Project management software. Include name of reviewer, date of Contractor's approval, and statement certifying that submittal has been reviewed, checked, and approved for compliance with the Contract Documents.
 - 1. Architect will not review submittals received from Contractor that do not have Contractor's review and approval.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.10 ARCHITECT'S REVIEW

- A. Action Submittals: Architect will review each submittal, indicate corrections or revisions required and return.
 - 1. PDF Submittals: Architect will indicate, via an action stamp on each submittal, the appropriate actions as follows:
 - a. "Approved"
 - b. "Approved as Noted"
 - c. "Return No Action Taken"
 - d. "Rejected"
 - e. "Revise and Resubmit"
- B. Informational Submittals: Architect will review each submittal and will return it as "For Information Only" or will return it if it does not comply with requirements. Architect and Construction Manager will forward each submittal to appropriate party.
- C. Partial submittals prepared for a portion of the Work will be reviewed when use of partial submittals has received prior approval from Architect.
- D. Incomplete submittals are unacceptable, will be considered nonresponsive, and will be returned for resubmittal without review.
- E. Architect will return without review submittals received from sources other than Contractor.
- F. Submittals not required by the Contract Documents will be returned by Architect without action.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

END OF SECTION 013300

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 013523 - SAFETY AND SECURITY

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Furnish all labor, materials, tools, equipment and services for effective project safety and security operations to meet all regulatory requirements in accordance with applicable codes and contract provisions.
- B. The Contractor is to furnish and install any supplementary or miscellaneous items, appurtenances, and devices incidental to or necessary for a safe and secure project operation. The types of security and protection provisions required include, but are not limited to worker PPE, fire protection, barricades, warning signs/lights, site enclosure fence, sidewalk bridges, building enclosure/lockup, 24/7 site access control, environmental protection, and similar provisions intended to minimize property losses, personal injuries and claims for damages at the project site. No part of such provision(s) shall become the subject of a claim for extension of time or for excess costs or damages by the Contractor.
- C. The Contractor is required to submit a project/site specific safety and security plan to the Owner for review/approval no later than the earlier of thirty (30) calendar days after Notice to Proceed or mobilization to site.

1.2 CONSTRUCTION SAFETY

- A. It shall be a condition of each construction contract that no contractor, subcontractor, or supplier 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 dangerous to his/her safety, as determined under construction safety standards promulgated by the U.S. Department of Labor or the Virginia Department of Labor and Industry.
- B. No Contractor awarded a 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 set forth in the Contract Section, Information for Bidders.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 SAFETY STANDARDS

- A. The Contractor shall comply with Federal, State, and local safety and fire codes and regulations and the applicable provisions of the following:
 - 1. Occupational Safety and Health Standards issued by the Secretary of Labor pursuant to the Williams-Steiger Occupational Safety and Health Act of 1970 and as amended.
 - 2. Virginia Occupational Safety and Health Standards for the construction industry.
 - 3. NFPA 70 E – Standards for Electric Safety at Workplace as referenced in OSHA 29 CFR 1926, sub-part K for safety measures, PPE protection from arc flash from electric equipment.
- B. Where requirements conflict, the most stringent requirement shall apply.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.2 ACCIDENT REPORTS

- A. The Contractor shall maintain an accurate record of, and shall immediately report orally to the Owner, any accidents resulting in death, traumatic injury, occupational disease, or damage of property, materials, supplies, and equipment incident to Work performed under this Contract. The Contractor shall provide a written preliminary accident report to the Owner within 24 hours of occurrence and a complete written report within 7 calendar days for any accident or reportable or recordable injury.

3.3 HARD HATS, SAFETY SHOES, AND EMPLOYEE IDENTIFICATION

- A. Hard hats shall be required at the construction site from start to completion of Work. Each Contractor, employee, and visitor at the construction site shall be required to wear a hard hat. The Contractor shall provide hard hats for visitors as necessary and shall enforce the wearing of hard hats by Contractor employees and visitors. Individuals found not wearing hard hats will not be permitted to remain on site. The Contractor shall be responsible for advising all individuals who will be working on the site of this requirement. All Contractor and Subcontractor employees are required to provide employee and company identification on their hard hats or shall carry a separate ID card.
- B. The Contractor shall require all of his employees to wear OSHA approved safety shoes and all required PPE on the site at all times.

3.4 HOUSEKEEPING

- A. The Contractor shall, at all times, keep the site and surrounding property clean and free of unnecessary and hazardous debris. Any damage to surrounding property shall be repaired upon notification by the Owner at no expense to the Owner.
- B. The Contractor shall provide all items required to ensure safety of individuals and property on site.

3.5 ALLAYING DUST, REMOVAL OF CONSTRUCTION DEBRIS, SILTATION CONTROL, AND OTHER HOUSEKEEPING

- A. The Contractor will take whatever steps are necessary to ensure that dust, mud and any other construction debris is not tracked onto the surrounding roadways to the satisfaction of and at no additional cost to the Owner.
- B. Stormwater Siltation Control Maintenance: Contractor shall maintain all storm water inlets previously installed by others protecting same with silt trap devices in accordance with the overall site plan details. Contractor to maintain and replace silted inlet protection measures at storm water inlets in paved areas used by the Contractor for staging and construction operations. Maintain inlet protection devices as required in response to runoff events and in response to site inspections. Contractor shall maintain the integrity of all silt fencing at all times whether installed or installed by others in the areas of their construction operations.
- C. The Contractor shall, at all times, keep the site and surrounding property clean and free of unnecessary and hazardous debris. Any damage to surrounding property shall be repaired upon notification by the Owner at no expense to the Owner.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- D. The Contractor shall provide all items required to ensure safety of individuals and property on site.

3.6 COMMUNITY IMPACT

The Contractor shall schedule operations with a minimum of disruption to affected or neighboring properties during construction.

- A. Consideration shall be given to adjacent and nearby property access; driveway maintenance including mud-tracking, dust & noise control; staff parking, pedestrian traffic, and overall public safety to the maximum extent possible. Dynamic signage, messaging to community, Maintenance of Traffic (MOT) (to be submitted to Owner's approval prior to execution) as well as designated safety officers from the Contractor will be required and will be provided at no cost to the Owner to maintain public safety.
- B. The Contractor shall abide by Arlington County and other applicable noise ordinances, rules, laws and regulations in effect at the job site during the entire project duration. In the case where overlapping constraints exist, the most stringent case shall apply.
- C. Staff employed by the Contractor shall recognize that they are working inside the boundaries of an active residential and commercial community and shall behave accordingly.

3.7 FIRE PROTECTION

- A. The Contractor is responsible for compliance with OSHA requirements and local fire codes and regulations as enforced by the governing Fire Marshall or his designated representative. Attention should be called, but not limited to, the following:
 - 1. Proper storage and removal of volatile waste
 - 2. Proper storage of bottled gasses
 - 3. On-site storage of fuels
 - 4. Establishment of smoking areas
 - 5. Placement of temporary portable fire extinguishers
 - 6. Employee training
 - 7. Emergency Access
- B. Adequate precautions against fire shall be taken throughout all operations. Flammable material shall be kept at an absolute minimum and shall be properly handled and stored. Fires or open salamanders shall not be permitted in any part of the Work
- C. Construction practices, including cutting and welding and protection during construction, shall be in accordance with the published standards of the National Fire Protection Association.
- D. Store gasoline and other flammable liquids in Underwriters Laboratories-listed safety containers in conformance with the National Board of Fire Underwriters recommendations. Storage, however, shall not be within a building.
- E. Make arrangements for periodic inspection of all construction areas by local fire protection authorities and insurance underwriters. Cooperate with these authorities and promptly carry out their recommendations.

3.8 HAZARDOUS MATERIALS

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- A. Hazard Communication Programs: Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the site in accordance with Laws or Regulations.

3.10 POLLUTION CONTROL

- A. The Contractor is responsible for compliance with governing anti-pollution laws and ordinances relative to on-going construction, clean-up, and disposal operations. On-site incineration or burial of items is not allowed.

3.11 SECURITY

- A. The Contractor is responsible for overall security of the construction site. This includes but is not necessarily limited to:
1. Preservation of all property adjacent to the work, the removal or destruction of which is not part of the work of the project. The Contractor shall be responsible, at no additional cost, for all damage or injury to property of any character during the prosecution of the work and he shall restore such property to a condition at least similar and equal to that existing before such damage or injury was done by repairing, rebuilding, or restoring, as may be directed.
 2. Establishing and maintaining perimeter fencing and access gate(s).
 3. Positive site access control including effective use and maintenance of a Visitor Log.
 4. Securing of work in progress and materials stored on site from damage by weather, theft, or vandalism.
 5. Coordination with local police authorities when high value construction material/equipment is expected to be stored on site.

END OF SECTION 013523

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 013543 - HAZARDOUS MATERIALS REMEDIATION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Hazardous materials remediation contractor responsibilities.
 - 2. Pre-Demolition Limited Regulated Hazardous Materials Survey Report for 3108 Columbia Pike, Arlington, VA 22206, is incorporated into these Contract Documents as Appendix A.
- B. Related Requirements:
 - 1. Section 011000 "Summary of Work" for use of the premises and phasing requirements.
 - 2. Section 028213 "Asbestos Abatement Design Plan" for asbestos abatement requirements.
 - 3. Section 028300 "Other Hazardous Materials Remediation" for other hazardous materials.

1.1 RESPONSIBILITIES

- A. The Contractor is responsible for all actions necessary for the safe and effective removal of any/all Hazardous Materials found on the site and as depicted in the Hazardous Materials Report. The Scope of Work shall include providing all labor, material, equipment, administration, and incidentals for performing abatement and monitoring work as required to meet current Federal, State and Local laws, codes and regulations. In the case of conflict in direction from authorities having jurisdiction, the most stringent case shall apply. Personnel performing such action(s) shall be properly trained, insured and licensed in the Commonwealth of Virginia. The Owner, at his sole discretion, may monitor and/or verify any/all activities related to the abatement and monitoring activities performed by the Contractor. Such action by the Owner shall not be construed as replacing the Contractor's responsibility to perform all required removal, abatement and/or monitoring activities for this Project.
- B. Hazardous Materials Awareness Training mandated by authorities having jurisdiction, standard industry work practices and/or per the Contractor's administrative policies including those of sub-contractors shall be scheduled, conducted, and completed at no additional expense to the Owner prior to crew members performing Work on or near hazardous materials.

PART 2 – PRODUCTS (NOT USED)

PART 3 – EXECUTION

3.1 HAZARDOUS MATERIAL REPORTS

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

- A. Hazardous materials identification and remediation activities are the responsibility of the Contractor as described in paragraph 1.2-A above and in accordance with findings shown in Section 028213 "Asbestos Abatement Design Plan", Section 02 and Appendix A and B.
- B. Appendix A: Pre-Demolition Limited Regulated Hazardous Materials Survey Report for 3108 Columbia Pike, Arlington, VA 22206.

END OF SECTION 013543

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 014100 – COORDINATION, FIELD ENGINEERING AND REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.01 SCHEDULES

- A. Responsibility for timely installation of all materials rests solely with the Contractor, who shall maintain coordination at all times. Coordination includes but is not limited to the following: installation of services by Dominion Energy (Electric), Arlington County Department of Public Works (Water & Sewer), Washington Gas, Cox, and Verizon. The responsibility for scheduling all activities including obtaining required permits and sequencing work as required by Arlington County Building & Development, inspectors or other Authorities Having Jurisdiction rests solely with the Contractor. The Contractor shall include such activities, their duration and the required sequencing in the Construction schedule.

1.02 FIELD DIMENSIONS

- A. The drawings accompanying these specifications indicate generally the design and arrangements of all equipment, apparatus, fixtures, accessories, etc., to complete the installation of all systems. The exact location or arrangement of equipment, unless otherwise dimensioned, is subject to minor changes necessitated by field conditions and shall be made as required without additional cost to Arlington County. Measurements shall be verified by actual observation at construction site and the Contractor shall be responsible for all of the work fitting into place in a satisfactory and workmanlike manner to the approval of Arlington County and Architect/Engineer.

1.03 CLEAN-UP DURING CONSTRUCTION

- A. During the construction period, the Contractor shall:
1. Clean up all waste materials, rubbish, and debris resulting from his operations weekly or at such frequencies as required by Arlington County.
 2. Place waste materials, rubbish, and debris from ground floor operations outside of building in a designated location.
 3. Place waste materials, rubbish, and debris from above ground floor operations in chute.
 4. Oversee cleaning and ensure that building and grounds are maintained free from accumulations of debris.
 5. Sprinkle dusty debris with water.
 6. At reasonable intervals, clean-up site and dispose of debris off site.
 7. Be responsible for procuring permits for hauling and dumping rubbish, waste materials and debris from site to area approved by local authorities.
 8. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from interior and exterior surfaces of fixtures, hardware and equipment.
 9. Repair, patch, and touch-up marred surfaces to match adjacent finishes.
 10. Comply with additional requirements defined in specifications.

1.04 DELIVERY AND STORAGE

- A. Storage of materials and equipment in conjunction with this contract is the responsibility of the Contractor. Stored materials and equipment shall be stored on the site where directed by

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

Arlington County's Representative. The Contractor is responsible for security of the site and for protection from the environment. Provide fencing or other security measures. Do not damage pavement or other improvements. Restore to original condition upon completion of work

- B. Materials damaged or defective as determined by Arlington County Project Manager, shall be replaced or repaired at no additional cost to Arlington County.
- C. Hazardous material brought to the site by the Contractor shall be accompanied by a Material Safety Data Sheet, Form OSHA-20 or DD Form 1813, pursuant to Federal Standard No. 313A (or latest revision thereof)
- D. The Contractor is responsible for receipt and transportation. All shipments to the project shall be addressed to the Contractor and not Arlington County.

1.05 INTERRUPTION OF EXISTING UTILITIES AND SERVICES

- A. The Contractor shall perform the work with a minimum of outage time for all utilities. Interruption shall be at approved sections of the utilities. In some cases, the Contractor may be required to perform the work while the existing utility is in service. The exiting utility services may be interrupted only when approved by Arlington County and utility company involved. The Contractor shall notify Arlington County Project Manager in writing at least seven calendar days in advance of the time desired for the existing service to be interrupted.
- B. The amount of time requested by the Contractor for interruption of existing utility service shall be as approved by Arlington County.

1.06 LAYOUT

- A. Dimensions and elevations indicated in layout of existing conditions shall be verified by the Contractor. Discrepancies between drawings, specifications and existing conditions shall be referred to the Architect/Engineer for adjustment before work affected is performed. Failure to make such notification shall place responsibility upon the Contractor.

1.07 CONTROLS

- A. The Contractor shall establish and preserve all control points and benchmarks, including the property corners.

1.08 STAKES AND GRADES

- A. The Contractor shall employ a certified civil engineer or land surveyor to stake out all of the construction. Rough grade stakes shall be set in sufficient number so that the site can be accurately graded to meet the intent of the drawings. Stakes for final grading shall be set for all sanitary, water main and storm sewers and all pavements, curbs and gutters.
- B. The Contractor shall perform the following:
 - 1. Provide datum benchmark for the use of all work.
 - 2. Lay out all site work.
 - 3. Lay out all building corners.
 - 4. Lay out building excavation.
 - 5. Lay out interior partitions on concrete slabs.
 - a. As soon as possible after completion of floor slabs, and prior to any partitions being done, lay out the entire full-scale floor plan for each floor area.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- b. Layout shall be made by snapping distinct and readable caulk lines or by painting lines, indicating the accurate thicknesses of walls and partitions, locations of swings of doors and similar physical features.
- c. After floor layouts have been made, Contractor and/or appropriate subcontractor shall be responsible for field checking room dimensions, wall thicknesses, dimensions of built-in equipment, and similar items of critical nature.

1.09 CODE COMPLIANCE

- A. The Contractor shall comply with all applicable Arlington County, Commonwealth of Virginia and Federal regulations, ordinances and laws. All violations shall be corrected within 24 hours from notice of violation.
- B. The Contractor is responsible for ensuring that necessary inspections are made, regarding Arlington County ordinances. It is the Contractor's responsibility to ensure that inspections are requested in a timely manner, and that the inspections are made and approvals granted.

PART 2 - MATERIALS - NOT USED

PART 3 - EXECUTION – NOT USED

END OF SECTION 014100

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 014516 – CONTRACTOR QUALITY CONTROL (CQC)

PART 1 - GENERAL

- 1.1 RELATED DOCUMENTS: Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.
- 1.2 Quality Control (QC) is the responsibility of the Contractor. The primary function of contractor quality control (CQC) is to ensure that the completed project meets all quality requirements of the contract.
- 1.4 Quality Assurance (QA) is the responsibility of the Owner. Quality assurance (QA) is the process by which the Owner assures that the Contractor's QC program is working effectively and that the end product complies with the quality established by the contract.
- 1.5 Construction Quality Management (CQM) is the performance of tasks, which ensure that construction is performed according to plans and specifications, on time, within Budget, easily maintained, and in a safe work environment. The purpose of CQM is the Owner's efforts; separate from, but in coordination and cooperation with the Contractor, to assure that the quality set by the plans and specifications for the overall Project is achieved.
- 1.6 References: American Society for testing and materials (ASTM), articles A-880; C-1077; D-3666; D-3740; E-329; E-543.
- 1.7 Payment: Separate payment will not be made for providing and maintaining an effective Quality Control Program and all costs associated shall be included in the contractor's bid.

PART 2 - SUBMITTALS

- 2.1 Submit the following in accordance with Section 013100 "Preconstruction Conference and Submittals".
 - A. Quality Control (QC) Plan. Submit a QC plan within 10 calendar days after receipt of Notice to proceed.
 - B. Components of the QC Plan:
 1. Provide, for approval, a QC plan submitted with pages numbered sequentially that covers both on-site and off-site work and includes the following: (Note: QC plans submitted in any other manner than provided in this section will be rejected).
 - Contractor's QC Organization
 - Names and qualifications
 - Duties, responsibility and authority of QC personnel.
 - Outside organizations
 - Appointment letters
 - Submittal procedures and sample register
 - Testing Laboratory Information
 - Testing Plan and log
 - Procedures for performing the three phases of control using a quality control checklist
 - Procedures to complete rework items
 - Documentation procedures

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- List of definable features of work
 - Personnel Matrix
 - Material Inspection form
 - Inspections Report form
 - Daily report form
 - RFI form
2. A chart showing the QC organizational structure.
 3. Names and qualifications, in resume format for each person in the QC organization.
 4. Duties, responsibilities and authorities of each person in the QC organization.
 5. A listing of outside organizations that will be providing services for the project under your direction, i.e. Consultants, materials, testing, design, equipment rentals, and a description of the services these firms will provide.
 6. Letters signed by an officer of the firm appointing the QC manager and alternate QC manager, stating that they are responsible for implementing and managing the QC program as described in the contract.
 7. Procedures for reviewing, approving and managing submittals. Provide the names of individuals responsible for submittal reviews. Provide the initial submittal of the submittal register to be used on the project.
 8. Testing and laboratory information required by the paragraphs entitled "Testing Requirements" and in Divisions 21, 22, 23, 26, and 27 as applicable.
 9. A testing plan and log that includes the tests required, referenced by the specification paragraph requiring it, the frequency and the person responsible for each test.
 10. Procedures to identify, record, track and complete re-work items.
 11. A quality control checklist. For each definable feature of work (DFOW), develop a list of quality control activities broken down by preparatory, initial and follow-up phases. Each list shall include a breakdown of quality checks that will be used when performing the quality control functions, inspections and test required by the contract documents. The quality control checklist should be developed with a view towards obtaining quality construction by planning ahead and identifying potential problems for each definable feature of work.
 12. Documentation Procedures, including proposed report formats.
 13. Procedures for identifying and documenting the completion inspection process. Include in these procedures the responsible party for punch-out list inspections, pre-final and final inspections. Refer to Division 1, "Project Closeout" for additional information.

PART 3 - EXECUTION

3.1 GENERAL

The Contractor is responsible for quality control and shall establish and maintain an effective quality control system as stated herein, and in compliance with the contract. The quality control system shall consist of plans, procedures and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

operations both on-site and off-site and shall be keyed to the proposed construction sequence. The site project superintendent will be held responsible for the quality of work on the job and is subject to removal by the Owner for non-compliance with the quality requirements specified in the contract (see "Levels of Authority" in section 5.3). The site project superintendent in this context shall be the highest level manager responsible for the overall construction activities at the site, including quality and production. The site superintendent shall maintain a physical presence at the site at all times during construction and shall be responsible for all construction and construction related activities at the site.

3.2 QUALITY CONTROL (QC) PLAN

The Contractor shall furnish for review by the Owner, not later than 10 days after receipt of the Notice to Proceed, the Contractor Quality Control (CQC) plan proposed to implement the requirements of the contract. The plan shall identify personnel, procedures, control, instructions, tests, records and forms to be used.

3.2.1 Contents of the CQC plan

The CQC plan shall include, as a minimum, the following to cover all construction operations, both on-site and off-site including work by sub-contractors, fabricators, suppliers and purchasing agents for sub-contractors, and any other parties working directly for the Contractor for the Project:

- A. A description of the quality control organization, including a chart showing lines of authority and acknowledgement that the CQC staff shall implement the three phase control system for all aspects of the work specified. The staff shall include a CQC System Manager who shall report to the Contractor's Executive Manager.
- B. The name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function.
- C. A copy of the letter to the CQC System Manager signed by an Owner or Authorized Officer of the Firm which describes the responsibilities and delegates sufficient authority to adequately perform the functions of the CQC System Manager, including authority to stop work which is not in compliance with the contract (or a safety related event). The CQC System Manager shall issue letters of direction to all other various quality control representatives outlining duties, authorities, and responsibilities. Copies of these letters shall also be furnished to the Owner.
- D. Procedures for scheduling, reviewing, certifying and managing submittals, including those of sub-contractors, off-site fabricators, suppliers and purchasing agents. These submittals shall be provided in accordance with Division 1, "SUBMITTAL PROCEDURES".
- E. Control, verification and acceptance testing and commissioning for each specific test shall include the test name, specification paragraph requiring the test, feature of work to be tested, test frequency and person responsible for each test.
- F. Procedures for tracking preparatory, initial and follow-up control phases, and control, verification, and acceptance tests including documentation.
- G. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- H. Reporting procedures, including proposed reporting format.
- I. A list of definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements and may be identified by different trades or disciplines or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable feature under a particular section. This list will be agreed upon during the coordination meeting.

3.2.2 Acceptance of the CQC Plan

Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during construction. The Owner reserves the right to require the Contractor to make changes in the CQC plan and operations including removal of personnel, as necessary, to obtain the quality specified.

3.2.3 Notification of Changes

After acceptance of the CQC plan, the Contractor shall notify the Owner in writing of any proposed change. Proposed changes are subject to acceptance by the Owner.

3.3 COORDINATION MEETING

The Contractor shall meet with the Owner to discuss the Contractor's Quality Control system for the project following submission of the CQC plan. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the QC operations, control activities, testing, administration of the system for both onsite and offsite work and the interrelationship of Contractor's Management and control with the Owner's Quality Assurance. Minutes of the meeting shall be prepared by the Owner and signed by both the Contractor and the Owner. The minutes shall become a part of the contract file. There may be occasions when subsequent conferences will be called by either party to reconfirm mutual understandings and/or address deficiencies in the CQC system or procedures which may require corrective action by the Contractor.

3.4 QUALITY CONTROL ORGANIZATION

3.4.1 Personnel Requirements

The requirements for the CQC organization are a CQC System Manager and sufficient number of additional qualified personnel to ensure contract compliance. Personnel identified in the technical provisions as requiring specialized skills to assure the required work is being performed properly will also be included as part of the CQC organization.

The Contractor's QC staff shall maintain a presence at the site at all times during progress of the work and have complete authority and responsibility to take any action necessary to ensure contract compliance. The CQC staff shall be subject to acceptance by the Owner.

The Contractor shall provide adequate office space, filing systems and other resources as necessary to maintain an effective and fully functional CQC organization on-site. Complete records of all letters, material submittals, shop drawing submittals, schedules and all other project documentation shall be promptly furnished to the CQC organization by the Contractor. The CQC organization shall be responsible to maintain these documents and records at the site at all times, except as otherwise acceptable to the Owner.

3.4.2 CQC System Manager

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

The Contractor shall identify as CQC System Manager an individual who shall be responsible for overall management of CQC and have authority to act in all QC matters for the Contractor. The CQC System Manager shall be a graduate engineer, graduate architect, or a graduate of construction management, with a minimum of five (5) years construction experience on construction similar to the contract. Or the Contractor may select a construction person with at least a minimum of fifteen (15) years of construction field experience on related construction projects and similar to the contract.

This CQC System Manager shall be on-site at all times during construction activities and shall be employed by the Contractor. The Project Superintendent may serve as the CQC System Manager. This person must meet the requirements established for the QC Manager and shall be Certified. The CQC System Manager shall attend progress meetings and report on quality issues and provide quality control updates.

An alternate for the CQC System Manager shall be identified in the plan to serve in the event of the CQC System Manager's absence. The requirements for the alternate shall be the same as for the designated CQC System Manager.

3.4.3 Removal of the CQC System Manager

If, at the discretion of Arlington County Construction Manager, the CQC System Manager is not fulfilling their duties outlined herein, they shall be removed from their role as the CQC System Manager. The Contractor must immediately replace them with a qualified person as outlined herein and submit that person and their qualifications to Arlington County Construction Manager for approval. Until a replacement is approved, the alternate CQC System Manager shall act as the CQC System Manager. Such grounds for removal include, but are not limited to:

1. Inadequate management of the outside organizations that are providing services for the project.
2. Failure to maintain and update the testing plan and log.
3. Failure to maintain and update the quality control checklist and sufficiently perform the inspections necessary to adequately check each phase of each definable feature of work (DFOW).
4. Failure to identify, record, track, and complete re-work items.
5. Unsatisfactory review, approval, and management of submittals.
6. Unsatisfactory documentation and reporting.
7. Failure to be on site full time during critical construction activities.

3.4.4 Additional Requirements

In addition to the above experience and/or education requirements, the CQC System Manager and alternate CQC System Manager shall have a U.S Army Corps of Engineers certification for Construction Quality Control Management for Contractors or equivalent.

3.4.5 Organizational changes

The Contractor shall maintain the CQC staff at full strength at all times. When it is necessary to make changes to the CQC staff, the contractor shall revise the CQC plan to reflect the changes

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

and submit the changes to the Owner.

3.5 SUBMITTALS AND DELIVERABLES

The QC organization shall be responsible for certifying that all submittals and deliverables are in compliance with the contract requirements.

When COMMISSIONING of systems is included in the contract, the submittals required by those sections shall be coordinated with TECHNICAL SUBMITTALS in Division 1 to ensure adequate time is allowed for each type of submittal required.

3.6 CONTROL

Contractor quality control is the means by which the contractor ensures that the construction, which includes that of sub-contractors and suppliers, complies with the requirements of the contract. At least three (3) phases of control shall be conducted by the Contractor's CQC System Manager for each definable feature of the construction work as follows:

3.6.1 Preparatory Phase

This phase shall be performed prior to beginning work on each definable feature of work; after all required plans/documents/materials are approved/accepted, and after copies are at the job site. This phase shall include:

- A review of each paragraph of the applicable specification section, reference codes and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by the Owner personnel until final acceptance of the work.
- A review of the contract documents.
- A check to assure that all materials and/or equipment have been tested submitted and approved.
- Review of provisions that have been made to provide required control inspection and testing.
- Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
- A physical examination of required materials, equipment and sample work to assure that they are on hand, conform to approved shop drawings or submitted data and are properly stored.
- A review of the appropriate activity hazard analysis to assure safety requirements is met.
- Discussion of procedures for controlling quality of the work including repetitive deficiencies. Document construction tolerances and workmanship standards for that feature of work.
- A check to ensure that the portion of the plan for the work to be performed has been accepted by the Owner.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- Discussion of the initial control phase.
- The Owner shall be notified at least 48 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC System Manager and attended by the superintendent, other QC personnel and the foreman responsible for the definable feature of work. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC System Manager and attached to the daily QC report. The contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.

3.6.2 Initial Phase

This phase shall be accomplished at the beginning of a definable feature of work. The following shall be accomplished:

- A check of work to ensure that it is in full compliance with contract requirements. Review minutes of the preparatory meeting.
- Verify adequacy of controls to ensure full contract compliance. Verify required control inspection and testing.
- Establish level of workmanship and verify that it meets minimum acceptable workmanship standards. Compare with required sample panels as appropriate.
- Resolve all differences.
- Check safety to include compliance with and upgrading of the safety plan and activity hazard analysis. Review the activity analysis with each worker.
- The Owner shall be notified at least 48 hours in advance of beginning the initial phase. Separate minutes of this phase shall be prepared by the CQC System Manager and attached to the daily QC report. Exact location of initial phase shall be indicated for future reference and comparison with the follow-up phases.
- The initial phase should be repeated for each new crew who works on-site or any time acceptable specified quality standards are not being met.
- Failure to provide 48 hours notice of these meetings to the Owner will prevent the Contractor from starting any DFOV. Owner attendance to these meetings is not mandatory, and once notice has been provided to the Owner and the meetings have taken place; the Contractor may start work. The Owner will however assure that such meetings have taken place and will review the minutes of the meeting made available by the QC System Manager.

3.6.3 Follow-up Phase

Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the QC documentation. Final follow-up checks shall be conducted and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The contractor shall not build nor conceal any non-conforming work.

3.6.4 Additional Preparatory and initial phases

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

Additional preparatory and initial phases shall be conducted on the same definable features of work if: the quality of on-going work is unacceptable; if there are changes in the applicable CQC staff, on-site superintendent or work crew; if work on a definable feature is resumed after a substantial period of inactivity; or if other problems develop, including but not limited to: forces beyond the control of the Owner or Contractor, damage to the site, etc.

3.7 TESTS**3.7.1 Testing Procedure**

The contractor shall perform specified or required tests to verify that control measures are adequate to provide a product which conforms to Contract requirements. Upon request, the contractor shall furnish to the Owner, duplicate samples of test specimens for possible testing by the Owner. Testing includes operation and/or acceptance tests when specified. The Contractor shall procure the services of a Arlington County approved testing laboratory or as recommended by the contractor, or establish an approved testing laboratory at the project site. The contractor shall perform the following activities and record and provide the following data:

- Verify that testing procedures comply with contract requirements.
- Verify that facilities and testing equipment are available and comply with testing standards.
- Check test instrument calibration data against certified standards.
- Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
- Results of all tests taken, both passing and failing tests, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken and the sequential control number identifying the test shall be given.
- If approved by the Owner, actual test reports may be submitted later with a reference to the tests number and date taken. An information copy of tests performed by off-site or commercial test facility shall be provided directly to the Owner. Failure to submit timely test reports as stated may result in non-payment for related work performed and disapproval of the test facility for this contract.

3.8 CERTIFIED TEST REPORTS

Certified test reports may be required for approval of materials and equipment. Testing shall have been performed in a laboratory, meeting the requirements specified herein. Test reports shall conform to paragraph 3.9, and shall be accompanied by certificates from the manufacturer certifying that the material and equipment proposed to be supplied under the contract is of the same type, quality, manufacturer and make, as that tested.

3.9 MANUFACTURER'S CERTIFICATES OF CONFORMANCE**3.9.1 Pre-printed certifications are not acceptable.**

Certificates shall be original(s), no copies will be accepted. Certifications shall name the appropriate equipment or material, specification, standard, or other document specified as controlling the quality of that item and shall have attached thereto-certified copies of test data upon which the certifications are based. Certificates shall be signed by the manufacturer's

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

official authorized to sign certificates of conformance or compliance.

3.9.2 If a material is called by a specific product manufacturer's name in the technical specifications, and the Contractor proposes that specific material for use in the work, the requirement for certificates of conformance may be waived by the Owner.

3.9.3 The requirement for "original" certificates of conformance may be waived by the Project Manager for standard builders products, if conformance with referenced specifications is clearly indicated on the manufacturer's product literature.

3.10 LABORATORY REPORTS:

3.10.1 Reports shall cite the contract requirements, the test or analysis procedures used, and the actual test results. For each report, the cover sheet shall be stamped in large red letters "CONFORMS" or "DOES NOT CONFORM". Reports shall be signed by a representative of the testing laboratory authorized to sign certified test reports.

3.10.2 Unless otherwise specified, certified tests should have been performed not earlier than one year prior to the contract award date.

3.11 PRODUCTS:

All products shall be manufactured by a company normally engaged in the product's production. Products shall have been in satisfactory commercial or industrial use a minimum of two years prior to award. Such application shall be similar to that as specified herein. Unless otherwise noted, provide the current model. Discontinued models are not acceptable.

3.12 WORKMANSHIP:

Comply with the industry standards and as specified in the technical sections.

3.13 MANUFACTURER'S INSTRUCTIONS:

Perform in compliance with the manufacturer's instructions. Should the instructions conflict with contract requirements, request clarification from the PM.

3.14 MANUFACTURER'S FIELD SERVICES:

As specified, provide qualified manufacturer's representatives to observe field conditions, installation and quality of workmanship.

3.15 TESTING, INSPECTION AND LABORATORY SERVICES

3.15.1 The contractor will employ and pay for services of an independent testing laboratory to perform specified services including the following:

- Foundation inspection
- Soils testing
- Concrete testing
- Structural steel inspection
- Bituminous paving

3.15.2 Employment of a testing laboratory shall in no way relieve the Contractor of the obligation to perform work according to the contract.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.16 CONTRACTOR'S RESPONSIBILITIES: The Contractor shall:

- 3.16.1 Cooperate with laboratory personnel; provide access to work and to manufacturer's operations.
- 3.16.2 Provide to laboratory preliminary representative samples of materials to be tested in required quantities.
- 3.16.3 Furnish copies of mill test reports.
- 3.16.4 Notify the testing laboratory 24 hours prior to any inspection or testing which is required. Should the Contractor schedule an inspection/testing and the work is not ready for inspection/testing, the Contractor shall be responsible for all associated costs, including stand-by time, travel time and mileage.
- 3.16.5 Furnish labor and facilities:
 - To provide access to work to be tested.
 - To obtain and handle samples at the site.
 - To facilitate inspections and tests.
 - Provide for laboratory's exclusive use for storage and curing of test samples.
- 3.16.6 Provide the Owner with the results and reports when they become available. Record in the Contractor's Daily Construction Report all inspections and tests performed that date and their results. Maintain records of all on site inspections and tests, and make them available to the Owner. Submit test and inspection reports as required below and in the technical sections. Monitoring the inspection effort will be performed by the Contractor's Superintendent and the Owner.
- 3.16.7 Where required, the Contractor shall hire testing and inspection agencies that are separate and independent from the entities that perform the Work to be tested and inspected, including but not limited to a testing and balancing firm for the mechanical systems that is separate and independent from the subcontractor performing the mechanical work.
- 3.16.8 Contractor shall arrange and pay for the following testing and inspections:
 - Re-testing of Owner provided tests due to failure.
 - Testing allowed by the Owner for consideration of acceptance of work previously determined by the Owner as non-conforming.
 - Rebar locating for core drilling or cutting of concrete.

3.17 LABORATORY'S RESPONSIBILITIES AND LIMITATIONS: The testing laboratory shall:

- 3.17.1 Cooperate with the Owner, the AE and the Contractor; provide qualified personnel promptly on notice, with no less than a 24 hour response time.
- 3.17.2 Perform specified inspections, sampling and testing of materials and methods of construction;
 - Comply with specified standards; ASTM, the recognized authorities, and as specified.
 - Ascertain compliance with requirements of the Contract.
 - Promptly notify the Owner and the Contractor of irregularities or deficiencies of work which are observed during performance of services.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- Promptly submit reports of inspections and tests to the PM, the Contractor and the AE per REPORTS below.

3.17.3 The testing laboratory is not authorized to:

- Release, revoke, alter or enlarge on requirements of the Contract Documents.
- Approve or accept any portion of work.
- Perform any duties of the Contractor.

3.18 CERTIFICATION OF NEC COMPLIANCES:

All (120 VAC and higher) mechanical and electrical devices including but not limited to equipment, motors, components, lighting panels, control panels, motor control centers, and switch gear shall be manufactured, assembled and installed in accordance with the National Electric Code (NEC) and all ICC 2003 Codes. In order to certify said NEC compliance, the Contractor and each subcontractor shall furnish only those items which are labeled/listed by Underwriters Laboratories, Inc. Canadian Standards Association and/or Factory Mutual, may also be obtained as appropriate, for the service and conditions which are intended. Field assembled and wired equipment such as switchgear; lighting and motor control panels/centers shall be inspected and tested by the Contractor prior to turn-over to the Owner.

Manufacturer's Representatives shall be authorized, in writing, to act in the specified capacity by the product manufacturer's home office. Welders, welding operations, and completed welds shall be inspected by an AWS Certified Welding Inspector as specified in the technical sections.

3.18.1 Do not cover or conceal work until required test and inspection results indicate the work conforms to contract requirements.

3.19 REPORTS:

After each inspection or test, provide the Owner and A/E with a report to include:

- Date of report
- Project title and Contract number,
- Name of inspector
- Date and time of test, sampling or inspection,
- Product identification and applicable specification section and paragraph,
- Location of inspection or test, type of inspection or test,
- Results of inspection or test, and
- Conformance or nonconformance with Contract requirements

3.20 OWNER PERFORMED FIELD INSPECTIONS AND TESTS:

Owner performed field inspections as well as test will be made in accordance with the Department of Transportation and Capital Infrastructure's internal Quality Assurance (QA) Plan and in accordance with the provisions of the Contract Documents. Owner's personnel will be on-site throughout the duration of the Project to assure compliance with all quality standards, through repeated inspections, tests, photographs and reports.

PART 4 - COMPLETION INSPECTIONS

4.1 Punch-Out Inspection

Near the end of the work, or any increment of the work established by a time stated in the Project

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

schedule and/or required by the specifications, the CQC System Manager shall conduct an inspection of the work.

A punch list of items that do not conform to the contract documents and specifications shall be prepared and included in the CQC documentation. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. A copy of this list shall be provided to the Owner.

The CQC System Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Owner that the building or facility is ready for the Pre-final inspection.

4.2 Pre-Final Inspection

The Owner will perform the pre-final inspection to verify that the facility is complete and ready to be occupied. An Owner Pre-final punch list may be developed as a result of this inspection. The Contractor's CQC System Manager shall ensure that all items on this list have been corrected before notifying the Owner.

Any items noted on the Pre-final inspection shall be corrected a timely manner as defined in the approved Project Schedule. These inspections and any deficiency corrections required by this paragraph shall be accomplished within the time slated for completion of the entire work or any particular increment of the work (where the project is divided into increments by separate completion dates).

4.3 Final Acceptance Inspection

The Contractor's Quality Control Inspection personnel, plus the superintendent or other primary management person, and the Owner shall be in attendance at the final acceptance inspection. The final acceptance inspection will be formally scheduled by the Owner, based upon results of the Pre-final inspection. Notice shall be given to the Owner at least fourteen (14) days prior to the final acceptance inspection and shall include the Contractor's assurance that that all specific items previously identified to the Contractor as being unacceptable, along with all remaining work performed under the contract, will be complete and acceptable by the date scheduled for the final inspection. Failure of the Contractor to have all contract work complete for this inspection shall result in a written notification of non-compliance. Where the Contractor fails to complete the deficiencies after the completion date assigned by the schedule, the Owner may elect to complete the work as necessary by hiring another Contractor. All associated costs incurred by the Owner as a result of such work (or re-work) shall be paid for by the original Contractor.

PART 5 - DOCUMENTATION

5.1 The CQC System Manager shall maintain all project records on site (especially those that are directly related to the work being performed) that are current and provide factual evidence that the required quality control activities and/or tests have been performed. These records shall include, at a minimum, the following:

- Daily Reports
- RFI Log
- A complete set of the County Approved permit drawings
- Updated, and current As-built drawings
- Copies of all PCO, CO's, Submittals & Safety Logs.
- Off-site activities from suppliers, vendors, and fabricators.
- All test procedures and test results.
- Complete copy of the Project Specifications.
- Copies of AHA's and Safety plans.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- Contractor's Re-work items List

At Substantial Completion all forms and documentation, As-builts, O & M Manuals, Training material, Final Punch-out Inspection reports, Daily Reports, etc. shall be turned over to the Owner. Refer to Division 1, "Project Close-out" for the number of copies required.

5.2 Notification of Non-Compliance

The Owner will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice when delivered to the Contractor at the work Site shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly (within 24 hours), the Owner may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages incurred by the Contractor against the Owner.

5.3 LEVELS OF AUTHORITY

- 5.3.1 The Owner reserves the right to remove any member of the Contractor's team off the job at any time for lack of performance, poor or uncooperative work attitude/ethic or other negative behavior or performance of work that is contrary to the quality established in the contract documents. Also, see Notification of Non-Compliance in section 5.2 above. Refer to item 5.3.3 below.
- 5.3.2 The Contractor shall notify the Owner of any situation which may negatively impact the construction project including personnel and/or Sub-Contractor issues, material delivery, damage, theft or any safety incident or violation, within 24 hours.
- 5.3.3 The Owner shall provide written notice to the Contractor requesting the removal of any member of the Contractor's personnel and will provide notice for the time frame for the team member replacement as agreed to by the Contractor but not to exceed 14 days. Interim replacement personnel shall be provided by the Contractor at no additional cost to the Owner.

END OF SECTION 014516

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 015200 - TEMPORARY FACILITIES, UTILITIES, ACCESS AND CONSTRUCTION AIDS

PART 1 - GENERAL

1.01 CONTRACTOR'S OFFICE

- A. The Contractor shall provide office(s) for their own use. Locate within the construction site and coordinate location with the Owner. General contractor is responsible for setting up all trailer(s) with all required utilities, permits, all utility connections, modification to trailer for pump and haul need and other utilities, footing/foundation as required and maintenance of the trailer while in use on project. Provide access stairs, ramps, etc. as required to trailer(s) to meet code. Power, AC, heat, indoor toilet facility with pump and haul, phone and internet service is required for the trailer(s). Trailer(s) shall be established onsite within one (1) month of the effective date of the Notice to Proceed. Remove all trailer(s) from the jobsite upon substantial completion of work. A trailer permit is required for each unit.
- B. The Contractor may provide and maintain storage sheds, other temporary buildings or trailers within the Limits of Disturbance, installation and placement of sheds and trailers shall be approved by Arlington County Construction Manager; a trailer permit is required for each unit, Remove from the jobsite upon the completion of work, or as directed.

1.02 TEMPORARY ELECTRICAL POWER

- A. The Contractor shall furnish and install temporary electrical facilities, including lamps, for construction and safety operations. All temporary facilities shall remain the property of the Contractor and be removed after permanent connections have been completed. Electrical wiring, conduit or equipment which are part of the permanent electrical systems, shall not be used for temporary electrical facilities, unless specifically approved by the Owner.
- B. Install temporary and permanent electrical power in accordance with National Electric Code (NEC). Provide appropriate disconnects and meters. Coordinate work with the local authorities.
- C. The Contractor shall be responsible for any damage or injury to equipment, materials, or personnel caused by temporary electrical installation. Costs for materials and installation of temporary electrical facilities shall be at the Contractor's expense.
- D. The Contractor shall arrange and pay for energy consumed in providing electrical facilities, including Arlington County trailer, until the project is fully accepted by Arlington County.

1.03 TEMPORARY WATER

- A. The Contractor shall make all arrangements to install and pay for all temporary equipment, piping, water meters and outlets for an adequate supply of clean water for construction purposes until date of substantial completion. Point of tie-in, meter(s) and hose bibs shall be indicated on the site utilization plan. Contractor shall furnish drinking water for all Contractor and Owner personnel.

1.04 TEMPORARY HEAT

- A. The Contractor, at his expense, shall furnish, install and maintain temporary heat and enclosures during contract activities and shall provide heat and enclosures to maintain satisfactory working conditions for all trades.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Provide heat, enclosures, fuel and services to protect all work and materials against injury from dampness and cold until final acceptance of all work and materials in the contract unless building is occupied by Arlington County prior to such acceptance.
- C. Use of open salamanders and other temporary heating devices which cause smoke damage will not be permitted.

1.05 SANITATION

- A. Sanitation facilities are not available from Arlington County. Construct and maintain approved sanitary conveniences for the use by persons employed on the jobsite. Arlington County Construction Manager will coordinate and approve location and installation. The conveniences shall be maintained in a clean, sanitary condition without nuisance, and their mandatory use shall be strictly enforced. Upon completion of the work, remove from the premises.

1.06 ACCESS ROADS

- A. The Contractor shall provide and maintain temporary access to the project site and will accomplish this per methods as approved by the AE and Arlington County so as not to interfere with work of others. See also Section 01 0010 "Summary of Work".
- B. All vehicles bringing or removing earth, loose materials or debris shall be loaded in a manner to prevent from dropping materials on roads and streets.
- C. At all points, where vehicles leave the project site and enter adjacent paved streets, the Contractor shall maintain an installation and crew to prevent any mud from being carried onto such adjacent paved streets.

1.07 DUST, DIRT AND MUD CONTROL

- A. The Contractor shall take whatever steps necessary to ensure that mud is not tracked onto the streets and to allay any and all dust at all times during the construction period.
- B. Contractor is responsible for cleaning up all debris, materials, etc., that fall from vehicles enroute to or from the site. No debris is allowed to fall on existing public road pavement.
- C. Earth, loose material or debris deposited on the streets due to Contract activities shall be removed immediately.

1.08 PARKING

- A. Construction personnel shall not at any time park on any private property without the proper expressed consent of the property owner. Contractor shall be restricted to parking on-site within the Limits of Disturbance or in areas approved as parking by Arlington County and allowed by VDOT or the adjoining property owner.
- B. Any Contractor personnel violating this stipulation, do so at their own risk, and should be aware that their vehicles may be towed at offender's expense.

1.09 TRAFFIC CONTROL

- A. Any traffic control deemed necessary to affect smooth traffic flow shall be provided by Contractor when so directed by the Owner.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.10 CONSTRUCTION ELEVATORS AND HOISTS

- A. Contractors shall provide cranes, hoists, towers and other lifting devices for proper and efficient movement of materials and shall provide operating personnel for the equipment. Equipment shall be provided with guys, bracing, other safety devices in accordance with the local or State codes.

1.11 SCAFFOLDING AND PLATFORMS

- A. Provide, erect, maintain, remove when directed, all scaffolding, staging, platforms, temporary runways, temporary flooring, guards, railings, stairs, etc., as required by local agencies having jurisdiction for protection of workmen and public. Construction inspection and maintenance of these items shall comply with all safety codes and regulations as applicable to project.

1.12 TEMPORARY FENCES AND BARRICADES

- A. The Contractor shall furnish, install and maintain in a sound condition all necessary temporary fences, barricades, trench and hole covers, warning lights and all other safety devices necessary to prevent injury to persons and damage to property. Temporary fencing within limits of disturbance is required; the Contractor shall coordinate with Arlington County Project Manager on locations and extents.

1.13 TEMPORARY PUMPING

- A. The Contractor shall provide all temporary pumping required to complete the work.

1.14 TEMPORARY ENCLOSURES

- A. The Contractor shall furnish and install temporary enclosures, doors and transparent plastic windows required to protect buildings from damage due to vandalism, or the elements, or to maintain suitable temperature during installation or finishing work.

1.15 TEMPORARY TELEPHONE & BROADBAND INTERNET SERVICES

- A. The Contractor shall arrange for and provide telephone and broadband internet services for the use of the Contractor, Arlington County, the AE and authorized representatives of Arlington County for the contract period. The Contractor shall pay for all costs of installation and all local telephone service. Long distance calls shall be paid for by the person placing the call. A dedicated broadband internet service connection is required for Arlington County's sole use in Arlington County trailer.

1.16 TEMPORARY PROJECT SIGNAGE

- A. Project signs as indicated, project sign detail to be provided to general contractor after award.
 - 1. Sign to be exterior grade plywood, 4'x8', single faced with lettering and graphics
 - 2. Pressure treated posts to be 4"x4"x12'
- B. Temporary Signs: Provide other signs as indicated to inform public individuals seeking entrance to project; provide temporary, directional signs for construction personnel and visitors.
- C. Maintain and touch-up signs so they are always legible
- D. Unauthorized signs are not permitted

1.17 TEMPORARY ACCESS

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- A. Provide temporary pedestrian and vehicular access to all construction activity effected onsite or offsite neighbors in construction with any road work and utility work throughout construction phase. Provide temporary signs, detours and safety signs as required. Provide schedule/plan of action minimum 2 weeks prior of any road work and/or utility installation to Owner for review and approval.

1.18 SUBSTANTIAL COMPLETION

- A. Upon project completion, after Substantial Completion, the general Contractor shall remove all temporary facilities, including, but not limited to trailers, temporary utilities, temporary fencing, etc. from the Project Site.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 015200

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 015700 - VPDES PERMIT, SWPPP, AND GENERAL E&S CONTROL REQUIREMENTS

PART 1 – GENERAL

- 1.1 The Contractor shall provide field-compliance and all documentation for VPDES, SWPPP and the General E&S Control requirements regulated by Authorities Having Jurisdiction (AHJ). Enforcement includes but is not limited to all applicable laws, rules, codes & regulations and, in the case of conflicting direction, the most stringent case shall apply.
- 1.2 The Owner will prepare the Stormwater Pollution Prevention Plan (SWPPP) and obtain the Virginia Pollution Discharge Elimination System (VPDES) permit prior to Notice-of-Award.
- 1.3 The VPDES permit and the SWPPP responsibilities shall be transferred by the Owner to the Contractor within 14 days after Notice-to-Proceed date.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 The Contractor shall provide the Owner with a copy of all correspondence received by the Contractor related to the transfer of the VPDES permit, within five (5) business days of receipt of said correspondence.
- 3.2 The Contractor shall be responsible for renewal of the VPDES Permit as needed including payment of associated fees by submitting a new registration statement at least 90 days before the expiration date of the existing general permit:
- 3.3 Prior to mobilization at the jobsite or commencement of construction activities, The Contactor shall:
 - A. Execute Responsible Land Disturber (RLD) Certification form.
 - B. Provide the name of a qualified individual responsible for carrying out the land disturbing activity. This individual shall ensure that all aspects of the Erosion and Sediment Control (ESC) plans are enforced in accordance with the approved Site Plan and all Virginia erosion and sediment control laws, as well as, all other applicable laws, rules, codes and regulations. Qualified individual shall possess a current Responsible Land Disturber (RLD) Certificate from the Department of Environmental Quality (DEQ):
- 3.4 The Contractor shall be responsible for compliance with all requirements outlined within the VPDES Permit and the SWPPP:

<https://www.deq.virginia.gov/Portals/0/DEQ/Water/PollutionDischargeElimination/IndustrialSWG P2014-SWPPPRequirements.pdf>

It is noted here that, in the case where regulatory direction overlaps, the more stringent case shall apply.

- 3.5 Corrective actions and payment for any fines or penalties associated with non-compliance to this specification shall be provided in a timely fashion by the Contractor without cost to the Owner.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- A. Timely corrective action shall mean meaningful corrective work occurring immediately for urgent items, 3-calendar days for non-urgent items and completion of all corrective action within 5-days in all cases. Level of urgency shall be determined by the AHJ.
- 3.6 The Contractor shall be required to submit, as part of the monthly payment application, copies of all inspection reports, corrective actions, as-built updates, and any notices or correspondence related to the VPDES permit and SWPPP that have not yet been submitted to the Owner's representative for a previous pay-cycle. The Owner reserves the right to withhold part or all of the monthly payment in the event of failure by the Contractor to comply with this specification including reporting requirements.
- 3.7 No later than 30 days after award of final project phase Substantial Completion, submit an original and signed Notice of Termination (NOT) to DPWES LDS "Site and Addressing Center" (SAC) with a copy to the Owner in accordance with 9VAC25-880-60.
- 3.8 The Contractor shall pay the applicable annual maintenance fees for termination of permit until final project acceptance by the AHJ.
- 3.9 Upon receipt from the SAC/DEQ, the Contractor shall provide a copy of the approved DEQ termination notice to the Owner
- 3.10 Any and all references to Virginia Stormwater Management Programs (VSMP) permit found elsewhere in the Contract Documents shall be deemed to mean VPDES permit.
- 3.11 All references to Department of Conservation and Recreation (DCR) found elsewhere in the Contract Documents shall be deemed to mean DEQ.
- 3.12 General Conditions lists the Virginia Stormwater Management Program (VSMP) Permit under OWNER-PAID PERMITS AND FEES. This specification section supersedes the referenced Section of the General Conditions.

END OF SECTION 015700

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 015719 - ENVIRONMENTAL PROTECTION

PART 1 - GENERAL

1.01 APPLICABLE PUBLICATIONS

- A. The publications listed below form part of this specification to the extent referenced. It is referred to in the text by the basic designation only.
 - 1. U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Regulation: 29 CFR 1926 OSHA Construction Industry Standards as adopted by the Commonwealth of Virginia.
 - 2. Codified Ordinances of Arlington County Code, Arlington County Erosion and Sediment Control Ordinance, chapter 57.
 - 3. Virginia Acts of Assembly – 2001 Session, Chapter 490. An Act to amend and reenact the Code of Virginia relating to the regulation of land-disturbing activities.

1.02 DEFINITIONS

- A. Sediment: Soil and other debris that has been eroded and transported by runoff water.
- B. Solid Waste: Rubbish, debris, garbage, and other discarded solid materials resulting from industrial, commercial, and agricultural operations, and from community activities.
- C. Rubbish: A variety of combustible and noncombustible wastes such as paper, boxes, glass, crockery, metal, lumber, cans and bones.
- D. Debris: Includes combustible and noncombustible wastes, such as ashes, waste materials that result from construction or maintenance and repair work, leaves and tree trimmings.
- E. Chemical Wastes: Includes salts, acids, alkalies, herbicides, pesticides, and organic chemicals.
- F. Sanitary Wastes:
 - 1. Sewage: Wastes characterized as domestic sanitary sewage.
 - 2. Garbage: Refuse and scraps resulting from preparation, cooking, dispensing, and consumption of food.
- G. Oily Waste: Includes petroleum products and bituminous materials.

1.03 ENVIRONMENTAL PROTECTION REQUIREMENTS: Provide and maintain, during the life of the contract, environmental protection. Provide environmental protective measures as required to control pollution that develops during normal construction practice. Provide environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project. Comply with all Federal, State, and local regulations pertaining to water, air, and noise pollution.

PART 2 - PRODUCTS - NOT USED

PART 3 - EXECUTION

3.01 PROTECTION OF NATURAL RESOURCES

- A. The natural resources within the project boundaries and outside the limits of permanent work performed under this contract shall be preserved in their existing condition or restored to an

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

equivalent or improved condition upon completion of the work. Repair or restore to original upon completion of the work. Repair or restore to original condition all trees or other landscape features scarred or damaged by equipment or operations. Obtain Project Manager's approval before the repair or restoration. Confine construction activities to areas defined by the work schedule, drawings, and specifications.

- B. Trees: Except in areas indicated to be cleared, do not remove, cut, deface, injure, or destroy trees or shrubs without special permission from the Project Manager. Protect existing trees which may be damaged by construction operations.
- C. Protect monuments and markers.
- D. Temporary Construction: Obliterate all signs of temporary construction facilities such as haul roads, work areas, structures, foundations of temporary structures, stockpiles of excess or waste materials, and all other vestiges of construction. Temporary roads, parking areas, and similar temporary use areas shall be graded in conformance with surrounding areas.
- E. Water Resources: Perform all work in such a manner to prevent any adverse environmental impact on water resources.
- F. Oil Substances: Prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water. Surround all temporary fuel oil, petroleum, or liquid chemical storage tanks with a temporary earth berm of sufficient size and strength to contain the contents of the tanks in the event of content leakage or spillage. Provide an impermeable secondary containment system for temporary tanks. Promptly dispose of all spilled material. Restore site and remove tanks, containment, and any spilled contamination upon completion or work.

3.02 EROSION AND SEDIMENT CONTROL MEASURES:

- A. Provide and maintain adequate erosion and sediment control measures according to the drawings and the provisions of the Arlington County Erosion and Sediment Control Ordinance.
- B. Burn-off of ground cover is not permitted.

3.03 CONTROL AND DISPOSAL OF WASTE

- A. Solid Wastes: All wastes shall be disposed of, by the Contractor, off the project property. With the exception of the material specifically indicated or specified to be salvaged for reuse in construction, or turned over to the County, all waste, cut trees, and demolished materials become the property of the Contractor, and shall be removed from the job site daily. Place wastes in Contractor supplied containers, and empty containers daily, in accordance with Federal, State, and local regulations.
- B. Sewage, Odor, and Pest Control: Use chemical toilets and periodically empty wastes into municipal sanitary sewage system. Include provisions for pest control and elimination of odors.
- C. Chemical Waste: Store chemical waste in corrosion resistant containers labeled to identify type of waste and date filled. Remove containers from project property, and dispose of in accordance with Federal, State, and local regulations. Submit a certified copy of the acceptance receipts for these materials, indicating quantities. For oil and hazardous material spills which may be large enough to violate Federal, State, and local regulations, notify the Project Manager immediately.
- D. Petroleum Products: Dispose of petroleum products in accordance with approved procedures meeting Federal, State, and local regulations.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.04 DUST CONTROL

- A. Keep dust down at all times, including non-working hours, weekends, and holidays. Sprinkle or treat with dust suppressors, the soil at the site, haul roads, and other areas disturbed by operations. No dry power brooming is permitted. Instead, use vacuuming, wet mopping, wet sweeping, or wet power brooming. Air blowing is permitted only for cleaning nonparticulate debris, such as steel reinforcing bars. No sandblasting is permitted unless dust there from is confined. Only wet cutting of concrete blocks, concrete, and asphalt is permitted. No unnecessary shaking of bags is permitted where bagged cement, concrete mortar, and plaster is used.

3.05 NOISE

- A. Make the maximum use of "low-noise-emission products" as certified by EPA. No blasting or use of explosives is permitted without written County Construction Manager approval.

END OF SECTION 015719

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage, and handling; manufacturers' standard warranties on products; special warranties; and comparable products.
- B. Related Requirements:
 - 1. Section 011000 "Summary of Work" for Contractor requirements related to Owner-furnished products.
 - 2. Section 012500 "Substitution Procedures" for requests for substitutions.
 - 3. Section 017800 "Project Closeout and Closeout Submittals" for submitting warranties.

1.3 DEFINITIONS

- A. Products: Items obtained for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility. Salvaged items or items reused from other projects are not considered new products. Items that are manufactured or fabricated to include recycled content materials are considered new products, unless indicated otherwise.
 - 3. Comparable Product: Product by named manufacturer that is demonstrated and approved through the comparable product submittal process described in Part 2 "Comparable Products" Article, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance, and other characteristics that equal or exceed those of specified product.
- B. Basis-of-Design Product Specification: A specification in which a single manufacturer's product is named and accompanied by the words "basis-of-design product," including make or model number or other designation. Published attributes and characteristics of basis-of-design product establish salient characteristics of products.
 - 1. Evaluation of Comparable Products: In addition to the basis-of-design product description, product attributes and characteristics may be listed to establish the significant qualities related to type, function, in-service performance and physical

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

properties, weight, dimension, durability, visual characteristics, and other special features and requirements for purposes of evaluating comparable products of additional manufacturers named in the specification. Manufacturer's published attributes and characteristics of basis-of-design product also establish salient characteristics of products for purposes of evaluating comparable products.

- C. Subject to Compliance with Requirements: Where the phrase "Subject to compliance with requirements" introduces a product selection procedure in an individual Specification Section, provide products qualified under the specified product procedure. In the event that a named product or product by a named manufacturer does not meet the other requirements of the specifications, select another named product or product from another named manufacturer that does meet the requirements of the specifications; submit a comparable product request or substitution request, if applicable.
- D. Comparable Product Request Submittal: An action submittal requesting consideration of a comparable product, including the following information:
 - 1. Identification of basis-of-design product or fabrication or installation method to be replaced, including Specification Section number and title and Drawing numbers and titles.
 - 2. Data indicating compliance with the requirements specified in Part 2 "Comparable Products" Article.
- E. Basis-of-Design Product Specification Submittal: An action submittal complying with requirements in Section 013300 "Submittal Procedures."
- F. Substitution: Refer to Section 012500 "Substitution Procedures" for definition and limitations on substitutions.

1.4 QUALITY ASSURANCE

- A. Compatibility of Options: If Contractor is given option of selecting between two or more products for use on Project, select product compatible with products previously selected, even if previously selected products were also options.
 - 1. Resolution of Compatibility Disputes between Multiple Contractors:
 - a. Contractors are responsible for providing products and construction methods compatible with products and construction methods of other contractors.
 - b. If a dispute arises between the multiple contractors over concurrently selectable but incompatible products, Architect will determine which products shall be used.
- B. Identification of Products: Except for required labels and operating data, do not attach or imprint manufacturer or product names or trademarks on exposed surfaces of products or equipment that will be exposed to view in occupied spaces or on the exterior.
 - 1. Labels: Locate required product labels and stamps on a concealed surface, or, where required for observation following installation, on a visually accessible surface that is not conspicuous.
 - 2. Equipment Nameplates: Provide a permanent nameplate on each item of service- or power-operated equipment. Locate on a visually accessible but inconspicuous surface. Include information essential for operation, including the following:

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- a. Name of product and manufacturer.
 - b. Model and serial number.
 - c. Capacity.
 - d. Speed.
 - e. Ratings.
3. See individual identification Sections in Divisions 21, 22, 23, 25, 26, 27 and 28 for additional equipment identification requirements.

1.5 COORDINATION

- A. Modify or adjust affected work as necessary to integrate work of approved comparable products and approved substitutions.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store, and handle products, using means and methods that will prevent damage, deterioration, and loss, including theft and vandalism. Comply with manufacturer's written instructions.

B. Delivery and Handling:

1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other losses.
3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
4. Inspect products on delivery to determine compliance with the Contract Documents and that products are undamaged and properly protected.

C. Storage:

1. Provide a secure location and enclosure at Project site for storage of materials and equipment.
2. Store products to allow for inspection and measurement of quantity or counting of units.
3. Store materials in a manner that will not endanger Project structure.
4. Store products that are subject to damage by the elements under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation and with adequate protection from wind.
5. Protect foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation, and weather-protection requirements for storage.
7. Protect stored products from damage and liquids from freezing.
8. Provide a secure location and enclosure at Project site for storage of materials and equipment by Owner's construction forces. Coordinate location with Owner.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Written standard warranty form furnished by individual manufacturer for a particular product and issued in the name of the Owner or endorsed by manufacturer to Owner.
 - 2. Special Warranty: Written warranty required by the Contract Documents to provide specific rights for Owner and issued in the name of the Owner or endorsed by manufacturer to Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included in the Project Manual, prepare a written document, using indicated form properly executed.
 - 3. See other Sections for specific content requirements and particular requirements for submitting special warranties.
- C. Submittal Time: Comply with requirements in Section 017700 "Closeout Procedures."

PART 2 - PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, are undamaged and, unless otherwise indicated, are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners, and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties meeting requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Architect will make selection.
 - 5. Descriptive, performance, and reference standard requirements in the Specifications establish salient characteristics of products.
 - 6. Or Equal: For products specified by name and accompanied by the term "or equal," "or approved equal," or "or approved," comply with requirements in "Comparable Products" Article to obtain approval for use of an unnamed product.
 - a. Submit additional documentation required by Architect through Construction Manager in order to establish equivalency of proposed products. Unless otherwise indicated, evaluation of "or equal" product status is by the Architect, whose determination is final.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

B. Product Selection Procedures:

1. Sole Product: Where Specifications name a single manufacturer and product, provide the named product that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - a. Sole product may be indicated by the phrase "Subject to compliance with requirements, provide the following."
2. Sole Manufacturer/Source: Where Specifications name a single manufacturer or source, provide a product by the named manufacturer or source that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered.
 - a. Sole manufacturer/source may be indicated by the phrase "Subject to compliance with requirements, provide products by the following."
3. Limited List of Products: Where Specifications include a list of names of both manufacturers and products, provide one of the products listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
 - a. Limited list of products may be indicated by the phrase "Subject to compliance with requirements, provide one of the following."
4. Non-Limited List of Products: Where Specifications include a list of names of both available manufacturers and products, provide one of the products listed or an unnamed product that complies with requirements.
 - a. Non-limited list of products is indicated by the phrase "Subject to compliance with requirements, available products that may be incorporated in the Work include, but are not limited to, the following."
 - b. Provision of an unnamed product is not considered a substitution, if the product complies with requirements.
5. Limited List of Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one of the manufacturers listed that complies with requirements. Comparable products or substitutions for Contractor's convenience will not be considered unless otherwise indicated.
 - a. Limited list of manufacturers is indicated by the phrase "Subject to compliance with requirements, provide products by one of the following."
6. Non-Limited List of Manufacturers: Where Specifications include a list of available manufacturers, provide a product by one of the manufacturers listed or a product by an unnamed manufacturer that complies with requirements.
 - a. Non-limited list of manufacturers is indicated by the phrase "Subject to compliance with requirements, available manufacturers whose products may be incorporated in the Work include, but are not limited to, the following."
 - b. Provision of products of an unnamed manufacturer is not considered a substitution, if the product complies with requirements.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

7. Basis-of-Design Product: Where Specifications name a product, or refer to a product indicated on Drawings, and include a list of manufacturers, provide the specified or indicated product or a comparable product by one of the other named manufacturers. Drawings and Specifications may additionally indicate sizes, profiles, dimensions, and other characteristics that are based on the product named. Comply with requirements in "Comparable Products" Article for consideration of an unnamed product by one of the other named manufacturers.
 - a. For approval of products by unnamed manufacturers, comply with requirements in Section 012500 "Substitution Procedures" for substitutions for convenience.
- C. Visual Matching Specification: Where Specifications require the phrase "match Architect's sample," provide a product that complies with requirements and matches Architect's sample. Architect's decision will be final on whether a proposed product matches.
 1. If no product available within specified category matches and complies with other specified requirements, comply with requirements in Section 012500 "Substitution Procedures" for proposal of product.
- D. Visual Selection Specification: Where Specifications include the phrase "as selected by Architect from manufacturer's full range" or a similar phrase, select a product that complies with requirements. Architect will select color, gloss, pattern, density, or texture from manufacturer's product line that includes both standard and premium items.
- E. Sustainable Product Selection: Where Specifications require product to meet sustainable product characteristics, select products complying with indicated requirements. Comply with requirements in Division 01 sustainability requirements Section and individual Specification Sections.
 1. Select products for which sustainable design documentation submittals are available from manufacturer.

2.2 COMPARABLE PRODUCTS

- A. Conditions for Consideration of Comparable Products: Architect will consider Contractor's request for comparable product when the following conditions are satisfied. If the following conditions are not satisfied, Architect may return requests without action, except to record noncompliance with the following requirements:
 1. Evidence that proposed product does not require revisions to the Contract Documents, is consistent with the Contract Documents, will produce the indicated results, and is compatible with other portions of the Work.
 2. Detailed comparison of significant qualities of proposed product with those of the named basis-of-design product. Significant product qualities include attributes, such as type, function, in-service performance and physical properties, weight, dimension, durability, visual characteristics, and other specific features and requirements.
 3. Evidence that proposed product provides specified warranty.
 4. List of similar installations for completed projects, with project names and addresses and names and addresses of architects and owners, if requested.
 5. Samples, if requested.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Architect's Action on Comparable Products Submittal: If necessary, Architect will request additional information or documentation for evaluation, as specified in Section 013300 "Submittal Procedures."
 - 1. Form of Approval of Submittal: As specified in Section 013300 "Submittal Procedures."
 - 2. Use product specified if Architect does not issue a decision on use of a comparable product request within time allocated.
- C. Submittal Requirements, Two-Step Process: Approval by the Architect of Contractor's request for use of comparable product is not intended to satisfy other submittal requirements. Comply with specified submittal requirements.
- D. Submittal Requirements, Single-Step Process: When acceptable to Architect, incorporate

PART 3 - EXECUTION (Not Used)

END OF SECTION 016000

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 017300 - EXECUTION

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes general administrative and procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. Field engineering and surveying.
 - 3. Installation of the Work.
 - 4. Progress cleaning.
 - 5. Starting and adjusting.
 - 6. Protection of installed construction.
- B. Related Requirements:
 - 1. Section 010010 "Summary of Work" for limits on use of Project site.
 - 2. Section 013300 " Submittal Procedures" for submitting surveys.
 - 3. Section 017800 "Project Closeout and Closeout Submittals" for submitting Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.
 - 4. Section 078413 "Penetration Firestopping" for patching penetrations in fire-rated construction.

1.03 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For professional engineer.
- B. Certificates: Submit certificate signed by professional engineer or land surveyor certifying that location and elevation of improvements comply with requirements.
- C. Landfill Receipts: Submit copy of receipts issued by a landfill facility, licensed to accept hazardous materials, for hazardous waste disposal.
- D. Certified Surveys: Submit two (2) copies signed by professional engineer.
- E. Final Property Survey: Submit 10 copies showing the Work performed and record survey data.

1.04 QUALITY ASSURANCE

- A. Land Surveyor Qualifications: A professional land surveyor who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing land-surveying services of the kind indicated.
- B. Manufacturer's Installation Instructions: Obtain and maintain on-site manufacturer's written recommendations and instructions for installation of products and equipment.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

PART 2 - PRODUCTS**2.01 MATERIALS**

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials for patching identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible. If identical materials are unavailable or cannot be used, use materials that, when installed, will provide a match acceptable to Architect for the visual and functional performance of in-place materials.

PART 3 - EXECUTION**3.01 EXAMINATION**

- A. Existing Conditions: The existence and location of underground and other utilities and construction indicated as existing are not guaranteed. Before beginning sitework, investigate and verify the existence and location of underground utilities, mechanical and electrical systems, and other construction affecting the Work.
 - 1. Before construction, verify the location and invert elevation at points of connection of sanitary sewer, storm sewer, and water-service piping; underground electrical services, and other utilities.
 - 2. Furnish location data for work related to Project that must be performed by public utilities serving Project site.
- B. Examination and Acceptance of Conditions: Before proceeding with each component of the Work, examine substrates, areas, and conditions, with Installer or Applicator present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
 - 2. Examine walls, floors, and roofs for suitable conditions where products and systems are to be installed.
 - 3. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.
- C. Proceed with installation only after unsatisfactory conditions have been corrected. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.02 PREPARATION

- A. Existing Utility Information: Furnish information to local utility that is necessary to adjust, move, or relocate existing utility structures, utility poles, lines, services, or other utility appurtenances located in or affected by construction. Coordinate with authorities having jurisdiction.
- B. Field Dimensions: The drawings accompanying these specifications indicate generally the design and arrangements of all equipment, apparatus, fixtures, accessories, etc., to complete the installation of all systems. The exact location or arrangement of equipment, unless otherwise dimensioned, is subject to minor changes necessitated by field conditions and shall be made as required without additional cost to Arlington County. Measurements shall be verified by actual observation at construction site and the Contractor shall be responsible for all of the work fitting into place in a satisfactory and workmanlike manner to the approval of Arlington County and AE.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- C. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.

3.03 CONSTRUCTION LAYOUT

- A. The Contractor shall employ a certified civil engineer or land surveyor to stake out all of the construction. Rough grade stakes shall be set in sufficient number so that the site can be accurately graded to meet the intent of the drawings. Stakes for final grading shall be set for all sanitary, water main and storm sewers and all pavements, curbs and gutters.
- B. Verification: Dimensions and elevations indicated in layout of existing conditions shall be verified by the Contractor. Discrepancies between drawings, specifications and existing conditions shall be referred to the A/E for adjustment before work affected is performed. Failure to make such notification shall place responsibility upon the Contractor.
- C. General: Engage a professional engineer or land surveyor to lay out the Work using accepted surveying practices.
1. Establish and preserve all control points and benchmarks, including the property corners.
 2. Establish limits on use of Project site.
 3. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
 4. Inform installers of lines and levels to which they must comply.
 5. Check the location, level and plumb, of every major element as the Work progresses.
 6. Notify A/E when deviations from required lines and levels exceed allowable tolerances.
 7. Close site surveys with an error of closure equal to or less than the standard established by authorities having jurisdiction.
- D. The Contractor shall perform the following:
1. Provide datum benchmark for the use of all work.
 2. Lay out all site work
 3. Lay out all building corners
 4. Lay out building excavation
 5. Lay out interior partitions on concrete slabs
 - a. As soon as possible after completion of floor slabs, and prior to any partitions being done, lay out the entire full-scale floor plan for each floor area.
 - b. Layout shall be made by snapping distinct and readable caulk lines or by painting lines, indicating the accurate thicknesses of walls and partitions, locations of swings of doors and similar physical features
 - c. After floor layouts have been made, Contractor and/or appropriate subcontractor shall be responsible for field checking room dimensions, wall thicknesses, dimensions of built-in equipment, and similar items of critical nature.
- E. Site Improvements: Locate and lay out site improvements, including pavements, grading, fill and topsoil placement, utility slopes, and rim and invert elevations.
- F. Building Lines and Levels: Locate and lay out control lines and levels for structures, building foundations, column grids, and floor levels, including those required for mechanical and electrical work. Transfer survey markings and elevations for use with control lines and levels. Level foundations and piers from two or more locations.
- G. Record Log: Maintain a log of layout control work. Record deviations from required lines and levels. Include beginning and ending dates and times of surveys, weather conditions, name and duty of each survey party member, and types of instruments and tapes used. Make the log available for reference by A/E.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.04 FIELD ENGINEERING

- A. Identification: Owner will identify existing benchmarks, control points, and property corners.
- B. Reference Points: Locate existing permanent benchmarks, control points, and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.
 - 1. Do not change or relocate existing benchmarks or control points without prior written approval of A/E. Report lost or destroyed permanent benchmarks or control points promptly. Report the need to relocate permanent benchmarks or control points to A/E before proceeding.
 - 2. Replace lost or destroyed permanent benchmarks and control points promptly. Base replacements on the original survey control points.

3.05 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts, and wiring in finished areas unless otherwise indicated.
 - 4. Maintain minimum headroom clearance of 96 inches in occupied spaces and 90 inches in unoccupied spaces.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Sequence the Work and allow adequate clearances to accommodate movement of construction items on site and placement in permanent locations.
- F. Tools and Equipment: Do not use tools or equipment that produce harmful noise levels.
- G. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- H. Attachment: Provide blocking and attachment plates and anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by A/E.
 - 2. Allow for building movement, including thermal expansion and contraction.
 - 3. Coordinate installation of anchorages. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- I. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, arrange joints for the best visual effect. Fit exposed connections together to form hairline joints.
- J. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.

3.06 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Enforce requirements strictly. Dispose of materials lawfully.
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold waste materials more than seven days during normal weather or three days if the temperature is expected to rise above 80 deg F.
 - 3. Clean up all waste materials, rubbish, and debris resulting from his operations weekly or at such frequencies as required by Arlington County.
 - 4. Place waste materials, rubbish, and debris from ground floor operations outside of building in area designated by Arlington County.
 - 5. Place waste materials, rubbish, and debris from above ground floor operations in chute.
 - 6. Oversee cleaning and ensure that building and grounds are maintained free from accumulations of debris.
 - 7. Sprinkle dusty debris with water.
 - 8. At reasonable intervals, clean-up site and dispose of debris off site.
 - 9. Be responsible for procuring permits for hauling and dumping rubbish, waste materials and debris from site to area approved by local authorities.
 - 10. Remove grease, dust, dirt, stains, labels, fingerprints, and other foreign materials from interior and exterior surfaces of fixtures, hardware and equipment.
 - 11. Repair, patch, and touch-up marred surfaces to match adjacent finishes.
 - 12. Comply with additional requirements defined in specifications.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Do not bury or burn waste materials on-site. Do not wash waste materials down sewers or into waterways. Comply with waste disposal requirements in Section 01 7419 "Construction Waste Management and Disposal."

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.
- J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging, or otherwise deleterious exposure during the construction period.

3.07 STARTING AND ADJUSTING

- A. Coordinate startup and adjusting of equipment and operating components with requirements in Section 01 9113 "General Commissioning Requirements."
- B. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units, and retest.
- C. Adjust equipment for proper operation. Adjust operating components for proper operation without binding.
- D. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- E. Manufacturer's Field Service: Comply with qualification requirements in Section 01 4516 "Contractor Quality Control."

3.08 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.

END OF SECTION 017300

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 017419 - CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for the following:
 - 1. Salvaging nonhazardous construction waste.
 - 2. Recycling nonhazardous construction waste.
 - 3. Disposing of nonhazardous construction waste.
- B. Related Requirements:
 - 1. Section 024119 "Selective Demolition" for demolition of existing structures.
 - 2. Section 042200 "Concrete Unit Masonry" for disposal requirements for masonry waste.
 - 3. Section 311000 "Site Clearing" for disposition of waste resulting from site clearing and removal of above- and below-grade improvements.

1.03 DEFINITIONS

- A. Construction Waste: Building and site improvement materials and other solid waste resulting from construction, remodeling, renovation, or repair operations. Construction waste includes packaging.
- B. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse, or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- C. Recycle: Recovery of demolition or construction waste for subsequent processing in preparation for reuse.
- D. Salvage: Recovery of construction waste and subsequent sale or reuse in another facility.
- E. Salvage and Reuse: Recovery of construction waste and subsequent incorporation into the Work.

1.04 PERFORMANCE REQUIREMENTS

- A. General: Achieve end-of-Project rates for salvage/recycling of 75 percent by weight of total non-hazardous solid waste generated by the Work. Practice efficient waste management in the use of materials in the course of the Work. Use all reasonable means to divert construction and demolition waste from landfills and incinerators. Facilitate recycling and salvage of materials, including the following:
 - 1. Construction Waste.
 - 2. Packaging.

1.05 ACTION SUBMITTALS

- A. Waste Management Plan: Submit plan within 15 days of date established for the Notice to Proceed.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.06 INFORMATIONAL SUBMITTALS

- A. Waste Reduction Progress Reports: Concurrent with each Application for Payment, submit report. Include the following information:
 - 1. Material category.
 - 2. Generation points of waste.
 - 3. Total quantity of waste in tons.
 - 4. Quantity of waste salvaged, both estimated and actual in tons.
 - 5. Quantity of waste recycled, both estimated and actual in tons.
 - 6. Total quantity of waste recovered (salvaged plus recycled) in tons.
 - 7. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- B. Waste Reduction Calculations: Before request for Substantial Completion, submit calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work.
- C. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.
- D. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- E. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- F. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts, and invoices.
- G. Qualification Data: For waste management coordinator.

1.07 QUALITY ASSURANCE

- A. Waste Management Coordinator Qualifications: Experienced firm, with a record of successful waste management coordination of projects with similar requirements.
- B. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.
- C. Regulatory Requirements: Comply with hauling and disposal regulations of authorities having jurisdiction.

1.08 WASTE MANAGEMENT PLAN

- A. General: Develop a waste management plan according to ASTM E 1609 and requirements in this Section. Plan shall consist of waste identification, waste reduction work plan, and cost/revenue analysis. Indicate quantities by weight or volume but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of site-clearing and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled, or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery, and handling and transportation procedures.
1. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses, and telephone numbers.
 2. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address, and telephone number of each landfill and incinerator facility.
 3. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling, and designated location where materials separation will be performed.
- D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Include the following:
1. Total quantity of waste.
 2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
 3. Total cost of disposal (with no waste management).
 4. Revenue from salvaged materials.
 5. Revenue from recycled materials.
 6. Savings in hauling and tipping fees by donating materials.
 7. Savings in hauling and tipping fees that are avoided.
 8. Handling and transportation costs. Include cost of collection containers for each type of waste.
 9. Net additional cost or net savings from waste management plan.

PART 2 - PRODUCTS (Not Used)**PART 3 - EXECUTION****3.01 PLAN IMPLEMENTATION**

- A. General: Implement approved waste management plan. Provide handling, containers, storage, signage, transportation, and other items as required to implement waste management plan during the entire duration of the Contract. Comply with operation, termination, and removal requirements in Section 01 5000 "Temporary Facilities, Utilities, Access and Construction Aids."
- B. Waste Management Coordinator: Engage a waste management coordinator to be responsible for implementing, monitoring, and reporting status of waste management work plan.
- C. Training: Train workers, subcontractors, and suppliers on proper waste management procedures, as appropriate for the Work.
1. Distribute waste management plan to everyone concerned within three (3) days of submittal return.
 2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling, and disposal.
- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated, and sold.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

2. Comply with Section 015200 "Temporary Facilities, Utilities, Access and Construction Aids" for controlling dust and dirt, environmental protection, and noise control.

3.02 RECYCLING CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Preparation of Waste: Prepare and maintain recyclable waste materials according to recycling or reuse facility requirements. Maintain materials free of dirt, adhesives, solvents, petroleum contamination, and other substances deleterious to the recycling process.
- C. Procedures: Separate recyclable waste from other waste materials, trash, and debris. Separate recyclable waste by type at Project site to the maximum extent practical according to approved construction waste management plan.
 1. Provide appropriately marked containers or bins for controlling recyclable waste until removed from Project site. Include list of acceptable and unacceptable materials at each container and bin. Inspect containers and bins for contamination and remove contaminated materials if found.
 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 4. Store components off the ground and protect from the weather.
 5. Remove recyclable waste from Owner's property and transport to recycling receiver or processor.

3.03 RECYCLING CONSTRUCTION WASTE

- A. Packaging:
 1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
 2. Polystyrene Packaging: Separate and bag materials.
 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
 4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Wood Materials:
 1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
 2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.

3.04 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled, or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Remove waste materials from Owner's property and legally dispose of them.

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

END OF SECTION 017419

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 017800 – PROJECT CLOSEOUT AND CLOSEOUT SUBMITTALS

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.02 SUMMARY

- A. Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Warranties.
 - 3. Final cleaning.
- B. Project Closeout shall be listed on the Schedule of Values as a separate line item as defined in Section 013216 "Activities Schedule".
- C. Related Requirements:
 - 1. Section 013216 "Activities Schedule" for requirements for Applications for Payment for Substantial and Final Completion.
 - 2. Section 013119 "Progress Meetings and Photographs" for submitting final completion construction photographic documentation.
 - 3. Section 017823 "Operation and Maintenance Data" for operation and maintenance manual requirements.
 - 4. Divisions 2 through 33 Sections for specific closeout and special cleaning requirements for the Work in those Sections.

1.03 SUBSTANTIAL COMPLETION

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications, and similar documents.
 - 4. Prepare and submit Project Record Documents, Approved operation and maintenance manuals, construction photographs, damage or settlement surveys, property surveys, and similar final record information.
 - 5. Deliver tools, spare parts, extra materials, and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - 6. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.
 - 7. Complete startup of systems.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

8. Submit test/adjust/balance records. Correct all discrepancies of the TAB reports. Submit summary report of corrective actions.
9. Systems have been tested, balanced and adjusted according to specification requirements, in presence of Arlington County's authorized representative, and operate properly
10. Complete training instruction of the Owner's operating and maintenance personnel. Terminate and remove temporary facilities from Project site, along with mockups, construction tools, and similar elements. All maintenance training of Arlington County personnel has been completed according to Section 017823; verify completion by the Commissioning Agent. Reference Article 9 of General Conditions.
11. Complete final cleaning requirements, including touchup painting.
12. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
13. The certificate of occupancy has been issued for the project.

Obtain and submit releases enabling the Owner unrestricted use of the work and access to services and utilities; include occupancy permits, operating certificates and similar releases.

B. LIST OF INCOMPLETE ITEMS

1. Preparation: Submit three copies of list. Include name and identification of each space and area affected by construction operations for incomplete items and items needing correction including, if necessary, areas disturbed by Contractor that are outside the limits of construction.
2. Organize list of spaces in sequential order, starting with exterior areas first and proceeding through interior rooms as numbered on Construction Documents.
3. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment, and building systems.
4. Include the following information at the top of each page:
 - a. Project name.
 - b. Date.
 - c. Name of Architect.
 - d. Name of Contractor.

C. INSPECTION

1. Submit a written request for inspection for Substantial Completion. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Architect, that must be completed or corrected before certificate will be issued.
2. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
3. Results of completed inspection will form the basis of requirements for Final Completion.

1.04 FINAL COMPLETION

- A. Submittals Prior to Final Completion: Before requesting final inspection for determining final completion, complete the following:

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1. Contract documents have been reviewed and the work has completed according to contract documents.
 2. The project has been inspected for compliance with the contract documents.
 3. The project is completed and ready for final inspection by owner.
 4. Submit a final Application for Payment according to Division 1 Section 013216 Activities Schedule and Progress Payments.
 5. Submit certified copy of Architect's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Architect. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 6. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 7. Submit pest-control final inspection report and warranty.
 8. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion, or when the Owner took possession of and responsibility for corresponding elements of the Work.
 9. Submit consent of surety to final payment. Approval of Record Drawings, Record Specifications, Record Product Data, and Record Samples.
 10. Complete all other specified closeout requirements.
 11. Provide a Compact Disc with all Closeout Documents in electronic format (PDF), to include all items required in this Section. Upload and submit all documents in e-Builder as required.
- B. Inspection: Submit a written request for final inspection for acceptance. On receipt of request, Architect will either proceed with inspection or notify Contractor of unfulfilled requirements. Architect will prepare a final Certificate for Payment after inspection or will notify Contractor of construction that must be completed or corrected before certificate will be issued.
1. Re-inspection: Request re-inspection when the Work identified in previous inspections as incomplete is completed or corrected.
 2. Two weeks advance notice of final inspection is required.
 3. The Owner, AE and additional Arlington County representatives will make the final inspection. The Owner and AE will develop a list of any items to be corrected and distribute the punch list to the Contractor and the inspection party.
 4. The final inspection shall not be requested until the work is ready for final inspection. If the final inspection is conducted and the work is not in fact ready, the Contractor may be held liable to Arlington County for the cost of conducting a subsequent final inspection.
 5. Should the Owner consider the work is not fully complete, the Owner shall notify the Contractor in writing of the reasons. The Contractor shall take immediate steps to remedy the stated deficiencies, and send second written notice to the Owner and Engineer certifying the work is complete and requesting re-inspection.
 6. The Contractor shall have thirty work days from receipt of the punch list to complete all items, unless otherwise directed by Arlington County's Construction Manager.
 7. Final acceptance shall not occur until all punch list items are completed.
 8. Arlington County shall notify the Contractor in writing, of final acceptance of the project by Arlington County.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

PART 2 - PRODUCTS

2.01 MAINTENANCE MATERIALS AND SPARE PARTS

- A. Provide products, spare parts, tools and maintenance materials to Arlington County in quantities specified in individual specification sections.
- B. Separately pack the items for each system or finish, clearly identifying the trade name and stock number, where item is to be used, and name, address and phone number of closest supplier.
- C. Deliver the items to the project site prior to the final inspection, unless otherwise directed by Arlington County's Construction Manager. Coordinate storage location(s) with the PM, provide bill of materials and obtain receipt from Arlington County's Construction Manager prior to final payment.

PART 3 - EXECUTION

3.01 FINAL CLEANING

- A. General: Perform final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and antipollution regulations.
- B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.
 - 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard, and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter, and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains, and other foreign deposits.
 - c. Remove tools, construction equipment, machinery, and surplus material from Project site.
 - d. Remove snow and ice to provide safe access to building.
 - e. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films, and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - f. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
 - g. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - h. Remove labels that are not permanent.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 - j. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings, and other foreign substances.
 - k. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - l. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers, and grills.
 - m. All Final HVAC filters shall be installed.
 - n. Clean ducts, blowers, and coils if units were operated without filters during construction.
 - o. Clean light fixtures, lamps, globes, and reflectors to function with full efficiency. Replace burned-out bulbs, and those noticeably dimmed by hours of use, and defective and noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
 - p. Leave Project clean and ready for occupancy.
- C. Pest Control: Engage an experienced, licensed exterminator to make a final inspection and rid Project of rodents, insects, and other pests. Prepare a report.
- D. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful, or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.
- 3.02 OPERATING AND MAINTENANCE DATA AND INSTRUCTION (See Section 017823).
- 3.03 PROJECT RECORD AS-BUILTS
- A. Deliver digital project record As-Builts to Arlington County's Construction Manager and the AE at the completion of the project and prior to final acceptance. This final submittal requires a Letter of Transmittal; documents shall be loaded electronically into e-Builder.
 - B. Project Record As-Builts include:
 - 1. As-Built drawings: See 3.04 below.
 - 2. Activities Schedule: See Section 013216.
 - 3. Technical Submittals: See Section 013300. Provide verification to Arlington County that all submittal items per the submittal register are approved, closed and loaded in e-Builder for record.
 - 4. Test Log: See Section 013300.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

5. Specifications and addenda: Mark legibly by hand or type on each section to record changes made by change order, field order, substitution or any other changes.
6. Operating and Maintenance Data: See Section 017823.

3.04 AS-BUILT DRAWINGS

- A. As-built drawings are a record of the construction, completed and maintained weekly by the Contractor, and shall include:
 1. A record of all modifications or changes from the contract drawings, however minor, including any additional work not appearing on the original contract drawings, which were incorporated in the work.
 2. All changes resulting from the final inspection.
 3. The location and description of any utility lines or other installations of any kind or description discovered or known to exist within the construction area. The location shall include dimensions to permanent features or landmarks, and depth for buried utilities.
 4. Changes in details of design or additional information obtained from submissions furnished by the Contractor, including, but not limited to:
 - a. Fabrication,
 - b. Erection,
 - c. Installation plans and placing details,
 - d. Dimensions of equipment foundations,
 - e. Sewer, utilities connection, and tie in inverts,
 - f. The topography and grades of all drainage installed or affected during the contract.
 - g. Certified copies of the surveyor's notebooks and calculations shall be submitted at the completion of the work.
- B. Mark up one set of full-size paper prints to show the as-built conditions. This set shall be maintained by and remain in the possession of the Contractor until final inspection.
- C. Arlington County approved changes to the contract documents, or additional information which might be uncovered in the course of construction, shall be accurately and neatly recorded as they occur, by means of details and notes. No construction work shall be concealed until the contractor has inspected, approved, and recorded the work.
- D. The Contractor and the AE shall jointly inspect the As-Built marked prints and other As-Built documents specified elsewhere, before the monthly pay request is submitted.
- E. Deliver the final As-Built marked prints to the A/E and a copy to Arlington County's Construction Manager and AE for review as part of the final inspection. As-Built shall be submitted electronically through e-Builder.
- F. Upon return of the As-Built to the Contractor, enter the changes resulting from the final inspection and re-submit within 10 days of the final inspection. Submit electronically through e-Builder.

3.05 WARRANTIES AND BONDS

- A. Submittal Time: Submit written warranties on request of Architect for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Partial Occupancy: Submit properly executed warranties within 15 days of completion of designated portions of the Work that are completed and occupied or used by Owner during construction period by separate agreement with Contractor.
- C. Provide duplicate, notarized copies to Arlington County's Construction Manager. Execute Contractor's submittals and assemble documents executed by subcontractors, suppliers, and manufacturers. Provide table of contents and assemble in binder with durable plastic cover. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address, and telephone number of Installer. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name, and name of Contractor. Provide additional copies of each warranty to include in operation and maintenance manuals.
- D. Submit material prior to final inspection. For equipment put into use with Arlington County's permission during construction, submit within ten days after first operation. The warranty period begins with substantial acceptance.
- E. Warranty starts on substantial acceptance date reference Section 017823. Not the date equipment is installed. Provide a copy of each warranty, bond and service contract issued.
- F. A Warranty Inspection is to be held not less than 10 months and not more than 12 months after Substantial Acceptance. This inspection is to be conducted by the Owner, Architect, Contractor and his major subcontractors (mechanical, electrical & plumbing). The purpose of this inspection is to identify systems or equipment that may not be functioning properly. A list of these warranty items will be prepared by the Owner and submitted to the Contractor for correction under the terms of the warranty

END OF SECTION 017800

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 017839 - AS-BUILT DOCUMENTATION

PART 1 - GENERAL

- 1.1 The Contractor is to furnish all labor, materials, and data necessary to maintain and produce project As-Built drawings and specifications in accordance with applicable Contract provisions.
- 1.2 Impacts resulting from the Contractor's failure to meet As-Built requirements shall in no part become the subject of a Contractor claim for Contract Time extension, excess costs or damages.
- 1.3 The terms 'drawings', "contract drawings", "drawing files", "working as-built drawings", and "final as-built drawings" all refer to contract drawings which are revised to be used for final as-built drawings.
- 1.4 As-Built documentation are a prerequisite for award of Substantial Completion. It is the Contractor's responsibility to submit complete and acceptable as-built documentation in a timely fashion for review including consideration of the typical review-cycle durations.
- 1.5 RELATED SPECIFICATION SECTIONS
 - A. General Conditions
 - B. Section 012900 Payment Procedures
 - C. Section 017800 Project Close-out and Close-Out Submittals
 - D. Section 017823 Operation and Maintenance Data

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

- 3.1 As-Built Posting During Construction
 - A. The Contractor shall revise paper drawings and specifications by red-line process to show the as-built conditions during the execution of the project. These working as-builts shall be kept current on a weekly basis and at least one set shall be available for review at the jobsite at all times. Changes from the contract documents which are made in the work or additional information which might be uncovered in the course of construction shall be accurately and neatly recorded as they occur by means of details and notes on the drawings. The working as-built documents will be jointly reviewed for accuracy and completeness by the Owner/Architect and the Contractor prior to each of the Contractor's monthly Applications for Payment.
- 3.2 PAYMENT
 - A. As-Built packages are line items in the Schedule of Values (reference General Conditions Section & Specification 012900). Payment for as-built drawings and specifications will be made as a single payment after Owner/AE review and acceptance of each As-Built package submission.
- 3.3 CONTENT
 - A. The As-Built packages shall be submitted as follows:
 1. As-Built Site Plan
 - a. The Contractor shall submit an as-built site plan prepared by a licensed Land Surveyor or licensed Professional Engineer, for review, and obtain approval by local authorities having jurisdiction for conformance with the approved site plan. The Contractor shall pay

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

any required filing, correction, and resubmission fees at no additional cost to the Owner. Notify the Owner in writing when plan is submitted and when the local authorities have approved the submission.

- b. The Contractor shall confirm all project required storm sewer systems are properly installed and acceptable to the Owner prior to the site as-built submission. The Contractor shall video all pipes, structure, and other system components and obtain approval from the Owner for the storm sewer systems. The Contractor shall provide the Owner with two copies of the final approved videos on disk for all storm sewer components.
- c. Submission information should minimally include the following:
 - 1) Boundary of the site
 - 2) Dimensional location/size of all building(s)
 - 3) All storm sewer, sanitary sewer, and fire hydrants, showing pipe sizes,
 - 4) lengths, top and invert elevations and percent of slope of pipe
 - 5) Deed book and page number of any dedication and all easements
 - 6) Location and cross-sectional survey of any storm water or bio retention areas(s)
 - 7) Certification by the engineer or surveyor indicating that the as-builts conform with the approved site plan except as shown and that it represents the actual conditions on the site, and bearing his signature and Virginia Registration Number
 - 8) Curb and gutter and/or ditch elevations
 - 9) Survey and record topographic elevations for all paving, sidewalks, stairs, ramps, and entrances to verify conformance with contract requirements. Arlington County will use this specific information to confirm ADA accessibility for the site.
 - 10) Any other pertinent information as determined by the Owner/Architect

2. Sanitary Sewer As-Built Plan

- a. The Contractor shall submit a separate sanitary sewer as-builts for review and obtain approval by local authorities having jurisdiction. The Contractor shall pay any required filing, correction, and resubmission fees at no additional cost to the Owner. Notify the Owner in writing when plan is submitted and when the local authorities have approved the submission.
- b. The Contractor is responsible to confirm all required sanitary sewer systems are properly installed and acceptable to the Owner prior to the sanitary sewer as-built submission. The Department of Public Works, Line Maintenance Division, shall video the sanitary sewer system to determine acceptability. The Contractor shall correct any and all deficiencies found in during this or other inspections at no cost to the Owner.

3. Project Record As-Built Plans

- a. The Contractor shall submit two paper sets and two (2) electronic copies of red-lined Contract drawings and specifications for review and approval of the Owner/Architect. The documents should be marked to reflect actual civil, architectural, structural, electrical, plumbing, mechanical, and other trades final as-built conditions of the project.
- b. Label each set of documents "RECORD AS-BUILTS". Have skilled draft-persons and typists transfer all changes, corrections, and entries.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- c. Submission information should minimally include the following:
- 1) Changes in details of design or additional information obtained from working drawings and specifications including but not limited to fabrication, erection, material changes/substitutions, installation plans and placing details, etc.
 - 2) Where contract drawings or specifications present options, only the option selected for construction shall be shown.
 - 3) Changes or modifications resulting from the substantial completion or final inspections.
 - 4) Changes or modifications brought about as a result of a Request for Information, Architect's Supplemental Instructions, Field Order, or Change Order.
 - 5) Location of internal utilities and appurtenances concealed in construction referenced to visible and accessible features of structure.
 - 6) Final location and depth of all utilities on the property.
 - 7) Field changes of dimension and/or detail.

END OF SECTION 017839

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 018800 - ACCESSIBILITY

PART 1 - GENERAL

- 1.1 The Contract Documents have been designed to comply with ICC/ANSI A117.1 as well as with the Department of Justice's 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design, with the more stringent of the two standards governing.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION

3.1 MANDATORY ADA COMPONENT PROJECT SUBMITTALS AND CONTRACTOR SCHEDULED PROJECT SITE MEETINGS:

Within 30 days after issuance of the Notice-to-Proceed (NTP), the Contractor shall submit for Owner review an ADA Compliance Submittal that outlines the Contractor's project specific ADA related work and execution plan. Subsequent to the Contractor making his ADA Compliance submittal, he shall schedule on-site review meetings to assure all work shall comply with all ADA provisions as reflected in the Contract Drawings and Specifications. At a minimum, the referenced plan shall reflect the following activities by the Contractor:

- a. Contractor to schedule and host multiple ADA pre-construction meetings with the Owner to review all ADA aspects of the project prior to the start of various ADA sensitive installation activities. Activities include, but are not limited to, partition framing, MEP rough-in, ceramic tile installation, millwork installation, toilet room plumbing fixture placement and clearances, toilet accessory component placement and installation, water cooler placement and clearances, handrail and guardrail installation, construction of interior and exterior ramps, sidewalks, stairs reviewing slope & cross pitch, limited degree of pitch, at all path of travel surfaces including landings adjacent to ramps, stairs and entries, etc.
- b. Review Contract Documents to identify items designed for conformance with accessibility criteria.
- c. Review installation/construction procedures and goals as they relate to compliance with applicable accessibility criteria and measurement criteria.
- d. Review all applicable accessibility criteria and methods of measurement of compliance.
- e. Review subcontractor shop drawings for adherence to all applicable accessibility criteria as shown in the Contract Drawings and Specifications.
- f. Develop a comprehensive checklist of all applicable accessibility criteria as shown on the Contract Drawings and Specifications for the purpose of periodic Quality Control inspections during construction and at Substantial Completion.
- g. Contractor to schedule and host a construction-phase field meeting with the Owner on site prior to close-in to review all ADA aspects of the Project and to review compliance at rough-in phase.
- h. Contractor to schedule and host a site hardscape review phase construction meeting, with the Owner present to review rough-ins of ADA aspects of the Project. This meeting is to be scheduled by the Contractor prior to concrete placement along the site "accessible path of travel" pavement. Railing and hardscape features shall be included. Concurrence regarding the ADA "path of travel" criteria including, but not limited to, accessible route(s) from handicapped parking stalls on site to the building public entrance(s) shall be addressed and confirmed.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- i. Field measurements and measurement criteria shall be applied to the accessible path(s) of travel slopes and cross slopes prior to placing concrete and shall be included as an agenda item of this meeting.
- j. Provide ADA component updates and field installation schedules for Owner review during regular Progress Meetings.

END OF SECTION 018800

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 024116 - STRUCTURE DEMOLITION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Demolition and removal of buildings and site improvements.
2. Removing below-grade construction.
3. Disconnecting, capping or sealing, and removing site utilities.
4. Salvaging items for reuse by Owner.

B. Related Requirements:

1. Section 011000 "Summary" for use of the premises and phasing requirements.
2. Section 013200 "Construction Progress Documentation" for preconstruction photographs taken before building demolition.
3. Section 311000 "Site Clearing" for site clearing and removal of above- and below-grade site improvements not part of building demolition.

1.2 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged.

1.3 MATERIALS OWNERSHIP

- A. Unless otherwise indicated, demolition waste becomes property of Contractor.

1.4 PREINSTALLATION MEETINGS

A. Predemolition Conference: Conduct conference at Project site.

1. Inspect and discuss condition of construction to be demolished.
2. Review structural load limitations of existing structures.
3. Review and finalize building demolition schedule and verify availability of demolition personnel, equipment, and facilities needed to make progress and avoid delays.
4. Review and finalize protection requirements.
5. Review procedures for noise control and dust control.
6. Review procedures for protection of adjacent buildings.
7. Review items to be salvaged and returned to Owner.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For refrigerant recovery technician.
- B. Engineering Survey: Submit engineering survey of condition of building.
- C. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property, for environmental protection, for dust control and, for noise control. Indicate proposed locations and construction of barriers.
- D. Schedule of Building Demolition Activities: Indicate the following:
 - 1. Detailed sequence of demolition work, with starting and ending dates for each activity.
 - 2. Temporary interruption of utility services.
 - 3. Shutoff and capping or re-routing of utility services.
- E. Predemolition Photographs or Video: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by salvage and demolition operations. Comply with Section 013233 "Photographic Documentation." Submit before the Work begins.
- F. Statement of Refrigerant Recovery: Signed by refrigerant recovery technician responsible for recovering refrigerant, stating that all refrigerant that was present was recovered and that recovery was performed according to EPA regulations. Include name and address of technician and date refrigerant was recovered.

1.6 CLOSEOUT SUBMITTALS

- A. Inventory: Submit a list of items that have been removed and salvaged.

1.7 QUALITY ASSURANCE

- A. Refrigerant Recovery Technician Qualifications: Certified by EPA-approved certification program.

1.8 FIELD CONDITIONS

- A. Buildings to be demolished will be vacated and their use discontinued before start of the Work.
- B. Buildings immediately adjacent to demolition area will be occupied. Conduct building demolition so operations of occupied buildings will not be disrupted.
 - 1. Provide not less than 72 hours' notice of activities that will affect operations of adjacent occupied buildings.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

2. Maintain access to existing walkways, exits, and other facilities used by occupants of adjacent buildings.

a. Do not close or obstruct walkways, exits, or other facilities used by occupants of adjacent buildings without written permission from authorities having jurisdiction.

C. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.

1. Before building demolition, Owner will remove the following items:

a. Existing Furniture.

D. Hazardous Materials: Present in buildings and structures to be demolished. A report on the presence of hazardous materials is on file for review and use. Examine report to become aware of locations where hazardous materials are present.

1. Hazardous material remediation is specified in Hazardous Materials Survey report conducted dated June 6, 2022 by JSK Environmental Consulting, LLC.

2. Do not disturb hazardous materials or items suspected of containing hazardous materials except under procedures specified elsewhere in the Contract Documents.

3. Owner will provide material safety data sheets for materials that are known to be present in buildings and structures to be demolished because of building operations or processes performed there.

E. On-site storage or sale of removed items or materials is not permitted.

1.9 COORDINATION

A. Arrange demolition schedule so as not to interfere with operations of adjacent occupied buildings.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

B. Standards: Comply with ANSI/ASSP A10.6 and NFPA 241.

2.2 SOIL MATERIALS

A. Satisfactory Soils: Comply with requirements in Section 312000 "Earth Moving."

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

PART 3 - EXECUTION

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

3.1 DEMOLITION CONTRACTOR

A. Demolition Contractor:

1. See requirements in section 013543 Hazardous Materials Remediation.

3.2 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting demolition operations.
- B. Review Project Record Documents of existing construction or other existing condition and hazardous material information provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- C. Perform an engineering survey of condition of building to determine whether removing any element might result in structural deficiency or unplanned collapse of any portion of structure or adjacent structures during building demolition operations.
- D. Steel Tendons: Locate tensioned steel tendons and include recommendations for de-tensioning.
- E. Inventory and record the condition of items to be removed and salvaged.

3.3 PREPARATION

- A. Refrigerant: Before starting demolition, remove refrigerant from mechanical equipment according to 40 CFR 82 and regulations of authorities having jurisdiction.
- B. Salvaged Items: Comply with the following:
 1. Clean salvaged items of dirt and demolition debris.
 2. Pack or crate items after cleaning. Identify contents of containers.
 3. Store items in a secure area until delivery to Owner.
 4. Transport items to storage area designated by Owner.
 5. Protect items from damage during transport and storage.

3.4 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Utilities to Be Disconnected: Locate, identify, disconnect, and seal or cap off utilities serving buildings and structures to be demolished.
 1. Arrange to shut off utilities with utility companies.
 2. If removal, relocation, or abandonment of utility services will affect adjacent occupied buildings, then provide temporary utilities that bypass buildings and structures to be demolished and that maintain continuity of service to other buildings and structures.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3. Cut off pipe or conduit a minimum of 24 inches (610 mm) below grade. Cap, valve, or plug and seal remaining portion of pipe or conduit after bypassing according to requirements of authorities having jurisdiction.
4. Do not start demolition work until utility disconnecting and sealing have been completed and verified in writing.

3.5 PROTECTION

- A. Existing Facilities: Protect adjacent walkways, loading docks, building entries, and other building facilities during demolition operations. Maintain exits from existing buildings.
- B. Temporary Shoring: Provide and maintain interior and exterior shoring, bracing, or structural support to preserve stability and prevent unexpected movement or collapse of construction being demolished.
 1. Strengthen or add new supports when required during progress of demolition.
- C. Existing Utilities to Remain: Maintain utility services to remain and protect from damage during demolition operations.
 1. Do not interrupt existing utilities serving adjacent occupied or operating facilities unless authorized in writing by Owner and authorities having jurisdiction.
 2. Provide temporary services during interruptions to existing utilities, as acceptable to Owner and authorities having jurisdiction.
 - a. Provide at least 72 hours' notice to occupants of affected buildings if shutdown of service is required during changeover.
- D. Temporary Protection: Erect temporary protection, such as walks, fences, railings, canopies, and covered passageways, where required by authorities having jurisdiction and as indicated. Comply with requirements in Section 015000 "Temporary Facilities and Controls."
 1. Protect adjacent buildings and facilities from damage due to demolition activities.
 2. Protect existing site improvements, appurtenances, and landscaping to remain.
 3. Erect a plainly visible fence around drip line of individual trees or around perimeter drip line of groups of trees to remain.
 4. Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent buildings and facilities to remain.
 5. Provide protection to ensure safe passage of people around building demolition area and to and from occupied portions of adjacent buildings and structures.
 6. Protect walls, windows, roofs, and other adjacent exterior construction that are to remain and that are exposed to building demolition operations.
 7. Erect and maintain dustproof partitions and temporary enclosures to limit dust, noise, and dirt migration to occupied portions of adjacent buildings.
- E. Remove temporary barriers and protections where hazards no longer exist. Where open excavations or other hazardous conditions remain, leave temporary barriers and protections in place.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.6 DEMOLITION, GENERAL

- A. General: Demolish indicated buildings and site improvements completely. Use methods required to complete the Work within limitations of governing regulations and as follows:
 - 1. Do not use cutting torches until work area is cleared of flammable materials. Maintain portable fire-suppression devices during flame-cutting operations.
 - 2. Maintain fire watch during and for at least two (2) hours after flame-cutting operations.
 - 3. Maintain adequate ventilation when using cutting torches.
 - 4. Locate building demolition equipment and remove debris and materials so as not to impose excessive loads on supporting walls, floors, or framing.

- B. Site Access and Temporary Controls: Conduct building demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Do not close or obstruct streets, walks, walkways, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction. Provide alternate routes around closed or obstructed trafficways if required by authorities having jurisdiction.
 - 2. Use water mist and other suitable methods to limit spread of dust and dirt. Comply with governing environmental-protection regulations. Do not use water when it may damage adjacent construction or create hazardous or objectionable conditions, such as ice, flooding, and pollution.

- C. Explosives: Use of explosives is not permitted.

3.7 DEMOLITION BY MECHANICAL MEANS

- A. Proceed with demolition of structural framing members systematically, from higher to lower level. Complete building demolition operations above each floor or tier before disturbing supporting members on the next lower level.

- B. Remove debris from elevated portions of the building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
 - 1. Remove structural framing members and lower to ground by method suitable to minimize ground impact and dust generation.

- C. Below-Grade Construction: Demolish foundation walls and other below-grade construction.
 - 1. Remove below-grade construction, including basements, foundation walls, and footings, completely.

- D. Existing Utilities: Demolish and remove existing utilities and below-grade utility structures.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- E. Hydraulic Elevator Systems: Demolish and remove elevator system, including cylinder, plunger, well assembly, steel well casing and liner, oil supply lines, and tanks.

3.8 SITE RESTORATION

- A. Below-Grade Areas: Completely fill below-grade areas and voids resulting from building demolition operations with satisfactory soil materials according to backfill requirements in Section 312000 "Earth Moving."
- B. Site Grading: Uniformly rough grade area of demolished construction to a smooth surface, free from irregular surface changes. Provide a smooth transition between adjacent existing grades and new grades.

3.9 REPAIRS

- A. Promptly repair damage to adjacent buildings caused by demolition operations.

3.10 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction, and recycle or dispose of them according to Section 017419 "Construction Waste Management and Disposal"
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Do not burn demolished materials.

3.11 CLEANING

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by building demolition operations. Return adjacent areas to condition existing before building demolition operations began.
 - 1. Clean roadways of debris caused by debris transport.

END OF SECTION 024116

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 311000 - SITE CLEARING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Protecting existing vegetation to remain.
 - 2. Removing existing vegetation.
 - 3. Clearing and grubbing.
 - 4. Stripping and stockpiling topsoil.
 - 5. Removing above- and below-grade site improvements.
 - 6. Disconnecting, capping or sealing, and removing site utilities.

1.3 DEFINITIONS

- A. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- B. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil," but in disturbed areas such as urban environments, the surface soil can be subsoil.
- C. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil; the zone where plant roots grow.
- D. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction and indicated on Drawings.
- E. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.5 MATERIAL OWNERSHIP

- A. Except for materials indicated to be stockpiled or otherwise remain on Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.6 INFORMATIONAL SUBMITTALS

- A. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - 1. Use sufficiently detailed photographs or video recordings.
 - 2. Include plans and notations to indicate specific wounds and damage conditions of each tree or other plant designated to remain.
- B. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.

1.7 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed trafficways if required by Owner or authorities having jurisdiction.
- B. Utility Locator Service: Notify Miss Utility for area where Project is located before site clearing.
- C. Do not commence site clearing operations until temporary erosion- and sedimentation-control measures are in place.
- D. Tree-Protection Zones: Protect according to requirements in Section 015639 "Temporary Tree and Plant Protection."
- E. Soil Stripping, Handling, and Stockpiling: Perform only when the soil is dry or slightly moist.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Satisfactory Soil Material: Requirements for satisfactory soil material are specified in Section 312000 "Earthwork."
 - 1. Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Verify that trees, shrubs, and other vegetation to remain or to be relocated have been flagged and that protection zones have been identified and enclosed according to the Drawings.
- C. Protect existing site improvements to remain from damage during construction.
 - 1. Restore damaged improvements to their original condition, as acceptable to Owner.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL

- A. Provide temporary erosion- and sedimentation-control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion- and sedimentation-control Drawings and requirements of authorities having jurisdiction.
- B. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- C. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- D. Remove erosion and sedimentation controls, and restore and stabilize areas disturbed during removal.

3.3 TREE AND PLANT PROTECTION

- A. Protect trees and plants remaining on-site.
- B. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations.

3.4 EXISTING UTILITIES

- A. Locate, identify, disconnect, and seal or cap utilities indicated to be removed or abandoned in place.
 - 1. Arrange with utility companies to shut off indicated utilities.
- B. Locate and identify, and disconnect utilities indicated to be abandoned in place.
- C. Excavate for and remove underground utilities indicated to be removed.

3.5 CLEARING AND GRUBBING

- A. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
 - 1. Do not remove trees, shrubs, and other vegetation indicated to remain or to be relocated.
 - 2. Grind down stumps and remove roots larger than 2 inches in diameter, obstructions, and debris to a depth of 18 inches below exposed subgrade.
 - 3. Use only hand methods or air spade for grubbing within protection zones.
 - 4. Chip removed tree branches and dispose of off-site.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
 - 1. Place fill material in horizontal layers not exceeding a loose depth of 8 inches, and compact each layer to a density equal to adjacent original ground.

3.6 TOPSOIL STRIPPING

- A. Remove sod and grass before stripping topsoil.
- B. Strip topsoil to depth of 6 inches in a manner to prevent intermingling with underlying subsoil or other waste materials.
 - 1. Remove subsoil and nonsoil materials from topsoil, including clay lumps, gravel, and other objects larger than 2 inches in diameter; trash, debris, weeds, roots, and other waste materials.
- C. Stockpile topsoil away from edge of excavations without intermixing with subsoil or other materials. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.
 - 1. Limit height of topsoil stockpiles to 72 inches.
 - 2. Do not stockpile topsoil within protection zones.
 - 3. Dispose of surplus topsoil. Surplus topsoil is that which exceeds quantity indicated to be stockpiled or reused.

3.7 SITE IMPROVEMENTS

- A. Remove existing above- and below-grade improvements as indicated and necessary to facilitate new construction.
- B. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
 - 1. Unless existing full-depth joints coincide with line of demolition, neatly saw-cut along line of existing pavement to remain before removing adjacent existing pavement. Saw-cut faces vertically.
 - 2. Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.

3.8 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
- B. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials, and transport them to recycling facilities. Do not interfere with other Project work.

END OF SECTION 311000

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 311020 – EROSION AND SEDIMENT CONTROL

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Requirements for temporary erosion and sedimentation control.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site. The Contractor shall present a general overview of erosion and sediment control measures will be implemented of the project.

1.3 CONTRACTOR PERSONNEL

- A. The Contractor shall assign a Certified Employee to the project site in the capacity of the Responsible land Disturber (RLD).

1.4 STANDARDS AND SPECIFICATIONS

- A. Temporary erosion and sediment control measures shall be constructed in conformance with the local jurisdiction and the latest edition of the Virginia Erosion and Sediment Control Handbook (VESCH), published by the Virginia Department of Conservation.
- B. The installation and maintenance of temporary erosion and sediment control devices shall be in accordance with the Stormwater Pollution Prevention Plan (SWPPP) required by the Virginia Department of Environmental Quality, which shall be prepared and submitted by the Contractor.

1.5 CONSTRUCTION OPERATION

- A. Storage of construction vehicles, trucks, and equipment is limited to the area within the limits of disturbance.

PART 2 - PRODUCTS

2.1 STABILIZATION MATERIALS

- A. Seed, mulch, fertilizer, soil conditioner and other materials for seeding and soil stabilization shall meet the requirements of the VESCH, latest edition.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

2.2 GEOTEXTILE (FILTER CLOTH)

- A. Geotextiles shall conform to the standards and specifications of the Contract Drawings and shall meet the requirements of the VESCH, latest edition.

2.3 STONE

- A. Stone 2 to 3 inches in size shall conform to AASHTO M43, No. 2.
- B. Stone 3/4 –inch to 12-inch shall conform to AASHTO M43, No.4.
- C. VDOT No. 1 Coarse Aggregate, Section 203.
- D. VDO No. 57 Coarse Aggregate, Section 203.

2.4 SILT FENCE

- A. Silt fence shall be installed in the locations reflected on the Contract Drawings.
- B. VESCH Standard 3.05.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect and maintain benchmarks and survey control points from disturbance during construction.
- B. Install the Phase 1 Erosion and Sediment Controls as shown on the Contract Drawings. All measures shall be inspected and approved by the Engineer and the local jurisdiction prior to beginning any land disturbance. The Contractor shall ensure all runoff from the disturbed area is directed to the erosion and sediment control measures.
- C. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- D. Inspect, maintain, and repair erosion- and sedimentation-control measures during construction until permanent vegetation has been established.
- E. The Contractor shall not remove any erosion and sediment control measure without the approval of the Engineer and the local jurisdiction.

3.2 TEMPORARY EROSION AND SEDIMENTATION CONTROL SEQUENCE OF CONSTRUCTION

- A. The Contractor shall implement the Erosion and Sediment Control Plan (E&S Plan) and sequence of construction reflected in the Contract Documents. Minor adjustments to the sediment control measures may be made in the field with the prior approval of the Engineer.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Major revisions, deletions, or substitutions to the E&S Plan will require a formal review and approval by the Engineer and the authority having jurisdiction prior to implementing the change.
- C. The Contractor shall apply for and obtain the Virginia Pollutant Discharge Elimination System (VPDES) Construction Permit.

3.3 RESPONSIBLE LAND DISTURBER

- A. At least 10 days prior to applying to the permit, the name and credentials of the Responsible Land Disturber (RLD) shall be submitted to the Engineer for approval. Any substitutes for the RLD will be subject to the approval of the Engineer. The substitution shall be timed to ensure that a RLD is assigned to the project at all times.
- B. The RLD shall be thoroughly experienced in all aspects of construction and have satisfactorily completed the Erosion and Sediment Control Training Program either conducted or authorized by the Commonwealth of Virginia pursuant to the appropriate legislation. The RLD shall have the primary responsibility and authority for the implementation of the approved erosion and sediment control plans, schedules and methods of operation for both onsite and offsite activities.
- C. The RLD's duties shall include":
 1. Inspect all erosion and sediment controls on a daily basis to ensure that all controls are in place at all times and to develop a list of activities and schedules to ensure conformance with the Contract Documents.
 2. Maintain a daily log of these inspections, including actions taken and submit a written report to the Engineer at the end of the week.
 3. Conduct after storm inspections with the Engineer both during and beyond normal working hours/days and submit a written report.
 4. Be assigned the authority by the Contractor to mobilize crews to make immediate repairs to the controls during working and nonworking hours.
 5. When requested, accompany the Engineer on Quality Assurance Inspections and inspections made by the regulating agencies.
 6. Coordinate with the Engineer to ensure all the corrections are made immediately and that the project is in compliance with the approved plans.

3.4 SCHEDULE

- A. Within the 14 days after the Notice of Award, the Contractor shall submit to the Engineer an Erosion and Sediment Control Schedule to implement the E&S Plan. The schedule shall indicate the sequence of construction, implementation and maintenance of controls, temporary and permanent stabilization, and various stages of soil disturbance.
- B. The schedule shall include:
 1. Clearing and grubbing of areas necessary for installation of perimeter controls specified in the Contract Documents.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- 2. Construction of perimeter controls specified in the Contract Documents.
- 3. Excavation and backfilling.
- C. No work shall be started onsite until the Erosion and Sediment Control schedule and methods of operation have been accepted by the Engineer.

3.5 MEETINGS

- A. At least seven (7) working days prior to the start of work, the Contractor shall initiate and conduct an Erosion and Sediment Control Field Meeting.

3.6 INITIAL CONTROLS

- A. All perimeter controls such as silt fence, earth dikes/swales, check dams, traps, basins, etc., shall be installed prior to the clearing and grubbing operation. Remove sod and grass before stripping topsoil.
- B. If the Engineer determines that the clearing area has been disturbed and a potential for sediment runoff or erosion exists, the Engineer will direct the Contractor to install the controls at that time.

3.7 STABILIZATION REQUIREMENTS

- A. Areas flatter than 3:1 and stockpile areas shall be permanently or temporarily stabilized as soon as possible, but not later than fourteen days after grubbing and grading activities have ceased in the area. Trap embankments and slopes, earth dikes, temporary swales, perimeter dike/swales, ditches, and slopes 3:1 or steeper shall be permanently or temporarily stabilized as soon as possible, but not later than seven days after grubbing and grading activities have ceased in the area. Slope 2:1 and steeper shall be stabilized with slope stabilization mat. The seven- and fourteen-day requirements mean that the stabilization operation is complete within the applicable seven or fourteen day time frame.
- B. When permanently stabilized areas are disturbed by the Contractor's grading operation or other activities not specifically approved by the Engineer, the re-stabilization will be at no additional cost to the Owner. Stabilization requirements may be reduced to less than seven days for sensitive areas and can be required at any point in time by the local jurisdiction. Maintenance shall be performed as necessary to ensure continued stabilization.
- C. All slopes shall be tracked within five days of establishment with cleated type equipment operating perpendicular to the slope.

3.8 MAINTENANCE

- A. All erosion and sediment control devices shall be maintained during the construction season, the winter months, and other times when the project is shut down. Access shall be maintained to all erosion and sediment controls until the controls are removed. Lack of maintenance by the Contractor will be considered as noncompliance with the E&S Plan.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Controls shall be inspected immediately following storm events. The Contractor shall repair controls when damaged and clean out controls as necessary as the first order of business after a storm event.
- C. Any pumping activity, including dewatering sediment traps and basins, shall be directed through a dewatering device approved by the Engineer.
- D. The Contractor shall remove accumulated sediment from sediment controls or other areas during routine maintenance of sediment controls, or as directed by the Engineer. Silt fence, super silt fence, stone outlet structures, stone check dams, sediment control logs, and straw bales shall have sediment removed when it reaches 50 percent of the height of the control device.
- E. Sediment removed from control devices shall be placed in an approved waste site either on or off the project. Material stored on-site may be reused once it has dried and it conforms to project requirements for embankment.

3.9 INSPECTIONS

- A. Field inspections relative to erosion and sediment control compliance may be conducted. If noncompliance with erosion and sediment control provisions are found, the Contractor shall conduct corrective action immediately. This corrective action may require a shutdown of construction activities until the noncompliance is satisfactorily corrected, and no claims against the project will be considered due to a shutdown of the grading operations or the entire project.

3.10 REMOVAL OF CONTROLS

- A. No erosion and sediment control measures shall be removed until all previously disturbed areas are vegetated and the removal has been approved by the Engineer and local jurisdiction. The sediment controls shall be backfilled, graded, and stabilized as specified in the Contract Documents.
- B. All control devices shall be removed, except where an attempt to remove a particular control may severely disturb an area that has been stabilized. When a sediment trap or stone outlet structure is placed at the bottom of a fill greater than 8 feet, the controls may be left in place as determined by the Engineer. Sediment traps left in place shall be stabilized by placing erosion control matting over a permanent seed mix.

3.11 SILT FENCE

- A. The geotextile shall be trenched a minimum of 8 inches into the ground and extend a minimum of 22 inches above ground. Silt fence shall be removed and reset when and as directed by the Engineer. All of the requirements for the original placement of the silt fence shall be strictly adhered to when the fence is reset.

3.12 STABILIZED CONSTRUCTION ENTRANCE

- A. Stabilized construction entrances shall be located as specified in the Contract Documents or as directed by the Engineer. Rehabilitation of stabilized construction entrance shall consist of periodic top dressing with additional VDOT No. 1 aggregate, replacement of pipe, or other

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

repairs to the entrance and sediment trapping devices as needed or as directed by the Engineer.

END OF SECTION 311020

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 312000 - EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Excavating and filling for rough grading the Site.
2. Preparing subgrades for slabs-on-grade, walks, pavements, turf and grasses and plants.
3. Subbase course for concrete walks and pavements.
4. Subbase course and base course for asphalt paving.

1.2 DEFINITIONS

A. Backfill: Soil material used to fill an excavation.

1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
2. Final Backfill: Backfill placed over initial backfill to fill a trench.

B. Base Course: Aggregate layer placed between the subbase course and hot-mix asphalt paving.

C. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.

D. Borrow Soil: Satisfactory soil imported from off-site for use as fill or backfill.

E. Drainage Course: Aggregate layer supporting the slab-on-grade that also minimizes upward capillary flow of pore water.

F. Excavation: Removal of material encountered above subgrade elevations and to lines and dimensions indicated.

1. Authorized Additional Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions as directed by the Engineer. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated lines and dimensions without direction by the Engineer. Unauthorized excavation, as well as remedial work directed by the Engineer, shall be without additional compensation.

G. Fill: Soil materials used to raise existing grades.

H. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.

I. Subbase Course: Aggregate layer placed between the subgrade and base course for hot-mix asphalt pavement, or aggregate layer placed between the subgrade and a cement concrete pavement or a cement concrete or hot-mix asphalt walk.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- J. Subgrade: Uppermost surface of an excavation or the top surface of a fill or backfill immediately below subbase, drainage fill, drainage course, or topsoil materials.
- K. Utilities: On-site underground pipes, conduits, ducts, and cables as well as underground services within buildings.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct pre-excavation conference at Project site.

1.4 INFORMATIONAL SUBMITTALS

- A. Material test reports.

1.5 FIELD CONDITIONS

- A. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earthwork operations.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from the Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by the Owner or authorities having jurisdiction.
- B. Utility Locator Service: Notify utility locator service for area where Project is located before beginning earth-moving operations.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
- B. Satisfactory Soils: Soil Classification Groups GP, GM, SW, SP, and SM according to ASTM D 2487 or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
 - 1. Liquid Limit: 40
 - 2. Plasticity Index: less than 15
- C. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D 2487, or a combination of these groups.
 - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- D. Subbase Material: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve.
- E. Base Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 294/D 2940M 0; with at least 95 percent passing a 1-1/2-inch sieve and not more than 8 percent passing a No. 200 sieve.
- F. Engineered Fill: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; with at least 90 percent passing a 1-1/2-inch sieve and not more than 12 percent passing a No. 200 sieve. Fill materials shall have a minimum standard Proctor (ASTM D 698) maximum dry density of approximately 100 pounds per cubic feet for fill materials. A mixture of on-site soils and boulders/cobbles is not an acceptable fill material.
- G. Bedding Course: Naturally or artificially graded mixture of natural or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940/D 2940M; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
- H. Drainage Course: Narrowly graded mixture of crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch sieve and zero to 5 percent passing a No. 8 sieve.

2.2 ACCESSORIES

- A. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored to comply with local practice or requirements of authorities having jurisdiction.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earth-moving operations.
- B. Protect and maintain erosion and sedimentation controls during earth-moving operations.
- C. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.

3.2 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes in the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

3.3 EXCAVATION FOR STRUCTURES

- A. Excavate to indicated elevations and dimensions within a tolerance of plus or minus 1 inch If applicable, extend excavations a sufficient distance from structures for placing and removing concrete formwork, for installing services and other construction, and for inspections.
 1. Excavations for Footings and Foundations: Do not disturb bottom of excavation. Excavate by hand to final grade just before placing concrete reinforcement. Trim bottoms to required lines and grades to leave solid base to receive other work.
 2. All foundation subgrades shall be observed, evaluated, and verified for the design bearing pressure by the Engineer after excavation. If low consistency soils are encountered during foundation construction, localized undercutting and/or in-place stabilization of foundation subgrades will be required. The actual need for and extent of undercutting shall be based on field observations made by the Engineer at the time of construction.
- B. Excavations at Edges of Tree- and Plant-Protection Zones:
 1. Excavate by hand or with an air spade to indicated lines, cross sections, elevations, and subgrades. If excavating by hand, use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.

3.4 EXCAVATION FOR WALKS AND PAVEMENTS

- A. Excavate surfaces under walks and pavements to indicated lines, cross sections, elevations, and subgrades.

3.5 EXCAVATION FOR UTILITY TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
- B. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit. Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
 1. Clearance: 12 inches each side of pipe or conduit.
- C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.
 1. Excavate trenches 6 inches deeper than elevation required in rock or other unyielding bearing material to allow for bedding course.
- D. Trenches in Tree-Protection Zones:

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1. Hand-excavate to indicated lines, cross sections, elevations, and subgrades. Use narrow-tine spading forks to comb soil and expose roots. Do not break, tear, or chop exposed roots. Do not use mechanical equipment that rips, tears, or pulls roots.
2. Do not cut main lateral roots or taproots; cut only smaller roots that interfere with installation of utilities.

3.6 SUBGRADE INSPECTION

- A. Proof-roll subgrade below new fill, slabs and pavements with a pneumatic-tired 20- to 30-ton truck to identify soft pockets and areas of excess yielding. Do not proof-roll frozen, wet or saturated subgrades.
- B. If Geotechnical Engineer determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
- C. Authorized additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
- D. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, as directed by Engineer, without additional compensation.

3.7 UNAUTHORIZED EXCAVATION

- A. Fill unauthorized excavation under foundations or wall footings by extending bottom elevation of concrete foundation to excavation bottom, without altering top elevation. Lean concrete fill, with 28-day compressive strength of 2500 psi, may be used when approved by Engineer.
 1. Fill unauthorized excavations under other construction, pipe, or conduit as directed by Engineer.

3.8 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.9 UTILITY TRENCH BACKFILL

- A. Place backfill on subgrades free of mud, frost, snow, or ice.
- B. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- C. Trenches under Roadways: Provide 4-inch of concrete before backfilling or placing roadway subbase course.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- D. Initial Backfill: Place and compact initial backfill of subbase material free of particles larger than 1 inch in any dimension, to a height of 12 inches over the pipe or conduit.
 - 1. Carefully compact initial backfill under pipe haunches and compact evenly up on both sides and along the full length of piping or conduit to avoid damage or displacement of piping or conduit. Coordinate backfilling with utilities testing.
- E. Final Backfill: Place and compact final backfill of satisfactory soil to final subgrade elevation.
- F. Warning Tape: Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.

3.10 SOIL FILL

- A. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- B. Place and compact fill material in layers to required elevations as follows:
 - 1. Under grass and planted areas, use satisfactory soil material.
 - 2. Under walks and pavements, use satisfactory soil material.

3.11 SOIL MOISTURE CONTROL

- A. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction to within 2 percent of optimum moisture content.
 - 1. Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
 - 2. Remove and replace, or scarify and air dry, otherwise satisfactory soil material that exceeds optimum moisture content by 2 percent and is too wet to compact to specified dry unit weight.

3.12 COMPACTION OF SOIL BACKFILLS AND FILLS

- A. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill soil materials evenly on all sides of structures to required elevations and uniformly along the full length of each structure.
- C. Compact soil materials to not less than the following percentages of maximum dry unit weight according to ASTM D 698:
 - 1. Under pavements, scarify and recompact top 12 inches of existing subgrade and each layer of backfill or fill soil material at 95 percent.
 - 2. Under walkways, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 95 percent.
 - 3. Under turf or unpaved areas, scarify and recompact top 6 inches below subgrade and compact each layer of backfill or fill soil material at 95percent.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

4. For utility trenches, compact each layer of initial and final backfill soil material at 95 percent.

3.13 GRADING

- A. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
- B. Site Rough Grading: Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to elevations required to achieve indicated finish elevations, within the following subgrade tolerances:
 1. Turf or Unpaved Areas: Plus or minus 1 inch.
 2. Walks: Plus or minus 1 inch.
 3. Pavements: Plus or minus 1/2 inch.

3.14 SUBBASE AND BASE COURSES UNDER PAVEMENTS AND WALKS

- A. Place subbase course and base course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place subbase course and base course under pavements and walks as follows:
 1. Shape subbase course and base course to required crown elevations and cross-slope grades.
 2. Place subbase course and base course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
 3. Compact subbase course and base course at optimum moisture content to required grades, lines, cross sections, and thickness to not less than 95 percent of maximum dry unit weight according to ASTM D 698.

3.15 DRAINAGE COURSE UNDER CONCRETE SLABS-ON-GRADE

- A. Place drainage course on subgrades free of mud, frost, snow, or ice.
- B. On prepared subgrade, place and compact drainage course under cast-in-place concrete slabs-on-grade as follows:
 1. Place drainage course that exceeds 6 inches in compacted thickness in layers of equal thickness, with no compacted layer more than 6 inches thick or less than 3 inches thick.
 2. Compact each layer of drainage course to required cross sections and thicknesses to not less than **95** percent of maximum dry unit weight according to ASTM D 698.

3.16 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform inspections:
- B. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- C. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
- D. Footing Subgrade: At footing subgrades, at least one test of each soil stratum will be performed to verify design bearing capacities. Subsequent verification and approval of other footing subgrades may be based on a visual comparison of subgrade with tested subgrade when approved by Architect.
- E. Field density tests to verify fill compaction should be performed for every 2,500 square feet (approximately 50 feet square) of fill area, with a minimum of two tests per lift. In confined areas, a greater frequency shall may be required.
- F. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify and moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.

3.17 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.

3.18 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Remove surplus satisfactory soil and waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.

END OF SECTION 312000

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 312319 - DEWATERING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes construction dewatering.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 FIELD CONDITIONS

- A. Survey Work: Engage a qualified land surveyor or professional engineer to survey adjacent existing buildings, structures, and site improvements; establish exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks and record existing elevations.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Dewatering Performance: Design, furnish, install, test, operate, monitor, and maintain dewatering system of sufficient scope, size, and capacity to control hydrostatic pressures and to lower, control, remove, and dispose of ground water and permit excavation and construction to proceed on dry, stable subgrades.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Provide temporary grading to facilitate dewatering and control of surface water.
- B. Protect and maintain temporary erosion and sedimentation controls, which are specified during dewatering operations.

3.2 INSTALLATION

- A. Install dewatering system utilizing wells, well points, or similar methods complete with pump equipment, standby power and pumps, filter material gradation, valves, appurtenances, water disposal, and surface-water controls.
 - 1. Space well points or wells at intervals required to provide sufficient dewatering.
 - 2. Use filters or other means to prevent pumping of fine sands or silts from the subsurface.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Place dewatering system into operation to lower water to specified levels before excavating below ground-water level.
- C. Provide standby equipment on-site, installed and available for immediate operation, to maintain dewatering on continuous basis if any part of system becomes inadequate or fails.

3.3 OPERATION

- A. Operate system continuously until drains, sewers, and structures have been constructed and fill materials have been placed or until dewatering is no longer required.
- B. Operate system to lower and control ground water to permit excavation, construction of structures, and placement of fill materials on dry subgrades. Drain water-bearing strata above and below bottom of foundations, drains, sewers, and other excavations.
 - 1. Do not permit open-sump pumping that leads to loss of fines, soil piping, subgrade softening, and slope instability.
 - 2. Reduce hydrostatic head in water-bearing strata below subgrade elevations of foundations, drains, sewers, and other excavations.
 - 3. Maintain piezometric water level a minimum of 24 inches below bottom of excavation.
- C. Remove dewatering system from Project site on completion of dewatering. Plug or fill well holes with sand or cut off and cap wells a minimum of 36 inches below overlying construction.

3.4 FIELD QUALITY CONTROL

- A. Survey-Work Benchmarks: Resurvey benchmarks regularly during dewatering and maintain an accurate log of surveyed elevations for comparison with original elevations. Promptly notify Architect if changes in elevations occur or if cracks, sags, or other damage is evident in adjacent construction.

END OF SECTION 312319

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 315000 - EXCAVATION SUPPORT AND PROTECTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes temporary excavation support and protection systems.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Shop Drawings: For excavation support and protection system, prepared by or under the supervision of a qualified professional engineer.
- B. Delegated-Design Submittal: For excavation support and protection systems, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.4 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For the following:
 - 1. Professional Engineer: Experience with providing delegated-design engineering services of the type indicated, including documentation that engineer is licensed in the state in which Project is located.
- B. Contractor Calculations: For excavation support and protection system. Include analysis data signed and sealed by the qualified professional engineer responsible for their preparation.
- C. Existing Conditions: Using photograph or video recordings, show existing conditions of adjacent construction and site improvements that might be misconstrued as damage caused by inadequate performance of excavation support and protection systems. Submit before Work begins.

1.5 CLOSEOUT SUBMITTALS

- A. Record Drawings: Identify locations and depths of capped utilities, abandoned-in-place support and protection systems, and other subsurface structural, electrical, or mechanical conditions.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.6 FIELD CONDITIONS

- A. Interruption of Existing Utilities: Do not interrupt any utility-serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility according to requirements indicated:
1. Notify Engineer no fewer than two days in advance of proposed interruption of utility.
 2. Do not proceed with interruption of utility without Engineer's written permission.
- B. Survey Work: Engage a qualified land surveyor or professional engineer to survey adjacent existing buildings, structures, and site improvements; establish exact elevations at fixed points to act as benchmarks. Clearly identify benchmarks, and record existing elevations.

PART 2 - PRODUCTS**2.1 PERFORMANCE REQUIREMENTS**

- A. Delegated Design: Engage a qualified professional engineer to design excavation support and protection systems to resist all lateral loading and surcharge, including but not limited to, retained soil, groundwater pressure, adjacent building loads, adjacent traffic loads, construction traffic loads, material stockpile loads, and seismic loads, based on the following:
1. Compliance with OSHA Standards and interpretations, 29 CFR 1926, Subpart P.
 2. Compliance with AASHTO Standard Specification for Highway Bridges or AASHTO LRFD Bridge Design Specification, Customary U.S. Units.
 3. Compliance with requirements of authorities having jurisdiction.
 4. Compliance with utility company requirements.
 5. Compliance with railroad requirements.

2.2 MATERIALS

- A. Provide materials that are either new or in serviceable condition.
- B. Structural Steel: ASTM A 36/A 36M, ASTM A 690/A 690M, or ASTM A 992/A 992M.
- C. Steel Sheet Piling: ASTM A 328/A 328M, ASTM A 572/A 572M, or ASTM A 690/A 690M; with continuous interlocks.
1. Corners: Site-fabricated mechanical interlock.
- D. Wood Lagging: Lumber, mixed hardwood, nominal rough thickness of size and strength required for application.
- E. Cast-in-Place Concrete: ACI 301, of compressive strength required for application.
- F. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.
- G. Tiebacks: Steel bars, ASTM A 722/A 722M.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

PART 3 - EXECUTION

3.1 INSTALLATION - GENERAL

- A. Locate excavation support and protection systems clear of permanent construction, so that construction and finishing of other work is not impeded.
- B. Install excavation support and protection systems to ensure minimum interference with roads, streets, walks, and other adjacent occupied and used facilities.
 - 1. Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - 2. Provide alternate routes around closed or obstructed traffic ways if required by authorities having jurisdiction.
- C. Install excavation support and protection systems without damaging existing buildings, structures, and site improvements adjacent to excavation.

3.2 SOLDIER PILES AND LAGGING

- A. Install steel soldier piles before starting excavation.
 - 1. Extend soldier piles below excavation grade level to depths adequate to prevent lateral movement.
 - 2. Space soldier piles at regular intervals not to exceed allowable flexural strength of wood lagging.
 - 3. Accurately align exposed faces of flanges to vary not more than 2 inches from a horizontal line and not more than 1:120 out of vertical alignment.
- B. Install wood lagging within flanges of soldier piles as excavation proceeds.
 - 1. Trim excavation as required to install lagging.
 - 2. Fill voids behind lagging with soil, and compact.
- C. Install wales horizontally at locations indicated on Drawings and secure to soldier piles.

3.3 SHEET PILING

- A. Before starting excavation, install one-piece sheet piling lengths and tightly interlock vertical edges to form a continuous barrier.
- B. Accurately place the piling using templates and guide frames unless otherwise recommended in writing by the sheet piling manufacturer.
 - 1. Limit vertical offset of adjacent sheet piling to 60 inches.
 - 2. Accurately align exposed faces of sheet piling to vary not more than 2 inches from a horizontal line and not more than 1:120 out of vertical alignment.
- C. Cut tops of sheet piling to uniform elevation at top of excavation.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.4 TIEBACKS

- A. Drill, install, grout, and tension tiebacks.
- B. Test load-carrying capacity of each tieback, and replace and retest deficient tiebacks.
 - 1. Have test loading observed by a qualified professional engineer responsible for design of excavation support and protection system.
- C. Maintain tiebacks in place until permanent construction is able to withstand lateral earth and hydrostatic pressures.

3.5 BRACING

- A. Locate bracing to clear columns, floor framing construction, and other permanent work. If necessary to move brace, install new bracing before removing original brace.
 - 1. Do not place bracing where it will be cast into or included in permanent concrete work unless otherwise approved by Engineer.
 - 2. Install internal bracing if required to prevent spreading or distortion of braced frames.
 - 3. Maintain bracing until structural elements are supported by other bracing or until permanent construction is able to withstand lateral earth and hydrostatic pressures.

3.6 MAINTENANCE

- A. Monitor and maintain excavation support and protection system.
- B. Prevent surface water from entering excavations by grading, dikes, or other means.
- C. Continuously monitor vibrations, settlements, and movements to ensure stability of excavations and constructed slopes and to ensure that damage to permanent structures is prevented.

3.7 FIELD QUALITY CONTROL

- A. Survey-Work Benchmarks: Resurvey benchmarks regularly during installation of excavation support and protection systems, excavation progress, and for as long as excavation remains open.
 - 1. Maintain an accurate log of surveyed elevations and positions for comparison with original elevations and positions.
 - 2. Promptly notify Engineer if changes in elevations or positions occur or if cracks, sags, or other damage is evident in adjacent construction.
- B. Promptly correct detected bulges, breakage, or other evidence of movement to ensure that excavation support and protection system remains stable.
- C. Promptly repair damages to adjacent facilities caused by installation or faulty performance of excavation support and protection systems.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.8 REMOVAL AND REPAIRS

- A. Remove excavation support and protection systems when construction has progressed sufficiently to support excavation and earth and hydrostatic pressures.
 - 1. Remove in stages to avoid disturbing underlying soils and rock or damaging structures, pavements, facilities, and utilities.
 - 2. Remove excavation support and protection systems to a minimum depth of 48 inches below overlying construction, and abandon remainder.
 - 3. Fill voids immediately with approved backfill compacted to density specified in Section 312000 "Earthwork."
 - 4. Repair or replace, as approved by Engineer, adjacent work damaged or displaced by removing excavation support and protection systems.
- B. Leave excavation support and protection systems permanently in place.

END OF SECTION 315000

3108 Columbia Pike Demolition

Issued for Bid

November 10, 2023

Dewberry Project No. 50156517

Arlington County Contract No.

22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 321216 - ASPHALT PAVING

1.1 SUMMARY

A. Section Includes:

1. Cold milling of existing asphalt pavement.
2. Hot-mix asphalt patching.
3. Hot-mix asphalt paving.
4. Hot-mix asphalt overlay.

B. Related Requirements:

1. Section 312000 "Earthwork" for subgrade preparation, fill material, separation geotextiles, unbound-aggregate subbase and base courses, and aggregate pavement shoulders.
2. Section 321373 "Concrete Paving Joint Sealants" for joint sealants and fillers at pavement terminations.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.

1.4 INFORMATIONAL SUBMITTALS

- A. Material Certificates: For each paving material. Include statement that mixes containing recycled materials will perform equal to mixes produced from all new materials.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by the Virginia Department of Transportation.
- B. Testing Agency Qualifications: Qualified according to ASTM D 3666 for testing indicated.
- C. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of the Virginia Department of Transportation standards and specifications, latest editions for asphalt paving work.
1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.6 FIELD CONDITIONS

- A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:
 - 1. Tack Coat: Minimum surface temperature of 60 deg F.
 - 2. Asphalt Base Course: Minimum surface temperature of 40 deg F and rising at time of placement.
 - 3. Asphalt Surface Course: Minimum surface temperature of 60 deg F at time of placement.

PART 2 - PRODUCTS

2.1 AGGREGATES

- A. Aggregates: As specified in Section 211 of VDOT Specifications.
- B. Mineral Filler: As specified in Section 201 of VDOT Specifications.

2.2 ASPHALT MATERIALS

- A. Emulsified Asphalt Prime Coat: Liquid asphalt conforming to Sections 210 and 311 of VDOT Specifications.
- B. Tack Coat: Emulsified asphalt conforming to Section 210 and 310 of VDOT Specifications.
- C. Water: Potable.

2.3 AUXILIARY MATERIALS

- A. Recycled Materials for Hot-Mix Asphalt Mixes: Reclaimed asphalt pavement; reclaimed, unbound-aggregate base material; and recycled tires, asphalt shingles, or glass from sources and gradations that have performed satisfactorily in previous installations, equal to performance of required hot-mix asphalt paving produced from all new materials.
- B. Herbicide: Commercial chemical for weed control, registered by the EPA, and not classified as "restricted use" for locations and conditions of application. Provide in granular, liquid, or wettable powder form.

2.4 MIXES

- A. Hot-Mix Asphalt: Dense-graded, hot-laid, hot-mix asphalt plant mixes per Section 211 of the VDOT Specifications. :
 - 1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.
 - 2. Base Course: As specified on the Drawings.
 - 3. Surface Course: As specified on the Drawings.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that subgrade is dry and in suitable condition to begin paving.
- B. Proceed with paving only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Protection: Provide protective materials, procedures, and worker training to prevent asphalt materials from spilling, coating, or building up on curbs, driveway aprons, manholes, and other surfaces adjacent to the Work.
- B. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph.
 - 2. Proof roll with a loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons.
 - 3. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Architect, and replace with compacted backfill or fill as directed

3.3 COLD MILLING

- A. Clean existing pavement surface of loose and deleterious material immediately before cold milling. Remove existing asphalt pavement by cold milling to grades and cross sections indicated.
 - 1. Mill to a depth of 2 inches.
 - 2. Mill to a uniform finished surface free of excessive gouges, grooves, and ridges.
 - 3. Control rate of milling to prevent tearing of existing asphalt course.
 - 4. Repair or replace curbs, driveway aprons, manholes, and other construction damaged during cold milling.
 - 5. Excavate and trim unbound-aggregate base course, if encountered, and keep material separate from milled hot-mix asphalt.
 - 6. Patch surface depressions deeper than 1 inch after milling, before wearing course is laid.
 - 7. Handle milled asphalt material according to approved waste management plan."
 - 8. Keep milled pavement surface free of loose material and dust.
 - 9. Do not allow milled materials to accumulate on-site.

3.4 PATCHING

- A. Asphalt Pavement: Saw cut perimeter of patch and excavate existing pavement section to sound base. Excavate rectangular or trapezoidal patches, extending 12 inches into perimeter of adjacent sound pavement, unless otherwise indicated. Cut excavation faces vertically. Remove excavated material. Re-compact existing unbound-aggregate base course to form new subgrade.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Tack Coat: Before placing patch material, apply tack coat uniformly to vertical asphalt surfaces abutting the patch. Apply at a rate of 0.05 to 0.15 gal./sq. yd.
 - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
- C. Placing Patch Material: Fill excavated pavement areas with hot-mix asphalt base mix for full thickness of patch and, while still hot, compact flush with adjacent surface.

3.5 REPAIRS

- A. Leveling Course: Install and compact leveling course consisting of hot-mix asphalt surface course to level sags and fill depressions deeper than 1 inch in existing pavements.
 - 1. Install leveling wedges in compacted lifts not exceeding 3 inches thick.
- B. Crack and Joint Filling: Remove existing joint filler material from cracks or joints to a depth of 1/4 inch.
 - 1. Clean cracks and joints in existing hot-mix asphalt pavement.
 - 2. Use emulsified-asphalt slurry to seal cracks and joints less than 1/4 inch wide. Fill flush with surface of existing pavement and remove excess.
 - 3. Use hot-applied joint sealant to seal cracks and joints more than 1/4 inch wide. Fill flush with surface of existing pavement and remove excess.

3.6 SURFACE PREPARATION

- A. Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.
- B. Herbicide Treatment: Apply herbicide according to manufacturer's recommended rates and written application instructions. Apply to dry, prepared subgrade or surface of compacted-aggregate base before applying paving materials.
- C. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd.
 - 1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
 - 2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

3.7 PLACING HOT-MIX ASPHALT

- A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
 - 1. Spread mix at a minimum temperature of 250 deg F.
 - 2. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Place paving in consecutive strips not less than 10 feet wide unless infill edge strips of a lesser width are required.
- C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

3.8 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.
 - 1. Clean contact surfaces and apply tack coat to joints.
 - 2. Offset longitudinal joints, in successive courses, a minimum of 6 inches.
 - 3. Offset transverse joints, in successive courses, a minimum of 24 inches.
 - 4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method according to AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations."

3.9 COMPACTION

- A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.
 - 1. Complete compaction before mix temperature cools to 185 deg F.
- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:
 - 1. Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041/D 2041M, but not less than 90 percent or greater than 96 percent.
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- G. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.10 INSTALLATION TOLERANCES

- A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:
 - 1. Base Course: Plus or minus 1/2 inch.
 - 2. Surface Course: Plus 1/4 inch, no minus.

- B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:
 - 1. Base Course: 1/4 inch.
 - 2. Surface Course: 1/8 inch.
 - 3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch.

3.11 FIELD QUALITY CONTROL

- A. Testing Agency: Contractor will engage a qualified testing agency to perform tests and inspections.

- B. Replace and compact hot-mix asphalt where core tests were taken.

- C. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

3.12 WASTE HANDLING

- A. General: Handle asphalt-paving waste according to approved waste management plan required in Section 017419 "Construction Waste Management and Disposal."

END OF SECTION 321216

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 321313 - CONCRETE PAVING

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes Concrete Paving Including the Following:
 - 1. Curbs and gutters.
 - 2. Walks and Pads

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete paving mixture. Include alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.

1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For qualified ready-mix concrete manufacturer and testing agency.
- B. Material Certificates: For the following, from manufacturer:
 - 1. Cementitious materials.
 - 2. Steel reinforcement and reinforcement accessories.
 - 3. Fiber reinforcement.
 - 4. Admixtures.
 - 5. Curing compounds.
 - 6. Applied finish materials.
 - 7. Bonding agent or epoxy adhesive.
 - 8. Joint fillers.

- C. Material Test Reports: For each of the following:

- 1. Aggregates

- D. Field quality-control reports

1.4 QUALITY ASSURANCE

- A. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
 - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities" (Quality Control Manual - Section 3, "Plant Certification Checklist").

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.5 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified independent testing agency to perform preconstruction testing on concrete paving mixtures.

1.6 FIELD CONDITIONS

- A. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.
- B. Cold-Weather Concrete Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. Comply with ACI 306.1 and the following:
1. When air temperature has fallen to or is expected to fall below 40 deg F, uniformly heat water and aggregates before mixing to obtain a concrete mixture temperature of not less than 50 deg F and not more than 80 deg F at point of placement.
 2. Do not use frozen materials or materials containing ice or snow.
 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in design mixtures.
 4. Hot-Weather Concrete Placement: Comply with ACI 301 and as follows when hot-weather conditions exist:
 5. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated in total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 6. Cover steel reinforcement with water-soaked burlap, so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
 7. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.

PART 2 - PRODUCTS**2.1 CONCRETE, GENERAL**

- A. Portland Cement class A3 in accordance with VDOT Section 217.

2.2 FORMS

- A. Curb and Gutter: VDOT Section 502
- B. Sidewalks: VDOT Section 504.
- C. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces.
1. Use flexible or uniformly curved forms for curves with a radius of 100 feet or less.
- D. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

2.3 STEEL REINFORCEMENT

- A. Plain-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, fabricated from as-drawn steel wire into flat sheets.
- B. Deformed-Steel Welded-Wire Reinforcement: ASTM A 1064/A 1064M, flat sheet.
- C. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420); deformed.
- D. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60 (Grade 420) plain-steel bars. Cut bars true to length with ends square and free of burrs.
- E. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars, welded-wire reinforcement, and dowels in place. Manufacture bar supports according to CRSI's "Manual of Standard Practice" from steel wire, plastic, or precast concrete of greater compressive strength than concrete specified.

2.4 CONCRETE MATERIALS

- A. VDOT Section 217

2.5 CURING MATERIALS

- A. VDOT Section 220.

2.6 RELATED MATERIALS

- A. Joint Fillers: ½-inch preformed asphalt expansion joint material conforming ASTM D 994, or ASTM D 1751.
- B. Slip-Resistive Aggregate Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive aggregate of fused aluminum-oxide granules or crushed emery aggregate containing not less than 50 percent aluminum oxide and not less than 20 percent ferric oxide; unaffected by freezing, moisture, and cleaning materials.
- C. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.

2.7 RELATED MATERIALS

- A. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self-expanding cork in preformed strips.
- B. Slip-Resistive Aggregate Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive aggregate of fused aluminum-oxide granules or crushed emery aggregate containing not less than 50 percent aluminum oxide and not less than 20 percent ferric oxide; unaffected by freezing, moisture, and cleaning materials.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Proof-roll prepared subbase surface below concrete paving to identify soft pockets and areas of excess yielding.

3.2 PREPARATION

- A. Remove loose material from compacted subbase surface immediately before placing concrete.

3.3 EDGE FORMS AND SCREED CONSTRUCTION

- A. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. Install forms to allow continuous progress of work and so forms can remain in place at least 24 hours after concrete placement.
- B. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

3.4 STEEL REINFORCEMENT INSTALLATION

- A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

3.5 JOINTS

- A. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. Construct transverse joints at right angles to centerline unless otherwise indicated.
- B. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints.
- C. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.
- D. Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of the concrete thickness:
- E. Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 1/4-inch radius. Repeat tooling of edges after applying surface finishes. Eliminate edging-tool marks on concrete surfaces.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.6 CONCRETE PLACEMENT

- A. Curbs, Gutters, Combination Curb and Gutter, and Paved Ditches: VDOT Section 502, "Road and Bridge Standards," and as indicated on the Drawings.
- B. Sidewalks: VDOT Section 504.

3.7 FLOAT FINISHING

- A. Slip-Resistive Aggregate Finish: Constructed in accordance with the requirements and procedures of VDOT standards

3.8 CONCRETE PROTECTION AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
- B. Comply with VDOT Section 316.04.

3.9 PAVING TOLERANCES

- A. Comply with tolerances in ACI 117 (ACI 117M) and as follows:
 - 1. Elevation: 3/4 inch.
 - 2. Thickness: Plus 3/8 inch, minus 1/4 inch.
 - 3. Surface: Gap below 10-feet- long; unlevelled straightedge not to exceed 1/2 inch.
 - 4. Joint Spacing: 3 inches.
 - 5. Contraction Joint Depth: 1/4 inch, no minus.
 - 6. Joint Width: Plus 1/8 inch, no minus.

3.10 REPAIR AND PROTECTION

- A. Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.
- B. Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.
- C. Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.

END OF SECTION 321313

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 321723 - PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes painted markings applied to asphalt and concrete pavement.

1.2 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For each exposed product and for each color and texture specified.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Accessibility Standard: Comply with applicable provisions in the USDOJ's "2010 ADA Standards for Accessible Design" and ICC A117.1.

2.2 PAVEMENT-MARKING PAINT

- A. Pavement-Marking Paint: MPI #32, solvent-borne traffic-marking paint.
 - 1. Color: As indicated on Drawings.

PART 3 - EXECUTION

3.1 PAVEMENT MARKING

- A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Architect.
- B. Allow paving to age for a minimum of 30 days before starting pavement marking.
- C. Sweep and clean surface to eliminate loose material and dust.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- D. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.
 - 1. Apply graphic symbols and lettering with paint-resistant, die-cut stencils. Apply paint so that it cannot run beneath stencil.

END OF SECTION 321723

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 329113 - SOIL PREPARATION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes planting soils specified by composition of the mixes.
- B. Related Requirements:
 - 1. Section 311000 "Site Clearing" for topsoil stripping and stockpiling.

1.2 DEFINITIONS

- A. Duff Layer: A surface layer of soil, typical of forested areas, that is composed of mostly decayed leaves, twigs, and detritus.
- B. Imported Soil: Soil that is transported to Project site for use.
- C. Manufactured Soil: Soil produced by blending soils, sand, stabilized organic soil amendments, and other materials to produce planting soil.
- D. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified as specified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth.
- E. Subgrade: Surface or elevation of subsoil remaining after excavation is complete, or the top surface of a fill or backfill before planting soil is placed.
- F. Subsoil: Soil beneath the level of subgrade; soil beneath the topsoil layers of a naturally occurring soil profile, typified by less than 1 percent organic matter and few soil organisms.
- G. Surface Soil: Soil that is present at the top layer of the existing soil profile. In undisturbed areas, surface soil is typically called "topsoil"; but in disturbed areas such as urban environments, the surface soil can be subsoil.
- H. USCC: U.S. Composting Council.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at **Project site**.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include recommendations for application and use.
 - 2. Include test data substantiating that products comply with requirements.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3. Include sieve analyses for aggregate materials.
4. Material Certificates: For each type of imported soil and soil amendment and fertilizer before delivery to the site, according to the following:
 - a. Manufacturer's qualified testing agency's certified analysis of standard products.
 - b. Analysis of fertilizers, by a qualified testing agency, made according to AAPFCO methods for testing and labeling and according to AAPFCO's SUIP #25.
- B. Analysis of nonstandard materials, by a qualified testing agency, made according to SSSA methods, where applicable
- C. Samples: For each bulk-supplied material in sealed containers labeled with content, source, and date obtained; providing an accurate representation of composition, color, and texture.

1.5 INFORMATIONAL SUBMITTALS

- A. Field quality-control reports.
- B. Preconstruction Test Reports: For preconstruction soil analyses specified in "Preconstruction Testing" Article.
- C. Field quality-control reports.

1.6 QUALITY ASSURANCE

- A. Testing Agency Qualifications: Contractor shall engage an independent, state-operated, or university-operated laboratory; experienced in soil science, soil testing, and plant nutrition; with the experience and capability to conduct the testing indicated; and that specializes in types of tests to be performed.
 1. Laboratories: Subject to compliance with requirements, provide testing by the following:
 2. Multiple Laboratories: At Contractor's option, work may be divided among qualified testing laboratories specializing in physical testing, chemical testing, and fertility testing.

1.7 PRECONSTRUCTION TESTING

- A. Preconstruction Testing Service: Engage a qualified testing agency to perform preconstruction soil analyses on existing, on-site soil.
 1. Notify Architect seven (7) days in advance of the dates and times when laboratory samples will be taken.
- B. Preconstruction Soil Analyses: For each unamended soil type, perform testing on soil samples and furnish soil analysis and a written report containing soil-amendment and fertilizer recommendations by a qualified testing agency performing the testing according to "Soil-Sampling Requirements" and "Testing Requirements" articles.
 1. Have testing agency identify and label samples and test reports according to sample collection and labeling requirements.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.8 SOIL-SAMPLING REQUIREMENTS

- A. General: Extract soil samples according to requirements in this article.
- B. Sample Collection and Labeling: Have samples taken and labeled by Contractor in presence of COR or state-certified, -licensed, or -registered soil scientist under the direction of the testing agency.
 - 1. Number and Location of Samples: Minimum of three representative soil samples where directed by Architect for each soil to be used or amended for landscaping purposes.
 - 2. Procedures and Depth of Samples: According to USDA-NRCS's "Field Book for Describing and Sampling Soils."
 - 3. Division of Samples: Split each sample into two, equal parts. Send half to the testing agency and half to Owner for its records.
 - 4. Labeling: Label each sample with the date, location keyed to a site plan or other location system, visible soil condition, and sampling depth.

1.9 TESTING REQUIREMENTS

- A. General: Perform tests on soil samples according to requirements in this article.
- B. Physical Testing:
 - 1. Soil Texture: Soil-particle, size-distribution analysis by one of the following methods according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods":
 - a. Sieving Method: Report sand-gradation percentages for very coarse, coarse, medium, fine, and very fine sand; and fragment-gradation (gravel) percentages for fine, medium, and coarse fragments; according to USDA sand and fragment sizes.
 - b. Hydrometer Method: Report percentages of sand, silt, and clay.
 - 2. Total Porosity: Calculate using particle density and bulk density according to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."
 - 3. Water Retention: According to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods."
 - 4. Saturated Hydraulic Conductivity: According to SSSA's "Methods of Soil Analysis - Part 1-Physical and Mineralogical Methods"; at 85% compaction according to ASTM D 698 (Standard Proctor).
- C. Chemical Testing:
 - 1. CEC: Analysis by sodium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."
 - 2. Clay Mineralogy: Analysis and estimated percentage of expandable clay minerals using CEC by ammonium saturation at pH 7 according to SSSA's "Methods of Soil Analysis - Part 1- Physical and Mineralogical Methods."
 - 3. Metals Hazardous to Human Health: Test for presence and quantities of RCRA metals including aluminum, arsenic, barium, copper, cadmium, chromium, cobalt, lead, lithium, and vanadium. If RCRA metals are present, include recommendations for corrective action.
 - 4. Phytotoxicity: Test for plant-available concentrations of phytotoxic minerals including aluminum, arsenic, barium, cadmium, chlorides, chromium, cobalt, copper, lead, lithium, mercury, nickel, selenium, silver, sodium, strontium, tin, titanium, vanadium, and zinc.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- D. Fertility Testing: Soil-fertility analysis according to standard laboratory protocol of SSSA NAPT NCR-13, including the following:
1. Percentage of organic matter.
 2. CEC, calcium percent of CEC, and magnesium percent of CEC.
 3. Soil reaction (acidity/alkalinity pH value).
 4. Buffered acidity or alkalinity.
 5. Nitrogen ppm.
 6. Phosphorous ppm.
 7. Potassium ppm.
 8. Manganese ppm.
 9. Manganese-availability ppm.
 10. Zinc ppm.
 11. Zinc availability ppm.
 12. Copper ppm.
 13. Sodium ppm and sodium absorption ratio.
 14. Soluble-salts ppm.
 15. Presence and quantities of problem materials including salts and metals cited in the Standard protocol. If such problem materials are present, provide additional recommendations for corrective action.
 16. Other deleterious materials, including their characteristics and content of each.
- E. Organic-Matter Content: Analysis using loss-by-ignition method according to SSSA's "Methods of Soil Analysis - Part 3- Chemical Methods."
- F. Recommendations: Based on the test results, state recommendations for soil treatments and soil amendments to be incorporated to produce satisfactory planting soil suitable for healthy, viable plants indicated. Include, at a minimum, recommendations for nitrogen, phosphorous, and potassium fertilization, and for micronutrients.
1. Fertilizers and Soil Amendment Rates: State recommendations in weight per 1000 sq. ft. for 6-inch depth of soil.
 2. Soil Reaction: State the recommended liming rates for raising pH or sulfur for lowering pH according to the buffered acidity or buffered alkalinity in weight per 1000 sq. ft. for 6-inch depth of soil.

1.10 DELIVERY, STORAGE, AND HANDLING

- A. Packaged Materials: Deliver packaged materials in original, unopened containers showing weight, certified analysis, name and address of manufacturer, and compliance with state and Federal laws if applicable.
- B. Bulk Materials:
1. Do not dump or store bulk materials near structures, utilities, walkways and pavements, or on existing turf areas or plants.
 2. Provide erosion-control measures to prevent erosion or displacement of bulk materials, discharge of soil-bearing water runoff, and airborne dust reaching adjacent properties, water conveyance systems, or walkways.
 3. Do not move or handle materials when they are wet or frozen.
 4. Accompany each delivery of bulk fertilizers and soil amendments with appropriate certificates.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

PART 2 - PRODUCTS

2.1 PLANTING SOILS SPECIFIED BY COMPOSITION

- A. General: Soil amendments, fertilizers, and rates of application specified in this article are guidelines that may need revision based on testing laboratory's recommendations after preconstruction soil analyses are performed.
- B. Planting-Soil Type: Imported, naturally formed soil from off-site sources and consisting of sandy loam loam silt loam loamy sand or sand soil according to USDA textures; and modified to produce viable planting soil.
 - 1. Planting soil shall conform to Virginia standards.

2.2 INORGANIC SOIL AMENDMENTS

- A. Lime: ASTM C 602, agricultural liming material containing a minimum of 80 percent calcium carbonate equivalent and as follows:
 - 1. Class: T, with a minimum of 99 percent passing through a No. 8 sieve and a minimum of 75 percent passing through a No. 60 sieve.
 - 2. Class: O, with a minimum of 95 percent passing through a No. 8 sieve and a minimum of 55 percent passing through a No. 60 sieve.
 - 3. Form: Provide lime in form of ground dolomitic limestone.
- B. Sulfur: Granular, biodegradable, and containing a minimum of 90 percent elemental sulfur, with a minimum of 99 percent passing through a No. 6 sieve and a maximum of 10 percent passing through a No. 40 sieve.
- C. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
- D. Perlite: Horticultural perlite, soil amendment grade.
- E. Agricultural Gypsum: Minimum 90 percent calcium sulfate, finely ground with 90 percent passing through a No. 50 sieve.
- F. Sand: Clean, washed, natural or manufactured, free of toxic materials, and according to ASTM C 33/C 33M.

2.3 ORGANIC SOIL AMENDMENTS

- A. Compost: Well-composted, stable, and weed-free organic matter produced by composting feedstock, and bearing USCC's "Seal of Testing Assurance," and as follows:
 - 1. Feedstock: Limited to leaves.
 - 2. Reaction: pH of 5.5 to 8.
 - 3. Soluble-Salt Concentration: Less than 4 dS/m
 - 4. Moisture Content: 35 to 55 percent by weight.
 - 5. Organic-Matter Content: 30 to 40 percent of dry weight.
 - 6. Particle Size: Minimum of 98 percent passing through a 4-inch sieve.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Sphagnum Peat: Partially decomposed sphagnum peat moss, finely divided or of granular texture with 100 percent passing through a 1/2-inch sieve, a pH of 3.4 to 4.8, and a soluble-salt content measured by electrical conductivity of maximum 5 dS/m.
- C. Muck Peat: Partially decomposed moss peat, native peat, or reed-sedge peat, finely divided or of granular texture with 100 percent passing through a 1/2-inch sieve, a pH of 6 to 7.5, a soluble-salt content measured by electrical conductivity of maximum 5 dS/m, having a water-absorbing capacity of 1100 to 2000 percent, and containing no sand.
- D. Wood Derivatives: Shredded and composted, nitrogen-treated sawdust, ground bark, or wood waste; of uniform texture and free of chips, stones, sticks, soil, or toxic materials.
 - 1. Partially Decomposed Wood Derivatives: In lieu of shredded and composted wood derivatives, mix shredded and partially decomposed wood derivatives with ammonium nitrate at a minimum rate of 0.15 lb/cu. ft. of loose sawdust or ground bark, or with ammonium sulfate at a minimum rate of 0.25 lb/cu. ft. of loose sawdust or ground bark.
- E. Manure: Well-rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, debris, and material harmful to plant growth.

2.4 FERTILIZERS

- A. Superphosphate: Commercial, phosphate mixture, soluble; a minimum of 20 percent available phosphoric acid.
- B. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - 1. Composition: 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
 - 2. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified testing agency.
- C. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
 - 1. Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.
 - 2. Composition: Nitrogen, phosphorous, and potassium in amounts recommended in soil reports from a qualified testing agency.
- D. Chelated Iron: Commercial-grade FeEDDHA for dicots and woody plants, and commercial-grade FeDTPA for ornamental grasses and monocots.

PART 3 - EXECUTION

3.1 GENERAL

- A. Place planting soil and fertilizers according to requirements in other Specification Sections.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Verify that no foreign or deleterious material or liquid such as paint, paint washout, concrete slurry, concrete layers or chunks, cement, plaster, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, or acid has been deposited in planting soil.
- C. Proceed with placement only after unsatisfactory conditions have been corrected.

3.2 PREPARATION OF UNAMENDED, ON-SITE SOIL BEFORE AMENDING

- A. Excavation: Excavate soil from designated area(s) to a depth of 6 inches and stockpile until amended.
- B. Unacceptable Materials: Clean soil of concrete slurry, concrete layers or chunks, cement, plaster, building debris, oils, gasoline, diesel fuel, paint thinner, turpentine, tar, roofing compound, acid, and other extraneous materials that are harmful to plant growth.
- C. Unsuitable Materials: Clean soil to contain a maximum of 8 percent by dry weight of stones, roots, plants, sod, clay lumps, and pockets of coarse sand.
- D. Screening: Pass unamended soil through a 2-inch sieve to remove large materials.

3.3 PLACING AND MIXING PLANTING SOIL OVER EXPOSED SUBGRADE

- A. General: Apply and mix unamended soil with amendments on-site to produce required planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Subgrade Preparation: Till subgrade to a minimum depth of 4 inches. Remove stones larger than 1-1/2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
 - 1. Apply, add soil amendments, and mix approximately half the thickness of unamended soil over prepared, loosened subgrade according to "Mixing" Paragraph below. Mix thoroughly into top 2 inches of subgrade. Spread remainder of planting soil.
- C. Mixing: Spread unamended soil to total depth of 4 inches, but not less than required to meet finish grades after mixing with amendments and natural settlement. Do not spread if soil or subgrade is frozen, muddy, or excessively wet.
 - 1. Amendments: Apply soil amendments, except compost, and fertilizer, if required, evenly on surface, and thoroughly blend them with unamended soil to produce planting soil.
 - a. Mix lime and sulfur with dry soil before mixing fertilizer.
 - b. Mix fertilizer with planting soil no more than seven days before planting.
 - 2. Lifts: Apply and mix unamended soil and amendments in lifts not exceeding 8 inches in loose depth for material compacted by compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- D. Compaction: Compact each blended lift of planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698 and tested in-place.
- E. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.4 PLACING MANUFACTURED PLANTING SOIL OVER EXPOSED SUBGRADE

- A. General: Apply manufactured soil on-site in its final, blended condition. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Subgrade Preparation: Till subgrade to a minimum depth of 4 inches. Remove stones larger than 1-1/2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
 - 1. Apply approximately half the thickness of planting soil over prepared, loosened subgrade. Mix thoroughly into top 2 inches of subgrade. Spread remainder of planting soil.
- C. Application: Spread planting soil to total depth of 4 inches, but not less than required to meet finish grades after natural settlement. Do not spread if soil or subgrade is frozen, muddy, or excessively wet.
 - 1. Lifts: Apply planting soil in lifts not exceeding 8 inches in loose depth for material compacted by compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
- D. Compaction: Compact each lift of planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698.
- E. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.5 BLENDING PLANTING SOIL IN PLACE

- A. General: Mix amendments with in-place, unamended soil to produce required planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.
- B. Preparation: Till unamended, existing soil in planting areas to a minimum depth of 4 inches. Remove stones larger than 1-1/2 inches in any dimension and sticks, roots, rubbish, and other extraneous matter and legally dispose of them off Owner's property.
- C. Mixing: Apply soil amendments, except compost, and fertilizer, if required, evenly on surface, and thoroughly blend them into full depth of unamended, in-place soil to produce planting soil.
 - 1. Mix lime and sulfur with dry soil before mixing fertilizer.
 - 2. Mix fertilizer with planting soil no more than seven days before planting.
- D. Compaction: Compact blended planting soil to 75 to 82 percent of maximum Standard Proctor density according to ASTM D 698.
- E. Finish Grading: Grade planting soil to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.6 APPLYING COMPOST TO SURFACE OF PLANTING SOIL

- A. Application: Apply compost component of planting-soil mix to surface of in-place planting soil. Do not apply materials or till if existing soil or subgrade is frozen, muddy, or excessively wet.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- B. Finish Grading: Grade surface to a smooth, uniform surface plane with loose, uniformly fine texture. Roll and rake, remove ridges, and fill depressions to meet finish grades.

3.7 FIELD QUALITY CONTROL

- A. Testing Agency: Contractor shall engage a qualified testing agency to perform tests and inspections.
- B. Perform the following tests and inspections:
 - 1. Compaction: Test planting-soil compaction after placing each lift and at completion using a densitometer or soil-compaction meter calibrated to a reference test value based on laboratory testing according to ASTM D 698. Space tests at no less than one for each 1000 sq. ft. of in-place soil or part thereof.
- C. Soil will be considered defective if it does not pass tests and inspections.
- D. Prepare test and inspection reports.
- E. Label each sample and test report with the date, location keyed to a site plan or other location system, visible conditions when and where sample was taken, and sampling depth.

3.8 PROTECTION

- A. Protect areas of in-place soil from additional compaction, disturbance, and contamination. Prohibit the following practices within these areas except as required to perform planting operations:
 - 1. Storage of construction materials, debris, or excavated material.
 - 2. Parking vehicles or equipment.
 - 3. Vehicle traffic.
 - 4. Foot traffic.
 - 5. Erection of sheds or structures.
 - 6. Impoundment of water.
 - 7. Excavation or other digging unless otherwise indicated.
- B. If planting soil or subgrade is over-compacted, disturbed, or contaminated by foreign or deleterious materials or liquids, remove the planting soil and contamination; restore the subgrade as directed by COR and replace contaminated planting soil with new planting soil.

3.9 CLEANING

- A. Protect areas adjacent to planting-soil preparation and placement areas from contamination. Keep adjacent paving and construction clean and work area in an orderly condition.
- B. Remove surplus soil and waste material including excess subsoil, unsuitable materials, trash, and debris and legally dispose of them off Owner's property unless otherwise indicated.
 - 1. Dispose of excess subsoil and unsuitable materials on-site where directed by Owner.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

END OF SECTION 329113

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 329200 - TURF AND GRASSES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Sodding.

1.2 DEFINITIONS

- A. Pesticide: A substance or mixture intended for preventing, destroying, repelling, or mitigating a pest. This includes insecticides, miticides, herbicides, fungicides, rodenticides, and molluscicides. It also includes substances or mixtures intended for use as a plant regulator, defoliant, or desiccant.
- B. Planting Soil: Existing, on-site soil; imported soil; or manufactured soil that has been modified with soil amendments and perhaps fertilizers to produce a soil mixture best for plant growth. See Section 329113 "Soil Preparation" and drawing designations for planting soils.

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 INFORMATIONAL SUBMITTALS

- 1. Certification of each seed mixture for turfgrass sod.
- B. Product certificates.

1.5 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified landscape Installer whose work has resulted in successful turf establishment.
 - 1. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Sod: Harvest, deliver, store, and handle sod according to requirements in "Specifications for Turfgrass Sod Materials" and "Specifications for Turfgrass Sod Transplanting and Installation" sections in TPI's "Guideline Specifications to Turfgrass Sodding." Deliver sod within 24 hours of harvesting and in time for planting promptly. Protect sod from breakage and drying.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.7 SCHEDULING

- A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion.
1. Spring Planting: 3/15 to 6/15
 2. Fall Planting: 9/15 to 12/01
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.

1.8 LAWN MAINTENANCE

- A. Begin maintenance immediately after each area is planted and continue until acceptable lawn is established, but for not less than the following periods:
1. Sodded Lawns: 1-year from date of Substantial Completion.
- B. Maintain and establish lawn by watering, fertilizing, weeding, cutting, trimming, replanting, and other operations. Roll, regrade, and replant bare or eroded areas to produce a uniformly smooth lawn.
1. In areas where mulch has been disturbed by wind or maintenance operations, add new mulch. Anchor as required to prevent displacement.
 2. Minimum maintenance shall include weekly watering and spring and fall mulching.
- C. Watering: Provide and maintain temporary piping, hoses, and lawn-watering equipment to convey water from sources and to keep lawn uniformly moist to a depth of 4 inches.
1. Schedule watering to prevent wilting, puddling, erosion, and displacement of seed or mulch. Lay out temporary watering system to avoid walking over muddy or newly planted areas.
 2. Water lawn at a minimum rate of 1 inch per week
- D. Mow lawn as soon as top growth is tall enough to cut. Repeat mowing to maintain specified height without cutting more than 40 percent of grass height. Remove no more than 40 percent of grass-leaf growth in initial or subsequent mowings. Do not delay mowing until grass blades bend over and become matted. Do not mow when grass is wet. Schedule initial and subsequent mowings to maintain the following grass height:
1. Mow grass 2 to 3 inches high.
- E. Lawn Postfertilization: Apply fertilizer after initial mowing and when grass is dry.
1. Use fertilizer that will provide actual nitrogen of at least 1 lb/1000 sq. ft. to lawn area.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

PART 2 - PRODUCTS

2.1 TURFGRASS SOD

- A. Turfgrass Sod: Certified complying with "Specifications for Turfgrass Sod Materials" in TPI's "Guideline Specifications to Turfgrass Sodding." Furnish viable sod of uniform density, color, and texture that is strongly rooted and capable of vigorous growth and development when planted.
- B. Turfgrass Species: Sod of grass species as follows, with not less than 95 percent germination, not less than 85 percent pure seed, and not more than 0.5 percent weed seed:
 - 1. Full Sun: Kentucky bluegrass (*Poa pratensis*), a minimum of three cultivars.

2.2 FERTILIZERS

- A. Commercial Fertilizer: Commercial-grade complete fertilizer of neutral character, consisting of fast- and slow-release nitrogen, 50 percent derived from natural organic sources of urea formaldehyde, phosphorous, and potassium in the following composition:
 - 1. Composition: 1 lb/1000 sq. ft. of actual nitrogen, 4 percent phosphorous, and 2 percent potassium, by weight.
- B. Slow-Release Fertilizer: Granular or pelleted fertilizer consisting of 50 percent water-insoluble nitrogen, phosphorus, and potassium in the following composition:
 - 1. Composition: 20 percent nitrogen, 10 percent phosphorous, and 10 percent potassium, by weight.

2.3 MULCHES

- A. Straw Mulch: Provide air-dry, clean, mildew- and seed-free, salt hay or threshed straw of wheat, rye, oats, or barley.
- B. Sphagnum Peat Mulch: Partially decomposed sphagnum peat moss, finely divided or of granular texture, and with a pH range of 3.4 to 4.8.
- C. Muck Peat Mulch: Partially decomposed moss peat, native peat, or reed-sedge peat, finely divided or of granular texture, with a pH range of 6 to 7.5, and having a water-absorbing capacity of 1100 to 2000 percent, and containing no sand.
- D. Compost Mulch: Well-composted, stable, and weed-free organic matter, pH range of 5.5 to 8; moisture content 35 to 55 percent by weight; 100 percent passing through 1-inch sieve; soluble salt content of 2 to 5 decisiemens/m; not exceeding 0.5 percent inert contaminants and free of substances toxic to plantings; and as follows:

2.4 PESTICIDES

- A. General: Pesticide, registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.

PART 3 - EXECUTION**3.1 TURF AREA PREPARATION**

- A. General: Prepare planting area for soil placement and mix planting soil according to Section 329113 "Soil Preparation."
- B. Reduce elevation of planting soil to allow for soil thickness of sod.
- C. Moisten prepared area before planting if soil is dry. Water thoroughly and allow surface to dry before planting. Do not create muddy soil.
- D. Before planting, obtain Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.2 SODDING

- A. Lay sod within 24 hours of harvesting. Do not lay sod if dormant or if ground is frozen or muddy.
- B. Lay sod to form a solid mass with tightly fitted joints. Butt ends and sides of sod; do not stretch or overlap. Stagger sod strips or pads to offset joints in adjacent courses. Avoid damage to soil or sod during installation. Tamp and roll lightly to ensure contact with soil, eliminate air pockets, and form a smooth surface. Work sifted soil or fine sand into minor cracks between pieces of sod; remove excess to avoid smothering sod and adjacent grass.
 - 1. Lay sod across slopes exceeding 1:3.
 - 2. Anchor sod on slopes exceeding 1:6 with wood pegs or steel staples spaced as recommended by sod manufacturer but not less than two anchors per sod strip to prevent slippage.
- C. Saturate sod with fine water spray within two hours of planting. During first week after planting, water daily or more frequently as necessary to maintain moist soil to a minimum depth of 1-1/2 inches below sod.

3.3 SATISFACTORY TURF

- A. Turf installations shall meet the following criteria as determined by Architect:
 - 1. Satisfactory Sodded Turf: At end of maintenance period, a healthy, well-rooted, even-colored, viable turf has been established, free of weeds, open joints, bare areas, and surface irregularities.
- B. Use specified materials to reestablish turf that does not comply with requirements, and continue maintenance until turf is satisfactory.

END OF SECTION 329200

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 329300 - PLANTS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Plants.
 - 2. Landscape edgings.
- B. Related Requirements:

1.2 DEFINITIONS

- A. Balled and Burlapped Stock: Exterior plants dug with firm, natural balls of earth in which they are grown, with ball size not less than diameter and depth recommended by ANSI Z60.1 for type and size of tree or shrub required; wrapped, tied, rigidly supported, and drum-laced as recommended by ANSI Z60.1.
- B. Balled and Potted Stock: Exterior plants dug with firm, natural balls of earth in which they are grown and placed, unbroken, in a container. Ball size is not less than diameter and depth recommended by ANSI Z60.1 for type and size of exterior plant required.
- C. Bare-Root Stock: Exterior plants with a well-branched, fibrous-root system developed by transplanting or root pruning, with soil or growing medium removed, and with not less than minimum root spread according to ANSI Z60.1 for kind and size of exterior plant required.
- D. Container-Grown Stock: Healthy, vigorous, well-rooted exterior plants grown in a container with well-established root system reaching sides of container and maintaining a firm ball when removed from container. Container shall be rigid enough to hold ball shape and protect root mass during shipping and be sized according to ANSI Z60.1 for kind, type, and size of exterior plant required.
- E. Fabric Bag-Grown Stock: Healthy, vigorous, well-rooted exterior plants established and grown in-ground in a porous fabric bag with well-established root system reaching sides of fabric bag. Fabric bag size is not less than diameter, depth, and volume required by ANSI Z60.1 for type and size of exterior plant.
- F. Finish Grade: Elevation of finished surface of planting soil.
- G. Manufactured Topsoil: Soil produced off-site by homogeneously blending mineral soils or sand with stabilized organic soil amendments to produce topsoil or planting soil.
- H. Planting Soil: Native or imported topsoil, manufactured topsoil, or surface soil modified to become topsoil; mixed with soil amendments.
- I. Subgrade: Surface or elevation of subsoil remaining after completing excavation, or top surface of a fill or backfill, before placing planting soil.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1.3 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.

1.4 SUBMITTALS

- A. Product Data: For each type of product indicated.
- B. Samples for Verification: For each of the following:
 - 1. Samples of each kind of mulch.
 - 2. Edging materials and accessories, of manufacturer's standard size, to verify color selected.
- C. Product Certificates: For each type of manufactured product, signed by product manufacturer, and complying with the following: Manufacturer's certified analysis for standard products.
 - 1. Analysis of other materials by a recognized laboratory made according to methods established by the Association of Official Analytical Chemists, where applicable.
- D. Qualification Data: For landscape Installer.
- E. Material Test Reports: For existing surface soil and imported topsoil.
- F. Planting Schedule: Indicating anticipated planting dates for exterior plants.
- G. Maintenance Instructions: Recommended procedures to be established by Owner for maintenance of exterior plants during a calendar year. Submit before expiration of required maintenance periods.

1.5 INFORMATIONAL SUBMITTALS

- A. Product certificates.
- B. Sample warranty.

1.6 CLOSEOUT SUBMITTALS

- A. Maintenance Data: Recommended procedures to be established by Owner for maintenance of plants during a calendar year.

1.7 QUALITY ASSURANCE

- A. Installer's Field Supervision: Require Installer to maintain an experienced full-time supervisor on Project site when work is in progress.
 - 1. Pesticide Applicator: State licensed, commercial.
- B. Provide quality, size, genus, species, and variety of plants indicated, complying with applicable requirements in ANSI Z60.1.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- C. Tree and Shrub Measurements: Measure according to ANSI Z60.1 with branches and trunks or canes in their normal position. Do not prune to obtain required sizes. Take caliper measurements 6 inches above ground for trees up to 4-inch caliper size, and 12 inches above ground for larger sizes. Measure main body of tree or shrub for height and spread; do not measure branches or roots tip-to-tip.
- D. Observation: Architect may observe trees and shrubs either at place of growth or at site before planting for compliance with requirements for genus, species, variety, size, and quality. Architect retains right to observe trees and shrubs further for size and condition of balls and root systems, insects, injuries, and latent defects and to reject unsatisfactory or defective material at any time during progress of work. Remove rejected trees or shrubs immediately from Project site.
- E. Notify Architect of sources of planting materials seven days in advance of delivery to site

1.8 DELIVERY, STORAGE, AND HANDLING

- A. Deliver bare-root stock plants within 24 hours of digging. Immediately after digging up bare-root stock, pack root system in wet straw, hay, or other suitable material to keep root system moist until planting. Transport in covered, temperature-controlled vehicles, and keep plants cool and protected from sun and wind at all times.
- B. Do not prune trees and shrubs before delivery, except as approved by Architect. Protect bark, branches, and root systems from sun scald, drying, sweating, whipping, and other handling and tying damage. Do not bend or bind-tie trees or shrubs in such a manner as to destroy their natural shape. Provide protective covering of exterior plants during delivery. Do not drop exterior plants during delivery.
- C. Handle planting stock by root ball.
- D. Deliver exterior plants after preparations for planting have been completed and install immediately. If planting is delayed more than six hours after delivery, set exterior plants trees in shade, protect from weather and mechanical damage, and keep roots moist.
- E. Store bulbs, corms, and tubers in a dry place at 60 to 65 deg F until planting.
- F. Deliver plants after preparations for planting have been completed, and install immediately. If planting is delayed more than six hours after delivery, set plants and trees in their appropriate aspect (sun, filtered sun, or shade), protect from weather and mechanical damage, and keep roots moist.

1.9 COORDINATION

- A. Planting Restrictions: Plant during one of the following periods. Coordinate planting periods with maintenance periods to provide required maintenance from date of Substantial Completion.
 - 1. Spring Planting: 3/15 to 6/15
 - 2. Fall Planting: 9/15 to 12/01
- B. Weather Limitations: Proceed with planting only when existing and forecasted weather conditions permit.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- C. Coordination with Lawns: Plant trees and shrubs after finish grades are established and before planting lawns, unless otherwise acceptable to Architect.
 - 1. When planting trees and shrubs after lawns, protect lawn areas and promptly repair damage caused by planting operations.

1.10 WARRANTY

- A. Special Warranty: Installer agrees to repair or replace plantings and accessories that fail in materials, workmanship, or growth within specified warranty period.
 - 1. Failures include, but are not limited to, the following:
 - a. Death and unsatisfactory growth, except for defects resulting from abuse, lack of adequate maintenance, or neglect by Owner.
 - b. Structural failures including plantings falling or blowing over.
 - 2. Warranty Periods: a minimum of one year after installation and acceptance of the landscaping, but not less than one year from date of substantial completion. Upon completion of the maintenance and warranty period, the Facilities Management Department (FMD), Building Design and Construction Division (BDCD) and the Contractor shall conduct a final walk-through of the site to ensure all plantings and lawn areas (grass) are acceptable.
 - a. Trees, Shrubs, Vines, and Ornamental Grasses: 12 months.
 - b. Ground Covers, Biennials, Perennials, and Other Plants: 12 months.

1.11 MAINTENANCE

- A. Trees and Shrubs: Maintain for the following maintenance period by pruning, cultivating, watering, weeding, fertilizing, restoring planting saucers, tightening and repairing stakes and guy supports, and resetting to proper grades or vertical position, as required to establish healthy, viable plantings. Spray as required to keep trees and shrubs free of insects and disease. Restore or replace damaged tree wrappings.
 - 1. Maintenance Period: 12 months from date of Substantial Completion.
- B. Ground Cover and Plants: Maintain for the following maintenance period by watering, weeding, fertilizing, and other operations as required to establish healthy, viable plantings:
 - 1. Maintenance Period: 12 months from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 PLANT MATERIAL

- A. General: Furnish nursery-grown plants true to genus, species, variety, cultivar, stem form, shearing, and other features indicated in Plant List, Plant Schedule, or Plant Legend indicated on Drawings and complying with ANSI Z60.1; and with healthy root systems developed by transplanting or root pruning. Provide well-shaped, fully branched, healthy, vigorous stock,

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

densely foliated when in leaf and free of disease, pests, eggs, larvae, and defects such as knots, sun scald, injuries, abrasions, and disfigurement.

- B. Root-Ball Depth: Furnish trees and shrubs with root balls measured from top of root ball, which begins at root flare according to ANSI Z60.1. Root flare shall be visible before planting.

2.2 FERTILIZERS

- A. Planting Tablets: Tightly compressed chip-type, long-lasting, slow-release, commercial-grade planting fertilizer in tablet form. Tablets shall break down with soil bacteria, converting nutrients into a form that can be absorbed by plant roots.
1. Size: 5-gram tablets.
 2. Nutrient Composition: 20 percent nitrogen, 10 percent phosphorous, and 5 percent potassium, by weight plus micronutrients.

2.3 MULCHES

- A. Organic Mulch: Shredded hardwood.

2.4 WEED-CONTROL BARRIERS

- A. Nonwoven Geotextile Filter Fabric: Polypropylene or polyester fabric, 3 oz./sq. yd. minimum, composed of fibers formed into a stable network so that fibers retain their relative position. Fabric shall be inert to biological degradation and resist naturally encountered chemicals, alkalis, and acids.
- B. Composite Fabric: Woven, needle-punched polypropylene substrate bonded to a nonwoven polypropylene fabric, 4.8 oz./sq. yd.

2.5 PESTICIDES

- A. General: Pesticide registered and approved by the EPA, acceptable to authorities having jurisdiction, and of type recommended by manufacturer for each specific problem and as required for Project conditions and application. Do not use restricted pesticides unless authorized in writing by authorities having jurisdiction.

2.6 LANDSCAPE EDGINGS

- A. Steel Edging: Standard commercial-steel edging, fabricated in sections of standard lengths, with loops stamped from or welded to face of sections to receive stakes.
1. <Double click here to find, evaluate, and insert list of manufacturers and products.>
 2. Edging Size: 3/16 inch thick by 4 inches deep.
 3. Finish: Manufacturer's standard paint.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

2.7 TREE-WATERING DEVICES

- A. Slow-Release Watering Device: Standard product manufactured for drip irrigation of plants and emptying its water contents over an extended time period; manufactured from UV-light-stabilized nylon-reinforced polyethylene sheet, PVC, or HDPE plastic.

PART 3 - EXECUTION**3.1 PLANTING AREA ESTABLISHMENT**

- A. General: Prepare planting area for soil placement and mix planting soil according to Section 329113 "Soil Preparation."
- B. Place and mix planting soil over exposed subgrade.
- C. Before planting, obtain Architect's acceptance of finish grading; restore planting areas if eroded or otherwise disturbed after finish grading.

3.2 EXCAVATION FOR TREES AND SHRUBS

- A. Planting Pits and Trenches: Excavate circular planting pits.
 - 1. Excavate planting pits with sides sloping inward at a 45-degree angle. Excavations with vertical sides are unacceptable. Trim perimeter of bottom leaving center area of bottom raised slightly to support root ball and assist in drainage away from center. Do not further disturb base. Ensure that root ball will sit on undisturbed base soil to prevent settling. Scarify sides of planting pit smeared or smoothed during excavation.
 - 2. Retain first two subparagraphs below if applicable.
 - 3. Excavate approximately three times as wide as ball diameter.
 - 4. Excavate at least 12 inches wider than root spread and deep enough to accommodate vertical roots for bare-root stock.
 - 5. Do not excavate deeper than depth of the root ball, measured from the root flare to the bottom of the root ball.
- B. Backfill Soil: Subsoil and topsoil removed from excavations may be used as backfill soil unless otherwise indicated.

3.3 TREE, SHRUB, AND VINE PLANTING

- A. Inspection: At time of planting, verify that root flare is visible at top of root ball according to ANSI Z60.1. If root flare is not visible, remove soil in a level manner from the root ball to where the top-most root emerges from the trunk. After soil removal to expose the root flare, verify that root ball still meets size requirements.
- B. Roots: Remove stem girdling roots and kinked roots. Remove injured roots by cutting cleanly; do not break.
- C. Set each plant plumb and in center of planting pit or trench with root flare 1 inch above adjacent finish grades.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1. Retain "Backfill" Subparagraph below if backfill or planting-soil type is not indicated on Drawings; revise to suit Project.
 2. Backfill: For trees, use excavated soil for backfill.]
 3. Retain applicable stock in first four subparagraphs below.
 4. Balled and Burlapped Stock: After placing some backfill around root ball to stabilize plant, carefully cut and remove burlap, rope, and wire baskets from tops of root balls and from sides, but do not remove from under root balls. Remove pallets, if any, before setting. Do not use planting stock if root ball is cracked or broken before or during planting operation.
 5. Balled and Potted and Container-Grown Stock: Carefully remove root ball from container without damaging root ball or plant.
 6. Fabric Bag-Grown Stock: Carefully remove root ball from fabric bag without damaging root ball or plant. Do not use planting stock if root ball is cracked or broken before or during planting operation.
 7. Bare-Root Stock: Support stem of each plant and spread roots without tangling or turning toward surface. Plumb before backfilling, and maintain plumb while working. Carefully work backfill around roots by hand. Bring roots into close contact with the soil.
 8. Backfill around root ball in layers, tamping to settle soil and eliminate voids and air pockets. When planting pit is approximately one-half filled, water thoroughly before placing remainder of backfill. Repeat watering until no more water is absorbed.
 9. Place planting tablets equally distributed around each planting pit when pit is approximately one-half filled. Place tablets beside the root ball about 1 inch from root tips; do not place tablets in bottom of the hole.
 - a. Bare-Root Stock: Place tablets beside soil-covered roots; do not place tablets touching the roots.
 - b. Quantity: Three for each caliper inch of plant.
 10. Continue backfilling process. Water again after placing and tamping final layer of soil.
- D. Slopes: When planting on slopes, set the plant so the root flare on the uphill side is flush with the surrounding soil on the slope; the edge of the root ball on the downhill side will be above the surrounding soil. Apply enough soil to cover the downhill side of the root ball.

3.4 TREE, SHRUB, AND VINE PRUNING

- A. Remove only dead, dying, or broken branches. Do not prune for shape.

3.5 GROUND COVER AND PLANT PLANTING

- A. Set out and space ground cover and plants other than trees, shrubs, and vines 9 inches apart or as indicated on Drawings in even rows with triangular spacing.
- B. Use planting soil for backfill.
- C. Dig holes large enough to allow spreading of roots.
- D. Work soil around roots to eliminate air pockets and leave a slight saucer indentation around plants to hold water.
- E. Water thoroughly after planting, taking care not to cover plant crowns with wet soil.
- F. Protect plants from hot sun and wind; remove protection if plants show evidence of recovery from transplanting shock.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.6 PLANTING AREA MULCHING

- A. Install weed-control barriers before mulching according to manufacturer's written instructions. Completely cover area to be mulched, overlapping edges a minimum of 6 inches and secure seams with galvanized pins.
- B. Mulch backfilled surfaces of planting areas and other areas indicated.
 - 1. Retain required mulch applications in two subparagraphs below.
 - 2. Trees and Treelike Shrubs in Turf Areas: Apply organic mulch ring of 3-inch radius around trunks or stems. Do not place mulch within 3 inches of trunks or stems.
 - 3. Organic Mulch in Planting Areas: Apply 2-inch average thickness of organic mulch extending 12 inches beyond edge of individual planting pit or trench and over whole surface of planting area, and finish level with adjacent finish grades. Do not place mulch within 3 inches of trunks or stems.

3.7 EDGING INSTALLATION

- A. Steel Edging: Install steel edging where indicated according to manufacturer's written instructions. Anchor with steel stakes spaced approximately 30 inches apart, driven below top elevation of edging.

3.8 INSTALLING SLOW-RELEASE WATERING DEVICE

- A. Provide one device for each tree.

3.9 PLANT MAINTENANCE

- A. Maintain plantings by pruning, cultivating, watering, weeding, fertilizing, mulching, restoring planting saucers, resetting to proper grades or vertical position, and performing other operations as required to establish healthy, viable plantings.
- B. Fill in, as necessary, soil subsidence that may occur because of settling or other processes. Replace mulch materials damaged or lost in areas of subsidence.
- C. Apply treatments as required to keep plant materials, planted areas, and soils free of pests and pathogens or disease. Use integrated pest management practices when possible to minimize use of pesticides and reduce hazards. Treatments include physical controls such as hosing off foliage, mechanical controls such as traps, and biological control agents.
- D. Apply pesticides and other chemical products and biological control agents according to authorities having jurisdiction and manufacturer's written recommendations. Coordinate applications with Owner's operations and others in proximity to the Work. Notify Owner before each application is performed.
- E. Protect plants from damage due to landscape operations and operations of other contractors and trades. Maintain protection during installation and maintenance periods. Treat, repair, or replace damaged plantings.
- F. At time of Substantial Completion, verify that tree-watering devices are in good working order and leave them in place. Replace improperly functioning devices.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.10 MAINTENANCE SERVICE

- A. Maintenance Service: Provide maintenance by skilled employees of landscape Installer. Maintain as required in "Plant Maintenance" Article. Begin maintenance immediately after plants are installed and continue until plantings are acceptably healthy and well established, but for not less than maintenance period below:
1. Revise time periods in "Maintenance Period for Trees and Shrubs" and "Maintenance Period for Ground Cover and Other Plants" subparagraphs below to suit local customs and growing conditions.
 2. Maintenance Period for Trees and Shrubs: 12 months from date of planting completion or Substantial Completion.
 3. Maintenance Period for Ground Cover and Other Plants: 12 months from date of planting completion or Substantial Completion.

END OF SECTION 329300

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

SECTION 334200 - STORMWATER CONVEYANCE

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Concrete pipe and fittings.
2. Non-pressure transition couplings.
3. Cleanouts.
4. Manholes.
5. Catch basins.
6. Stormwater inlets.
7. Stormwater detention structures.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product. Certification of compliance with VDOT Specifications and Standards where applicable.

B. Shop Drawings:

1. Manholes: Include plans, elevations, sections, details, frames, and covers.
2. Catch basins and stormwater inlets. Include plans, elevations, sections, details, frames, covers, and grates.
3. Stormwater Quality Structures: Include plans, elevations, sections, details, frames, covers, design calculations, and concrete design-mix reports.

1.3 QUALITY ASSURANCE

A. Piping materials shall bear label, stamp, or other markings of specified testing agency.

PART 2 - PRODUCTS

2.1 PVC PIPE AND FITTINGS

A. NSF Marking: Comply with NSF 14, "Plastics Piping Systems Components and Related Materials," for plastic piping components. Include marking with "NSF-drain" for plastic storm drain and "NSF-sewer" for plastic storm sewer piping.

B. PVC Corrugated Sewer Piping:

1. Pipe: ASTM F 949, PVC, corrugated pipe with bell-and-spigot ends for gasketed joints.
2. Fittings: ASTM F 949, PVC molded or fabricated, socket type.
3. Gaskets: ASTM F 477, elastomeric seals.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

- C. Adhesive Primer: ASTM F 656.

2.2 CONCRETE PIPE AND FITTINGS

- A. Reinforced-Concrete Sewer Pipe and Fittings: as specified in VDOT Specification Section 232.02 (a) 1b; class as shown on Drawings.
- B. Joint Material: as specified in VDOT Specification Section 302.03 (a) 2.d (1).

2.3 NONPRESSURE TRANSITION COUPLINGS

- A. Comply with ASTM C 1173, elastomeric, sleeve-type, reducing or transition coupling, for joining underground nonpressure piping. Include ends of same sizes as piping to be joined, and corrosion-resistant-metal tension band and tightening mechanism on each end.
- B. Sleeve Materials:
1. For Concrete Pipes: ASTM C 443, rubber.
 2. For Cast-Iron Soil Pipes: ASTM C 564, rubber.
 3. For Fiberglass Pipes: ASTM F 477, elastomeric seal or ASTM D 5926, PVC.
 4. For Plastic Pipes: ASTM F 477, elastomeric seal or ASTM D 5926, PVC.
 5. For Dissimilar Pipes: ASTM D 5926, PVC or other material compatible with pipe materials being joined.
- C. Unshielded, Flexible Couplings:
1. Description: Elastomeric sleeve with stainless-steel shear ring and corrosion-resistant-metal tension band and tightening mechanism on each end.
- D. Shielded, Flexible Couplings:
1. Description: ASTM C 1460, elastomeric or rubber sleeve with full-length, corrosion-resistant outer shield and corrosion-resistant-metal tension band and tightening mechanism on each end.
- E. Ring-Type, Flexible Couplings:
1. Description: Elastomeric compression seal with dimensions to fit inside bell of larger pipe and for spigot of smaller pipe to fit inside ring.

2.4 CLEANOUTS

- A. Cast-Iron Cleanouts:
1. Description: ASME A112.36.2M, round, gray-iron housing with clamping device and round, secured, scoriated, gray-iron cover. Include gray-iron ferrule with inside caulk or spigot connection and countersunk, tapered-thread, brass closure plug.
 2. Top-Loading Classification(s): Heavy Duty.
 3. Sewer Pipe Fitting and Riser to Cleanout: ASTM A 74, Service class, cast-iron soil pipe and fittings.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

B. PVC Cleanouts:

1. Description: PVC body with PVC threaded plug. Include PVC sewer pipe fitting and riser to cleanout of same material as sewer piping.

2.5 MANHOLES

A. Standard Precast Concrete Manholes:

1. Description: ASTM C 478, precast, reinforced concrete, of depth indicated, with provision for sealant joints.
2. Diameter: 48 inches minimum unless otherwise indicated.
3. Ballast: Increase thickness of precast concrete sections or add concrete to base section as required to prevent flotation.
4. Base Section: 6-inch minimum thickness for floor slab and 4-inch minimum thickness for walls and base riser section, and separate base slab or base section with integral floor.
5. Riser Sections: 4-inch minimum thickness, and lengths to provide depth indicated.
6. Top Section: Eccentric-cone type unless concentric-cone or flat-slab-top type is indicated, and top of cone of size that matches grade rings.
7. Joint Sealant: ASTM C 990, bitumen or butyl rubber.
8. Resilient Pipe Connectors: ASTM C 923, cast or fitted into manhole walls, for each pipe connection.
9. Steps: Cast into base, riser, and top section at intervals shown.
10. Adjusting Rings: Interlocking HDPE rings with level or sloped edge in thickness and diameter matching manhole frame and cover, and of height required to adjust manhole frame and cover to indicated elevation and slope. Include sealant recommended by ring manufacturer.
11. Grade Rings: Reinforced-concrete rings, 6- to 9-inch total thickness, to match diameter of manhole frame and cover, and height as required to adjust manhole frame and cover to indicated elevation and slope.

2.6 CONCRETE

A. General: Cast-in-place concrete in accordance with ACI 318, ACI 350, and the following:

1. Cement: ASTM C 150/C 150M, Type II.
2. Fine Aggregate: ASTM C 33/C 33M, sand.
3. Coarse Aggregate: ASTM C 33/C 33M, crushed gravel.
4. Water: Potable.

B. Portland Cement Design Mix: 4000 psi minimum, with 0.45 maximum water/cementitious materials ratio.

1. Reinforcing Fabric: ASTM A 1064, steel, welded wire fabric, plain.
2. Reinforcing Bars: ASTM A 615, Grade 60 deformed steel.

C. Manhole Channels and Benches: Factory or field formed from concrete. Portland cement design mix, 4000 psi minimum, with 0.45 maximum water/cementitious materials ratio. Include channels and benches in manholes.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

1. Channels: Concrete invert, formed to same width as connected piping, with height of vertical sides to three-fourths of pipe diameter. Form curved channels with smooth, uniform radius and slope.
 - a. Invert Slope: 1 percent through manhole.
 2. Benches: Concrete, sloped to drain into channel.
 - a. Slope: 4 percent.
- D. Ballast and Pipe Supports: Portland cement design mix, 3000 psi minimum, with 0.58 maximum water/cementitious materials ratio.
1. Reinforcing Fabric: ASTM A 1064, steel, welded wire fabric, plain.
 2. Reinforcing Bars: ASTM A 615, Grade 60 deformed steel.

2.7 CATCH BASINS

- A. Standard Precast Concrete Catch Basins:
1. Description: ASTM C 478, precast, reinforced concrete, of depth indicated, with provision for sealant joints.
 2. Base Section: 6-inch minimum thickness for floor slab and 4-inch minimum thickness for walls and base riser section, and separate base slab or base section with integral floor.
 3. Riser Sections: 4-inch minimum thickness, 48-inch diameter, and lengths to provide depth indicated.
 4. Top Section: Eccentric-cone type unless concentric-cone or flat-slab-top type is indicated. Top of cone of size that matches grade rings.
 5. Joint Sealant: ASTM C 990, bitumen or butyl rubber.
 6. Adjusting Rings: Interlocking rings with level or sloped edge in thickness and shape matching catch basin frame and grate. Include sealant recommended by ring manufacturer.
 7. Grade Rings: Include two or three reinforced-concrete rings, of 6- to 9-inch total thickness, that match 24-inch-diameter frame and grate.
 8. Steps: Cast into base, riser and top section sidewall at intervals shown.
 9. Pipe Connectors: ASTM C 923, resilient, of size required, for each pipe connecting to base section.
- B. Frames and Grates: VFDOT Section 204.
1. Size: 24 by 24 inches minimum unless otherwise indicated.
 2. Grate Free Area: Approximately 50 percent unless otherwise indicated.

2.8 STORMWATER INLETS

- A. Curb Inlets: Made with vertical curb opening, of materials and dimensions according to VDOT standards.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

PART 3 - EXECUTION**3.1 EARTHWORK**

- A. Excavation, trenching, and backfilling are specified in Section 312000 "Earth Moving."

3.2 PIPING INSTALLATION

- A. General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground storm drainage piping. Location and arrangement of piping layout take into account design considerations. Install piping as indicated, to extent practical. Where specific installation is not indicated, follow piping manufacturer's written instructions.
- B. Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings in accordance with manufacturer's written instructions for use of lubricants, cements, and other installation requirements.
- C. Install manholes for changes in direction unless fittings are indicated. Use fittings for branch connections unless direct tap into existing sewer is indicated.
- D. Install proper size increasers, reducers, and couplings where different sizes or materials of pipes and fittings are connected. Reducing size of piping in direction of flow is prohibited.
- E. When installing pipe under streets or other obstructions that cannot be disturbed, use pipe-jacking process of microtunneling.
- F. Install gravity-flow, nonpressure drainage piping in accordance with the following:
1. Install piping pitched down in direction of flow.
 2. Install piping NPS 6 and larger with restrained joints at tee fittings and at changes in direction. Use corrosion-resistant rods, pipe or fitting manufacturer's proprietary restraint system, or cast-in-place concrete supports or anchors.
 3. Install piping with 2-foot minimum cover.
 4. Install PVC sewer piping in accordance with ASTM D 2321 and ASTM F 1668.
 5. Install reinforced-concrete sewer piping in accordance with ASTM C 1479 and ACPA's "Concrete Pipe Installation Manual."

3.3 PIPE JOINT CONSTRUCTION

- A. Join gravity-flow, nonpressure drainage piping in accordance with the following:
1. Join PVC corrugated sewer piping in accordance with ASTM D 2321 for elastomeric-seal joints.
 2. Join reinforced-concrete sewer piping in accordance with ACPA's "Concrete Pipe Installation Manual" for rubber-gasketed joints.
 3. Join dissimilar pipe materials with nonpressure-type flexible couplings.
- B. Join force-main pressure piping in accordance with the following:
1. Join PVC pressure piping in accordance with AWWA M23 for gasketed joints.
 2. Join dissimilar pipe materials with pressure-type couplings.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3.4 CLEANOUT INSTALLATION

- A. Install cleanouts and riser extensions from sewer pipes to cleanouts at grade. Use cast-iron soil pipe fittings in sewer pipes at branches for cleanouts and cast-iron soil pipe for riser extensions to cleanouts. Install piping so cleanouts open in direction of flow in sewer pipe.
 - 1. Use Heavy-Duty, top-loading classification cleanouts in vehicle-traffic service areas.
 - 2. Use Extra-Heavy-Duty, top-loading classification cleanouts in roads.
- B. Set cleanout frames and covers in earth in cast-in-place concrete block, 18 by 18 by 12 inches deep. Set with tops 1 inch above surrounding earth grade.
- C. Set cleanout frames and covers in concrete pavement and roads with tops flush with pavement surface.

3.5 MANHOLE INSTALLATION

- A. General: Install manholes, complete with appurtenances and accessories indicated.
- B. Install precast concrete manhole sections with sealants in accordance with ASTM C 891.
- C. Where specific manhole construction is not indicated, follow manhole manufacturer's written instructions.
- D. Set tops of frames and covers flush with finished surface of manholes that occur in pavements. Set tops **3 inches** above finished surface elsewhere unless otherwise indicated.

3.6 CATCH BASIN INSTALLATION

- A. Construct catch basins to sizes and shapes indicated.
- B. Set frames and grates to elevations indicated.

3.7 CONCRETE PLACEMENT

- A. Place cast-in-place concrete in accordance with ACI 318.

3.8 CONNECTIONS

- A. Make connections to existing piping and underground manholes.
 - 1. Use commercially manufactured wye fittings for piping branch connections. Remove section of existing pipe; install wye fitting into existing piping; and encase entire wye fitting, plus 6-inch overlap, with not less than 6 inches of concrete with 28-day compressive strength of 3000 psi.
 - 2. Make branch connections from side into existing piping, NPS 4 to NPS 20. Remove section of existing pipe, install wye fitting into existing piping, and encase entire wye with not less than 6 inches of concrete with 28-day compressive strength of 3000 psi.
 - 3. Make branch connections from side into existing piping, NPS 21 or larger, or to underground manholes and structures by cutting into existing unit and creating an opening large enough to allow 3 inches of concrete to be packed around entering

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

connection. Cut end of connection pipe passing through pipe or structure wall to conform to shape of and be flush with inside wall unless otherwise indicated. On outside of pipe, manhole, or structure wall, encase entering connection in 6 inches of concrete for minimum length of 12 inches to provide additional support of collar from connection to undisturbed ground.

- a. Use concrete that will attain a minimum 28-day compressive strength of 3000 psi unless otherwise indicated.
 - b. Use epoxy-bonding compound as interface between new and existing concrete and piping materials.
4. Protect existing piping, manholes, and structures to prevent concrete or debris from entering while making tap connections. Remove debris or other extraneous material that may accumulate.

3.9 CLOSING ABANDONED STORM DRAINAGE SYSTEMS

- A. Abandoned Piping: Close open ends of abandoned underground piping indicated to remain in place. Include closures strong enough to withstand hydrostatic and earth pressures that may result after ends of abandoned piping have been closed. Use either procedure below:
1. Close open ends of piping with at least 8-inch thick, brick masonry bulkheads.
 2. Close open ends of piping with threaded metal caps, plastic plugs, or other acceptable methods suitable for size and type of material being closed. Do not use wood plugs.
- B. Backfill to grade in accordance with Section 312000 "Earth Moving."

3.10 IDENTIFICATION

- A. Materials and their installation are specified in Section 312000 "Earth Moving." Arrange for installation of green warning tape directly over piping and at outside edge of underground structures.
1. Use warning tape or detectable warning tape over ferrous piping.
 2. Use detectable warning tape over nonferrous piping and over edges of underground structures.

3.11 FIELD QUALITY CONTROL

- A. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of Project.
1. Submit separate reports for each system inspection.
 2. Defects requiring correction include the following:
 - a. Alignment: Less than full diameter of inside of pipe is visible between structures.
 - b. Deflection: Flexible piping with deflection that prevents passage of ball or cylinder of size not less than 92.5 percent of piping diameter.
 - c. Damage: Crushed, broken, cracked, or otherwise damaged piping.
 - d. Infiltration: Water leakage into piping.
 - e. Exfiltration: Water leakage from or around piping.

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

3. Replace defective piping using new materials, and repeat inspections until defects are within allowances specified.
 4. Reinspect and repeat procedure until results are satisfactory.
- B. Test new piping systems, and parts of existing systems that have been altered, extended, or repaired, for leaks and defects.
1. Do not enclose, cover, or put into service before inspection and approval.
 2. Test completed piping systems in accordance with requirements of authorities having jurisdiction.
 3. Schedule tests and inspections by authorities having jurisdiction with at least 24 hours' advance notice.
 4. Submit separate report for each test.
 5. Gravity-Flow Storm Drainage Piping: Test in accordance with requirements of authorities having jurisdiction, UNI-B-6, and the following:
 - a. Exception: Piping with soiltight joints unless required by authorities having jurisdiction.
 - b. Option: Test plastic piping in accordance with ASTM F 1417.
- C. Leaks and loss in test pressure constitute defects that must be repaired.
- D. Replace leaking piping using new materials, and repeat testing until leakage is within allowances specified.
- 3.12 CLEANING
- A. Clean interior of piping of dirt and superfluous materials. Flush with potable water.

END OF SECTION 334200

3108 Columbia Pike Demolition

Issued for Bid
November 10, 2023

Dewberry Project No. 50156517
Arlington County Contract No.
22-DES-RFP-19b

THIS PAGE LEFT INTENTIONALLY BLANK

3108 COLUMBIA PIKE DEMOLITION

ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

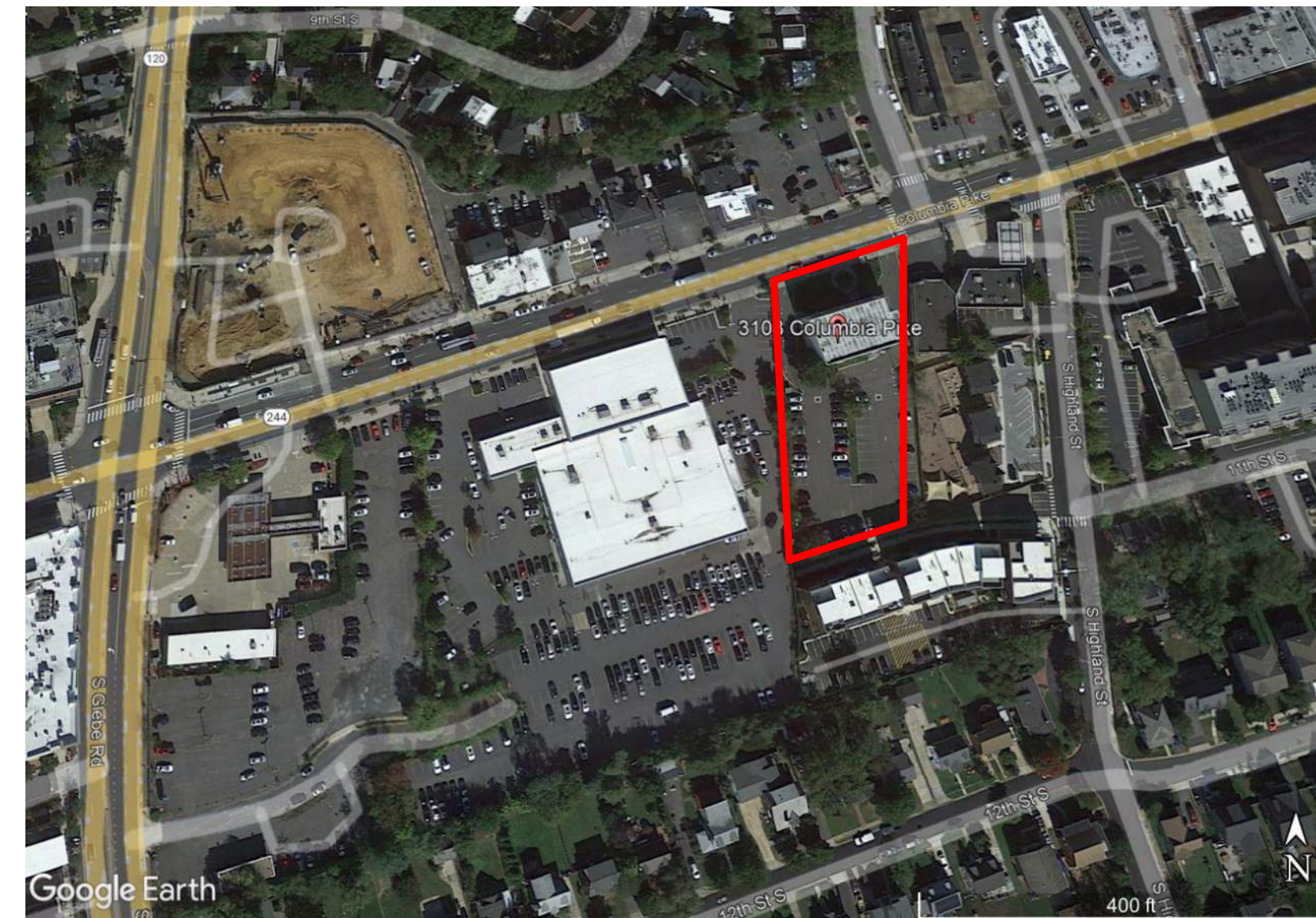
3108 COLUMBIA PIKE
ARLINGTON, VA 22204

ISSUED FOR BID

NOVEMBER 10, 2023



STREET VIEW



SATELLITE/ MAP VIEW

ARCHITECTURAL

Dewberry Architects Inc.

8401 ARLINGTON BLVD
FAIRFAX, VA 22031

703.698.9050

CIVIL

Dewberry Engineers, Inc.

8401 ARLINGTON BLVD
FAIRFAX, VA 22031

703.849.0100
703.849.0518 fax

ELECTRICAL

Dewberry Engineers, Inc.

8401 ARLINGTON BLVD
FAIRFAX, VA 22031

703.849.0100
703.849.0518 fax

3108 COLUMBIA PIKE DEMOLITION

ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

3108 COLUMBIA PIKE

ARLINGTON, VIRGINIA 22204

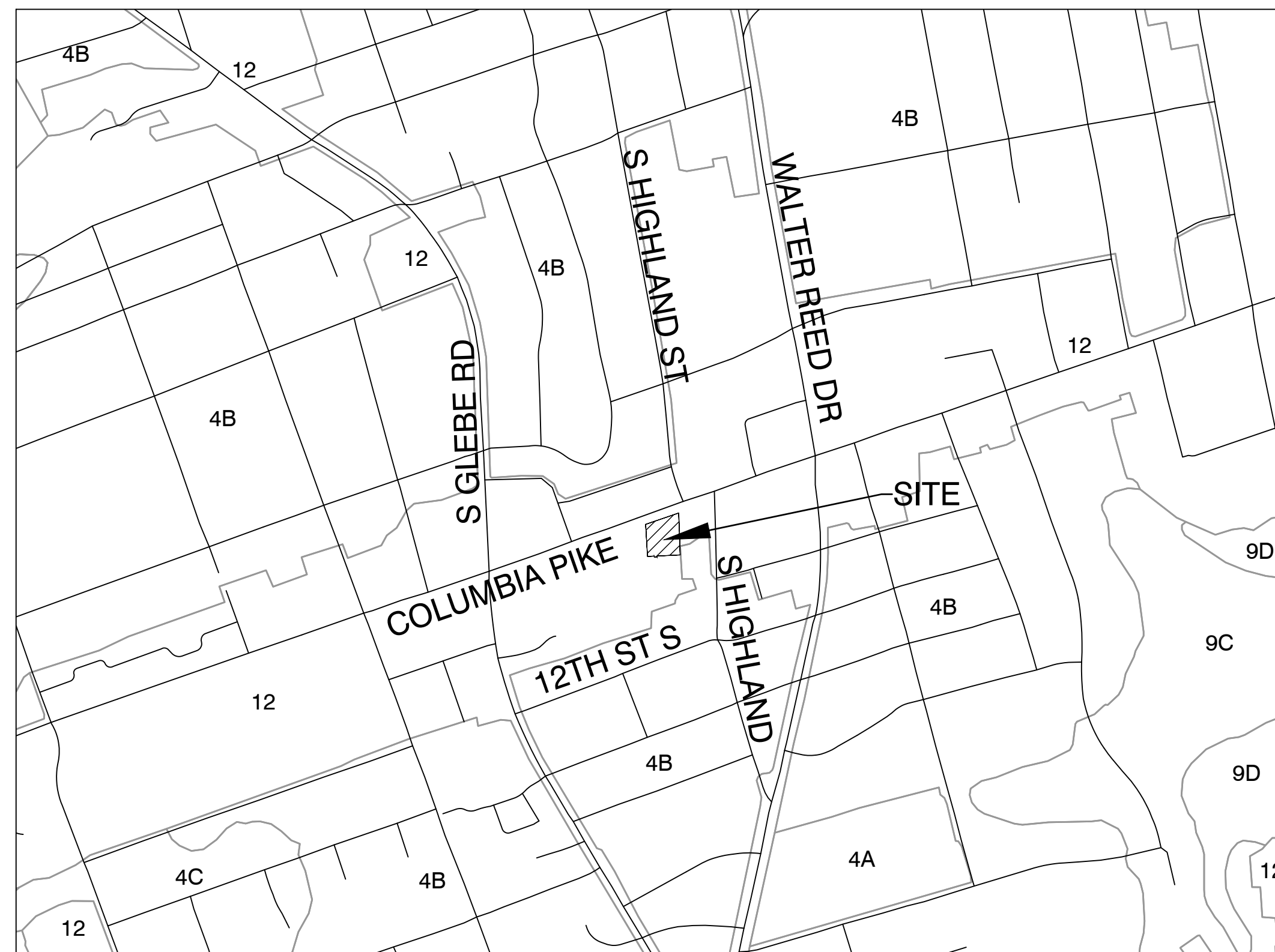
USE PERMIT # UPER22-00069

SWM # 23-0138

DATUM NOTES:

HORIZONTAL DATUM: THE SITE SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983 AS COMPUTED FROM FIELD RUN BOUNDARY AND HORIZONTAL SURVEY.

VERTICAL DATUM: THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY.



VICINITY MAP

SCALE 1" = 500'

OWNER

NAME: THE COUNTY BOARD OF ARLINGTON
 ADDRESS: 2100 CLARENDON BLAVD, SUITE 300
 ARLINGTON VA 22201
 TELEPHONE: (703) 228-3130

DEVELOPER

NAME: ARLINGTON COUNTY - DES
 FACILITIES DESIGN AND CONSTRUCTION
 ADDRESS: 1400 N. UHLE STREET, SUITE 403
 ARLINGTON VA 22201
 TELEPHONE: (703) 216-6555
 EMAIL: VMAISLIN@ARLINGTONVA.US

ENGINEER

NAME: DEWBERRY ENGINEERS INC.
 ADDRESS: 8401 ARLINGTON BOULEVARD
 FAIRFAX VA 22031
 TELEPHONE: (703) 849-0100

CONTRACTOR

NAME: TO BE DETERMINED
 ADDRESS: TO BE DETERMINED
 TELEPHONE: TO BE DETERMINED

SHEET INDEX

SHEET #	DRAWING #	DESCRIPTION
1	C-000	CIVIL COVER SHEET
2	C-001	GENERAL NOTES & LEGEND
3	C-002	BOUNDARY AND TOPOGRAPHY SURVEY
4	C-003	SITE DETAILS
5	C-100	EXISTING CONDITIONS AND DEMO PLAN
6	C-200	SITE PLAN
7	C-300	GRADING AND UTILITY PLAN
8	C-310	DRY UTILITY PLAN
9	C-320	STORM SEWER PLAN, PROFILES AND COMPUTATIONS
10	C-330	DRAINAGE AREA MAPS
11	C-331	ADEQUATE OUTFALL ANALYSIS
12	C-332	WATER QUALITY COMPUTATIONS
13	C-333	WATER QUALITY COMPUTATIONS
14	C-334	STORMWATER DETAILS
15	C-335	POLLUTION PREVENTION PLAN
16	C-800	MAINTENANCE OF TRAFFIC PLAN
17	C-810	EROSION AND SEDIMENT CONTROL PHASE 1
18	C-820	EROSION AND SEDIMENT CONTROL PHASE 2
19	C-860	EROSION AND SEDIMENT CONTROL DETAILS
20	C-870	EROSION AND SEDIMENT CONTROL NARRATIVE
21	C-900	TREE INVENTORY & PRESERVATION PLAN
22	C-901	LANDSCAPE PLAN
23	C-902	LANDSCAPE AND TREE PRESERVATION DETAILS
24	E-001	ELECTRICAL COVER SHEET
25	E-002	ELECTRICAL NOTES
26	E-101	ELECTRICAL SITE PLAN
27	E-102	LIGHTING PHOTOMETRIC SITE PLAN
28	E-501	ELECTRICAL DETAILS

P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site\Sheets\CEP\C-000 CIVIL COVER SHEET.dwg, Jan 10, 2024, 11:50am



ISSUED FOR BID 11-10-2023			ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	
			CIVIL COVER SHEET 3108 COLUMBIA PIKE DEMOLITION 3108 COLUMBIA PIKE ARLINGTON COUNTY, VIRGINIA 22204	
		DEWBERRY REVISIONS	SCALE: AS-SHOWN	C-000
				1 OF 28
1 01/09/24 ADDENDUM 1 NO. DATE DESCRIPTION BY				
COUNTY REVISIONS SUBMITTED DATE: 8/4/2023 DESIGNED: BWB CHECKED: TCC PROJECT/FILE NO. LDAP23-00146				
SCALE IN FEET 1" = 500' 1 INCH				

CIVIL LEGEND

EXISTING INTERMEDIATE CONTOUR	-----86-----
EXISTING CONTOUR INDEX	-----200-----
FUTURE-EXISTING CONTOUR	-----86-----
PROPOSED CONTOUR	-----86-----
EXISTING CURB	=====
PROPOSED CURB & GUTTER	=====
PROPOSED C-3	=====
EXISTING WATERLINE W/TEE	W W
PROPOSED WATERLINE W/TEE	W
EXISTING TELECOMM LINE	--- COMM --- COMM
PROPOSED TELECOMM LINE	--- COMM ---
EXISTING STORM SEWER	
PROPOSED STORM SEWER	
EXISTING SANITARY SEWER	--- SS --- SS
PROPOSED SANITARY SEWER	--- SS --- SS
EXISTING ELECTRIC SERVICE	--- E --- E
PROPOSED ELECTRIC SERVICE	--- E ---
PROPOSED 1" ELECTRIC CONDUIT	--- PVC ---
EXISTING GAS LINE	--- G ---
PROPOSED GAS LINE	--- G ---
PROPERTY LINE	-----
EASEMENT LINE	-----
CENTER LINE	-----
LIMITS OF DISTURBANCE	-----
EXISTING SAFETY FENCE	--- □ --- □
PROPOSED SAFETY FENCE	--- □ --- □
EXISTING SPOT ELEVATIONS	+312.0
PROPOSED SPOT ELEVATION	+12.00
EXISTING TREE W/TRUNK DIAMETER	○ 12" DIM.
EXISTING TREE W/DRIPLINE	
PROPOSED TREE	
FLOW LINE OF SWALE	→ → →
EXISTING UTILITY POLE	
PROPOSED UTILITY POLE	
EXISTING FIRE HYDRANT	
PROPOSED FIRE HYDRANT	
EXISTING WATER VALVE	--- W --- ○
PROPOSED WATER VALVE	--- W --- ●
WATER METER (SINGLE & DOUBLE)	
EXISTING STREET SIGN	
STREET SIGN	
PARKING INDICATOR INDICATES THE NUMBER OF PARKING SPACES	
TEST PIT	
EXISTING LIGHT POLE	
PROPOSED STREET LIGHTING	
PROPOSED PLANTER DRAINS	
EXISTING PARKING METER	
EXISTING FDC	
EXISTING BOLLARDS	
EXISTING GAS METER	
PROPOSED GAS METER	

NOTES:

1. THE PROPERTY DELINEATED IN THIS PLAN IS LOCATED IN ARLINGTON COUNTY REAL PROPERTY IDENTIFICATION MAP 32-007-018 AND IS ZONED S-3A.
2. THE BOUNDARY INFORMATION SHOWN HEREON BASED IS ON CURRENT FIELD RUN SURVEY PREPARED BY DEWBERRY, DATED SEPTEMBER 20, 2022.
3. THE SITE SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983 AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY.
4. THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY.
5. EROSION & SEDIMENT CONTROL FOR THE PROJECT AREA WILL BE PROVIDED IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
6. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE DEVELOPER, THE CONTRACTOR, OR THEIR AGENTS OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY OTHER ORDINANCE ENACTED BY ARLINGTON COUNTY.
7. THIS PLAN COMPLIES WITH THE ARLINGTON COUNTY CONSTRUCTION STANDARDS AND SPECIFICATIONS, WHICH WENT INTO EFFECT SEPTEMBER 09, 2020. ALL UTILITY PERMITS ISSUED AFTER THIS DATE MUST COMPLY WITH THE CONSTRUCTION CRITERIA IN THE UPDATED MANUAL, INCLUDING ANY REVISIONS THAT MAY HAVE BEEN ISSUED.
8. THE ENGINEER SHALL NOT HAVE CONTROL OVER OR CHARGE OF AND SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OR FOR SAFETY PRECAUTIONS AND PROGRAMS IN CONNECTION WITH THE WORK SHOWN ON THESE PLANS. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE CONTRACTOR'S SCHEDULES OR FAILURE TO CARRY OUT THE WORK. THE ENGINEER IS NOT RESPONSIBLE FOR ACTS OR OMISSIONS OF THE CONTRACTOR, SUBCONTRACTORS, OR THEIR AGENTS OR EMPLOYEES, OR OF ANY OTHER PERSONS PERFORMING PORTIONS OF THE WORK.
9. THE DEVELOPER/BUILDER SHALL CONTACT ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES (DES) TO DISCUSS UTILITY PERMIT REQUIREMENTS FOR INSTALLATION OF WATER AND SEWER MAINS AND CERTIFICATION OF WATER AND SANITARY SEWER AVAILABILITY PRIOR TO ISSUANCE OF A BUILDING PERMIT.
10. NO CEMETERIES OR HISTORIC SITES ARE KNOWN TO EXIST WITHIN THE PROJECT LIMITS SHOWN ON THIS PLAN.
11. NO RPA EXIST WITHIN THE PROJECT AREA PER ARLINGTON COUNTY'S GIS INFORMATION.
12. NO FEMA 100 YEAR FLOODPLAIN EXIST WITHIN THE PROJECT AREA PER FEMA FIRM MAP 51013C0038C EFFECTIVE 08/19/2013
13. CONTROLLED FILLS SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY METHOD "A" PER STANDARD PROCTOR AASHTO-T99, ASTM-D698, OR VTM-1 AS APPLICABLE. DENSITY SHALL BE CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.
14. ALL FINISHED GRADING, SEEDING, SODDING OR PAVING SHALL BE DONE IN SUCH A MANNER TO PRECLUDE THE PONDING OF WATER ON THE SITE.
15. REFER TO THE GEOTECHNICAL ENGINEER FOR METHODS, MATERIALS AND DETAILS FOR CONSTRUCTION OF ALL EARTHWORK ACTIVITIES.
16. THE OWNER SHALL BE RESPONSIBLE FOR SECURING ANY & ALL FLOOD HAZARD USE, WETLAND, LAND DISTURBANCE & STORM WATER DISCHARGE PERMITS, AS APPLICABLE PRIOR TO CONSTRUCTION.
17. THE CONTRACTOR SHALL BE RESPONSIBLE FOR HONORING ALL CONDITIONS OF SUCH PERMITS.
18. WHEN DURING THE COURSE OF CONSTRUCTION, ANY OBJECT OF AN UNUSUAL NATURE IS ENCOUNTERED, THE CONTRACTOR SHALL CEASE THE WORK IN THAT AREA & IMMEDIATELY NOTIFY THE PROPER AUTHORITY, ARLINGTON COUNTY AND/OR THE ARCHITECT/ENGINEER.
19. ANY RETAINING WALL 3FT. OR GREATER IN HEIGHT SHALL REQUIRE THE ISSUANCE OF A SEPARATE BUILDING PERMIT.

UTILITY NOTES:

1. EXISTING WATER SERVICES MAY BE USED DURING CONSTRUCTION WITH PROPER NOTIFICATION. PRIOR TO FINAL ACCEPTANCE, ALL INACTIVE WATER SERVICES SHALL BE DISCONTINUED BY THE CONTRACTOR AT THE WATER MAIN. ARLINGTON COUNTY WILL REMOVE THE EXISTING WATER METER FROM THE METER BOX AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THE REMAINING WATER METER BOX.
2. THE DISCONTINUATION OF WATER SERVICE AT THE WATER MAIN WILL NEED TO BE PERFORMED BY THE GENERAL CONTRACTOR.
3. THE PERMANENT CAP OFF OF THE SANITARY LATERAL (SANITARY BUILDING CONNECTION) AT THE PUBLIC SEWER MAIN WILL NEED TO BE PERFORMED BY THE GENERAL CONTRACTOR. FIRST PERMIT TO OBTAIN WILL BE A PLUMBING PERMIT FOR THE SEWER CAP OFF. EXCAVATION RIGHT-OF-WAY PERMITS (EXCV AND TREX) WILL ALSO BE NEEDED WHEN PERFORMING THE PERMANENT SEWER CAP OFF IN THE STREET.

ARLINGTON COUNTY, VIRGINIA – DEPARTMENT OF ENVIRONMENTAL SERVICES

THE FOLLOWING GENERAL NOTES ARE REQUIRED ON DEVELOPMENT PLANS WITH FRONTAGE ALONG ARLINGTON COUNTY STREETS AND WILL BE EDITED AS NEEDED TO REFLECT SPECIFIC SITE PLAN CONDITIONS.

1. ALL CONSTRUCTION SHALL CONFORM TO THE CURRENT ARLINGTON COUNTY DES STANDARDS AND SPECIFICATIONS.
 2. THE DEVELOPER OR CONTRACTOR SHALL REMOVE AND REPLACE, TO THE CURRENT ARLINGTON COUNTY DES STANDARDS AND SPECIFICATIONS, ANY EXISTING ENTRANCES, CURB AND GUTTER OR SIDEWALK ALONG THE FRONTAGE OF THE SITE IN POOR CONDITION, OR DAMAGED DURING CONSTRUCTION.
 3. THE DEVELOPER OR CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND CLOSING, TO ARLINGTON COUNTY STANDARDS, ANY EXISTING ENTRANCES NOT BEING USED IN CONJUNCTION WITH THIS DEVELOPMENT.
 4. THE DEVELOPER OR CONTRACTOR SHALL OBTAIN ARLINGTON COUNTY PERMITS FOR ALL WORK WITHIN THE RIGHT-OF-WAY ALONG THE FRONTAGE OF THIS SITE.
 5. THERE MAY BE UNDERGROUND CONDUIT, CABLES AND TRAFFIC DETECTION DEVICES IN THIS AREA, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ANY TRAFFIC CONTROLS THAT ARE DISTURBED DURING CONSTRUCTION. NOTIFY THE TRANSPORTATION ENGINEERING & OPERATIONS BUREAU AT (703) 228-3575, 24 HOURS PRIOR TO STARTING WORK.
 6. THE DEVELOPER OR CONTRACTOR SHALL NOT DISTURB OR REMOVE ANY TRAFFIC CONTROL SIGNS, PARKING METERS OR ANY OTHER TRAFFIC CONTROL DEVICE WITHOUT PRIOR PERMISSION FROM THE TRANSPORTATION ENGINEERING & OPERATIONS BUREAU. CONTACT TRANSPORTATION ENGINEERING AT (703) 228-3575.
 7. THE DEVELOPER OR CONTRACTOR SHALL OBTAIN A PERMIT FROM THE TRANSPORTATION ENGINEERING & OPERATIONS BUREAU, PRIOR TO PLACING ANY OBSTRUCTION WITHIN THE PUBLIC RIGHT OF WAY, OR ON SIDEWALKS ALONG THE FRONTAGE OF THIS DEVELOPMENT.
 8. ALL SANITARY SEWER CLEAN-OUTS LOCATED WITHIN THE TRAVEL WAY OR PARKING LOT OF THIS DEVELOPMENT SHALL BE CAST IRON.
 9. THE DEVELOPER OR CONTRACTOR SHALL OBTAIN PERMITS FROM THE INSPECTION SERVICES DIVISION PRIOR TO ANY DEMOLITION, EXCAVATION OR CONSTRUCTION OF ON-SITE FACILITIES. FOR INFORMATION AND PERMIT REQUIREMENTS TELEPHONE (703) 228-3800
 10. THE PLANNING OF STREET TREES FOR THIS DEVELOPMENT, SHALL BE COORDINATED WITH AND APPROVED BY THE DEPARTMENT OF PARKS, RECREATION AND CULTURAL RESOURCES (DPRCR). THIS COORDINATION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, DEVELOPER OR THEIR ENGINEER. THE DEVELOPER OR CONTRACTOR SHALL CONTACT PRCR AT (703) 228-1863, 72 HOURS IN ADVANCE TO SCHEDULE INSPECTION OF EXCAVATION, PLANT MATERIAL AND INSTALLATION. ALSO PRIOR TO REMOVING OR DISTURBING ANY EXISTING COUNTY TREES CONTACT PRCR FOR INFORMATION AND APPROVAL.
- UTILITY MARKING REQUIREMENTS:
11. THE DEVELOPER OR CONTRACTOR SHALL NOTIFY "MISS UTILITY OF VIRGINIA" DIAL 811, 48 HOURS PRIOR TO THE START OF ANY EXCAVATION OR CONSTRUCTION, FOR THE MARKING OF UNDERGROUND UTILITIES.
 12. COORDINATE WITH DES-TRANSIT BUREAU AT 703-228-3049 AT LEAST 4 WEEKS PRIOR TO COMMENCEMENT OF WORK IF TRANSIT IS AFFECTED OR IF THERE ARE ANY IMPACTS TO TRANSIT SIGNS OR ROUTES.

NOTE: ALL TEMPORARY & FINAL BUS TRAVEL LANES MUST BE MINIMUM 11' WIDE.

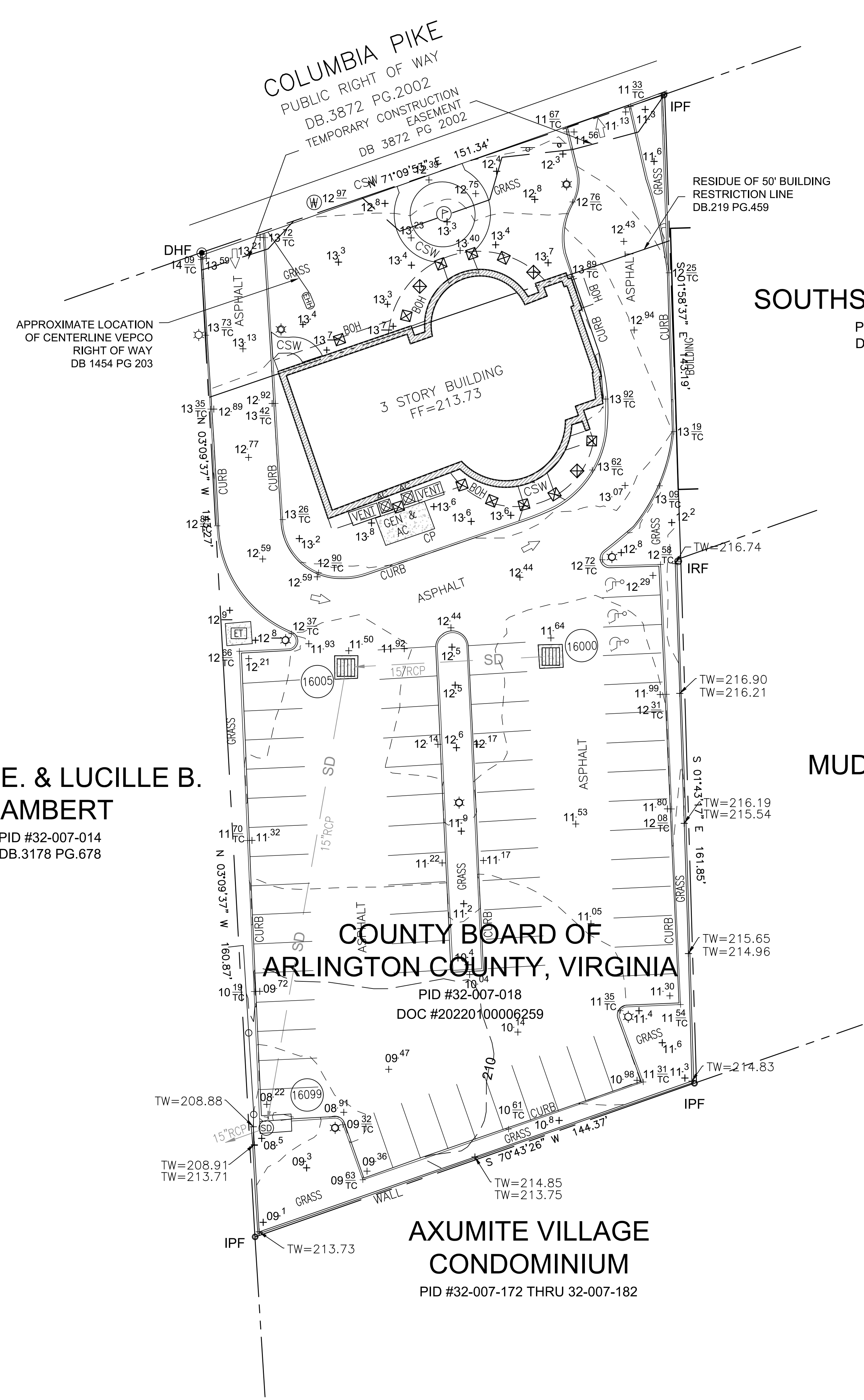


ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

GENERAL NOTES & LEGEND
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN C-001 2 OF 28

ISSUED FOR BID 11-10-2023		
DEWBERRY REVISIONS		
NO.	DATE	DESCRIPTION
COUNTY REVISIONS		
SUBMITTED DATE:	DESIGNED:	PROJECT/FILE NO.
8/4/2023	BWB	LDAP23-00146
CHECKED:	TCC	



SOUTHSIDE REDS, LLC

PID #32-007-019
DB.4533 PG.433

MUDITA REALTY, LLC

PID #32-007-170
DOC #20200100031709

BRUCE E. & LUCILLE B. LAMBERT

PID #32-007-014
DB.3178 PG.678

COUNTY BOARD OF ARLINGTON COUNTY, VIRGINIA

AXUMITE VILLAGE CONDOMINIUM

PID #32-007-172 THRU 32-007-182

NOTES

- THE HORIZONTAL COORDINATE SYSTEM IS REFERENCED TO VIRGINIA STATE GRID COORDINATE SYSTEM VCS 83, US SURVEY FOOT UNITS.
- THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
- BOUNDARY INFORMATION SHOW HEREON IS BASED ON EXISTING DEEDS AND PLATS OF RECORDS AND A LIMITED FIELD SURVEY PERFORMED ON 9/20/2022 .
- NO TITLE REPORT FURNISHED. ALL UNDERLYING EASEMENTS MAY NOT BE INDICATED ON THIS PLAT.
- THE TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF JESUS H. ECHEVARRIA, FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON 9/20/2022; AND THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.



LEGEND

- 16000 TOP=211.17
OUT=207.42
- 16005 TOP=211.12
IN=207.12
OUT=207.02
- 16099 TOP=208.57
IN=203.67
OUT=203.58
- AC AIR CONDITIONER
- BOH BUILDING OVERHANG
- CP CONCRETE PAD
- CSW CONCRETE SIDEWALK
- GEN GENERATOR
- IPF IRON PIPE FOUND
- IRF IRON ROD FOUND
- RCP REINFORCED CONCRETE PIPE
- TC TOP OF CURB
- TW TOP OF WALL
- AC AIR CONDITIONER
- ☒ COLUMN
- EHB ELECTRIC HAND HOLE
- ET ELECTRIC TRANSFORMER
- INLET
- Ⓟ FLAG POLE
- ♿ HANDICAP PARKING SPACE
- ☆ LIGHT POLE
- ♣ SIGN
- ⊙ WATER MANHOLE
- CHAIN LINK FENCE
- SD STORM PIPE

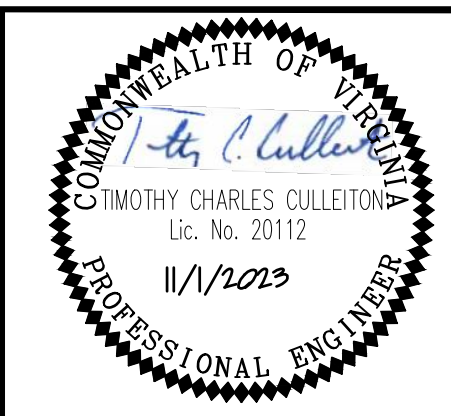


ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

BOUNDARY AND TOPOGRAPHY SURVEY
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

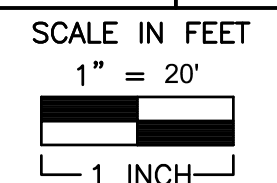
SCALE: AS-SHOWN **C-002** 3 OF 28

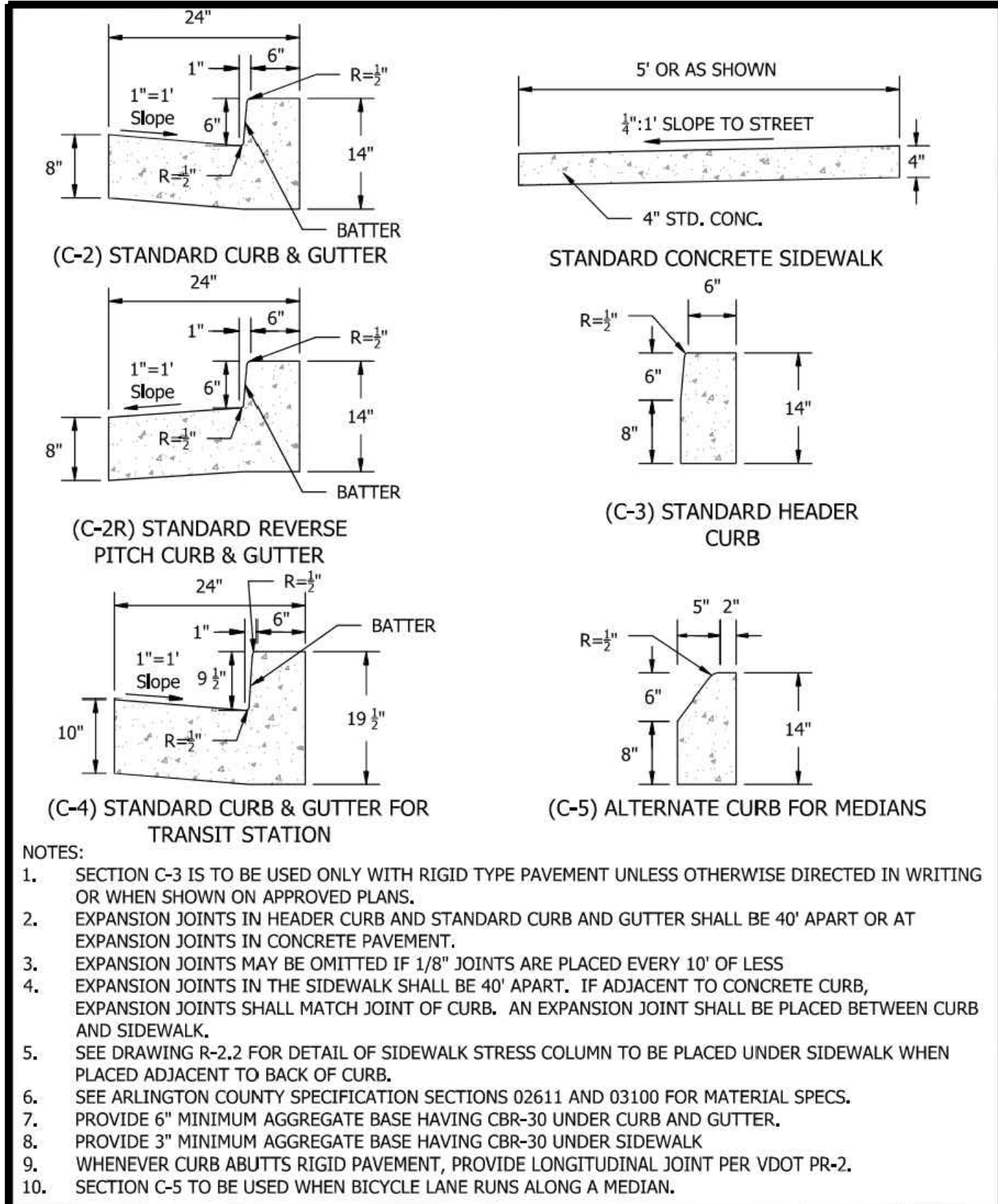
ISSUED FOR BID 11-10-2023



NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			

SUBMITTED DATE: 8/4/2023 DESIGNED: BWB PROJECT/FILE NO. LDAP23-00146
CHECKED: TCC

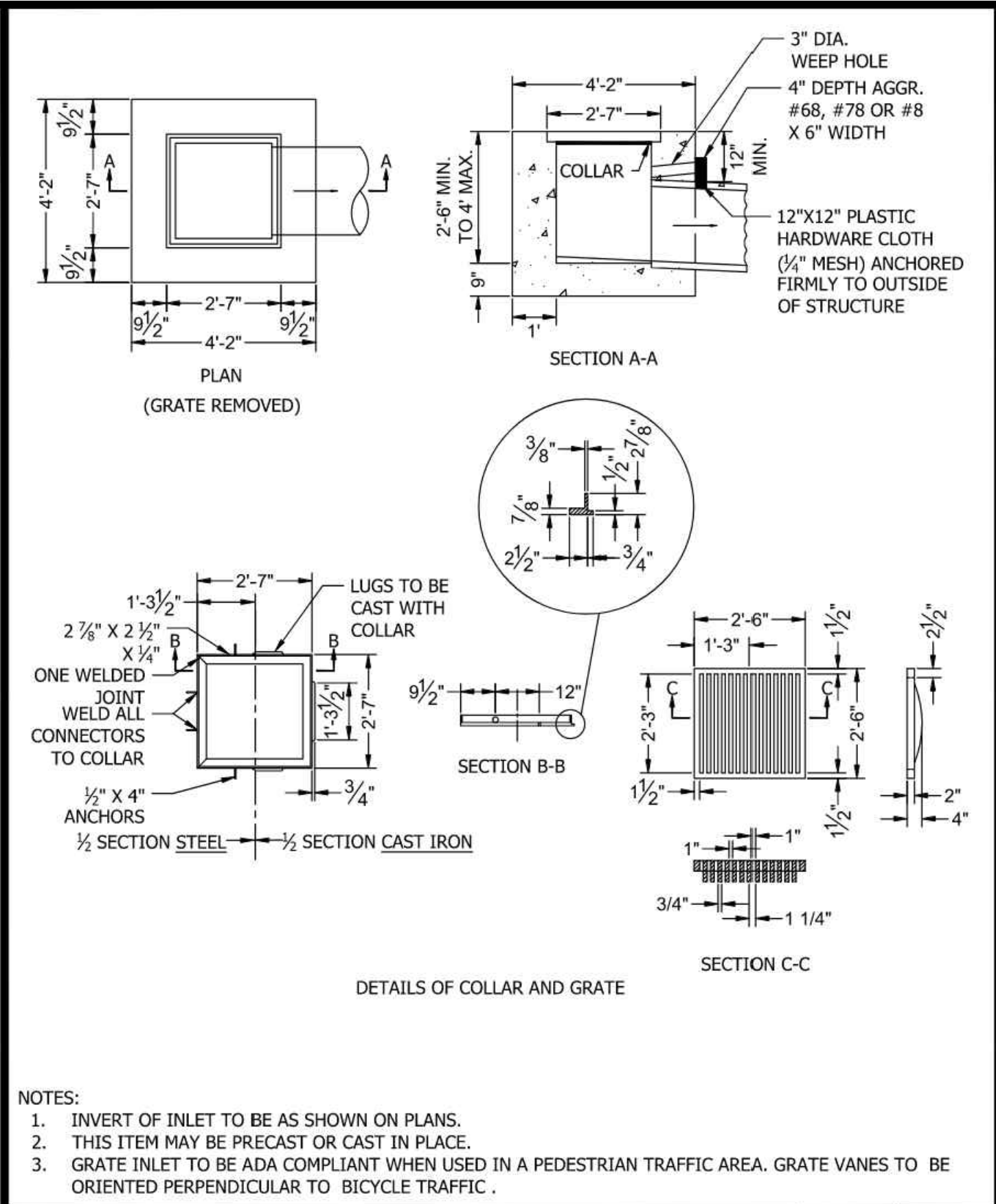




CONCRETE CURB & GUTTER AND SIDEWALK

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

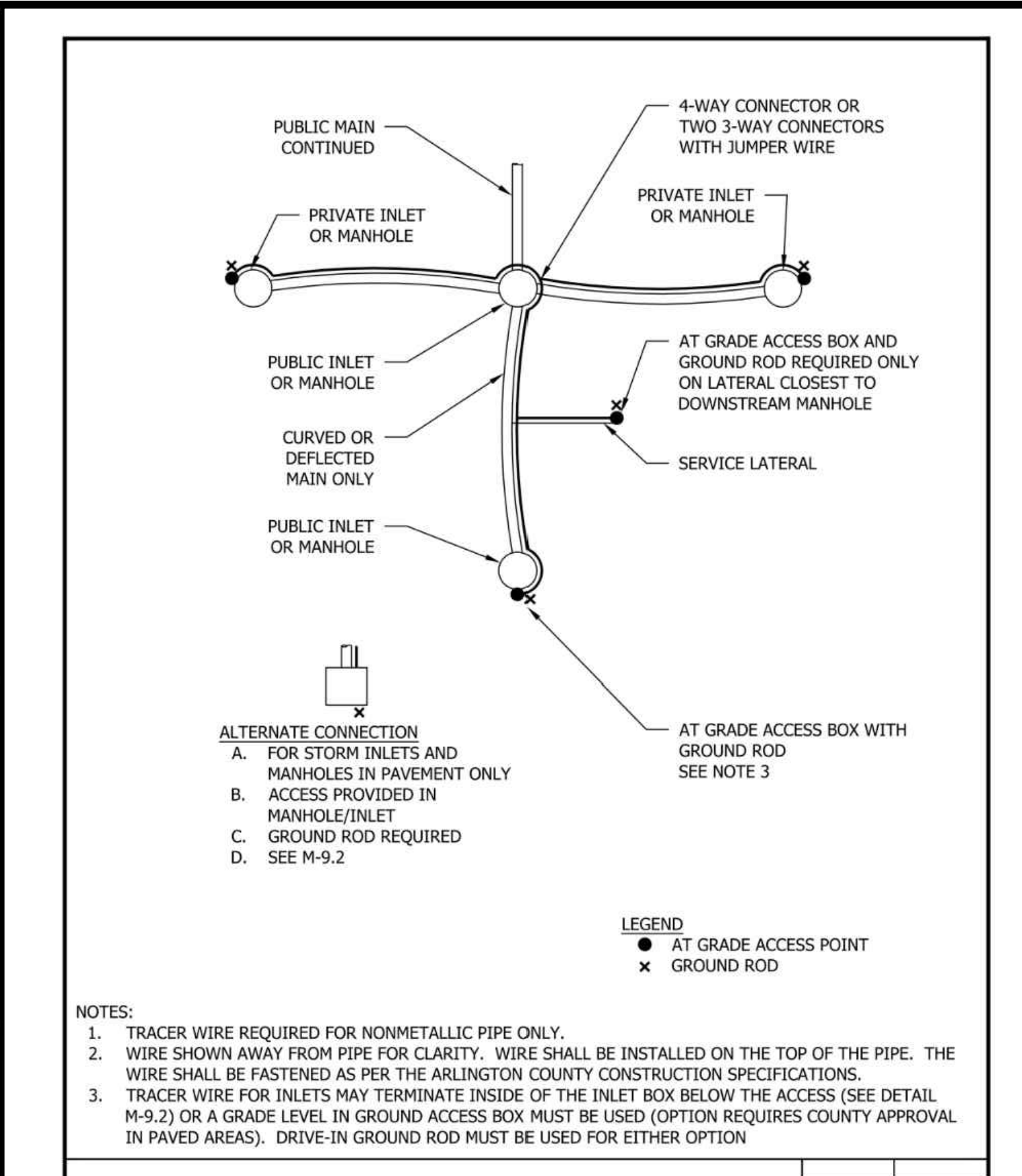
ISSUED 9/14/2020
DRAWING NO. **R-2.0**



**NONROADWAY SHALLOW GRATE INLET
15" TO 24" PIPE MAXIMUM**

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

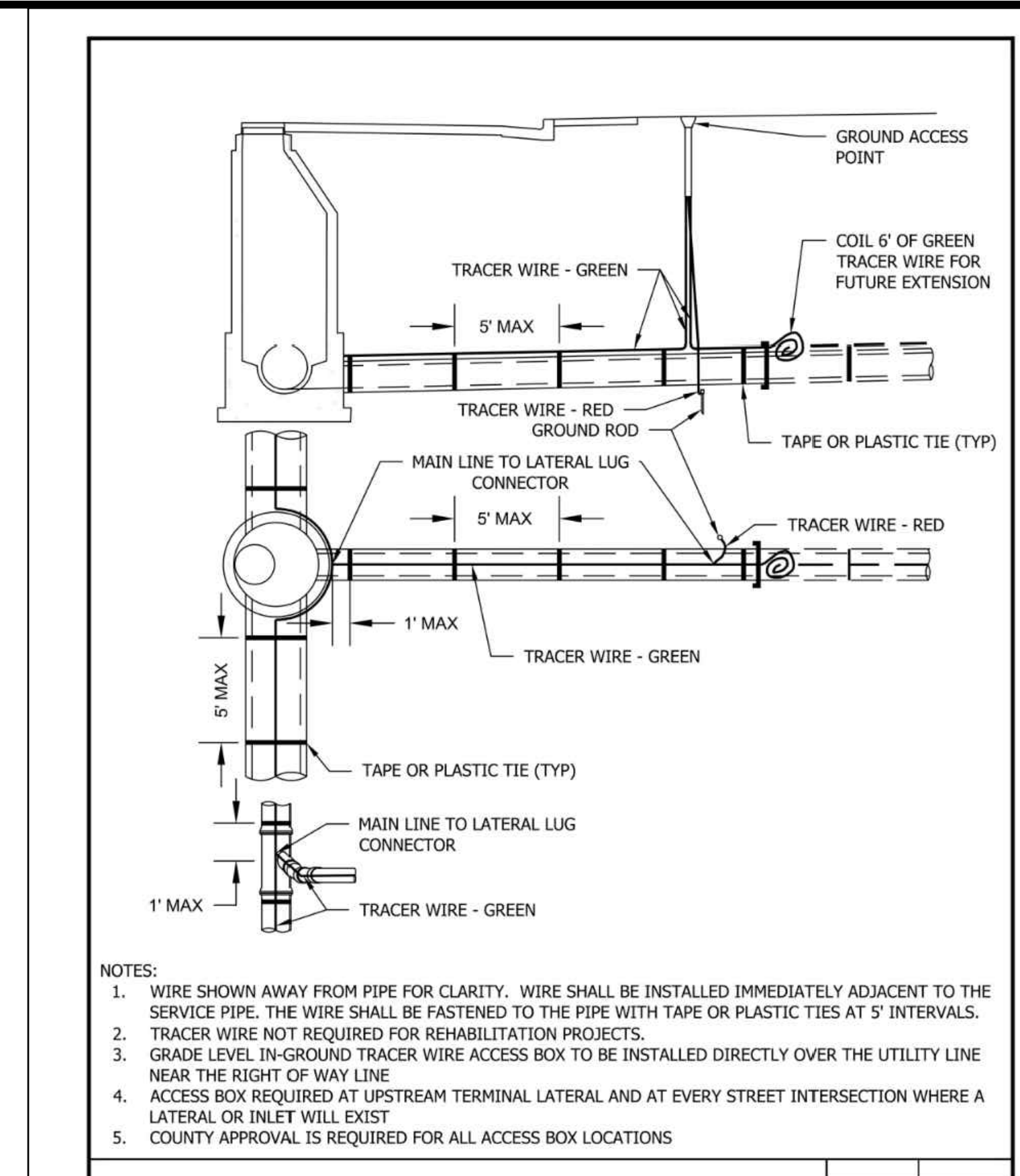
ISSUED 9/14/2020
DRAWING NO. **D-1.9**



TRACER WIRE SAMPLE PLAN

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

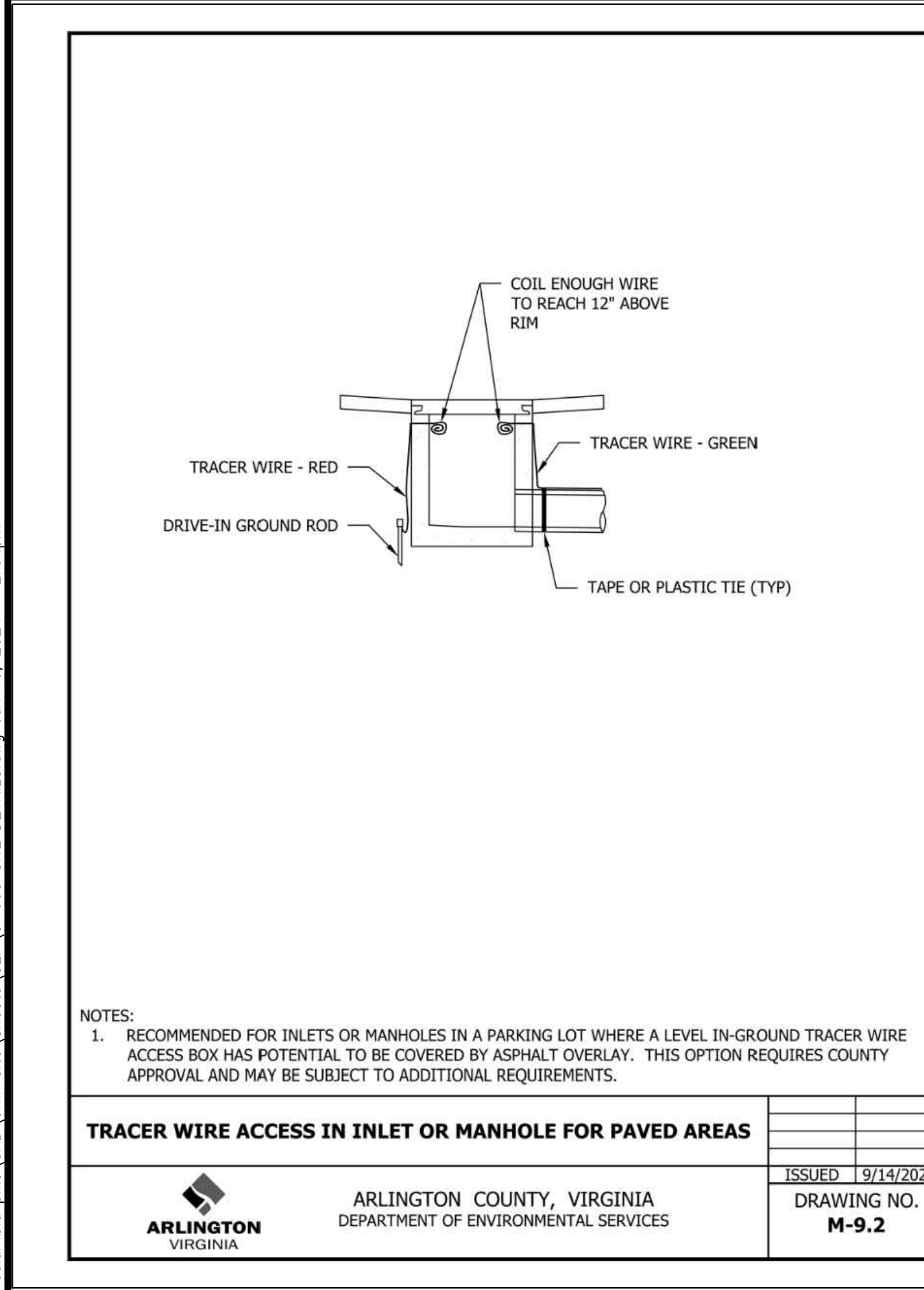
ISSUED 2/28/2023
DRAWING NO. **M-9.0**



TRACER WIRE LATERAL DETAIL

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

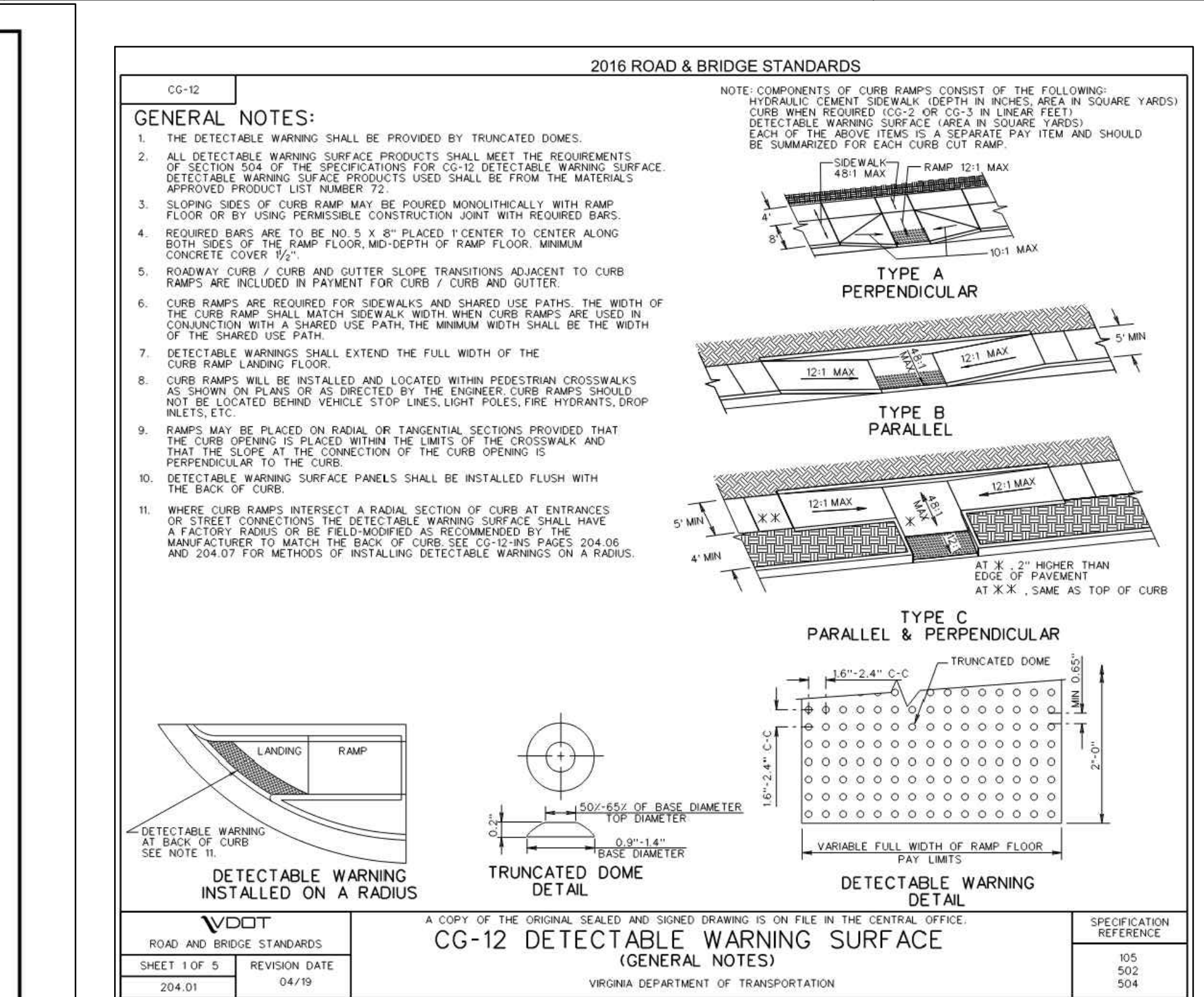
ISSUED 9/14/2020
DRAWING NO. **M-9.1**



TRACER WIRE ACCESS IN INLET OR MANHOLE FOR PAVED AREAS

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

ISSUED 9/14/2020
DRAWING NO. **M-9.2**



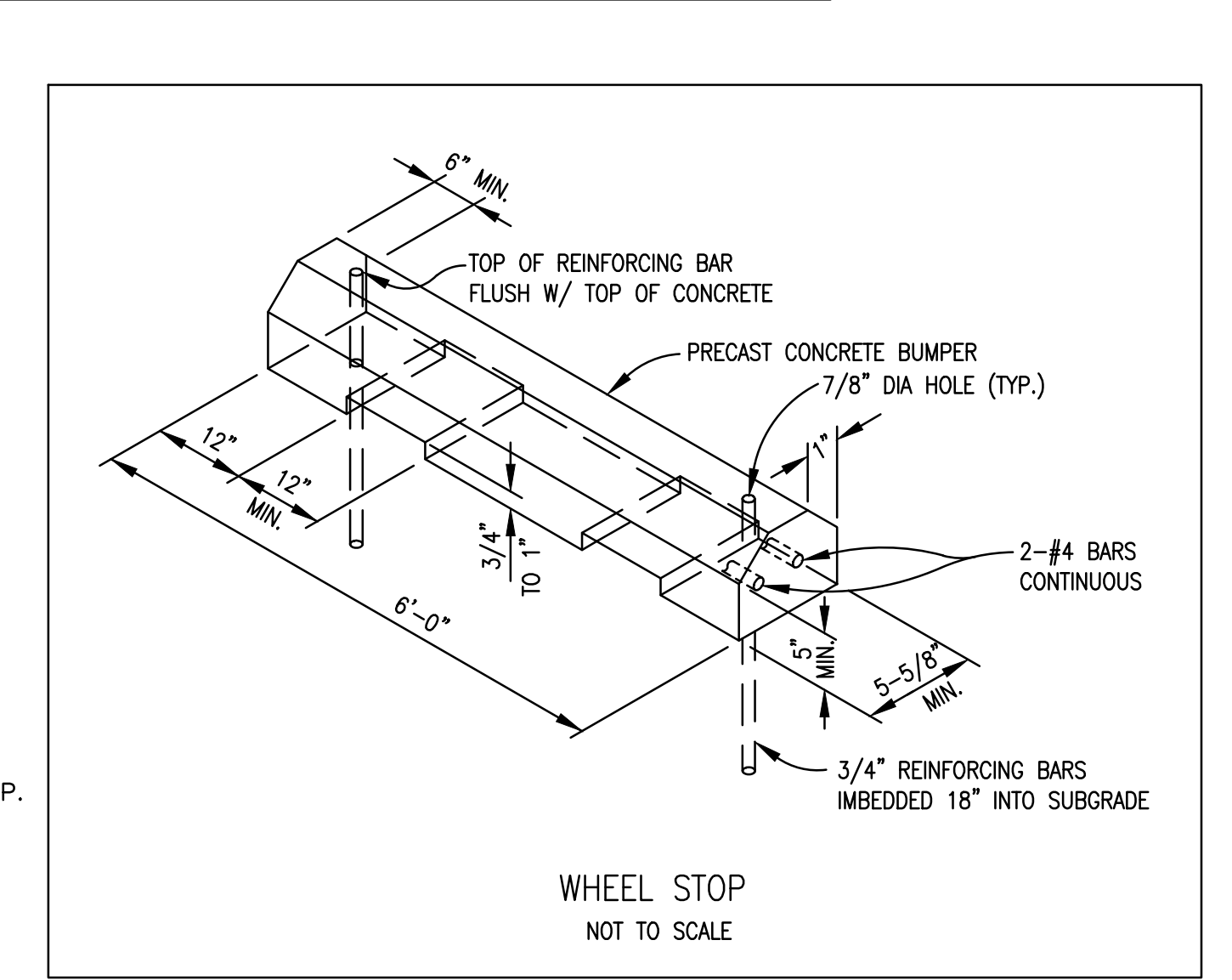
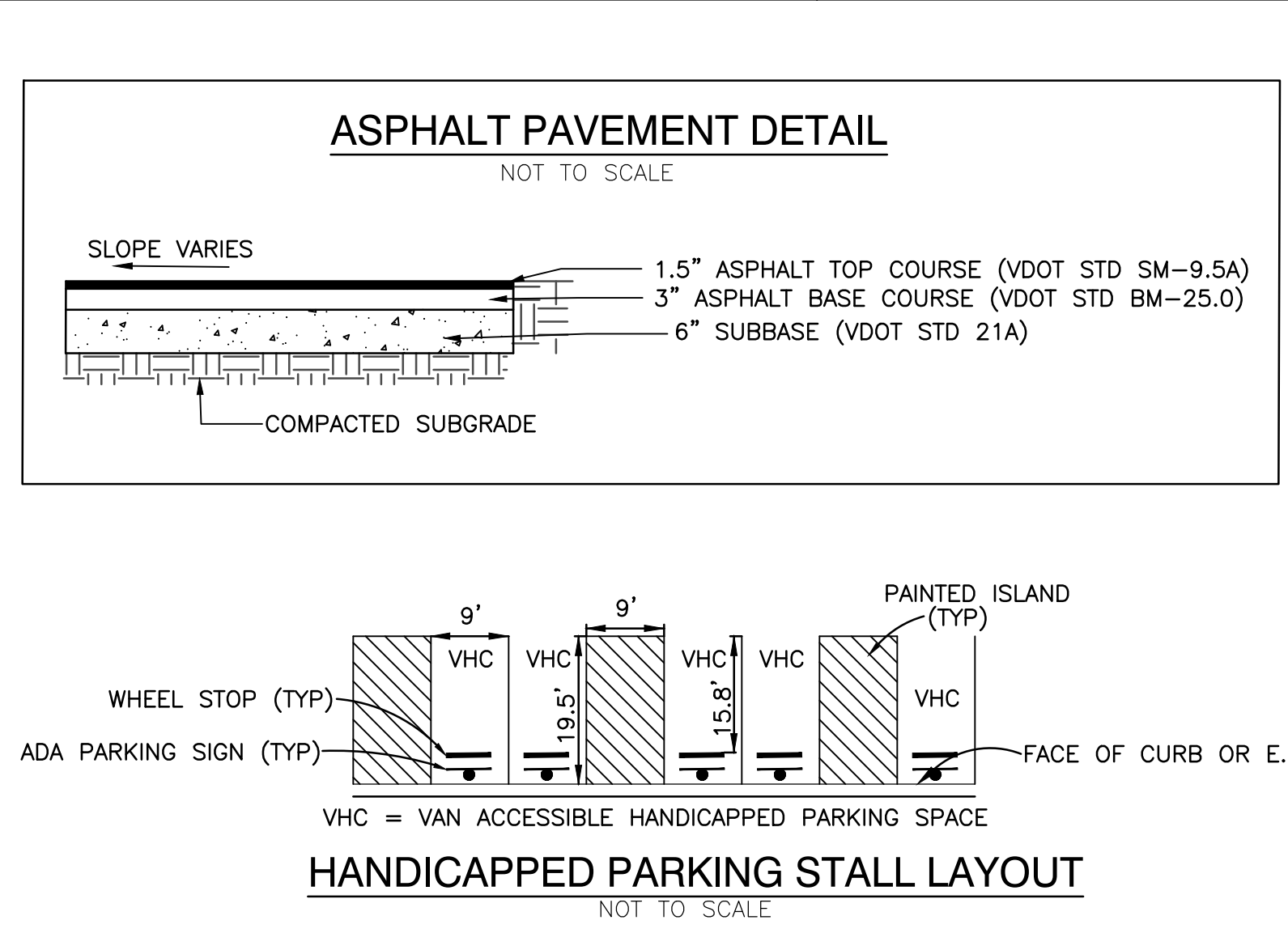
CG-12 DETECTABLE WARNING SURFACE (GENERAL NOTES)

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

VDOT ROAD AND BRIDGE STANDARDS
SHEET 1 OF 5 REVISION DATE 204.01 04/19

VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION REFERENCE 805, 502, 504



ISSUED FOR BID 11-10-2023

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE: 8/4/2023		DESIGNED: BWB	PROJECT/FILE NO. LDAP23-00146
		CHECKED: TCC	

SCALE IN FEET AS SHOWN

1 INCH

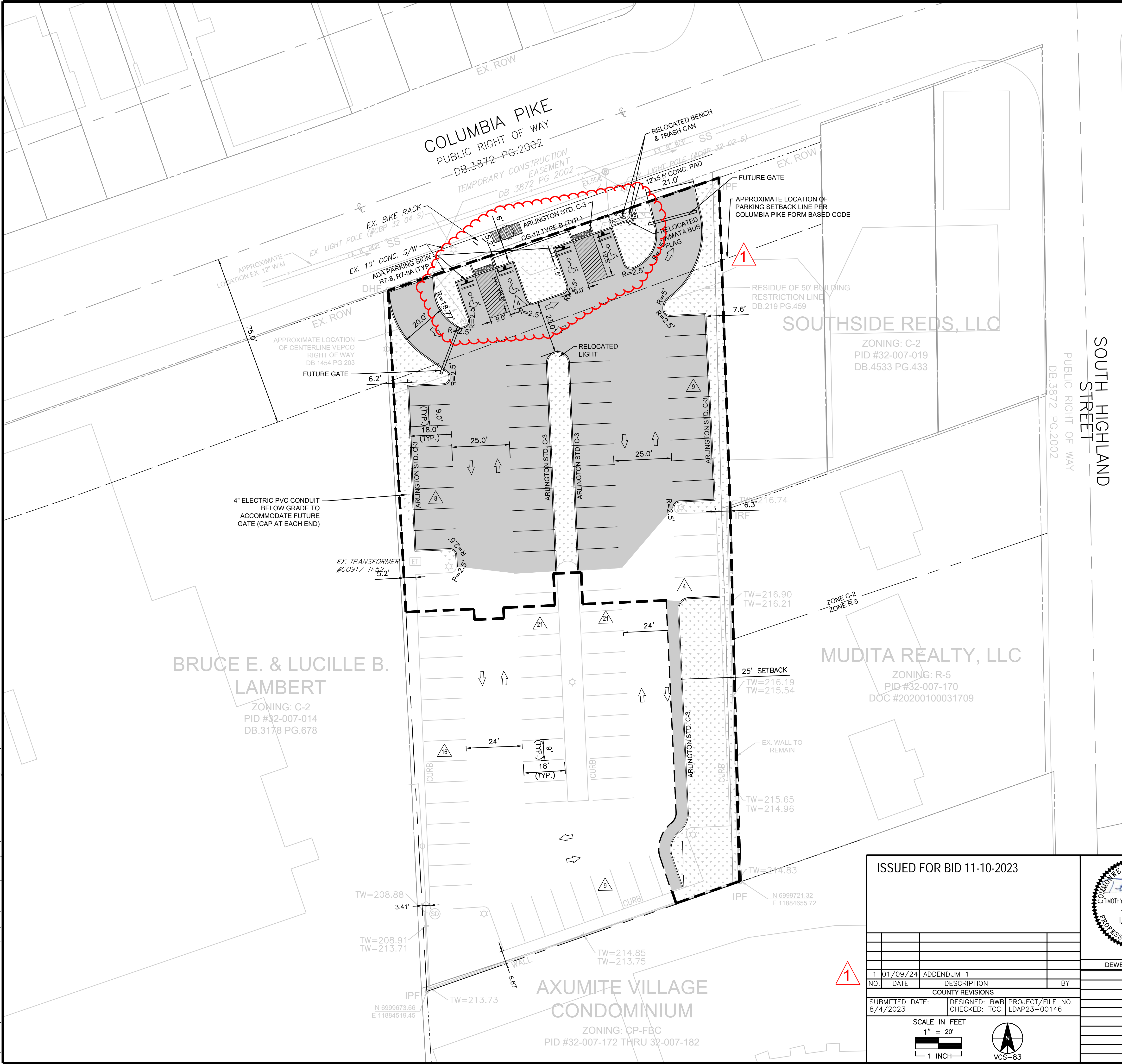
Dewberry Dewberry Engineers Inc.
8401 ARLINGTON BLVD. FAIRFAX, VA 22031
PHONE: 703.849.0100 FAX: 703.849.0518

**ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES**

SITE DETAILS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-003** 4 OF 28

P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site Sheets\CEP-C-200 SITE PLAN.dwg Jan 10, 2024 - 11:51am



PARKING TABULATION

PROPOSED PARKING WITHIN S-3A ZONE: 92 SPACES

MINIMUM NUMBER OF ACCESSIBLE SPACES REQUIRED: 4 SPACES
 TOTAL ACCESSIBLE SPACES PROVIDED: 4 SPACES

ZONING SUMMARY

EXISTING ZONING: S-3A

PROPOSED SITE LEGEND

- PROPOSED ASPHALT PAVING
- PROPOSED CONCRETE PAVING
- PROPOSED SOD
- LIMITS OF CLEARING AND GRADING

GRADING PLAN GENERAL NOTES

- ANY WORK WITHIN THE RIGHT-OF-WAY REQUIRES AN EXCAVATION PERMIT.
- THE PERMIT HOLDER OR REPRESENTATIVE THEREOF SHALL BE RESPONSIBLE TO REPAIR / RESTORE ALL STREETSCAPE ELEMENTS WITHIN THE RIGHT-OF-WAY THAT ARE DAMAGED AS A RESULT OF CONSTRUCTION. RESTORATION SHALL BE REQUIRED AT THE INSPECTOR'S DISCRETION.



ARLINGTON COUNTY, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES

SITE PLAN
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-200** 6 OF 28

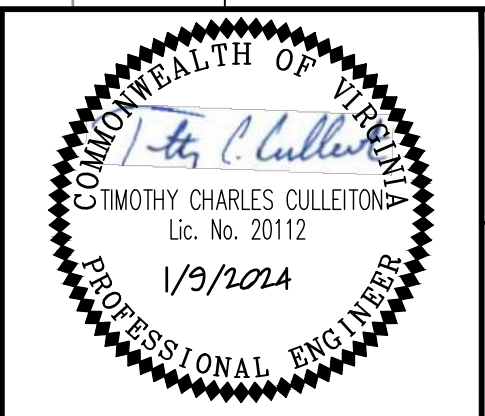
ISSUED FOR BID 11-10-2023

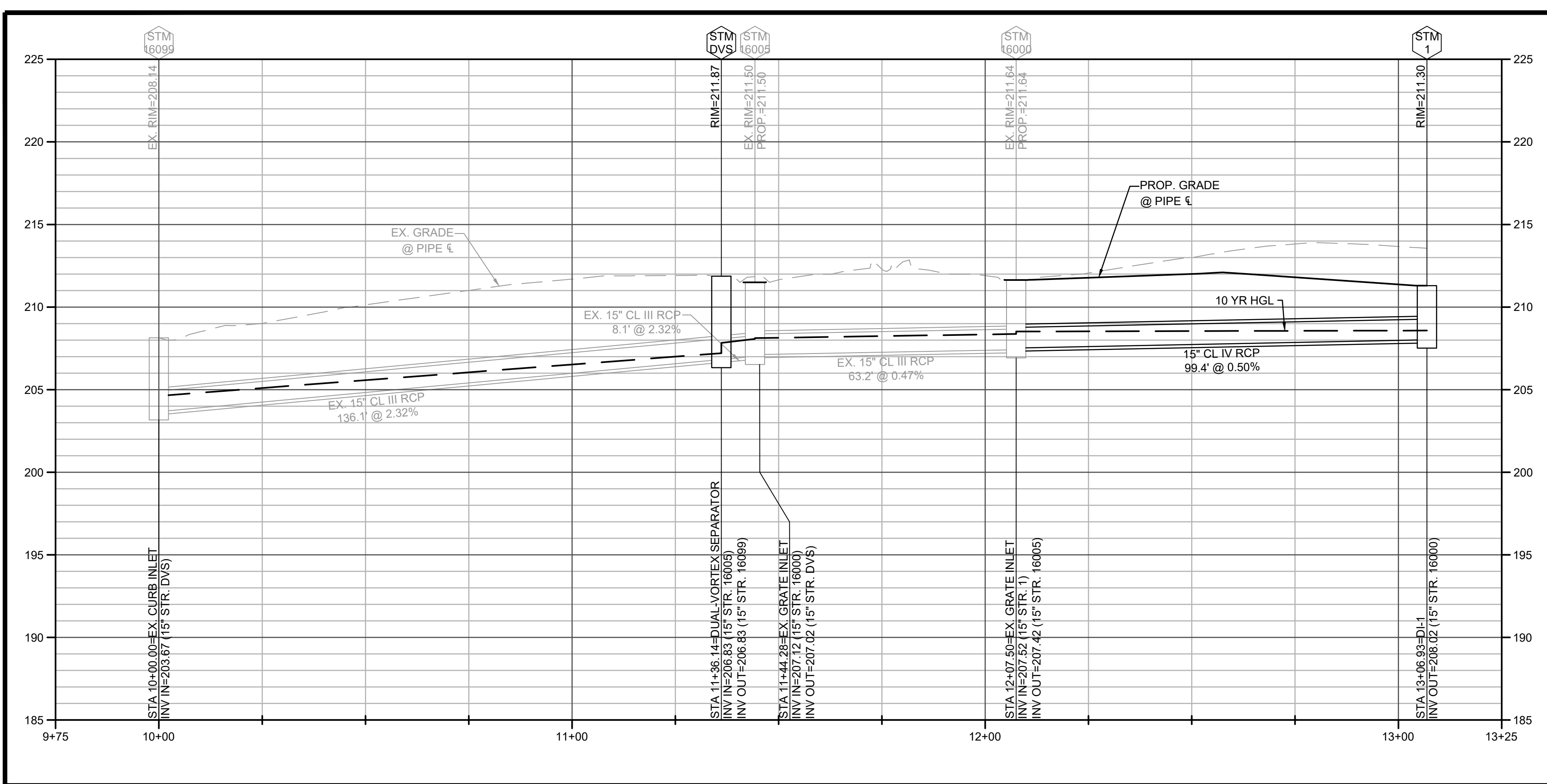
1 01/09/24 ADDENDUM 1

NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			
SUBMITTED DATE: 8/4/2023		DESIGNED: BWB	PROJECT/FILE NO. LDAP23-00146
		CHECKED: TCC	

SCALE IN FEET
 1" = 20'
 1 INCH

VCS-83





STORM SEWER DESIGN COMPUTATIONS

OUTLET		INC. DRAINAGE AREA (ACRES)	ACQUM. DRAINAGE AREA (ACRES)	"C" COEFFICIENT	INCREMENTAL CA	ACCUMULATED CA	TIME TO INLET (MIN)	RAINFALL INTENSITY (IN/HR)	INCREMENTAL "Q" (CFS)	ACCUMULATED "Q" (CFS)	UPPER INVERT ELEVATION	LOWER INVERT ELEVATION	FALL (FT)	LENGTH OF RUN (FT)	SLOPE (%)	PIPE DIAMETER (IN)	"n"	MAXIMUM "Q" (CFS)	"V" VELOCITY (FPS)	FLOW TIME (SEC)
FROM	TO																			
STM1	16000	0.16	0.16	0.88	0.14	0.14	5.0	6.84	1.0	1.0	208.02	207.52	0.50	99.4	0.50%	15	0.013	4.6	2.9	34.3
16000	16005	0.06	0.22	0.83	0.05	0.19	5.0	6.84	0.3	1.3	207.42	207.12	0.30	63.2	0.47%	15	0.013	4.4	3.1	20.4
16005	DVS	0.20	0.42	0.80	0.16	0.35	5.0	6.84	1.1	2.4	207.02	206.83	0.19	8.1	2.33%	15	0.013	9.9	6.5	1.3
DVS	16099	0.00	0.42	0.00	0.00	0.35	5.0	6.84	0.0	2.4	206.83	203.67	3.16	136.1	2.32%	15	0.013	9.8	6.4	21.1

HYDRAULIC GRADE LINE COMPUTATIONS

Inlet Str.	Outlet Water Surf Elev (ft)	Do (in)	Qo (cfs)	Lo (ft)	Sfo (%)	Hf (ft)	JUNCTION LOSS													Final H (ft)	Inlet Water Surf Elev (ft)	Opening Elev. (ft)
							Vo (fps)	Ho (ft)	Qi (cfs)	Vi (fps)	Qivi	Vi ² /2g	Hi (ft)	Angle (deg)	Ha (ft)	Ht (ft)	1.3Ht	0.5Ht				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)		
DVS	204.67	15	2.40	136.14	0.14	0.19	6.45	0.16	2.40	6.46	15.50	0.65	0.23	0	0.00	0.39		0.19	0.38	205.05	211.87	
16005	207.83	15	2.40	8.14	0.14	0.01	6.46	0.16	1.30	3.10	4.04	0.15	0.05	77	0.10	0.31	0.40	0.20	0.21	208.04	211.12	
16000	208.12	15	1.30	63.22	0.04	0.03	3.10	0.04	0.96	2.90	2.79	0.13	0.05	90	0.09	0.17	0.23		0.25	208.37	211.17	
STM 1	208.52	15	0.96	99.43	0.02	0.02	2.90	0.03	0.00	0.00	0.00	0.00	0.00	0	0.00	0.03	0.04		0.06	208.58	211.80	

DI-1 INLET DESIGN COMPUTATIONS

Qi (Orifice) = $C_o \cdot A \cdot (2gd)^{0.5}$	$C_o = 0.67$	(For $d > 0.8'$)				
Qi (Weir) = $C_w \cdot P \cdot d^{1.5}$	$C_w = 3.00$	(For $d < 0.8'$)				
$g \text{ (ft/s}^2\text{)} = 32.17$						
Area (sf) = 2.33	A (50% Clogged) = 1.17	$C_o \cdot A = 0.78$				
Perimeter (ft) = 9.00	P (50% Clogged) = 4.50	$C_w \cdot P = 13.50$				
Number	Q Incr. (cfs)	D (weir)	D (orifice)	Controlling D	Top Elev	10 YR-WSE
STM 1	0.96	0.17'	0.02'	Weir	211.30	211.47

P:\PROJECT\50156517_3108 Columbia Pike\CAD\CIVIL-SITE\SHEETS\CEP\C-320 STORM SEWER PLAN, PROFILES AND COMPUTATIONS.dwg Nov. 08, 2023 - 2:03pm



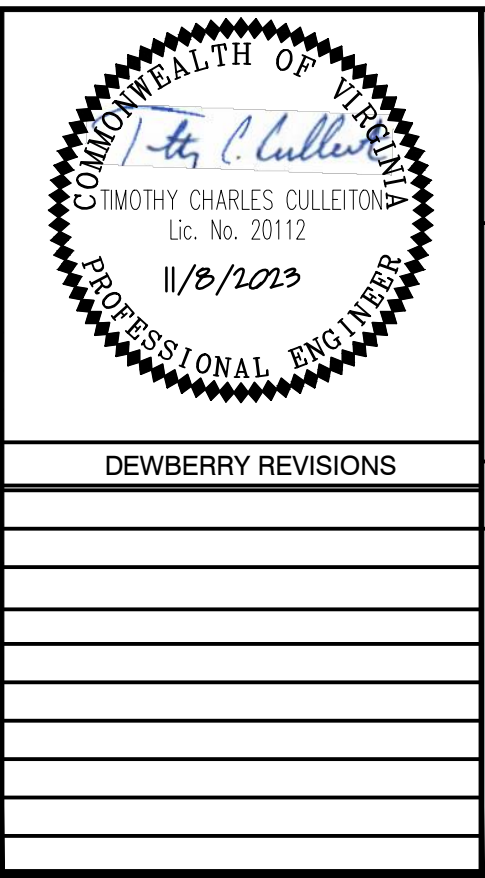
ISSUED FOR BID 11-10-2023

NO.	DATE	DESCRIPTION	BY

COUNTY REVISIONS

SUBMITTED DATE:	DESIGNED:	PROJECT/FILE NO.
8/4/2023	BWB	LDAP23-00146
CHECKED:	TCC	

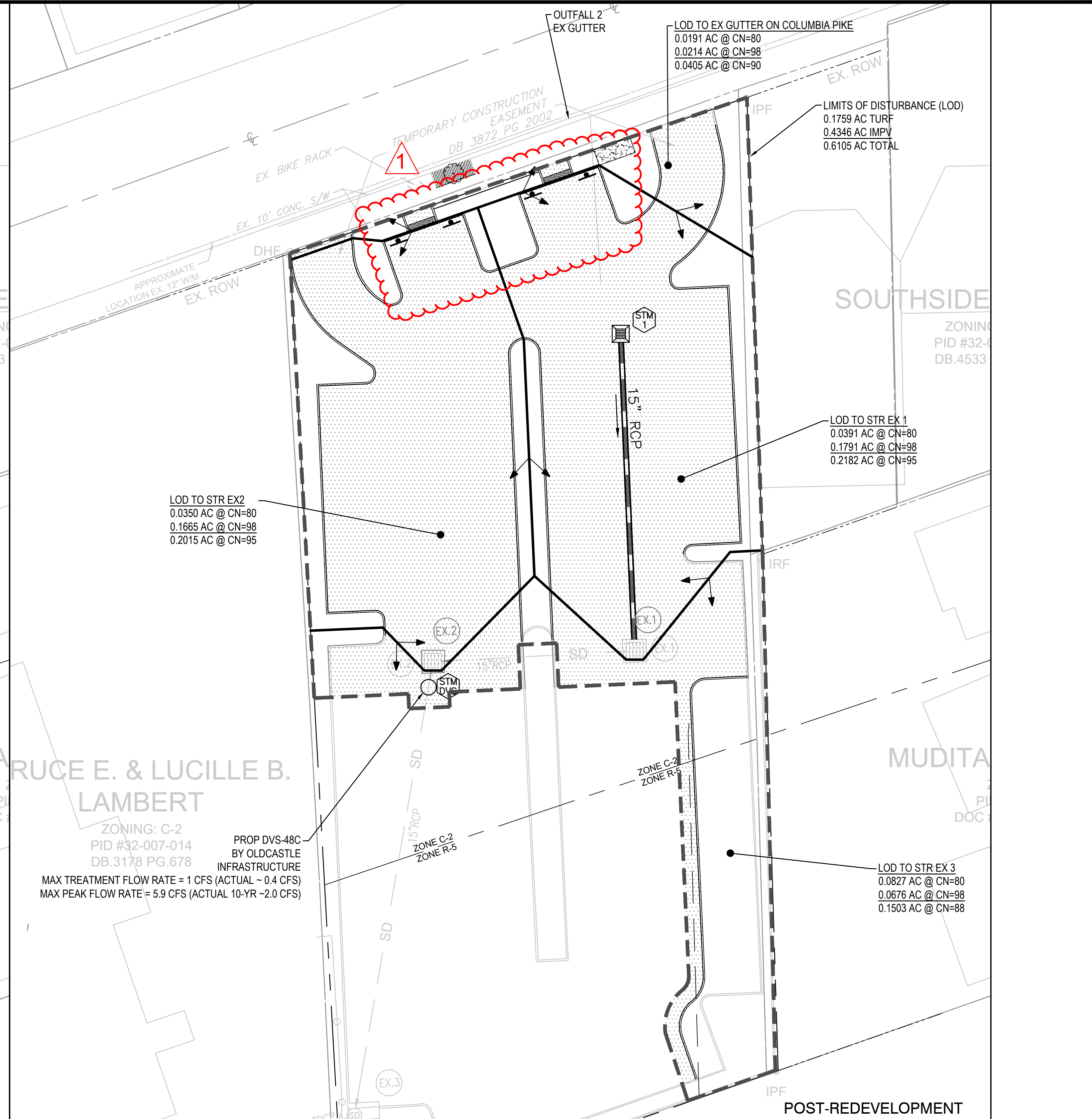
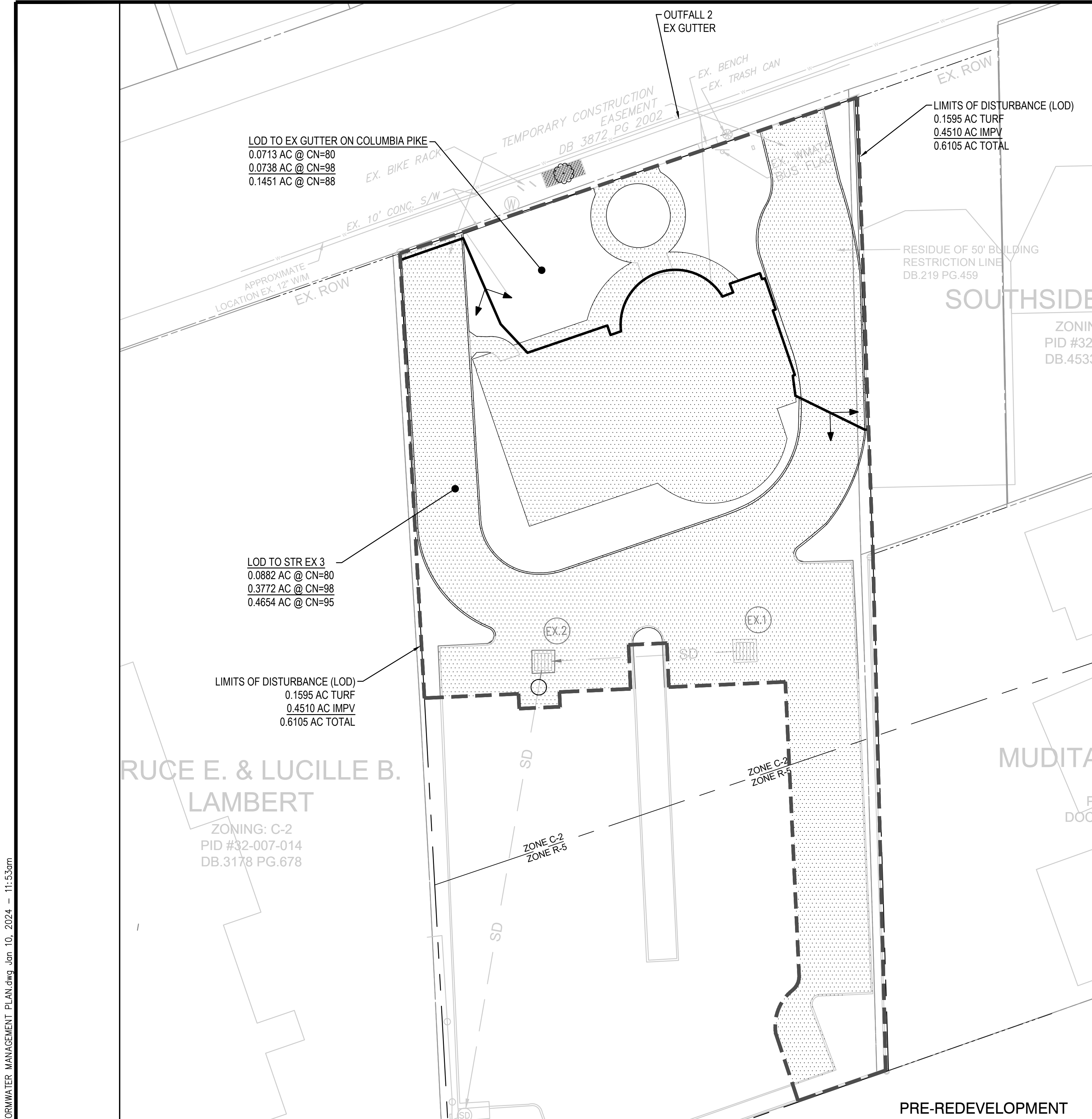
SCALE IN FEET
1" = 20'
1 INCH



ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

STORM SEWER PLAN, PROFILES AND COMPUTATIONS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-320** 9 OF 28



P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site\Sheets\CEP-C-330-STORMWATER MANAGEMENT PLAN.dwg Jun 10, 2024 - 11:53am

DRAINAGE AREA MAP NARRATIVE

PRE-REDEVELOPMENT
THE EXISTING SITE CONSISTS OF AN OFFICE BUILDING, ASPHALT PARKING LOT, AND CLOSED STORM SEWER SYSTEM. A MAJORITY OF THE SITE DRAINS TO A CLOSED STORM SYSTEM THROUGH ONSITE INLETS INCLUDING TWO GRATE INLETS (EX 1, EX2) AND A CURB INLET (EX3). THE REMAINDER OF THE SITE FLOWS TOWARD COLUMBIA PIKE INTO THE GUTTERPAN CONTINUING EAST TOWARDS S. HIGHLAND STREET.

POST-REDEVELOPMENT
DRAINAGE PATTERNS REMAIN LARGELY THE SAME IN THE POST-REDEVELOPMENT CONDITION. WITH THE EXPANSION OF THE ASPHALT PARKING LOT THERE IS ONE ADDITIONAL GRATE INLET (STR. 1) THAT TIES TO THE EXISTING CLOSED SYSTEM. THE SITE IMPROVEMENTS SLIGHTLY ALTER THE ONSITE DRAINAGE PATTERNS WITH LESS AREA DRAINING OVERLAND TOWARDS COLUMBIA PIKE.

IMPERVIOUS TABULATION

	PRE-DEVELOPMENT	POST-DEVELOPMENT
IMPERVIOUS	0.4510 AC.	0.4346 AC.
TURF	0.1595 AC.	0.1759 AC.
TOTAL	0.6105 AC.	0.6105 AC.

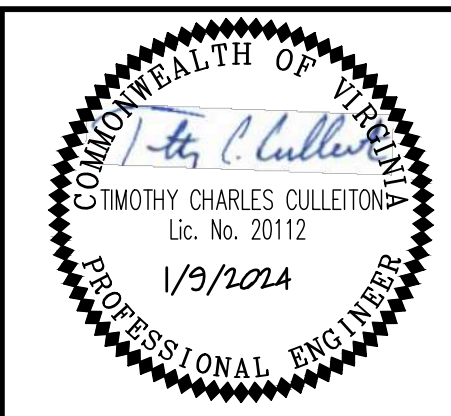
Dewberry Dewberry Engineers Inc.
8401 ARLINGTON BLVD. FAIRFAX, VA 22031
PHONE: 703.849.0100 FAX: 703.849.0518

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRAINAGE AREA MAPS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN C-330 10 OF 28

ISSUED FOR BID 11-10-2023



NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	

COUNTY REVISIONS

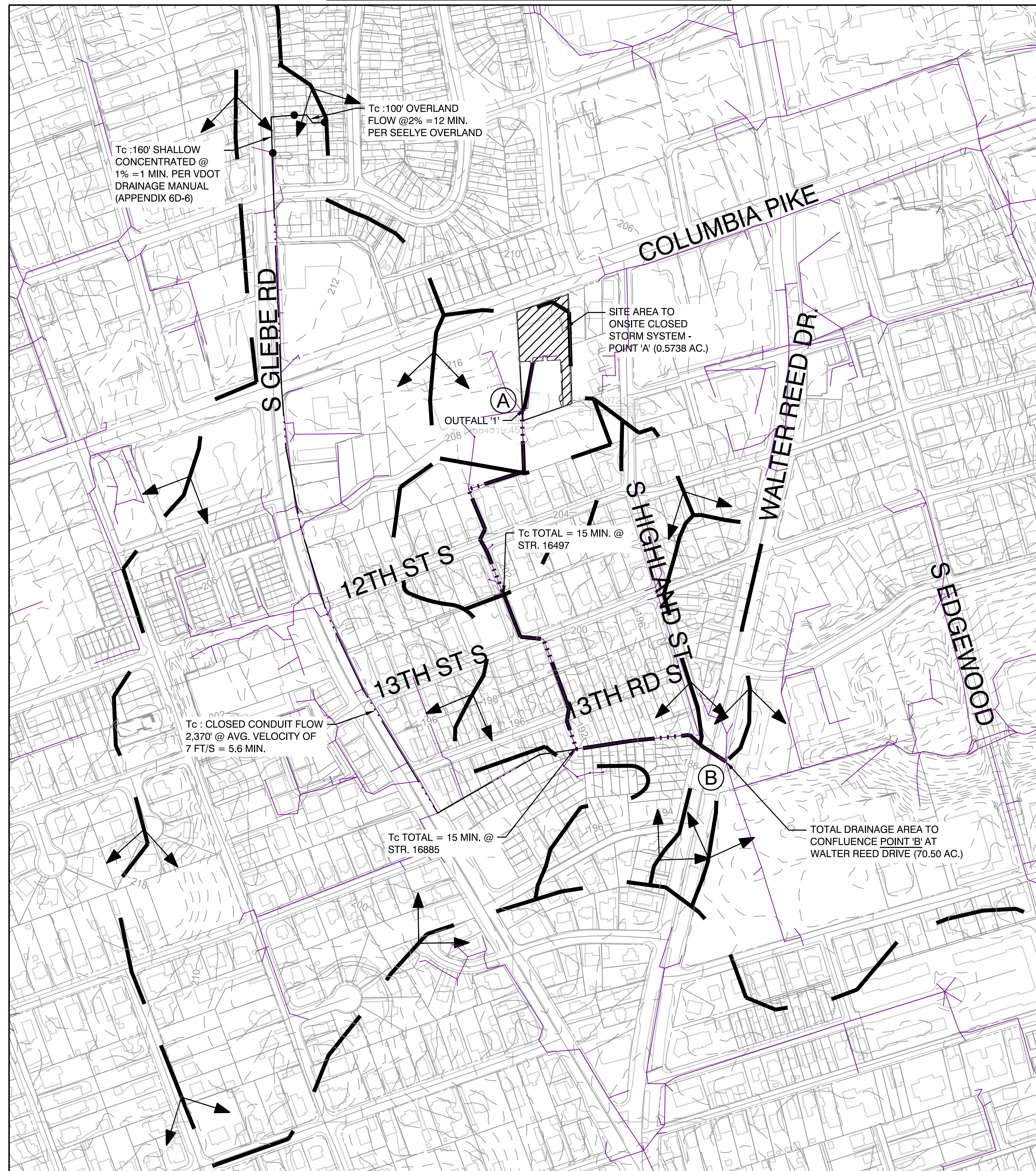
SUBMITTED DATE: 8/4/2023 DESIGNED: BWB PROJECT/FILE NO. LDAP23-00146
CHECKED: TCC

SCALE IN FEET
1" = 20'
1 INCH

VCS-83



STORM DRAINAGE OUTFALL AND EXTENT OF REVIEW MAP



OUTFALL ANALYSIS (2-YR) - STORM SEWER COMPUTATIONS

OUTLET																						
FROM	TO	INC. DRAINAGE AREA (ACRES)	ACCUM. DRAINAGE AREA (ACRES)	"C" COEFFICIENT	INCREMENTAL CA	ACCUMULATED CA	TIME TO INLET (MIN)	RAINFALL INTENSITY (IN/HR)	INCREMENTAL "Q" (CFS)	ACCUMULATED "Q" (CFS)	UPPER INVERT ELEVATION	LOWER INVERT ELEVATION	FALL (FT)	LENGTH OF RUN (FT)	SLOPE (%)	PIPE DIAMETER (IN)	"n"	MAXIMUM "Q" (CFS)	"V" VELOCITY (FPS)	FLOW TIME (SEC)	RIM ELEV. (GIS)	APPROX. COVER
EX.3	D-8	1.23	1.23	0.80	0.98	0.98	5.0	5.15	5.1	5.1	203.45	202.95	0.50	37.0	1.35%	21	0.013	18.4	6.4	5.8	208.6	3.4
D-8	EX-2	0.68	1.91	0.80	0.54	1.53	5.0	5.15	2.8	7.9	202.95	201.21	1.74	128.5	1.35%	21	0.013	18.4	7.2	17.7	207.0	2.3
EX-2	EX-1	0.12	2.03	0.80	0.10	1.62	5.0	5.15	0.5	8.4	201.11	199.69	1.42	162.0	0.88%	21	0.013	14.8	6.3	25.8	207.0	4.1
EX-1	16366	2.06	4.09	0.80	1.65	3.27	5.0	5.15	8.5	16.9	199.59	197.59	2.00	119.8	1.67%	24	0.013	29.2	9.6	12.5	205.9	4.3
16366	16389	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	197.49	197.00	0.49	31.8	1.54%	24	0.013	28.1	9.2	3.4	204.2	4.7
16389	16418	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	196.90	196.20	0.70	41.6	1.68%	24	0.013	29.3	9.6	4.3	203.9	5.0
16418	16480	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	196.10	195.00	1.10	92.8	1.19%	24	0.013	24.6	8.4	11.0	203.8	5.7
16480	16497	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	194.90	194.50	0.40	26.3	1.52%	30	0.013	50.6	9.1	2.9	203.8	6.4
16497	16606	4.36	8.45	0.75	3.27	6.54	10.0	4.12	13.5	27.0	194.40	193.10	1.30	127.9	1.02%	30	0.013	41.4	8.9	14.3	203.5	6.6
16606	16610	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	193.00	192.30	0.70	64.8	1.08%	30	0.013	42.6	9.1	7.1	203.5	8.0
16610	16801	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	192.20	186.10	6.10	204.7	2.98%	30	0.013	70.8	13.3	15.4	202.0	7.3
16801	16838	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	186.00	185.50	0.50	37.6	1.33%	30	0.013	47.3	9.9	3.8	191.9	3.4
16838	16885	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	185.40	184.50	0.90	82.1	1.10%	30	0.013	42.9	9.2	9.0	192.1	4.2
16885	16872	47.13	55.58	0.75	35.35	41.89	15.0	3.45	121.9	144.5	184.40	183.00	1.40	155.2	0.90%	54	0.013	186.8	13.0	12.0	192.2	3.3
16872	16862	0.00	55.58	0.00	0.00	41.89	15.0	3.45	0.0	144.5	182.90	180.00	2.90	163.1	1.78%	54	0.013	262.2	16.8	9.7	190.2	2.8
16862	16883	0.00	55.58	0.00	0.00	41.89	15.0	3.45	0.0	144.5	179.90	179.00	0.90	48.1	1.87%	54	0.013	269.0	17.2	2.8	186.8	2.4
16883	16897	11.15	66.73	0.78	8.70	50.59	15.0	3.45	0.0	174.5	178.90	178.00	0.90	32.0	2.81%	54	0.013	329.8	20.7	1.5	186.1	2.7
16897	16911	0.00	66.73	0.00	0.00	50.59	15.0	3.45	0.0	174.5	177.90	177.30	0.60	45.2	1.33%	54	0.013	226.6	15.6	2.9	186.1	3.7
16911	16982	3.76	70.49	0.80	3.01	53.59	15.0	3.45	10.4	184.9	177.20	176.00	1.20	84.3	1.42%	54	0.013	234.6	16.3	5.2	185.6	3.9

INVERTS PER ARLINGTON CO. APPROVED USE PERMIT #U-3224-09-1

PIPE LENGTHS AND STR. #S PER ARLINGTON CO. GIS OPEN DATA

STORMWATER MANAGEMENT PLAN AND ADEQUATE OUTFALL NARRATIVE

AS SHOWN, THE 3108 COLUMBIA PIKE DEMOLITION PROJECT IS DEFINED BY APPROXIMATELY 0.6105 ACRES OF DISTURBED AREA. THE PROJECT WILL RESULT IN A SMALL DECREASE IN IMPERVIOUS COVER OF APPROXIMATELY 0.0114 ACRES. THE 3108 COLUMBIA PIKE SITE IS LOCATED WITHIN THE ARLINGTON BRANCH WATERSHED.

WATER QUALITY NARRATIVE (ARLINGTON COUNTY CODE §60-11.A - 9VAC25-870-65)

BECAUSE THE DISTURBED AREA (SITE) INCLUDES NEW DEVELOPMENT ON PRIOR DEVELOPED LAND, THE VIRGINIA RUNOFF REDUCTION METHOD (VRRM) REDEVELOPMENT WORKSHEET IS USED TO SHOW WATER QUALITY COMPLIANCE. SEE SHEETS C-332-C-333.

THE TOTAL PROJECT LOAD REDUCTION REQUIRED FOR PHOSPHORUS IS ESTIMATED TO BE 0.0950 LB/YR. THE ESTIMATED TOTAL PROJECT LOAD REDUCTION ACHIEVED FOR PHOSPHORUS IS 0.1806 LB/YR. THIS REDUCTION WILL BE PROVIDED BY ONE (1) MANUFACTURED TREATMENT DEVICES (MTD) CONSISTING OF ONE (1) DUAL-VORTEX SEPARATOR (DVS-48C). THIS MTD IS A HYDRODYNAMIC SEPARATOR BY OLDCASTLE INFRASTRUCTURE AND IS LISTED ON THE VIRGINIA STORMWATER BMP CLEARINGHOUSE AS AN ACCEPTABLE TREATMENT DEVICE. THE DVS-48C WILL BE SITED IN THE LOCATION SHOWN ON SHEET C-300.

WATER QUANTITY NARRATIVE (ARLINGTON COUNTY CODE §60-11.A - 9VAC25-870-66)

OUTFALL DESCRIPTIONS

THERE ARE (2) OUTFALLS WHERE RUNOFF LEAVES THE SITE:

OUTFALL 1 IS AT EXISTING DRAINAGE STRUCTURE #3 (EX 3), PER AVAILABLE ARLINGTON COUNTY GIS INFORMATION, DOWNSTREAM OF EX 3 THE CONVEYANCE SYSTEM IS A CLOSED STORM SEWER SYSTEM THROUGHOUT THE EXTENT OF REVIEW TO POINT 'B' SHOWN ON THE OUTFALL AND EXTENT OF REVIEW MAP, THIS SHEET.

OUTFALL 2 IS THE EXISTING GUTTER PAN ADJACENT TO THE PROJECT ON COLUMBIA PIKE. THE EXISTING GUTTER ENDS AT A CURB INLET ON COLUMBIA PIKE AT SOUTH HIGHLAND STREET. DOWNSTREAM OF THE CURB INLET THE CONVEYANCE SYSTEM APPEARS TO BE A CLOSED STORM SEWER SYSTEM. UNDER POST-DEVELOPMENT CONDITIONS, RUNOFF FROM THE PROJECT AREA WILL BE LESS THAN PRE-DEVELOPMENT. THE ESTIMATED REDUCTION IN 2- AND 10-YR 24-HOUR DISCHARGE TO OUTFALL 2 DUE TO THE PROJECT IS APPROXIMATELY 0.2 CFS AND 0.4 CFS, RESPECTIVELY. BECAUSE THIS IS A REDUCTION IN DISCHARGE AND NO KNOWN DRAINAGE COMPLAINTS, THE RECEIVING CONVEYANCE SYSTEM IS ASSUMED TO BE ADEQUATE.

CHANNEL PROTECTION (§9VAC25-870-66.B) ADEQUACY

CONCENTRATED FLOW FROM THE DISTURBED AREA DISCHARGES TO OUTFALL '1' THROUGH A CLOSED CONDUIT STORM SYSTEM AT POINT 'A'. APPROXIMATELY 0.5700 ACRES OF THE DISTURBED AREA DRAINS TO ONSITE INLET TO EX3 WHERE IT LEAVES THE SITE AT OUTFALL '1'. THE FLOW IS CONVEYED VIA THE CLOSED SYSTEM SOUTH THROUGH SINGLE FAMILY NEIGHBORHOODS CROSSING 12TH ST S, 13TH ST S, AND 13TH RD S BEFORE A CHANGE IN DIRECTION TO THE EAST TOWARDS WATER REED DRIVE TO POINT 'B'.

STORM VELOCITY COMPUTATIONS FOR THE 2-YR STORM USING THE RATIONAL METHOD ARE PROVIDED ON THIS SHEET WHICH EXCEED THE TWO-YEAR 24 HOUR STORM PEAK FLOW. THE CLOSED SYSTEM IS CONSTRUCTED SOLELY OF REINFORCED CONCRETE PIPE AND THE CALCULATED VELOCITIES ARE NON-EROSIVE FOR THE SYSTEM THROUGHOUT THE EXTENT OF REVIEW DESCRIBED BELOW.

FLOOD PROTECTION (§9VAC25-870-66.C) ADEQUACY

CONCENTRATED FLOW FROM THE DISTURBED AREA DISCHARGES TO OUTFALL '1' THROUGH A CLOSED CONDUIT STORM SYSTEM AT POINT 'A'. APPROXIMATELY 0.5700 ACRES OF THE DISTURBED AREA DRAINS TO ONSITE INLETS TO EX3 WHERE IT LEAVES THE SITE AT OUTFALL '1'. THE FLOW IS CONVEYED VIA THE CLOSED SYSTEM SOUTH THROUGH SINGLE FAMILY NEIGHBORHOODS CROSSING 12TH ST S, 13TH ST S, AND 13TH RD S BEFORE A CHANGE IN DIRECTION TO THE EAST TOWARDS WATER REED DRIVE TO POINT 'B'.

THERE IS NO KNOWN CASES OF LOCALIZED FLOODING FOR THE STORM SYSTEM ANALYZED FOR FLOOD PROTECTION. STORM CAPACITY COMPUTATIONS FOR THE 10-YR STORM USING THE RATIONAL METHOD ARE PROVIDED ON THIS SHEET WHICH EXCEED THE TEN-YEAR 24 HOUR PEAK FLOW. THE CLOSED SYSTEM IS ADEQUATE TO CONVEY THE PEAK FLOW RATE WITHIN THE STORMWATER CONVEYANCE SYSTEM FOR THE EXTENT OF REVIEW DESCRIBED BELOW.

LIMITS OF ANALYSIS

CHANNEL PROTECTION (§9VAC25-870-66.B.4.A) & FLOOD PROTECTION (§9VAC25-870-66.C.3.A)

THE LIMITS OF ANALYSIS FOR BOTH CHANNEL AND FLOOD PROTECTION SHALL EXTEND TO A POINT WHERE THE SITE'S CONTRIBUTING DRAINAGE AREA IS LESS THAN OR EQUAL TO 1.0% OF THE TOTAL WATERSHED AREA. THIS POINT (POINT 'B') IS PROVIDED IN THE 'STORM DRAINAGE OUTFALL AND EXTENT OF REVIEW MAP', THIS SHEET. THE SITE'S CONTRIBUTING DRAINAGE AREA TO OUTFALL '1' IS 0.5700 ACRES. AT THE LIMITS OF ANALYSIS (POINT 'B') THE TOTAL WATERSHED AREA IS APPROXIMATELY 75.50 ACRES, WHICH IS GREATER THAN 100 TIMES THE CONTRIBUTING SITE AREA. FROM THE POINT OF THE SITE OUTFALL '1' TO THE LIMITS OF ANALYSIS, STORMWATER IS CONVEYED THROUGH A CLOSED CONDUIT SYSTEM.

ADEQUACY CONCLUSION

IT IS THE OPINION OF THE ENGINEER THAT THE OUTFALL IS ADEQUATE AND THAT THE PROPOSED DEVELOPMENT RESULTING IN A FLOW DECREASE WILL NOT HAVE ANY ADVERSE IMPACT ON LOWER LYING PROPERTIES AND WILL NOT AGGRAVATE ANY EXISTING DRAINAGE PROBLEM OR CAUSE A NEW DRAINAGE PROBLEM TO DOWNSTREAM PROPERTIES.

OUTFALL ANALYSIS (10-YR) - STORM SEWER COMPUTATIONS

OUTLET																						
FROM	TO	INC. DRAINAGE AREA (ACRES)	ACCUM. DRAINAGE AREA (ACRES)	"C" COEFFICIENT	INCREMENTAL CA	ACCUMULATED CA	TIME TO INLET (MIN)	RAINFALL INTENSITY (IN/HR)	INCREMENTAL "Q" (CFS)	ACCUMULATED "Q" (CFS)	UPPER INVERT ELEVATION	LOWER INVERT ELEVATION	FALL (FT)	LENGTH OF RUN (FT)	SLOPE (%)	PIPE DIAMETER (IN)	"n"	MAXIMUM "Q" (CFS)	"V" VELOCITY (FPS)	FLOW TIME (SEC)	RIM ELEV. (GIS)	APPROX. COVER
EX.3	D-8	1.23	1.23	0.80	0.98	0.98	5.0	6.84	6.7	6.7	203.45	202.95	0.50	37.0	1.35%	21	0.013	18.4	6.9	5.4	208.6	3.4
D-8	EX-2	0.68	1.91	0.80	0.54	1.53	5.0	6.84	3.7	10.5	202.95	201.21	1.74	128.5	1.35%	21	0.013	18.4	7.8	16.5	207.0	2.3
EX-2	EX-1	0.12	2.03	0.80	0.10	1.62	5.0	6.84	0.7	11.1	201.11	199.69	1.42	162.0	0.88%	21	0.013	14.8	6.7	24.0	207.0	4.1
EX-1	16366	2.06	4.09	0.80	1.65	3.27	5.0	6.84	11.3	22.4	199.59	197.59	2.00	119.8	1.67%	24	0.013	29.2	10.2	11.8	205.9	4.3
16366	16389	0.00	4.09	0.00	0.00	3.27	5.0	6.84	0.0	22.4	197.49	197.00	0.49	31.8	1.54%	24	0.013	28.1	9.9	3.2	204.2	4.7
16389	16418	0.00	4.09	0.00	0.00	3.27	5.0	6.84	0.0	22.4	196.90	196.20	0.70	41.6	1.68%	24	0.013	29.3	10.2	4.1	203.9	5.0
16418	16480	0.00	4.09	0.00	0.00	3.27	5.0	6.84	0.0	22.4	196.10	195.00	1.10	92.8	1.19%	24	0.013	24.6	8.9	10.5	203.8	5.7
16480	16497	0.00	4.09	0.00	0.00	3.27	5.0	6.84	0.0	22.4	194.90	194.50	0.40	26.3	1.52%	30	0.013	50.6	9.9	2.6	203.8	6.4
16497	16606	4.36	8.45	0.75	3.27	6.54	10.0	5.47	17.9	35.8	194.40	193.10	1.30	127.9	1.02%	30	0.013	41.4	9.4	13.6	203.5	6.6
16606	16610	0.00	8.45	0.00	0.00	6.54	10.0	5.47	0.0	35.8	193.00	192.30	0.70	64.8	1.08%	30	0.013	42.6	9.7	6.7	203.5	8.0
16610	16801	0.00	8.45	0.00	0.00	6.54	10.0	5.47	0.0	35.8	192.20	186.10	6.10	204.7	2.98%	30	0.013	70.8	14.4	14.2	202.0	7.3
16801	16838	0.00	8.45	0.00	0.00	6.54	10.0	5.47	0.0	35.8	186.00	185.50	0.50	37.6	1.33%	30	0.013	47.3	10.5	3.6	191.9	3.4
16838	16885	0.00	8.45	0.00	0.00	6.54	10.0	5.47	0.0	35.8	185.40	184.50	0.90	82.1	1.10%	30	0.013	42.9	9.7	8.4	192.1	4.2
16885	16872	47.13	55.58	0.75	35.35	41.89	15.0	4.09	144.6	171.3	184.40	183.00	1.40	155.2	0.90%	54	0.013	186.8	13.3	11.7	192.2	3.3
16872	16862	0.00	55.58	0.00	0.00	41.89	15.0	4.09	0.0	171.3	182.90	180.00	2.90	163.1	1.78%	54	0.013	262.2	17.5	9.3	190.2	2.8
16862	16883	0.00	55.58	0.00	0.00	41.89	15.0	4.09	0.0	171.3	179.90	179.00	0.90	48.1	1.87%	54	0.013	269.0	17.7	2.7	186.8	2.4
16883	16897	11.15	66.73	0.78	8.70	50.59	15.0	4.09	35.6	206.9	178.90	178.00	0.90	32.0	2.81%	54	0.013	329.8	21.7	1.5	186.1	2.7
16897	16911	0.00	66.73	0.00	0.00	50.59	15.0	4.09	0.0	206.9	177											

VRRM COMPUTATIONS

Project Name: **3108 COLUMBIA PIKE**
Date: **12/18/2023**
Linear Development Project? **No**

CLEAR ALL
(Ctrl+Shift+R)

data input cells
constant values
calculation cells
final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) → **0.6105**

Maximum reduction required: **10%**
The site's net increase in impervious cover (acres) is: **0.0000**
Post-Development TP Load Reduction for Site (lb/yr): **0.0806**

Check:
BMP Design Specifications List: 2013 Draft Stds & Specs
Linear project? **No**
Land cover areas entered correctly? **✓**
Total disturbed area entered? **✓**

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed forest/open space					0.0000
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.1595	0.1595
Impervious Cover (acres)				0.4510	0.4510
					0.6105

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.0000
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.1759	0.1759
Impervious Cover (acres)				0.4346	0.4346
Area Check	OK.	OK.	OK.	OK.	0.6105

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre		
Pre-ReDevelopment	Listed	Adjusted ¹
Forest/Open Space Cover (acres)	0.0000	0.0000
Weighted Rv(forest)	0.0000	0.0000
% Forest	0%	0%
Managed Turf Cover (acres)	0.1595	0.1595
Weighted Rv(turf)	0.2500	0.2500
% Managed Turf	26%	26%
Impervious Cover (acres)	0.4510	0.4510
Rv(impervious)	0.9500	0.9500
% Impervious	74%	74%
Total Site Area (acres)	0.6105	0.6105
Site Rv	0.7671	0.7671

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)		Land Cover Summary-Post		Land Cover Summary-Post	
Post ReDev. & New Impervious		Post-ReDevelopment		Post-Development New Impervious	
Forest/Open Space Cover (acres)	0.0000	Forest/Open Space Cover (acres)	0.0000		
Weighted Rv(forest)	0.0000	Weighted Rv(forest)	0.0000		
% Forest	0%	% Forest	0%		
Managed Turf Cover (acres)	0.1759	Managed Turf Cover (acres)	0.1759		
Weighted Rv (turf)	0.2500	Weighted Rv (turf)	0.2500		
% Managed Turf	29%	% Managed Turf	29%		
Impervious Cover (acres)	0.4346	ReDev. Impervious Cover (acres)	0.4346	New Impervious Cover (acres)	0.0000
Rv(impervious)	0.9500	Rv(impervious)	0.9500	Rv(impervious)	--
% Impervious	71%	% Impervious	71%		
Final Site Area (acres)	0.6105	Total ReDev. Site Area (acres)	0.6105		
Final Post Dev Site Rv	0.7483	ReDev Site Rv	0.7483		

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0390	0.0390
Pre-ReDevelopment Treatment Volume (cubic feet)	1,700,0198	1,700,0198
Pre-ReDevelopment TP Load (lb/yr)	1.0681	1.0681
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.7500	1.7500
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		0.2503

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.0381	Post-ReDevelopment Treatment Volume (acre-ft)	0.0381	Post-Development Treatment Volume (acre-ft)	--
Final Post-Development Treatment Volume (cubic feet)	1,658,3474	Post-ReDevelopment Treatment Volume (cubic feet)	1,658,3474	Post-Development Treatment Volume (cubic feet)	--
Final Post-Development TP Load (lb/yr)	1.0419	Post-ReDevelopment Load (lb/yr)*	1.0419	Post-Development TP Load (lb/yr)	--
Final Post-Development TP Load per acre (lb/acre/yr)	1.7100	Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.7100		
		Max. Reduction Required (Below Pre-ReDevelopment Load)	10%		

TP Load Reduction Required for Redeveloped Area (lb/yr)	0.0806	TP Load Reduction Required for New Impervious Area (lb/yr)	0
---	--------	--	---

¹ Adjusted Land Cover Summary:

Pre-ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column 1 shows load reduction requirement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr) **0.0806**

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	7.6412	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	7.4538
-----------------------------------	--------	--	--------

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.0000	0.0000	0.0000	0.0000	0.0000	OK.
IMPERVIOUS COVER (ac)	0.3456	0.0676	0.0000	0.0000	0.0000	OK.
IMPERVIOUS COVER TREATED (ac)	0.3456	0.0000	0.0000	0.0000	0.0000	OK.
MANAGED TURF AREA (ac)	0.0741	0.0827	0.0000	0.0000	0.0000	OK.
MANAGED TURF AREA TREATED (ac)	0.0741	0.0000	0.0000	0.0000	0.0000	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³) **1,658.3474**

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft ³)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	0.7911	0.1936	0.0000	0.0000	0.0000	0.9847
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.1580	0.0000	0.0000	0.0000	0.0000	0.1580
TP LOAD REMAINING (lb/yr)	0.6330	0.1936	0.0000	0.0000	0.0000	0.8266
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.0419
TP LOAD REDUCTION REQUIRED (lb/yr)	0.0806
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.1580
TP LOAD REMAINING (lb/yr)	0.8839
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.0000 **

** TARGET TP REDUCTION EXCEEDED BY 0.0774 LB/YEAR **

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	7.4538
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.0000
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	7.4538



ISSUED FOR BID 11-10-2023

1 01/09/24 ADDENDUM 1

NO. DATE DESCRIPTION BY

COUNTY REVISIONS

SUBMITTED DATE: 8/4/2023 DESIGNED: BWB PROJECT/FILE NO. LDAP23-00146 CHECKED: TCC

SCALE IN FEET
1" = 20'

1 INCH

VCS-83

DEWBERRY REVISIONS

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

WATER QUALITY COMPUTATIONS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-332** 12 OF 28

Drainage Area A

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.0000	0.0000
Managed Turf (acres)				0.0741	0.0741	0.2500
Impervious Cover (acres)				0.3456	0.3456	0.9500
Total					0.4197	

Stormwater Best Management Practices (RR = Runoff Reduction)

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft ³)	Runoff Reduction (ft ³)	Remaining Runoff Volume (ft ³)	Total BMP Treatment Volume (ft ³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0	0.0741	0.3456	0.0000	0.0000	1,259.0474	1,259.0474	20	0.0000	0.7902	0.1580	0.6321	
14.b. Manufactured Treatment Device-Filtering	0			0.0000	0.0000	0.0000	0.0000	20	0.0000	0.0000	0.0000	0.0000	
14.c. Manufactured Treatment Device-Generic	0			0.0000	0.0000	0.0000	0.0000	20	0.0000	0.0000	0.0000	0.0000	

TOTAL IMPERVIOUS COVER TREATED (ac)	0.3456	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.0741	AREA CHECK: OK.
TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	0.0806	
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)	0.7911	
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.1580	
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.0000	
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)	0.1580	
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)	0.6330	
SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS		
NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.0000	
NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.0000	
TOTAL NITROGEN REMOVED IN D.A. A (lb/yr)	0.0000	

Tv = 1259.0474 CF (TREATMENT VOLUME TO DVS-60C)
 DA = 0.4197 AC (DRAINAGE AREA TO DVS-60C IN AC)
 DA = 18282 SF (DRAINAGE AREA TO DVS-60C IN SF)
 Qa = 0.07 FT (RUNOFF VOLUME IN FEET = Tv/DA)
 Qa = 0.84 IN (RUNOFF VOLUME IN WATERSHED INCHES)
 P = 1 IN (RAINFALL, 1" IN VIRGINIA FOR WATER QUALITY)
 CN = 99 (NRCS ADJUSTED CURVE NUMBER TO DVS-60C)

Equation 11.11, pg 11-31 of VA SWM HANDBOOK, 2011

$$CN = \frac{1000}{[10 + 5P + 10Qa - 10(Qa^2 + 1.25QaP)^{0.5}]}$$

```

X X XXXXXXX XXXXX X
X X X X X XX
X X X X X X
XXXXXXX XXXX X XXXXX X
X X X X X X
X X X X X X
X X XXXXXXX XXXXX XXX

```

THIS PROGRAM REPLACES ALL PREVIOUS VERSIONS OF HEC-1 KNOWN AS HEC1 (JAN 73), HEC1GS, HEC1DB, AND HEC1KW.

THE DEFINITIONS OF VARIABLES -RTIMP- AND -RTIOR- HAVE CHANGED FROM THOSE USED WITH THE 1973-STYLE INPUT STRUCTURE. THE DEFINITION OF -AMSKK- ON RM-CARD WAS CHANGED WITH REVISIONS DATED 28 SEP 81. THIS IS THE FORTRAN77 VERSION NEW OPTIONS: DAMBREAK OUTFLOW SUBMERGENCE, SINGLE EVENT DAMAGE CALCULATION, DSS:WRITE STAGE FREQUENCY, DSS:READ TIME SERIES AT DESIRED CALCULATION INTERVAL LOSS RATE:GREEN AND AMPT INFILTRATION KINEMATIC WAVE: NEW FINITE DIFFERENCE ALGORITHM

HEC-1 INPUT PAGE 1

LINE	ID	1	2	3	4	5	6	7	8	9	10
1	ID	3108	COLUMBIA	PIKE	DEMOLITION						
2	ID	ARLINGTON	COUNTY,	VIRGINIA							
3	ID	1"	RAINFALL	DEPTH							
4	ID	TREATMENT	FLOW	RATE	TO	DVS-48C					
5	IT	1				1500					
6	IO	5									
7	JR	PREC	1								
8	KK	DVS									
9	KM	TO	DVS-48C	(0.4197	AC	@	NRCS	ADJUSTED	RCN=99	@	TC=5
10	KO										21
11	BA	0.00066									
12	PB	1.0									
13	IN	6									
14	PC	0	0.0013	0.0023	0.0034	0.0044	0.0055	0.0065	0.0076	0.0087	0.0098
15	PC	0.0109	0.0121	0.0132	0.0143	0.0155	0.0167	0.0178	0.019	0.0202	0.0214
16	PC	0.0226	0.0238	0.0251	0.0263	0.0276	0.0288	0.0301	0.0314	0.0327	0.034
17	PC	0.0353	0.0366	0.0379	0.0393	0.0406	0.042	0.0434	0.0447	0.0461	0.0475
18	PC	0.0489	0.0504	0.0518	0.0532	0.0547	0.0562	0.0576	0.0591	0.0606	0.0621
19	PC	0.0636	0.0651	0.0667	0.0682	0.0697	0.0713	0.0729	0.0745	0.076	0.0776
20	PC	0.0793	0.0809	0.0826	0.0843	0.0861	0.0879	0.0898	0.0916	0.0936	0.0955
21	PC	0.0975	0.0996	0.1017	0.1038	0.106	0.1082	0.1104	0.1127	0.115	0.1174
22	PC	0.1198	0.1223	0.1247	0.1273	0.1298	0.1324	0.1351	0.1378	0.1405	0.1432
23	PC	0.1461	0.149	0.1521	0.1554	0.1588	0.1623	0.166	0.1699	0.1739	0.178
24	PC	0.1823	0.1868	0.1914	0.1961	0.201	0.2061	0.2117	0.2179	0.2247	0.2321
25	PC	0.24	0.249	0.2591	0.2702	0.2825	0.2955	0.3157	0.337	0.3662	0.4067
26	PC	0.4766	0.5933	0.6338	0.663	0.6843	0.7045	0.7176	0.7298	0.7409	0.751
27	PC	0.76	0.7679	0.7753	0.7821	0.7883	0.7939	0.799	0.8039	0.8086	0.8132
28	PC	0.8177	0.822	0.8261	0.8301	0.834	0.8377	0.8412	0.8446	0.8479	0.851
29	PC	0.854	0.8568	0.8595	0.8622	0.8649	0.8676	0.8702	0.8727	0.8753	0.8778
30	PC	0.8802	0.8826	0.885	0.8873	0.8896	0.8918	0.894	0.8962	0.8983	0.9004
31	PC	0.9025	0.9045	0.9064	0.9084	0.9103	0.9121	0.9139	0.9157	0.9174	0.9191
32	PC	0.9208	0.9224	0.924	0.9256	0.9271	0.9287	0.9303	0.9318	0.9334	0.9349
33	PC	0.9364	0.9379	0.9394	0.9409	0.9424	0.9439	0.9453	0.9468	0.9482	0.9496
34	PC	0.9511	0.9525	0.9539	0.9553	0.9566	0.958	0.9594	0.9607	0.9621	0.9634
35	PC	0.9647	0.966	0.9673	0.9686	0.9699	0.9712	0.9724	0.9737	0.9749	0.9762
36	PC	0.9774	0.9786	0.9798	0.981	0.9822	0.9834	0.9845	0.9857	0.9868	0.9879
37	PC	0.9891	0.9902	0.9913	0.9924	0.9935	0.9945	0.9956	0.9967	0.9977	0.9987
38	PC	1									
39	LS										99
40	UD	0.05									
41	ZZ										

UNCONTROLLED AREA

Drainage Area B

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.0000	0.0000
Managed Turf (acres)				0.0827	0.0827	0.2500
Impervious Cover (acres)				0.0676	0.0676	0.9500
Total					0.1503	

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS

FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES
 TIME TO PEAK IN HOURS
 RATIOS APPLIED TO PRECIPITATION

OPERATION	STATION	AREA	PLAN	RATIO 1
HYDROGRAPH AT	DVS	.00	1	0.41
				12.10

*** NORMAL END OF HEC-1 ***

Site Information - Revised 9/19/2017

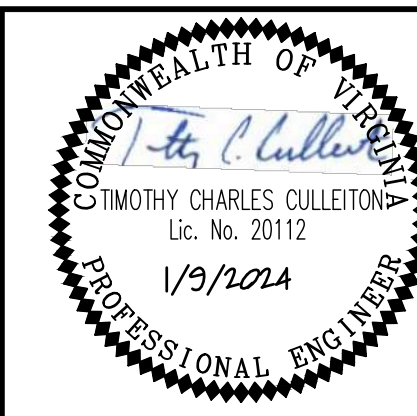

Project SWM #	LDA Permit #	Disturbed Area (acres)	% Pre-Impervious	% Post-Impervious	Pre-Development TP load (lb/yr)	Post-Development TP load (lb/yr)	TP load reduction achieved (lb/yr)	Pre-Development TN load (lb/yr)	Post-Development TN load (lb/yr)	TN load reduction achieved (lb/yr)	Total Site Area (acres)	Pre-Forest Area (acres)	Pre-Turf Area (acres)	Pre-Impervious Area (acres)	Post-Forest Area (acres)	Post-Turf Area (acres)	Post-Impervious Area (acres)	Pre-Runoff Volume	Post-Runoff Volume	Runoff Volume Reduction Achieved	Site Latitude (Decimal Degrees)	Site Longitude (Decimal Degrees)	Anticipated Start Date
23-0138	LDA00146	0.6105	73.9	71.2	1.07	1.04	0.16	7.64	7.45	0.00	0.6105	0.0000	0.1595	0.4510	0.0000	0.1759	0.4346	1700.0198	1658.3474	0.0000	38.861423	-77.089453	7/15/2024

Stormwater Management Facility Information- Revised 3/19/2019

Facility Type**	Description	Location	LDA Permit #	Project SWM #	Building Permit #	Facility ID	BMP downstream of another BMP (in Series)?	Upstream (Primary) BMP	Chesapeake Bay Segment	Watershed	HUC6	Soils	Runoff Treated (in)	Volume Treated (ft ³)	Treated Area (acres)	Forest Area (acres)	Turf Area (acres)	Impervious Area (acres)	RPC	Phosphorus Efficiency (%)	Nitrogen Efficiency (%)	Sediment Efficiency (%)	TP load removed (lbs)	TN load removed (lbs)
MANUFACTURED BMP	Hydrodynamic Separator	Parking Lot	LDA00146	23-0138		23-0138A	No		POTTF_VA	Arlington Branch	PL25	C/D	1.00	1259.0	0.4197	0.0000	0.0741	0.3456	32007018	20.00	0.00	0.00	0.1580	0.00



Dewberry Engineers Inc.
 8401 ARLINGTON BLVD.
 FAIRFAX, VA 22031
 PHONE: 703.849.0100
 FAX: 703.849.0518

ISSUED FOR BID 11-10-2023			ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	
			WATER QUALITY COMPUTATIONS 3108 COLUMBIA PIKE DEMOLITION 3108 COLUMBIA PIKE ARLINGTON COUNTY, VIRGINIA 22204	
DEWBERRY REVISIONS		SCALE: AS-SHOWN		13 OF 28
1	01/09/24	ADDENDUM 1		
NO.	DATE	DESCRIPTION	BY	
COUNTY REVISIONS				
SUBMITTED DATE: 8/4/2023		DESIGNED: BWB CHECKED: TCC		PROJECT/FILE NO. LDAP23-00146
SCALE IN FEET 1" = 20'				

P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site\Sheets\SEP-23\333-WATER QUALITY COMPUTATIONS.dwg, Jan 10, 2024, 11:53am

DUAL-VORTEX SEPARATOR (DVS)

DESCRIPTION

The Dual-Vortex Separator (DVS) is a hydrodynamic stormwater treatment device used to remove pollutants from urban runoff. Impervious surfaces and other urban and suburban landscapes generate a variety of contaminants that can enter stormwater and pollute downstream receiving waters. The DVS is designed to capture and retain sediment as well as floating trash, debris and oils. The concentration of metals and other constituents associated with sediment or floating pollutants may also be reduced.

FUNCTION

Stormwater runoff enters the DVS unit through an inlet pipe. Inflow is split evenly between two vortex tubes by a V-shaped weir. The shape and diameter of the vortex tubes promotes circular motion of the incoming stormwater at increased velocities to enhance particle settling through centrifugal force. The system is also designed with an extended flow path to maximize hydraulic residence time which allows increased time to settle out solids. Settled pollutants are collected in an isolated storage area at the bottom of the structure, while floating trash, debris and petroleum hydrocarbons are retained behind baffles that contain the vortex chambers. During peak runoff events, flow in excess of design treatment flow overtops the bypass weir and exits the system without entering the treatment chambers to interrupt the treatment process or re-entrain captured pollutants. Treatment and bypass flows exit the system through an outlet pipe that is plumbed at the same elevation as the inlet pipe.

CONFIGURATION

The internal components of the DVS system are fabricated from stainless steel and mounted in a manhole or vault structure. The system is typically delivered as a complete unit for installation by the contractor. Installation includes excavation, preparation of the base rock, setting the unit, plumbing the inlet and outlet piping, backfill and placement of the finished surface at grade. Access to the installed system is allowed through ductile iron casting or hatch covers. The number of access points provided is dependent on the size and configuration of the system.

MAINTENANCE OVERVIEW

State and local regulations require all stormwater management systems to be inspected on a regular basis and maintained as necessary to ensure performance and protect downstream receiving waters. Without maintenance, excessive pollutant buildup can limit system performance by reducing the operating capacity and increase the potential for scouring of pollutants during periods of high flow.

INSPECTION EQUIPMENT

The following equipment is helpful when conducting DVS inspections:

- | Recording device (pen and paper form, voice recorder, iPad, etc.)
- | Suitable clothing (appropriate footwear, gloves, hardhat, safety glasses, etc.)
- | Traffic control equipment (cones, barricades, signage, flagging, etc.)
- | Manhole hook or pry bar
- | Flashlight
- | Tape measure
- | Measuring stick or sludge sampler
- | Long-handled net (optional)
- | Replacement Sorbent Pads

INSPECTION PROCEDURES

Inspection is essential to consistent system performance and is easily completed. Inspection is typically conducted a minimum of twice per year but since pollutant transport and deposition varies from site to site, a site-specific maintenance frequency should be established during the first two or three years of operation. DVS inspections are visual and are conducted without entering the unit. To complete an inspection, safety measures including traffic control should be deployed before the access covers are removed. Once the covers have been removed, the following items should be checked and recorded (see form provided on page 5) to determine whether maintenance is required:

- | Inspect the internal components and note whether there are any broken or missing parts. In the unlikely event that internal parts are broken or missing, contact Oldcastle Infrastructure at (800) 579-8819 to determine appropriate corrective action.
- | Note whether the inlet or outlet pipe is blocked or obstructed.
- | Observe, quantify and record the accumulation of floating trash and debris in the baffled chambers around the vortex tubes. The significance of accumulated floating trash and debris is a matter of judgement. A long-handled net may be used to retrieve the bulk of trash and debris at the time of inspection if full maintenance due to accumulation of oils or sediment is not yet warranted.
- | Observe, quantify and record the accumulation of oils in the baffled chambers around the vortex tubes. If sorbent pads have been used to absorb free oil and grease, observe and record their condition. Unless the sorbent pads are tethered to the internal baffles, spent pads may be netted and replaced at the time of inspection. The significance of accumulated floating oils is a matter of judgement. However, if there is evidence of an oil or fuel spill, immediate maintenance is warranted.
- | Finally, observe, quantify and record the accumulation of sediment in the sediment storage sump. A calibrated dipstick, tape measure or sludge sampler may be used to determine the amount of accumulated sediment. The depth of sediment may be determined by calculating the difference between the measurement from the rim of the DVS to the top of the accumulated sediment and the measurement from the rim of the DVS to the bottom of the DVS structure. Finding the top of the accumulated sediment takes some practice and a light touch, but increasing resistance as the measuring device is lowered toward the bottom of the unit indicates the top of the accumulated sediment.

MAINTENANCE INDICATORS

Maintenance should be scheduled if any of the following conditions are identified during inspection:

- | Internal components are broken or missing.
- | Inlet or outlet piping is obstructed.
- | The accumulation of floating trash and debris that cannot be retrieved with a net and/or oil in the baffled chambers around the vortex tubes is significant.
- | Tethered sorbent pads, if used, are dirty or saturated.
- | The sediment level in the sediment storage sump is greater than 12 inches. The capacity of the sediment sump is 18 inches of sediment depth for all DVS models. Sediment depths greater than 18 inches will begin to affect the performance of the system.

MAINTENANCE EQUIPMENT

The following equipment is helpful when conducting DVS maintenance:

- | Suitable clothing (appropriate footwear, gloves, hardhat, safety glasses, etc.)
- | Traffic control equipment (cones, barricades, signage, flagging, etc.)
- | Manhole hook or pry bar
- | Confined space entry equipment, if needed
- | Flashlight
- | Tape measure
- | Sorbent pads
- | Vacuum truck

MAINTENANCE PROCEDURES

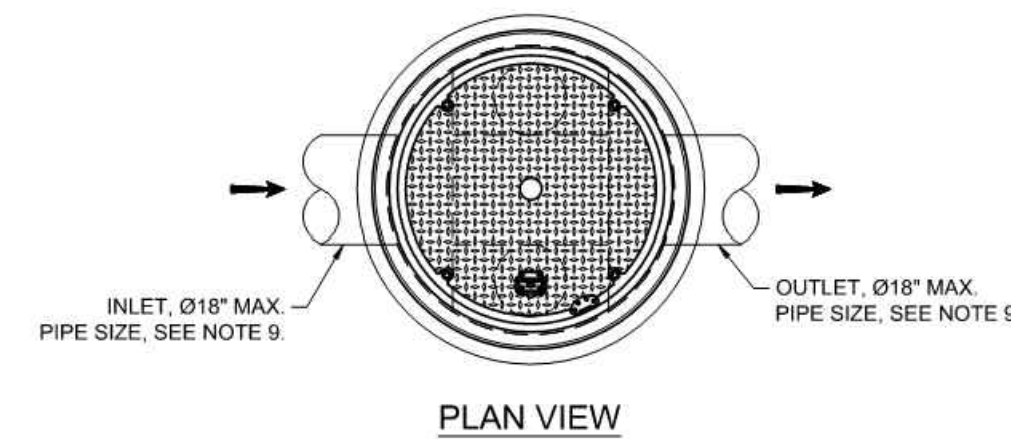
Maintenance should be conducted during dry weather when no flow is entering the system. All maintenance, except possibly the attachment of sorbent pads (if required), may be conducted without entering the DVS structure. Once safety measures such as traffic control are deployed, the access covers may be removed and the following activities may be conducted to complete maintenance:

- | Remove floating trash, debris and oils from the water surface using an extension on the end of the boom hose of the vacuum truck. Continue using the vacuum truck to completely dewater the structure through the vortex tubes and evacuate all accumulated sediment from the sediment sump. Some jetting may be required to fully evacuate sediment from the sump. This is easily achieved by inserting a jet hose through the vortex tube opposite the tube used for vacuum hose access.
- | If sorbent pads are required and are tethered to the structure, only personnel that are OSHA Confined Space Entry trained and certified may enter the structure to remove and replace the spent pads.
- | The structure does not need to be refilled with water after maintenance is complete. The system will fill with water when the next storm event occurs.
- | All material removed from the DVS during maintenance must be disposed of in accordance with local regulations. In most cases, the material may be handled in the same manner as disposal of material removed from sumped catch basins or manholes.

DUAL-VORTEX SEPARATOR INSPECTION AND MAINTENANCE LOG	
DVS Model _____	Inspection Date _____
Location _____	
Condition of Internal Components	Notes: _____
<input type="checkbox"/> Good <input type="checkbox"/> Damaged <input type="checkbox"/> Missing	
Inlet or Outlet Blockage or Obstruction	Notes: _____
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Floating Trash and Debris	Notes: _____
<input type="checkbox"/> Significant <input type="checkbox"/> Not Significant	
Floating Oils	Notes: _____
<input type="checkbox"/> Significant <input type="checkbox"/> Not Significant <input type="checkbox"/> Spill	
Sediment Depth	Notes: _____
<input type="checkbox"/> Inches of Sediment _____	
Maintenance Requirements	
<input type="checkbox"/> Yes - Schedule Maintenance <input type="checkbox"/> No - Schedule Re-Inspection	

SITE SPECIFIC DATA				
Structure ID	DVS			
Water Quality Flow Rate (cfs)	0.41' CFS			
Peak Flow Rate (cfs)	2.4' CFS			
Rim Elevation	211.87			
Pipe Data	Pipe Angle	Pipe Size	Pipe Type	Invert Elevation
Inlet	180	15"	RCP	206.83
Inlet				
Outlet at 0'	15"	RCP		206.83
*Angle is Clockwise from Outlet at 0'.				
Notes:				

*SEE SHEET C-333 FOR SUPPORTING COMPUTATIONS
*SEE SHEET C-320 FOR SUPPORTING COMPUTATIONS



NOTES:

- DESIGN LOADINGS:
 - ASR1010-95-94-14 IMPACT.
 - DESIGN FILL: Y MAXIMUM.
 - ASSUMED WATER TABLE: BELOW INVERT.
 - DRY LATERAL EARTH PRESSURE (EP) = 45 PCF.
 - LATERAL LIVE LOAD SURCHARGE = 80 PSF (APPLIED TO 8' BELOW GRADE).
 - NO LATERAL SURCHARGE FROM ADJACENT BUILDINGS, WALLS, PIERS, OR FOUNDATIONS.
- CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 5,000 PSI MINIMUM.
- STEEL REINFORCEMENT: REBAR ASTM A-615 OR A-706, GRADE 60.
- CEMENT: ASTM C-150 SPECIFICATION.
- REQUIRED NATIVE ALL-OVERLAP SOIL BEARING PRESSURE = 2,500 PSF.
- REFERENCE STANDARD:
 - ASTM C 478
 - ASTM C 497
- THIS STRUCTURE IS DESIGNED TO THE PARAMETERS NOTED HEREIN. PLEASE VERIFY THAT THESE PARAMETERS MEET PROJECT REQUIREMENTS (I.E. LIVE LOAD, FILL RANGE, WATER TABLE). IF DESIGN PARAMETERS ARE INCORRECT, REVIEWING ENGINEER/AUTHORITY SHALL NOTIFY OLDCASTLE INFRASTRUCTURE UPON REVIEW OF THIS SUBMITTAL.
- TREATMENT CAPACITY IS DEPENDENT ON LOCAL REGULATORY REQUIREMENTS. BYPASS CAPACITY IS DEPENDENT ON OUTLET PIPE DIAMETER. CONTACT OLDCASTLE INFRASTRUCTURE FOR PROJECT SPECIFIC TREATMENT AND BYPASS SIZING RECOMMENDATIONS.
- STANDARD INLET/OUTLET PIPE CONFIGURATION TO ENTER AND EXIT STRUCTURE AT 180° SPECIAL ANGLED CONFIGURATIONS AVAILABLE.
- OVERSIZED HOLES TO ACCOMMODATE SPECIFIC PIPE TYPE MUST BE CONCENTRIC TO PIPE ID. ALL ANNUAL SPACES SHALL BE FILLED WITH A MINIMUM OF 3000 PSI CONCRETE FOR FULL THICKNESS OF PRECAST WALLS.
- CONTRACTOR RESPONSIBLE TO ENSURE ADEQUATE BEARING SURFACE IS PROVIDED (I.E. COMPACTED & LEVEL PER PROJECT SPECIFICATIONS).
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT OLDCASTLE INFRASTRUCTURE.

Oldcastle Infrastructure
A BURNS GROUP COMPANY

Ph: 800.579.8819 www.oldcastleinfrastructure.com

Dual-Vortex Separator DVS-48C

THIS PRODUCT IS PROTECTED BY THE FOLLOWING US PATENT: 7,182,874; RELATED FOREIGN PATENTS; OR OTHER PATENTS PENDING.

DATE	REVISION	SHEET
8/4/2023	DVS-48C-SC	1 OF 1

NOTES:

- CONTRACTOR SHALL COORDINATE A PRE-INSTALLATION MEETING FOR THE DVS WITH ARLINGTON COUNTY OFFICE OF SUSTAINABILITY AND ENVIRONMENTAL MANAGEMENT (OSEM). EMAIL StormwaterReview@arlingtonva.us TO SCHEDULE
- UPON COMPLETION OF THE DUAL-VORTEX SEPARATOR INSTALLATION, THE CONTRACTOR SHALL PROVIDE WRITTEN CERTIFICATION TO THE MANUFACTURER THAT THE DEVICE IS INSTALLED PROPERLY.

Dewberry Dewberry Engineers Inc.
8401 ARLINGTON BLVD. FAIRFAX, VA 22031
PHONE: 703.849.0100 FAX: 703.849.0518

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

STORMWATER DETAILS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-334** 14 OF 28

ISSUED FOR BID 11-10-2023			
NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			
SUBMITTED DATE		DESIGNED: BWB	PROJECT/FILE NO.
8/4/2023		CHECKED: TCC	LDAP23-00146
SCALE: 1" = 1' IN FEET			

DEWBERRY REVISIONS

PROFESSIONAL ENGINEER
TIMOTHY CHARLES CULLETON
Lic. No. 20112
11/8/2023

Watershed / Impaired Waters / Total Maximum Daily Load (TMDL) Information

This project site is in the Chesapeake Bay and Potomac River watersheds; TMDLs have been established for sediment, nutrients (nitrogen, phosphorus), and PCBs. A TMDL has also been established for bacteria in the Four Mile Run Watershed. Measures will be taken to minimize the discharge of these pollutants of concern to the storm drain system and surface waters.

Site inspections will be conducted every four (4) business days

Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site.

Nutrients shall be applied in accordance with manufacturer's recommendations or an approved nutrient management plan and shall not be applied during rainfall events, during windy conditions, or when rain is in the immediate 48-hour forecast.

For projects located in the Potomac River Watershed, measures will be taken to prevent /minimize the discharge of PCBs from the project site. Proper sediment controls and stabilization measures will be implemented. Debris and waste materials generated during demolition activities shall be properly disposed in accordance with local, state, and federal regulations.

Arlington County's TMDL Action Plan for Bacteria covers the entire County. Measures will be taken to prevent /minimize the discharge of bacteria from the project site. Pollution prevention controls focused on managing dumpsters, portable lavatories, and other wastes will be implemented (additional information is provided in Section 6.0 Potential Sources of Pollution & Pollution Prevention Practices).

1.0 SWPPP Documents Located Onsite & Available for Review

SWPPP Documents	Located Onsite & Available for Review?	
• LDA Permit	<input type="checkbox"/> Yes	
• Erosion & Sediment Control Plan (or agreement in lieu of)	<input type="checkbox"/> Yes	
• Pollution Prevention Plan	<input type="checkbox"/> Yes	
• Stormwater Management Plan	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A
• Construction General Permit	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A
• Notice of Coverage Letter	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A
• Registration Statement	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A

Required documents are kept in a centralized location on the project site (i.e. mail box or another container marked SWPPP). Permits are displayed on site.

2.0 Authorized Non-Stormwater Discharges

Types of Authorized Non-Stormwater Discharges	Likely Present at Project Site?	
• Uncontaminated / filtered excavation dewatering	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
• Uncontaminated / filtered wash water	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
• Potable water sources that do not create an in-stream impact	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
• Pumped uncontaminated ground water	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> NA
• Landscape irrigation	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> NA
• Other _____	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> NA

2

V-01/2022

5.0 Pollution Prevention Practices (PPP)

Pollution prevention practices (PPP) including daily good housekeeping efforts will be employed at the project site to prevent pollution discharges. Equipment, tools and materials needed for cleanup (brooms, shovels, vacuums, trash bags) will be readily available on site.

The following selected ("checked") activities will be conducted during this project and the corresponding pollution prevention controls and practices will be implemented. Specific controls and additional information are included as applicable.

- (1) **Clearing, Grading, Excavating - Sediment Control / Stabilization (PPP1)**
- Erosion and sediment controls selected and/or described in Section 4.0 will be installed and maintained to protect resources and prevent sediment from leaving the site/LOD and entering the storm drain system or surface waters.
 - Sediment tracking onto paved areas outside the LOD / construction entrances will be swept up
 - Plastic sheeting, tarps, 2" deep straw cover, mulch and/or erosion matting will be used for temporary stabilization of exposed soil / slopes.
 - The Pre-Storm Site Preparation Checklist will be followed and implemented.

- (2) **Saw Cutting and Paving Operations (PPP2)**
- Slurry or other debris shall not enter a storm drain or surface water.
 - Spill containment techniques such as the use of sand bags or booms around the immediate work area shall be used to contain and capture any non-stormwater discharges.
 - Slurry from saw cutting operations must be contained, collected (vacuumed), and disposed of properly.

Description of temporary controls that will be used:

- (3) **Concrete Operations - Washout and Waste Management (PPP3)**
- Concrete wash out will be conducting in a leak-proof container or leak-proof settling basin that is designed so that no overflows can occur due to inadequate sizing or precipitation. Hardened concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wastes.
- Concrete wash water shall not be discharged to a storm drain or surface water.
 - Washout facilities will be sized appropriately for the needs of the project.
 - Washout facilities will not be located near storm drains.
 - Mixers and truck chutes will be washed out in designated contained washout areas
 - No tracking from washout areas will occur.
 - Plastic sheeting, boards, or tarps will be placed under concrete truck chutes during pouring
 - Concrete washout areas will not be used for dewatering

The selected concrete wash out facility will be used:

- Washout Structure - Wood Planks
- Washout Structure - Straw Bales
- Prefabricated Containment System - Type: _____
- Other: _____

6

V-01/2022

- (4) **Washing Activities (PPP4)**
- Wash water discharges to the storm drain system or surface waters are prohibited. The following pollution prevention practices and controls will be implemented where applicable:
- Wash water or liquid wastes shall not enter a storm drain or surface waters.
 - A suitable containment system for cleaning equipment such as a drum, prefabricated system, lined container, or portable wash pad will be provided.
 - The wash / containment area will be sized appropriately for the needs of the project.
 - The wash / containment area(s) will be situated away from storm drains.
 - Containers will be monitored for leaks or damage. Containers will be replaced as needed.

Washout containment / controls for this project will include:

- (5) **Dewatering Operations (PPP5)**
- Construction site dewatering will not be discharged without the use of controls. Sediment laden or turbid water associated with dewatering shall be filtered, settled or similarly treated prior to discharge. The dewatering detail on approved ESC plan will be used. Dewatering operations will be monitored to ensure the controls being used are effective (clear water being discharged) and no clogging or overflow is occurring. Controls will be cleaned out or replaced when the control is no longer effective at removing sediment. Pumping will be conducted so that the rate of discharge does not overwhelm the dewatering system and allows for adequate settling and/or filtration.

Dewatering controls that will be used:

- Filter bag on stone bed with haybales
- Portable sediment tank
- Manufactured / customized system

- (6) **Materials / Chemical Use and Storage (PPP6)**
- Areas will be designated for material delivery and storage. These areas will be near construction entrances and not situated near storm drains. Lay downs areas will be shown on plans. Storage and containment areas will be adequately enclosed or covered. Additional pollution prevention practices and controls include:

- Stockpiled soil and other loose materials that can be washed away shall be covered with a tarp, plastic sheeting, or other stabilization matting when not being actively accessed. Covers must be properly secured / anchored down to prevent the covering from being blown off and exposing materials to rain. Controls such as hay bales or booms should be placed along the perimeter of stock pile (downhill side).
- Stockpiled materials located on the edge of roadways will not obstruct flow along the curb line (gutter). Adequate space between the curb and stockpile will be left to allow stormwater to flow along the curb line. Pipes or boards laid over curbs may be used to create the flow through space.
- Secondary containment will be used for storage of fuels, oil, grease, paint, solvents, sealers, cleaners, and other chemicals. Materials will be kept secured and covered when not in use.

- (7) **Equipment and Vehicle Fueling / Maintenance (PPP7)**
- Designated areas for refueling vehicles or equipment or perform maintenance will be located away from storm drains and surface waters. Additional pollution prevention practices and controls include:

7

V-01/2022

- Vehicles and equipment will be inspected daily for leaks. Any leaks or spills will be addressed upon discovery.
- Containment measures will be used when conducting fueling (e.g. place fuel mats, spill pads, boards, or plastic sheeting on ground) to contain drips, leaks, spills.
- Fuel tank (s) will have containment.
- Fuel tanks and containers will be inspected daily for signs of damage.
- Employees will be instructed not to "top off" or overfill vehicles or equipment to prevent spills.
- Secondary containment and secure storage will be provided for fuel, oil, solvent and/or lubricants.
- Drip pans, sheeting, and/or absorbent pads will be placed under heavy equipment when not in use (i.e. overnight) to capture any potential leaks.

- (8) **Waste Management (PPP8)**
- Trash, waste, and construction debris will be managed and disposed of properly. Designated areas for trash and debris collection will be situated as far away from storm drains as possible. Additional pollution prevention practices and controls include:

- A sufficient number of waste containers will be kept on a site to handle the quantity of waste produced.
- Waste collection / pick up will be conducted as necessary to prevent overfilling.
- Containers will have lids or covers that can be used to cover open containers at the end of the work day and prior to rain events. Roll off containers will be kept covered when not being accessed. Lids and doors on dumpsters and/or trash can will be kept closed.
- Waste containers will be checked frequently for damage / leaks. Any cleaning will be conducting using DRY methods. Waste containers will not be power washed or hosed out unless the wash water is collected and disposed of into the sanitary sewer system.
- Damaged containers / receptacles (leaking, cracked, corroded, or otherwise deteriorating) will be replaced.

- (9) **Portable Lavatories (PPP9)**
- Portable lavatory units will be properly situated and maintained to prevent pollution releases. Additional pollution prevention practices and controls include:

- Portable lavatories will be situated away from storm drains and surface waters.
- Portable lavatories will be kept level and have secondary containment (i.e. trays) if situated on paved surfaces.
- Units will be inspected for leaks or damage will be conducted frequently.
- Routine maintenance / cleaning will occur, and units will be replaced if damaged or leaking.

- (10) **Nutrient Management / Fertilizer Application (PPP10)**
- Fertilizer will be applied in accordance with manufacturer's recommendations. Fertilizer will not be applied during rainfall events or windy conditions, or when rain is forecasted. Fertilizer will be properly secured and stored under cover when not being used. Residual fertilizer on paved surfaces will be swept up.

8

V-01/2022

7.0 Spill Prevention, Response, and Reporting

Spills and leaks will be cleaned up upon discovery using dry cleaning methods (placement of absorbent materials, sweeping, shoveling, bagging, proper disposal). Spills will not be hosed down unless the wash water is contained, collected and disposed of properly.

Spill kits will be kept on site. The spill kit shall be labeled, stocked, and readily accessible. **Employees will be informed of the location of the spill kit(s) and how to respond to and report spills.**

Spill kits should contain absorbent materials, pads, socks, plastic bags, and personal protective equipment (gloves, eye protection). Shovels/brooms should be accessible.

Location(s) of spill kit(s) on site:

-
-
-

Spill Response and Reporting:

- Check for hazards (flammable material, noxious fumes, cause of spill) – if flammable liquid, turn off engines and nearby electrical equipment. **If serious hazards are present leave the area and call 911.**
- Ensure the spill area is safe to enter and does not pose an immediate threat to health and safety
- Stop the spill source.
- Notify personnel in area of spill and potential dangers.
- Ask for assistance to block off area and help with cleanup efforts.
- Take measures to prevent a spill from spreading and/or entering storm drains (socks, booms, soil)
- Clean up spill using dry methods and dispose of materials in accordance with Safety Data Sheet specification and local, state, and federal regulations.
- Never flush or "hose down" a spill down into a storm drain.
- If spilled material has entered a storm drain or surface water, call the Fire Department (911)

Emergency Contacts:

- Arlington County Fire & Police 911 / 703-558-2222
- DES Water, Sewer, Streets 24-Hour Emergency 703-228-6555
- Washington Gas Emergency Line 703-750-1400
- VA Dept. of Emergency Management (24 hour) 804-674-2400

Water or sewer breaks, or overflows will be reported to Arlington County Department of Environmental Services, Water, Sewer, Streets 24-Hour Emergency # 703-228-6555

Leaking underground storage tanks will be reported to the Virginia Department of Environmental Quality Northern Regional Office, 703-583-3800 and the Arlington County Fire Prevention Office, 703-228-4644

10

V-01/2022

POLLUTION PREVENTION PLAN NOTES (STORMWATER MANUAL - SECTION 2.4)

- ONLY THE FOLLOWING NON-STORMWATER DISCHARGES ARE AUTHORIZED BY ARLINGTON COUNTY'S MS4 PERMIT, UNLESS THE STATE WATER CONTROL BOARD OR ARLINGTON COUNTY DETERMINES THE DISCHARGE TO BE A SIGNIFICANT SOURCE OF POLLUTANTS TO SURFACE WATERS:
 - WATER LINE FLUSHING (MANAGED IN A MANNER TO AVOID AN INSTREAM IMPACT); LANDSCAPE IRRIGATION; DIVERTED STREAM FLOWS; RISING GROUND WATERS; UNCONTAMINATED GROUND WATER INFILTRATION (AS DEFINED AT 40 CFR 35.2005(20)); UNCONTAMINATED PUMPED GROUND WATER; DISCHARGES FROM POTABLE WATER SOURCES; FOUNDATION DRAINS; AIR CONDITIONING CONDENSATION; IRRIGATION WATER; SPRINGS; WATER FROM CRAWL SPACE PUMPS; FOOTING DRAINS; LAWN WATERING; INDIVIDUAL RESIDENTIAL CAR WASHING; FLOWS FROM RIPARIAN HABITATS AND WETLANDS; DECHLORINATED SWIMMING POOL DISCHARGES; STREET WATER WASHING; DISCHARGES OR FLOWS FROM EMERGENCY FIREFIGHTING ACTIVITIES; AND, OTHER ACTIVITIES GENERATING DISCHARGES IDENTIFIED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY AS NOT REQUIRING VPDES AUTHORIZATION.
- APPROPRIATE CONTROLS MUST BE IMPLEMENTED TO PREVENT ANY NON-STORMWATER DISCHARGES NOT INCLUDED ON THE ABOVE LIST (E.G., CONCRETE WASH WATER, PAINT WASH WATER, VEHICLE WASH WATER, DETERGENT WASH WATER, SLURRY/WASH WATER FROM SAW CUTTING ACTIVITIES, ETC.) FROM BEING DISCHARGED INTO ARLINGTON COUNTY'S MUNICIPAL STORM SEWER SYSTEM (MS4), OR STREAM NETWORK.
- PER CHAPTER 26.5C OF THE ARLINGTON COUNTY CODE, IT SHALL BE UNLAWFUL FOR ANY PERSON TO DISCHARGE DIRECTLY OR INDIRECTLY INTO THE STORM SEWER SYSTEM OR STATE WATERS, ANY SUBSTANCE LIKELY, IN THE OPINION OF THE COUNTY MANAGER, TO HAVE AN ADVERSE EFFECT ON THE STORM SEWER SYSTEM OR STATE WATERS.

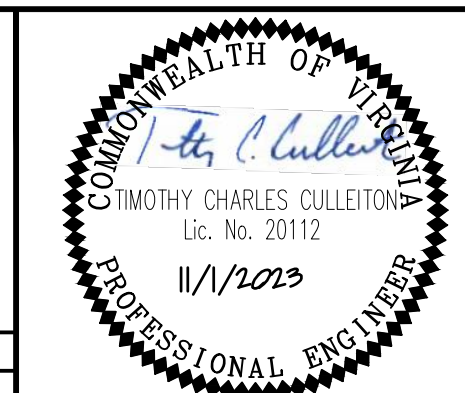


ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

POLLUTION PREVENTION PLAN
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

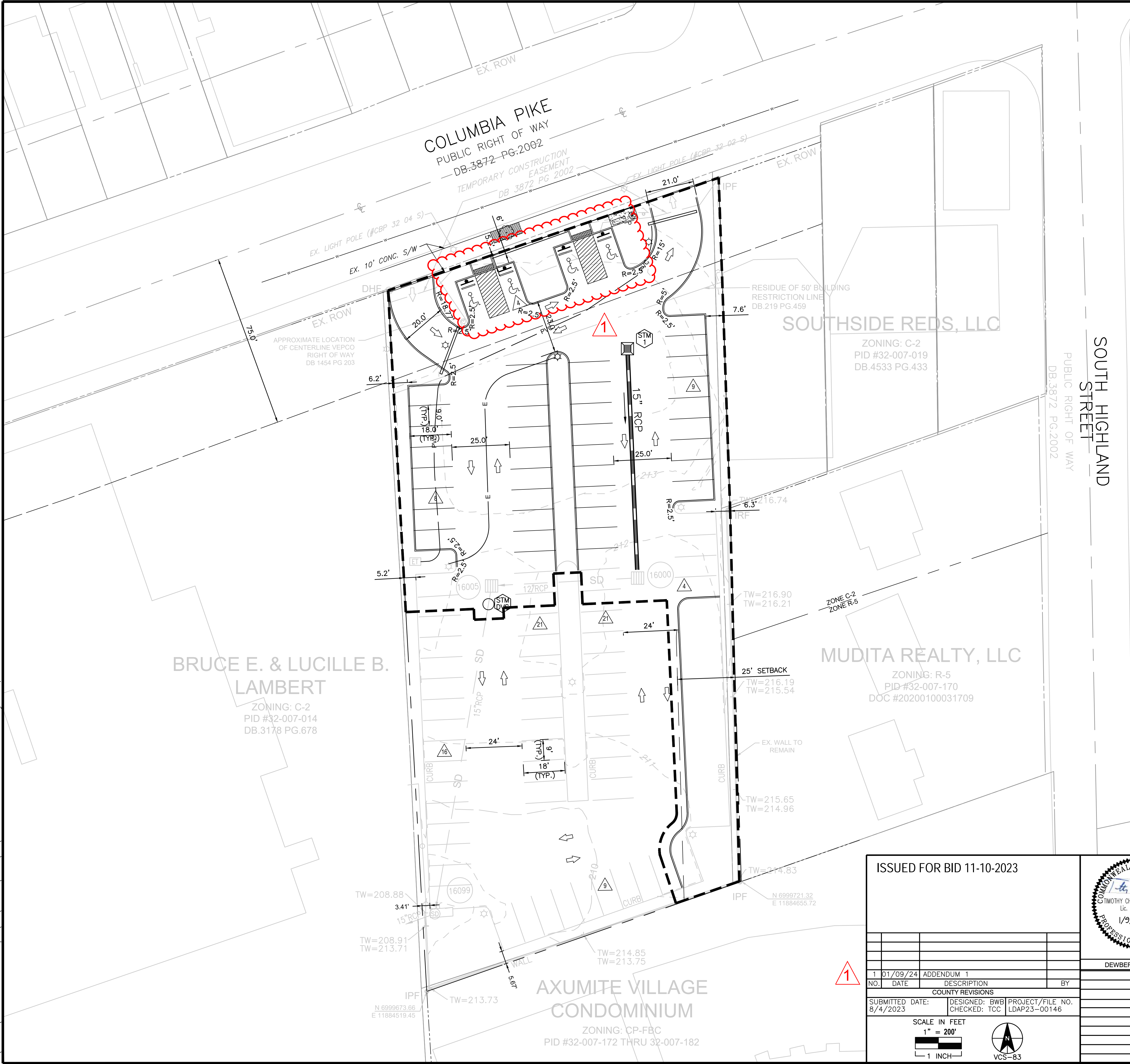
SCALE: AS-SHOWN C-335 15 OF 28

ISSUED FOR BID 11-10-2023		
NO.	DATE	DESCRIPTION
COUNTY REVISIONS		
SUBMITTED DA	DESIGNED: BWB	PROJECT/FILE NO.
8/4/2023	CHECKED: TCC	LDAP23-00146
SCALE IN FEET		
1" = 1 INCH		



DEWBERRY REVISIONS

P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site\Streets\CEP\XC-800_MAINTENANCE OF TRAFFIC PLAN.dwg Jan 10, 2024 - 11:54am

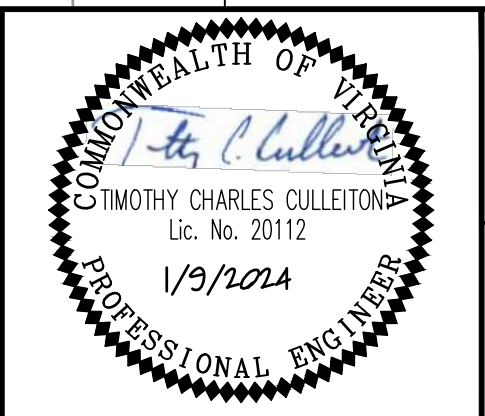


ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

MAINTENANCE OF TRAFFIC PLAN
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN C-800 16 OF 28

ISSUED FOR BID 11-10-2023



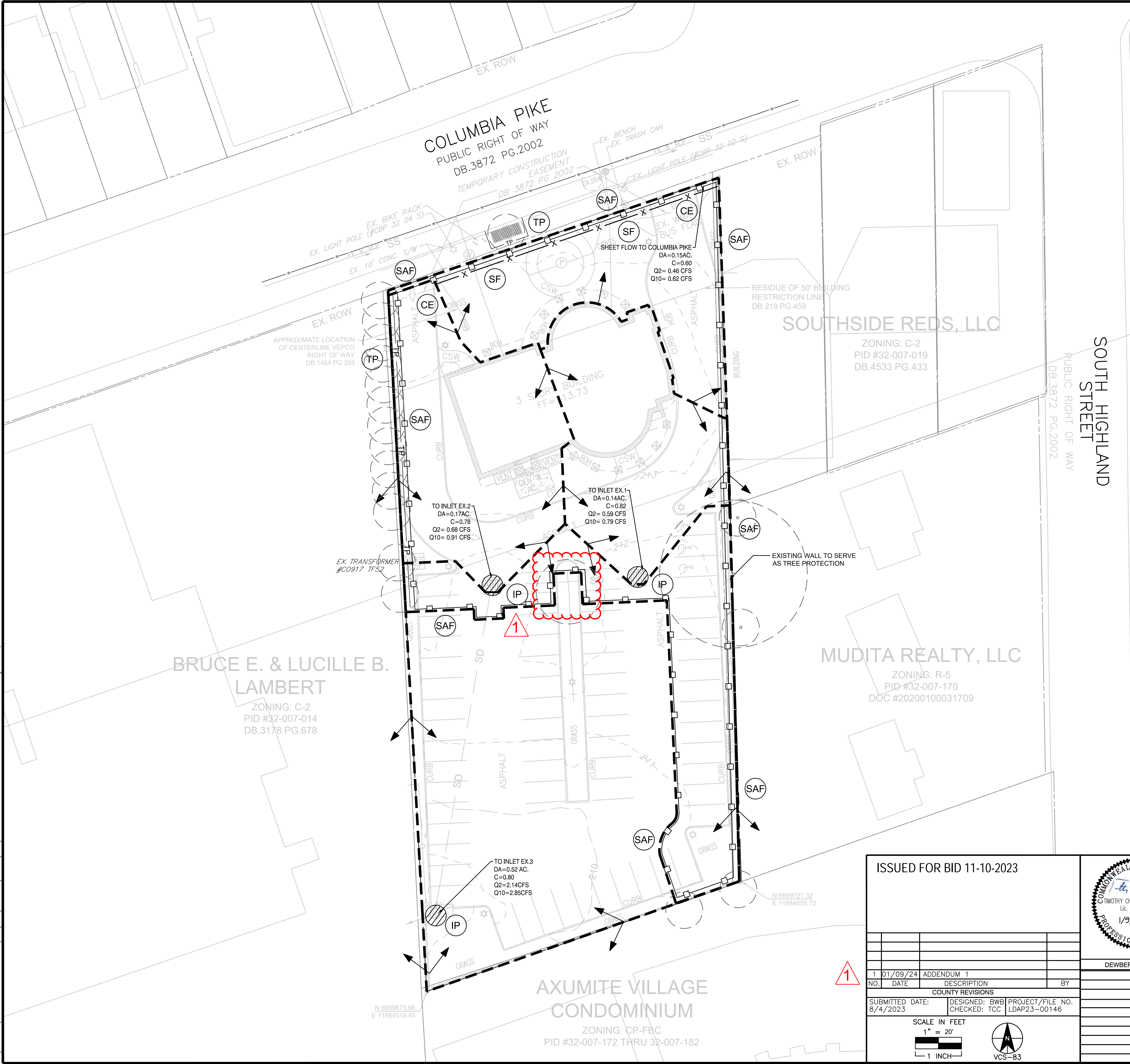
NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE:		DESIGNED: BWB	PROJECT/FILE NO.
8/4/2023		CHECKED: TCC	LDAP23-00146

SCALE IN FEET
1" = 200'

1 INCH = 200 FEET



P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site\Sheets\CEP-C-810-EROSION AND SEDIMENT CONTROL PHASE 1.dwg Jan 10, 2024 - 11:54am



VIRGINIA UNIFORM CODING SYSTEM
FOR EROSION AND SEDIMENT CONTROL PRACTICES

NO	TITLE	KEY	SYMBOL
3.01	SAFETY FENCE	SAF	
3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.07	STORM DRAINAGE INLET PROTECTION	IP	
3.38	TREE PRESERVATION AND PROTECTION	TP	
DRAINAGE DIVIDES			

LIMITS OF CLEARING & GRADING
 CRITICAL ROOT ZONE

EROSION & SEDIMENT CONTROL NOTES:
THIS SHEET DEPICTS PHASE 1 OF A 2 PHASE EROSION & SEDIMENT CONTROL PLAN FOR THE SITE. PHASE 1 IS INTENDED FOR INSTALLATION OF PERIMETER CONTROLS. PHASE 2 IS FOR FINAL INFRASTRUCTURE CONDITIONS. REFER TO SHEET C-870 FOR E&S NARRATIVE.

BRUCE E. & LUCILLE B. LAMBERT
ZONING: C-2
PID #32-007-014
DB.3178 PG.678

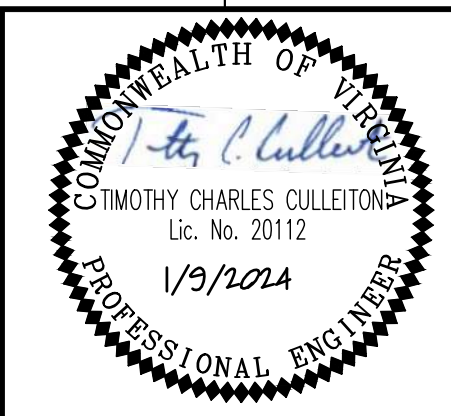
SOUTHSIDE REDS, LLC
ZONING: C-2
PID #32-007-019
DB.4533 PG.433

MUDITA REALTY, LLC
ZONING: R-5
PID #32-007-170
DOC #20200100031709

AXUMITE VILLAGE CONDOMINIUM
ZONING: CP-FBC
PID #32-007-172 THRU 32-007-182



ISSUED FOR BID 11-10-2023



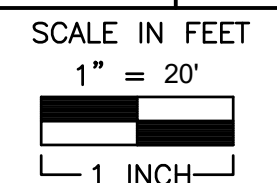
ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

EROSION AND SEDIMENT CONTROL PHASE 1
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

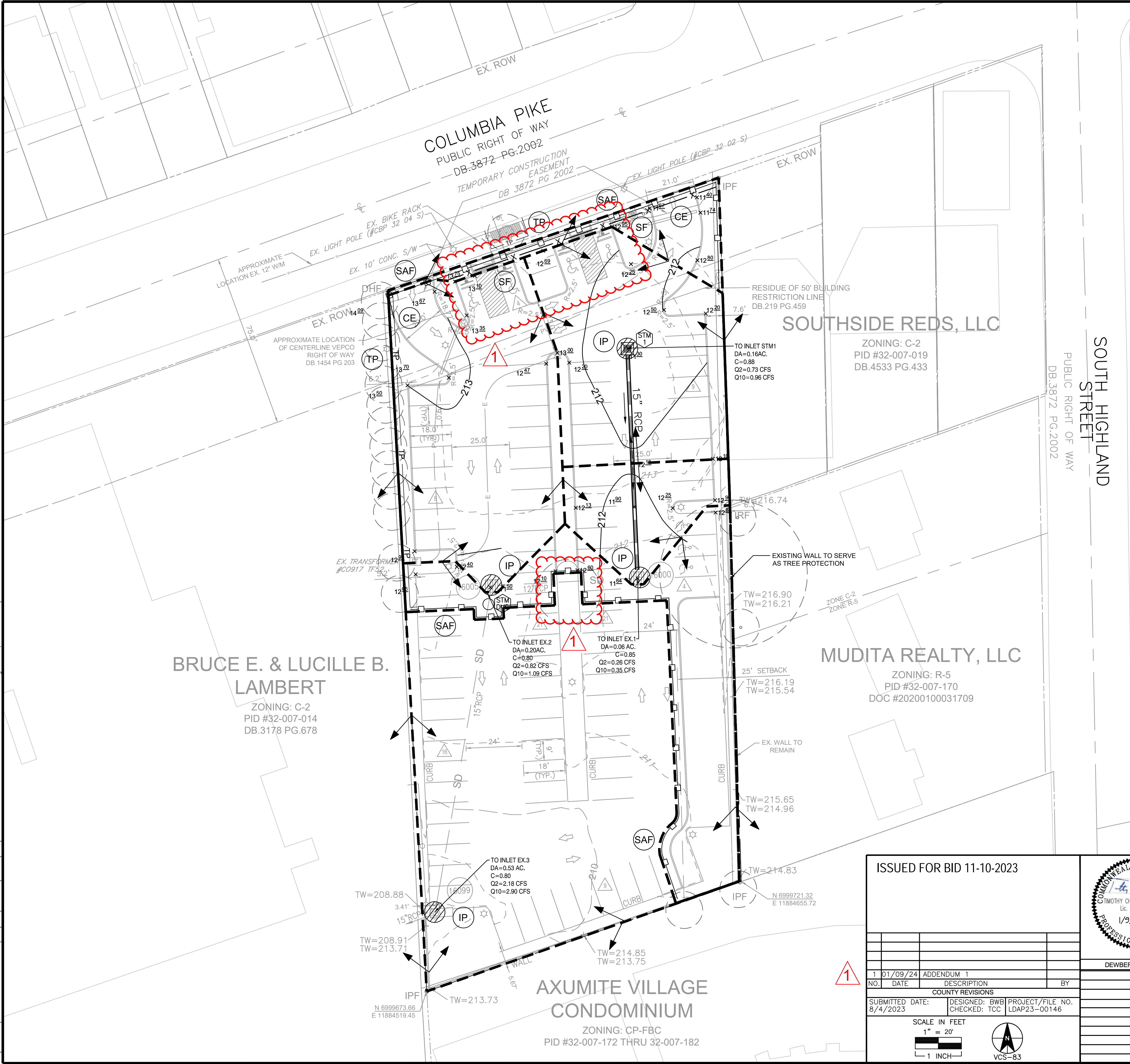
SCALE: AS-SHOWN **C-810** 17 OF 28

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	

SUBMITTED DATE: 8/4/2023 DESIGNED: BWB PROJECT/FILE NO. LDAP23-00146
CHECKED: TCC



P:\PROJECT\50156517_3108_columbia_pike\civil\site\Sheets\CEP-C-820_EROSION AND SEDIMENT CONTROL PHASE 2.dwg Jan 10, 2024 - 1:18pm



VIRGINIA UNIFORM CODING SYSTEM
FOR EROSION AND SEDIMENT CONTROL PRACTICES

NO	TITLE	KEY	SYMBOL
3.01	SAFETY FENCE	SAF	
3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.07	STORM DRAINAGE INLET PROTECTION	IP	
3.38	TREE PRESERVATION AND PROTECTION	TP	
DRAINAGE DIVIDES			

LIMITS OF CLEARING & GRADING
 CRITICAL ROOT ZONE

EROSION & SEDIMENT CONTROL NOTES:
THIS SHEET DEPICTS PHASE 1 OF A 2 PHASE EROSION & SEDIMENT CONTROL PLAN FOR THE SITE. PHASE 1 IS INTENDED FOR INSTALLATION OF PERIMETER CONTROLS. PHASE 2 IS FOR FINAL INFRASTRUCTURE CONDITIONS. REFER TO SHEET C-870 FOR E&S NARRATIVE.

BRUCE E. & LUCILLE B. LAMBERT
ZONING: C-2
PID #32-007-014
DB.3178 PG.678

SOUTHSIDE REDS, LLC
ZONING: C-2
PID #32-007-019
DB.4533 PG.433

MUDITA REALTY, LLC
ZONING: R-5
PID #32-007-170
DOC #20200100031709

AXUMITE VILLAGE CONDOMINIUM
ZONING: CP-FBC
PID #32-007-172 THRU 32-007-182

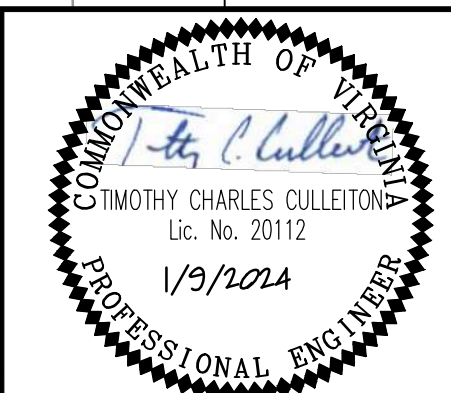


ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

EROSION AND SEDIMENT CONTROL PHASE 2
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-820** 18 OF 28

ISSUED FOR BID 11-10-2023



NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE:		DESIGNED: BWB	PROJECT/FILE NO.
8/4/2023		CHECKED: TCC	LDAP23-00146
SCALE IN FEET 1" = 20'			

DEWBERRY REVISIONS

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION: THIS PROJECT IS LOCATED AT 3108 COLUMBIA PIKE, APPROXIMATELY 750' EAST FROM THE INTERSECTION OF S. GLEBE ROAD AND COLUMBIA PIKE. THIS PLAN PROPOSES THE DEMOLITION OF THE EXISTING BUILDING AND EXPANSION OF THE EXISTING PARKING AREA. THE SITE IS LOCATED WITHIN THE ARLINGTON BRANCH WATER SHED AND THE TOTAL DISTURBED AREA IS APPROXIMATELY 0.6105 ACRES.

EXISTING SITE CONDITIONS: THE PROJECT SITE CONSISTS OF A VACANT OFFICE BUILDING, PARKING LOT, AND ASSOCIATED INFRASTRUCTURE. THE MAJORITY OF THE SITE CONSISTS OF IMPERVIOUS AREA AND GENERALLY SLOPES TO THE SOUTHWEST.

ADJACENT PROPERTIES: THE SITE IS BOUNDED BY COLUMBIA PIKE TO THE NORTH, A CAR DEALERSHIP TO THE WEST, CONDOMINIUMS TO THE SOUTH, AND A MIX OF COMMERCIAL AND RESIDENTIAL TO THE EAST.

OFF-SITE AREAS: THERE IS NO PROPOSED OFF-SITE WORK OR DISTURBANCE PROPOSED WITH THIS PROJECT.

EROSION AND SEDIMENT CONTROL MEASURES: THE EROSION AND SEDIMENT CONTROL MEASURES FOR THIS PROJECT AREA INCLUDE SAFETY FENCE, SILT FENCE AND CONSTRUCTION ENTRANCE.

PERMANENT STABILIZATION: ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH GRASS, MULCH OR SOD. SEE THE PROPOSED PLANS FOR ADDITIONAL INFORMATION.

STORMWATER RUNOFF CONSIDERATIONS: TOTAL LAND DISTURBANCE.....= 26,593 SF (0.6105 ACRES)

PRE-IMPROVEMENT IMPERVIOUS AREA.....= 19,847 SF (0.4519 ACRES)

POST-IMPROVEMENT IMPERVIOUS AREA.....= 18,931 SF (0.4346 ACRES)

DECREASED IMPERVIOUS AREA.....= 716 SF (0.0164 ACRES)



SOILS INFORMATION: THE FOLLOWING SOILS ARE FOUND ON SITE (SEE SOILS MAP ON SHEET 1 (COVER SHEET) FOR LOCATION) SOIL# SOIL NAME HYDROLOGIC GROUP ERODABILITY: 12 URBAN LAND-UDORTHTENTS VARIES N/A

CRITICAL AREAS: THERE ARE NO STEEP SLOPES OR CRITICAL AREAS LOCATED WITHIN THE LIMITS OF DISTURBANCE.

EROSION & SEDIMENT CONTROL PROJECT PHASING

- PHASE I: 1. PRE-CONSTRUCTION MEETING WITH THE PROJECT OFFICER, CONTRACTOR, URBAN FORESTER, RESPONSIBLE LAND DISTURBER, AND COUNTY INSPECTOR. 2. INSTALL THE TEMPORARY CONSTRUCTION ENTRANCE IN THE LOCATION SHOWN ON THE E&S PHASE I PLAN. MUD AND DEBRIS SHALL BE WASHED FROM ALL TRUCKS EXITING THE SITE. WASHWATER SHALL BE CAPTURED AND FILTERED. 3. INSTALL TREE PROTECTION FENCE (TP) AS SHOWN ON E&S PHASE I PLAN. 4. INSTALL PERIMETER CONTROLS AS SHOWN ON E&S PLAN

- PHASE II: 1. BEGIN UTILITY CONSTRUCTION, INSTALL ALL UNDERGROUND UTILITIES AND BEGIN SITE GRADING. 2. ONCE THE SITE IS BOUGHT TO NEAR FINAL GRADE, AND THE UTILITY CONSTRUCTION IS COMPLETE, COMMENCE CONSTRUCTION OF CURB & GUTTER, STREET, SIDEWALKS, AND OTHER IMPROVEMENTS 3. THE CONTROL MEASURES MAY NOT BE REMOVED UNTIL ALL OF THE DISTURBED AREAS HAVE BEEN STABILIZED AND ONLY AS APPROVED AND DIRECTED BY THE INSPECTOR.

EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE ARLINGTON COUNTY EROSION AND SEDIMENT CONTROL ORDINANCE. THE MINIMUM STANDARDS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE.

THE EROSION AND SEDIMENT CONTROL INSPECTOR SHALL HAVE THE AUTHORITY TO ADD OR DELETE EROSION AND SEDIMENT CONTROLS AS NEEDED IN THE FIELD.

STRUCTURAL PRACTICES

TEMPORARY CONSTRUCTION ENTRANCE - VESCH 3.02

- 1. A TEMPORARY CONSTRUCTION ENTRANCE WITH A WASH RACK SHALL BE INSTALLED AT THE EXISTING ACCESS POINT TO THE SITE. DURING MUDDY CONDITIONS, DRIVERS OF CONSTRUCTION VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE RE-ENTERING THE LOCAL ROADWAYS. 2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. 3. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY. 4. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED INTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.

SILT FENCE - VESCH 3.05

- 1. SILT FENCE WILL BE INSTALLED WITH THE E&S PLAN TO FILTER RUNOFF FROM DISTURBED AREAS. RUNOFF SHALL NOT BE DIRECTED PARALLEL TO THE INSTALLATION OF SILT FENCE. 2. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. 3. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM UNDERCUTTING. 4. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE, THE FABRIC SHALL BE REPLACED IMMEDIATELY. 5. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER. 6. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, THEN PREPARED AND SEEDED.

STORM DRAIN INLET PROTECTION - VESCH 3.07

- 1. ALL EXISTING & PROPOSED STORM SEWER INLETS WITHIN THE PROJECT LIMITS SHALL BE PROTECTED DURING CONSTRUCTION. SEDIMENT-LADEN WATER SHALL BE FILTERED BEFORE ENTERING THE STORM SEWER INLETS. INLETS MUST NOT CAUSE FLOODING. 2. INLET PROTECTION SHALL BE INSPECTED AFTER EACH RAIN EVENT AND REPAIRS SHALL BE MADE AS NECESSARY. 3. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

TREE PROTECTION

- 1. TREES SHALL BE PROTECTED PER THE REQUIREMENTS OF THE CHESAPEAKE BAY PRESERVATION ORDINANCE AND THE CURRENT ANSI STANDARDS FOR MANAGEMENT OF TREES AND SHRUBS DURING SITE PLANNING, SITE DEVELOPMENT, AND CONSTRUCTION. 2. ALL TREES SHOWN TO BE PROTECTED ON THE PLAN ARE TO BE PROTECTED UNLESS OTHERWISE DIRECTED BY THE FORESTER. THE COUNTY'S URBAN FORESTER BE CONTACTED AT URBANFORESTRY@ARLINGTONVA.US AND ALLOWED TO INSPECT ALL TREE PROTECTION 72 HOURS PRIOR TO THE START OF CONSTRUCTION. IN SPITE OF PRECAUTIONS, SOME DAMAGE TO PROTECTED TREES MAY OCCUR. IN SUCH CASES, THE COUNTY URBAN FORESTER SHALL DIRECT THE PROJECT TO REMEDIATE DAMAGE FOLLOWING CURRENT ANSI STANDARDS, OR WORK WITH THE PROJECT TO REPLACE TREES, IF THEY ARE DAMAGED BEYOND REPAIR.

TEMPORARY SEEDING - VESCH 3.31

- 1. ALL DENUDED AREAS, WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED. 2. SEE SHEET III-288 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) FOR ALLOWABLE PLANTING MATERIAL, SEEDING RATES, AND DATES. THE PLANTING REQUIREMENTS OF THE "SOUTH" SHALL BE FOLLOWED. LIMING SHALL BE BASED ON TABLE 3.31-A OF VESCH. FERTILIZERS SHALL BE APPLIED AS 600 LB/ACRE. THE FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2-4" OF SOIL. SEED SHALL BE EVENLY APPLIED AND SMALL GRAINS SHALL BE PLANTED NO MORE THAN 1.5" DEEP. SEEDING MADE IN FALL FOR WINTER COVER AND DURING HOT SUMMER MONTHS SHALL BE MULCHED.

PERMANENT SEEDING - VESCH 3.32

- 1. SINCE THE SUBJECT SITE IS LOCATED WITHIN THE COASTAL PLAIN AREA OF VIRGINIA, SHEET III-304 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK SHALL BE FOLLOWED FOR FINAL SEEDING MATERIAL, SEEDING RATES, AND DATES OF APPLICATION, EXCEPT IN RESOURCE PROTECTION AREAS. 2. IN RESOURCE PROTECTION AREAS, THE ARLINGTON COUNTY RESOURCE PROTECTION AREA SEED MIX, OR AN APPROVED EQUAL, SHALL BE APPLIED. APPLY AT 50 LBS/ACRE (2 LB/1000 SF) BETWEEN AUGUST 15TH AND MAY 15TH.

Table with 3 columns: PERCENT OF MIX (%), LATIN NAME, COMMON NAME. Lists various seed types like Lolium multiflorum, Elymus virginicus, etc.

SODDING - VESCH 3.33

- 1. SODDED AREAS SHALL BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLANS. SOIL TESTS SHALL BE MADE TO DETERMINE THE EXACT REQUIREMENTS FOR LIME AND FERTILIZER. PRIOR TO LAYING SOD, SOIL SURFACE SHALL BE CLEAR OF TRASH, DEBRIS AND LARGE OBJECTS. QUALITY OF SOD SHALL BE STATE CERTIFIED TO ENSURE GENETIC PURITY AND HIGH QUALITY. SOD SHALL NOT BE LAID ON FROZEN SOIL SURFACE, OR IN EXCESSIVELY WET OR DRY WEATHER. SOD SHALL BE DELIVERED AND INSTALLED WITHIN 36 HOURS, AND SHALL BE INSTALLED PER PAGE III-339 OF VESCH.

THE EROSION AND SEDIMENT CONTROL INSPECTOR SHALL HAVE THE AUTHORITY TO ADD OR DELETE EROSION AND SEDIMENT CONTROLS AS NEEDED IN THE FIELD. IN ADDITION, NO SEDIMENT TRAPS OR BASINS MAY BE REMOVED WITHOUT PRIOR APPROVAL OF THE INSPECTOR.

EROSION AND SEDIMENT CONTROL MANAGEMENT MEASURES

LANDSCAPE / TREE PRESERVATION NOTES

PRIOR TO ANY LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL CONTACT THE ARLINGTON COUNTY ARBORIST TO SCHEDULE AN INSPECTION.

LAND CONSERVATION NOTES:

- 1. NO DISTURBED AREA WILL REMAIN DENUDED FOR MORE THAN 7 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE INSPECTOR. 2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING. FIRST AREAS TO BE CLEARED ARE TO BE THOSE REQUIRED FOR THE PERIMETER CONTROLS. 3. ALL STORM AND SANITARY SEWER LINES NOT IN STREETS ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL. NO MORE THAN 100 FEET ARE TO BE OPEN AT ANY ONE TIME. 4. ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, SEEDED AND MULCHED WITHIN 5 DAYS AFTER BACKFILLING. 5. ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS ARE TO BE MULCHED AND SEEDED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES TO ALL SOIL STOCKPILES. 6. DURING CONSTRUCTION, STORM SEWER INLETS INSIDE THE LIMITS OF DISTURBANCE WILL BE PROTECTED BY INLET PROTECTION. 7. ANY DISTURBED AREA NOT COVERED BY NOTE 1 ABOVE AND NOT PAVED, SODDED OR BUILT UPON BY NOV. 1, OR DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW MULCH AT THE RATE OF 2 TONS/ACRE AND OVER-SEEDED BY APRIL 15. 8. AT THE COMPLETION OF ANY PROJECT CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED.

EROSION & SEDIMENT CONTROL PROGRAM:

- 1. THE EROSION & SEDIMENT CONTROL PLAN IS INTENDED TO ESTABLISH ENTRANCES AND PERIMETER CONTROL MEASURES WHICH INCLUDES SILT FENCE (SF), INLET PROTECTION (IP), AND OTHER CONTROLS SPECIFIED ON THE PLANS. 2. WHERE CONSISTENT WITH JOB SAFETY REQUIREMENTS, ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES. NO MATERIAL SHALL BE PLACED IN STREAMBEDS. ANY STOCKPILED MATERIAL WHICH WILL REMAIN IN PLACE LONGER THAN 7 DAYS SHALL BE SEEDED AND MULCHED. WHEN SPOIL IS PLACED ON THE DOWNHILL SIDE OF TRENCH, IT SHALL BE BACKSLOPED TO DRAIN TOWARD THE TRENCH. WHEN NECESSARY TO DEWATER THE TRENCH, THE PUMP DISCHARGE HOSE SHALL OUTLET IN A STABILIZED AREA OR A SEDIMENT TRAPPING DEVICE. 3. ALL PRACTICES AND CONTROL DEVICES DESCRIBED HEREIN SHALL CONFORM TO THE CURRENT VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) OR ARLINGTON COUNTY STANDARDS AND SPECIFICATIONS. IN ADDITION, THE CONTRACTOR SHALL TAKE THE FOLLOWING STEPS TO MINIMIZE THE VOLUME OF SILT: a. CONTRACTOR SHALL EVALUATE THE SITE TO DETERMINE EXTENSIVE CUT AND FILL AREAS, AND SHALL WORK THOSE AREAS TO MINIMIZE THE USE OF HEAVY EQUIPMENT. CONTRACTOR SHALL BRING DISTURBED AREAS TO GRADE (ROUGH OR FINISHED) AND STABILIZE THOSE AREAS WITH TEMPORARY OR PERMANENT VEGETATION. THESE DISTURBED AREAS SHALL BE STABILIZED PRIOR TO BEGINNING WORK IN ANOTHER AREA. b. FILL AREAS SHALL BE COMPACTED COMPLETELY PRIOR TO THE END OF EACH WORK DAY. FILL SLOPE SURFACES SHALL BE KEPT ROUGH TO REDUCE SHEET EROSION OF THE SLOPES. CONTRACTOR SHALL RE-DIRECT CONCENTRATED RUNOFF, BY EARTH BERMS OR OTHER DEVICES, AROUND ACTIVELY DISTURBED AREAS TO STABILIZED OUTLETS. c. CUT SLOPES SHALL BE PROTECTED FROM CONCENTRATED FLOW BY BERMS (ABOVE THE SLOPE) AND DIRECTED AROUND THE DISTURBED AREA TO STABILIZED OUTLETS. 4. MEASURES TO CONTROL EROSION AND SEDIMENTATION SHALL BE PROVIDED PURSUANT TO AND IN COMPLIANCE WITH CURRENT STATE AND LOCAL REGULATIONS. THE INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND/OR THE APPROVAL OF THE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OR HIS AGENT OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA AND CHAPTER 57 OF THE ARLINGTON COUNTY CODE. 5. ALL AREAS, ON OR OFF-SITE, THAT ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS SEED MIXTURE OR SOD THAT IS INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. ALL SLOPES 3:1 AND GREATER SHALL BE RECEIVE SOIL STABILIZATION IN ACCORDANCE WITH THE SPECIFICATIONS. 6. WHERE STREAM CROSSINGS ARE REQUIRED FOR EQUIPMENT, TEMPORARY CULVERTS SHALL BE PROVIDED. 7. FOR FURTHER REQUIREMENTS AND DETAILS OF TREE PRESERVATION, PLANTING, EROSION AND SEDIMENT CONTROL, SEE COUNTY CONSTRUCTION STANDARDS AND SPECIFICATIONS AND/OR THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- 1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND/OR ARLINGTON COUNTY STANDARDS AND SPECIFICATIONS. 2. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION. 3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING. 4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES. 5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN THE AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION AND SEDIMENT CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY. 6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.

- 7. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED. 8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE. 9. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY. 10. ALL POST-CONSTRUCTION STORMWATER MANAGEMENT FACILITIES SHALL BE KEPT OFF-LINE UNTIL CONSTRUCTION IS COMPLETED AND ALL AREAS HAVE BEEN PROPERLY STABILIZED. 11. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.

PRE-STORM EROSION & SEDIMENTATION CHECKLIST:

PER GENERAL EROSION AND SEDIMENT CONTROL NOTE 6, THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ANY ADDITIONAL EROSION AND SEDIMENT CONTROL (ESC) MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE COUNTY. THESE SUPPLEMENTARY PRACTICES ARE IN ADDITION TO THOSE SHOWN IN AN EROSION AND SEDIMENT CONTROL PLAN. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MODIFIED AS NEEDED TO ENSURE ONLY CLEAR WATER IS DISCHARGED FROM THE SITE.

THE FOLLOWING ACTIONS SHALL BE TAKEN PRIOR TO STORM EVENTS WITH PREDICTED HEAVY AND/OR LARGE VOLUME RAINFALL TO PREVENT SEDIMENT DISCHARGES FROM A CONSTRUCTION SITE. A TYPICAL SUMMER THUNDERSTORM IS AN EXAMPLE OF A STORM EVENT WITH PREDICTED HEAVY AND/OR LARGE VOLUME RAINFALL.

- 1. PERIMETER CONTROLS a. SILT FENCE SHALL BE CHECKED FOR UNDERMINING, HOLES, OR DETERIORATION OF THE FABRIC. FENCING SHALL BE REPLACED IMMEDIATELY IF THE FABRIC IS DAMAGED OR WON. SILT FENCE MUST BE TRENCHED INTO THE GROUND PER STATE SPECIFICATIONS (VESCH STD & SPEC 3.09). b. WOODEN STAKES OR STEEL POSTS SHALL BE PROPERLY SECURED UPRIGHT INTO THE GROUND. DAMAGED POSTS OR STAKES MUST BE REPLACED. c. SEDIMENT THAT HAS ACCUMULATED AGAINST THE SILT FENCE SHALL BE REMOVED. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE LEVEL REACHES ONE-HALF THE HEIGHT OF THE FENCING. d. HAY BALES OR A STONE BERM SHALL BE PLACED ACROSS THE CONSTRUCTION ENTRANCE TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. 2. EXPOSED SLOPES AND SOIL a. EXPOSED SLOPES NOT AT THE FINAL STABILIZATION PHASE SHALL BE COVERED WITH STRAW, TARPS, PLASTIC SHEETING, OR EROSION CONTROL MATTING. COVERING MATERIAL SHALL BE PROPERLY SECURED/ANCHORED. b. CONTROLS SHALL BE INSTALLED TO PREVENT CONCENTRATED FLOW DOWN AN EXPOSED SLOPE. BERMS OR DIVERSION DIKES SHALL BE INSTALLED AT THE TOP OF CUT/EXPOSED SLOPES TO DIRECT STORM FLOW AROUND THE DISTURBED AREA. c. EXPOSED SLOPES AT THE FINAL STABILIZATION PHASE SHALL BE STABILIZED USING SLOPE STABILIZATION PRACTICES SUCH AS SOIL STABILIZATION BLANKETS OR MATTING AS SPECIFIED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH STD & SPEC 3.36). BLANKETS OR MATS MUST BE PROPERLY SECURED AND ANCHORED TO THE SLOPE USING STAPLES, PINS, OR STAKES. d. SEEDED AREAS SHALL BE CHECKED AND RESEEDED AS NECESSARY TO COVER EXPOSED SOIL. RECENTLY SEEDED AREAS SHALL BE PROTECTED BY STRAW OR SOIL STABILIZATION BLANKETS TO PREVENT SEEDING FROM BEING WASHED AWAY. 3. STOCKPILES a. STOCKPILED SOIL AND OTHER LOOSE MATERIALS THAT CAN BE WASHED AWAY SHALL BE COVERED WITH A TARP. PLASTIC SHEETING, OR OTHER STABILIZATION MATTING. THE COVER MUST BE PROPERLY SECURED/ANCHORED DOWN TO PREVENT IT FROM BEING BLOWN OFF AND EXPOSED MATERIALS TO RAIN. CONTROLS SUCH AS HAY BALES OR BOOMS SHALL BE PLACED ALONG THE PERIMETER OF THE STOCKPILE (DOWNHILL SIDE).

UTILITY INSTALLATION:

UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:

- 1. NO MORE THAN 100 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME. 2. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES. 3. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT STREAMS OR OFF-SITE PROPERTY. 4. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION. 5. STABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS. 6. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH. 7. ANY DISTURBED AREA NOT COVERED BY NOTE #1 ABOVE AND PAVED, SODDED OR BUILT UPON BY NOVEMBER 1ST, OR DISTURBED AFTER THAT DATE, SHALL BE MULCHED WITH HAY OR STRAW AT THE RATE OF 2 TONS PER ACRE AND OVER-SEEDED NO LATER THAN MAY 15TH. 8. AT THE COMPLETION OF THE CONSTRUCTION PROJECT AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED. ARLINGTON COUNTY INSPECTOR TO APPROVE REMOVAL OF ALL TEMPORARY SILTATION MEASURES.

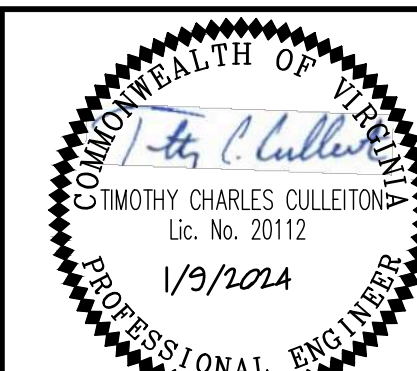
MAINTENANCE PROGRAM:

THE FOLLOWING MAINTENANCE PROGRAM WILL BE IMPLEMENTED FOR THE CONTROLS SPECIFIED IN THIS NARRATIVE AND ON THE PLAN:

- 1. THE SITE SUPERINTENDENT OR HIS/HER REPRESENTATIVE SHALL MAKE A VISUAL INSPECTION OF ALL CONTROLS AND NEWLY STABILIZED AREA (I.E. SEEDED AND MULCHED AND/OR SODDED AREAS) ON A DAILY BASIS, ESPECIALLY AFTER A HEAVY RAINFALL EVENT TO ENSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE WORK DAY INCLUDING RE-SEEDED AND MULCHING OR RE-SODDING IF NECESSARY. 2. ALL SEDIMENT TRAPPING DEVICES SHALL BE CLEARED OUT AT 50% TRAP CAPACITY AND THE SEDIMENT SHALL BE DISPOSED OF BY SPREADING ON THE SITE OR IF NOT SUITABLE FOR FILL, HAULING AWAY AND DEPOSITING AT AN ACCEPTABLE DUMP SITE. 3. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PREVENT MUD AND/OR OTHER DEBRIS FROM ENTERING EXISTING SWMBMP FACILITIES OR WATERWAYS. SHOULD OFF-SITE AREAS BECOME POLLUTED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING THE AFFECTED AREAS TO THE SATISFACTION OF THE INSPECTOR. 4. AT THE COMPLETION OF CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ANY REMAINING DENUDED AREAS SHALL BE STABILIZED. CERTAIN DEVICES MAY BE REMOVED PRIOR TO CONSTRUCTION COMPLETION BUT ONLY WITH THE APPROVAL OF THE COUNTY INSPECTOR. 5. AFTER CONSTRUCTION OPERATIONS HAVE ENDED, ALL DISTURBED AREAS SHALL BE STABILIZED. UPON APPROVAL OF THE COUNTY INSPECTOR, SEDIMENT CONTROLS SHALL BE REMOVED AND THE GROUND PERMANENTLY STABILIZED WITH ESTABLISHED VEGETATION WITHIN 30 DAYS.



ISSUED FOR BID 11-10-2023



ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES

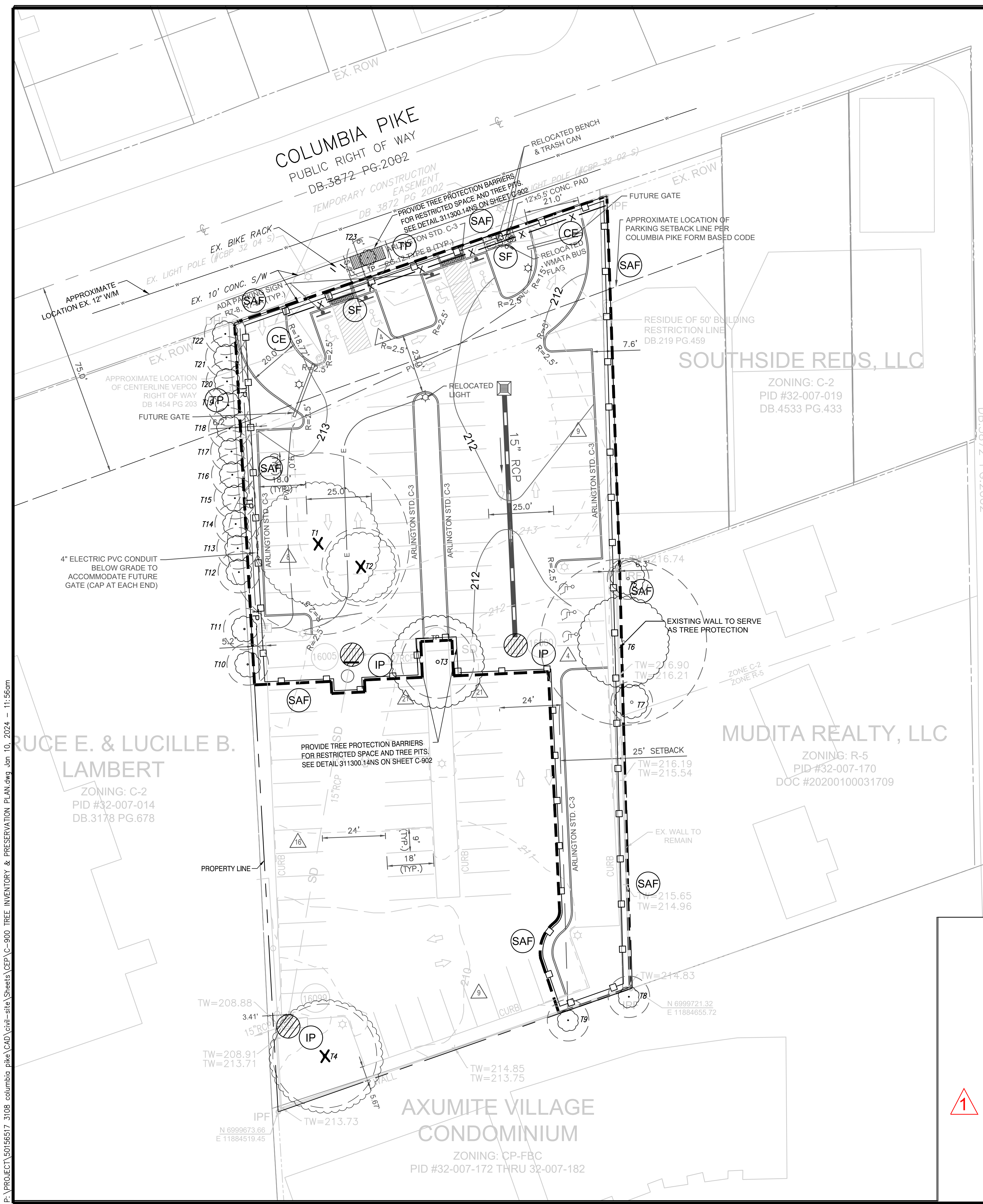
EROSION AND SEDIMENT CONTROL NARRATIVE 3108 COLUMBIA PIKE DEMOLITION 3108 COLUMBIA PIKE ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN C-870 20 OF 28

Table with 3 columns: NO., DATE, DESCRIPTION, BY. Row 1: 1, 01/09/24, ADDENDUM 1, [blank]

SUBMITTED DATE: 8/4/2023 DESIGNED: BWB CHECKED: TCC PROJECT/FILE NO. LDAP23-00146





LEGEND

- TP TREE PROTECTION FENCE
- SAF SAFETY FENCE
- TREE TO REMAIN
- TREE TO BE REMOVED
- CRITICAL ROOT ZONE

CANOPY CALCULATIONS

CANOPY CALCULATION (SQUARE FEET)	
PARCEL SIZE	43,165 SF
TREE CANOPY REQUIRED (10%)	4,317 SF
LARGE CANOPY TREE CONSERVED (X2 BONUS)	0
SMALL CANOPY TREE CANOPY CONSERVED	0
TREE CANOPY REMAINING TO PLANT	4,317 SF
TREE CANOPY PLANTED	5,381.25 SF
TOTAL TREE CANOPY (CONSERVATION AND PLANTING)	5,381.25 SF

TREE SURVEY INFORMATION

3108 COLUMBIA PIKE
 TREE SURVEY INFORMATION COMPLETED BY: JANICE M. CENA #MA-4469A DATE 6/7/2023

TR EE #	BOTANICAL NAME	COMMON NAME	SIZE (DBH)	SPECIES RATING	CONDITI ON	ACTION	REPLACEMEN T CALCULATION	REPLACEMEN T	CRZ IMPACTE D	CANOPY CONSERVED	CONSERVATIO N CREDIT	NOTES
T1	Magnolia grandiflora	Southern magnolia	35	80	0.85	Remove	23.80	5	100%			INSIDE LOD
T2	Acer platanoides	Norway maple	15	50	0.20	Remove	1.50	1	100%			INSIDE LOD
T3	Acer platanoides	Norway maple	14	50	0.45	Preserve	3.15				0	
T4	Acer platanoides	Norway maple	20	50	0.20	Remove	2	1	0			
T5	Carpinus caroliniana	American hornbeam	3	80	0.80	Preserve	1		25%			OFFSITE
T6	Morus alba	White mulberry	32	30	0.50	Preserve	4.80		12%			OFFSITE
T7	Quercus bicolor	Swamp white oak	3	85	0.85	Preserve	1		23%			OFFSITE
T8	Lagerstroemia	Crape myrtle	3	70	0.80	Preserve	1		20%			OFFSITE
T9	Quercus phellos	Willow Oak	5	75	0.80	Preserve	1		20%			OFFSITE
T10	Cercis canadensis	Redbud	6	75	0.40	Preserve	1		25%			OFFSITE
T11	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		25%			OFFSITE
T12	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T13	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T14	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T15	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T16	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T17	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T18	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T19	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T20	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T21	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T22	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T23	Acer rubrum	Red maple	4	70	0.20	Preserve	1		1%			STREET TREE
TOTAL:								7		0	0	

P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site\Sheets\CEP-C-900_TREE_INVENTORY & PRESERVATION PLAN.dwg Jan 10, 2024 - 11:56am

Dewberry Dewberry Engineers Inc.
 8401 ARLINGTON BLVD.
 FAIRFAX, VA 22031
 PHONE: 703.849.0100
 FAX: 703.849.0518

ISSUED FOR BID 11-10-2023

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE:	DESIGNED:	PROJECT/FILE NO.	
8/4/2023	BWB	LDAP23-00146	
CHECKED:		TCC	

SCALE IN FEET
 1" = 20'
 1 INCH

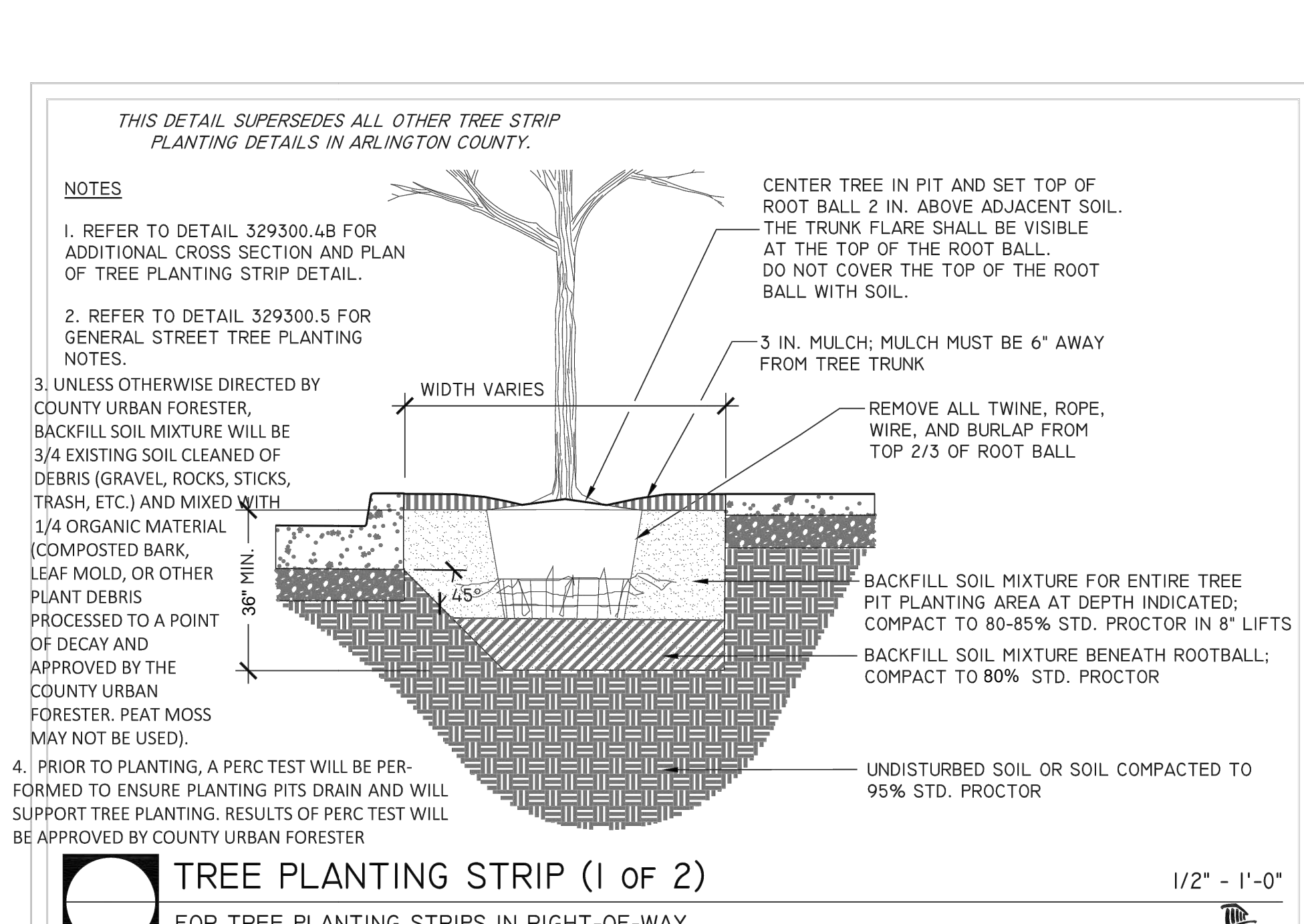
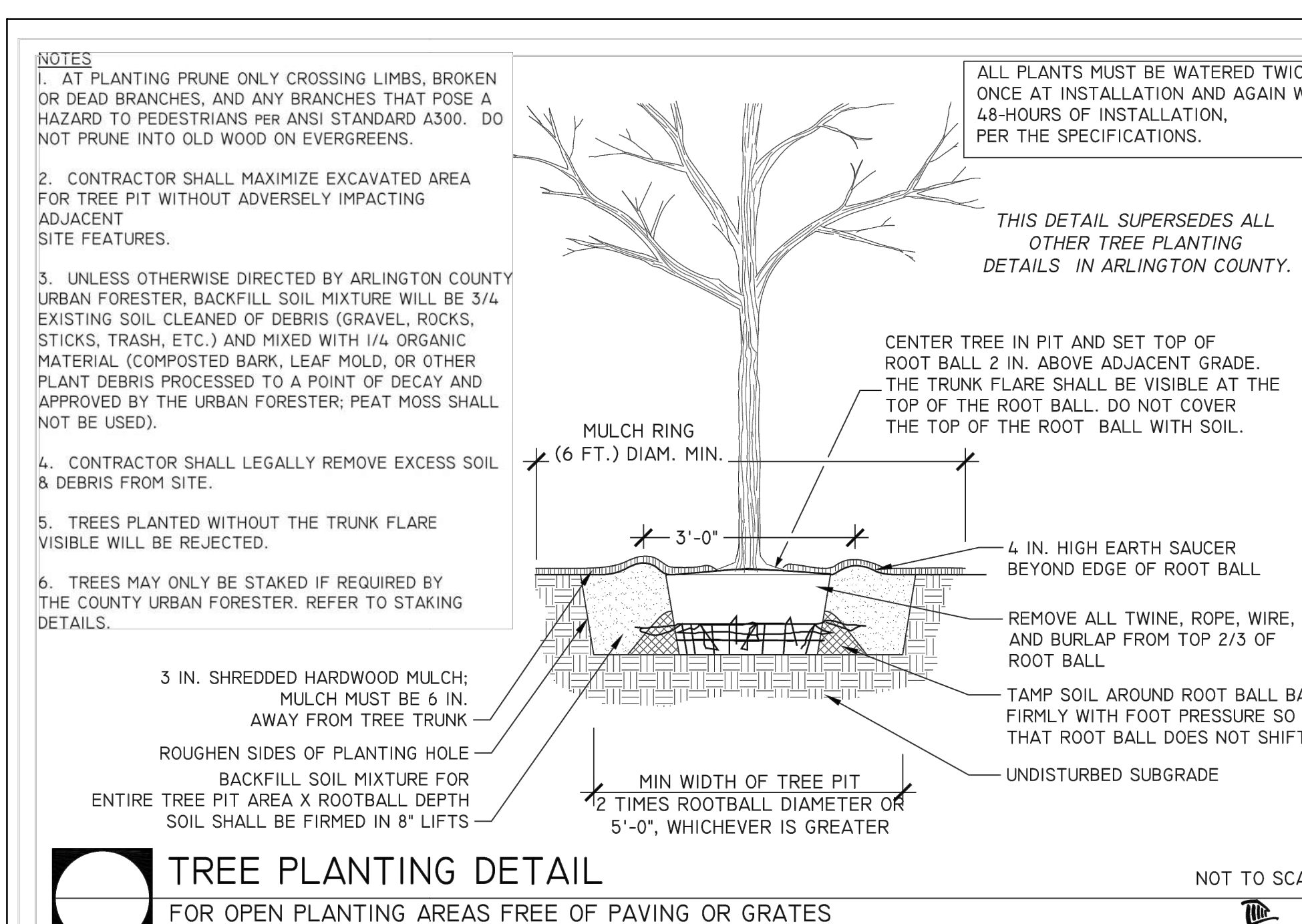
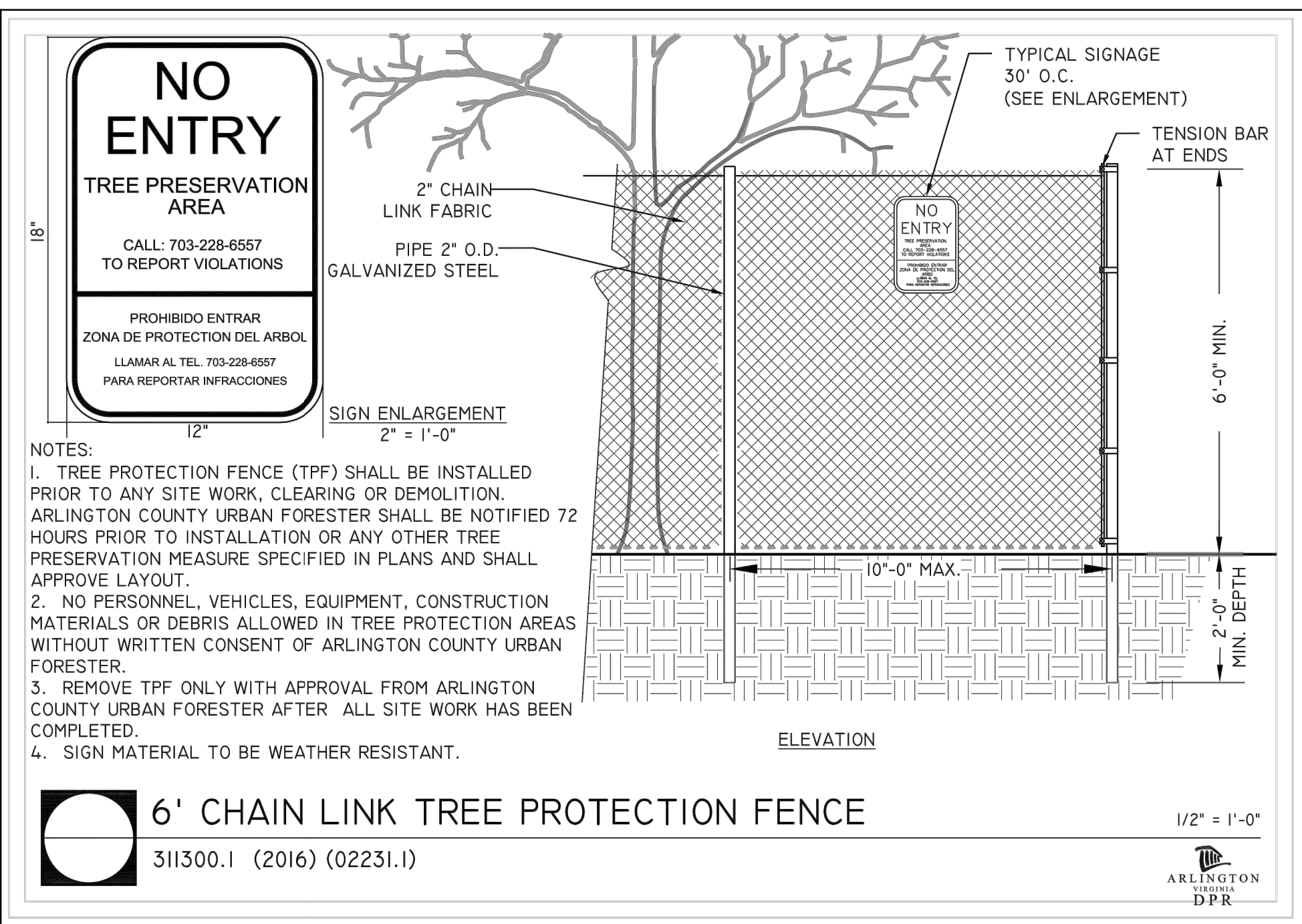
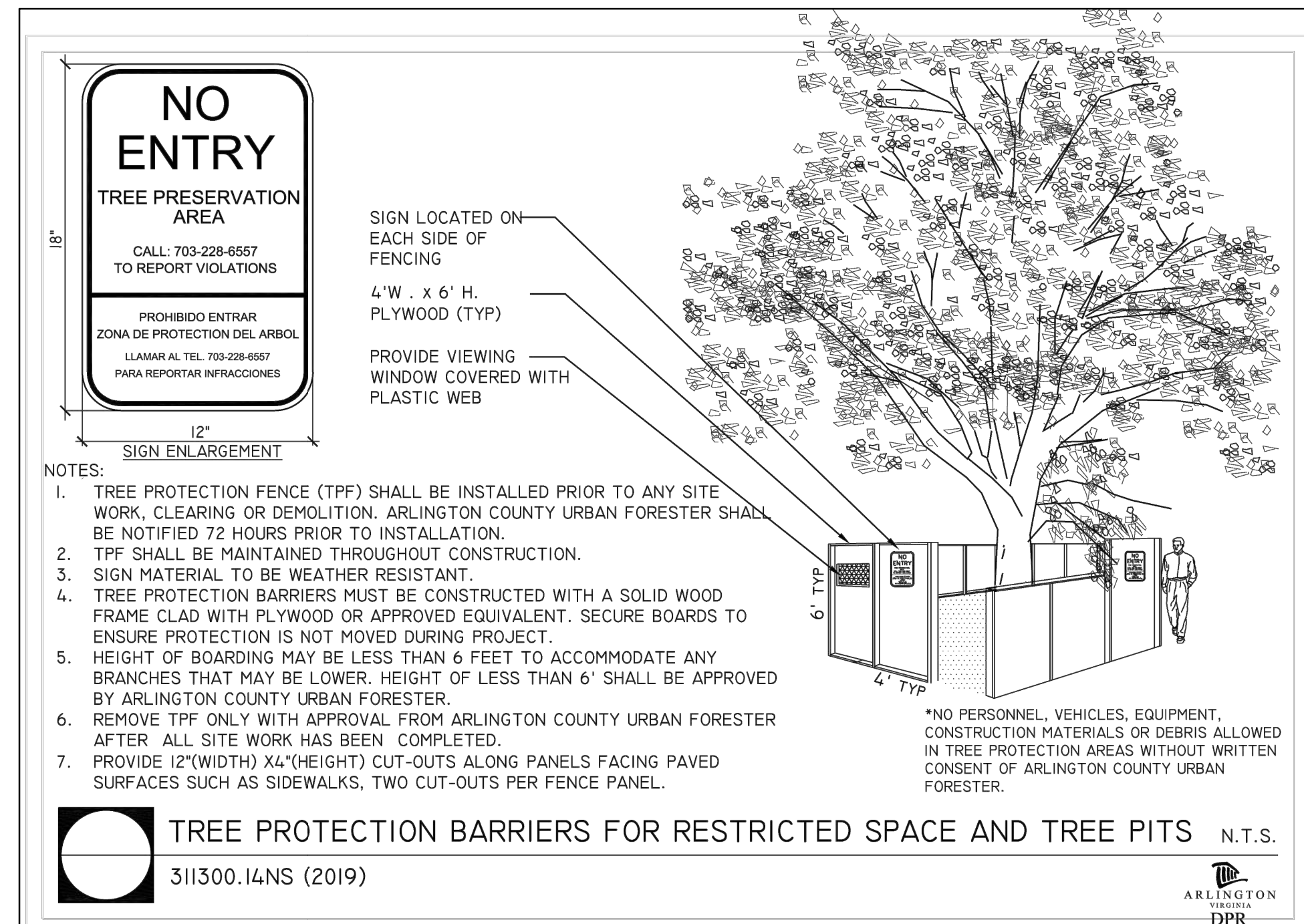
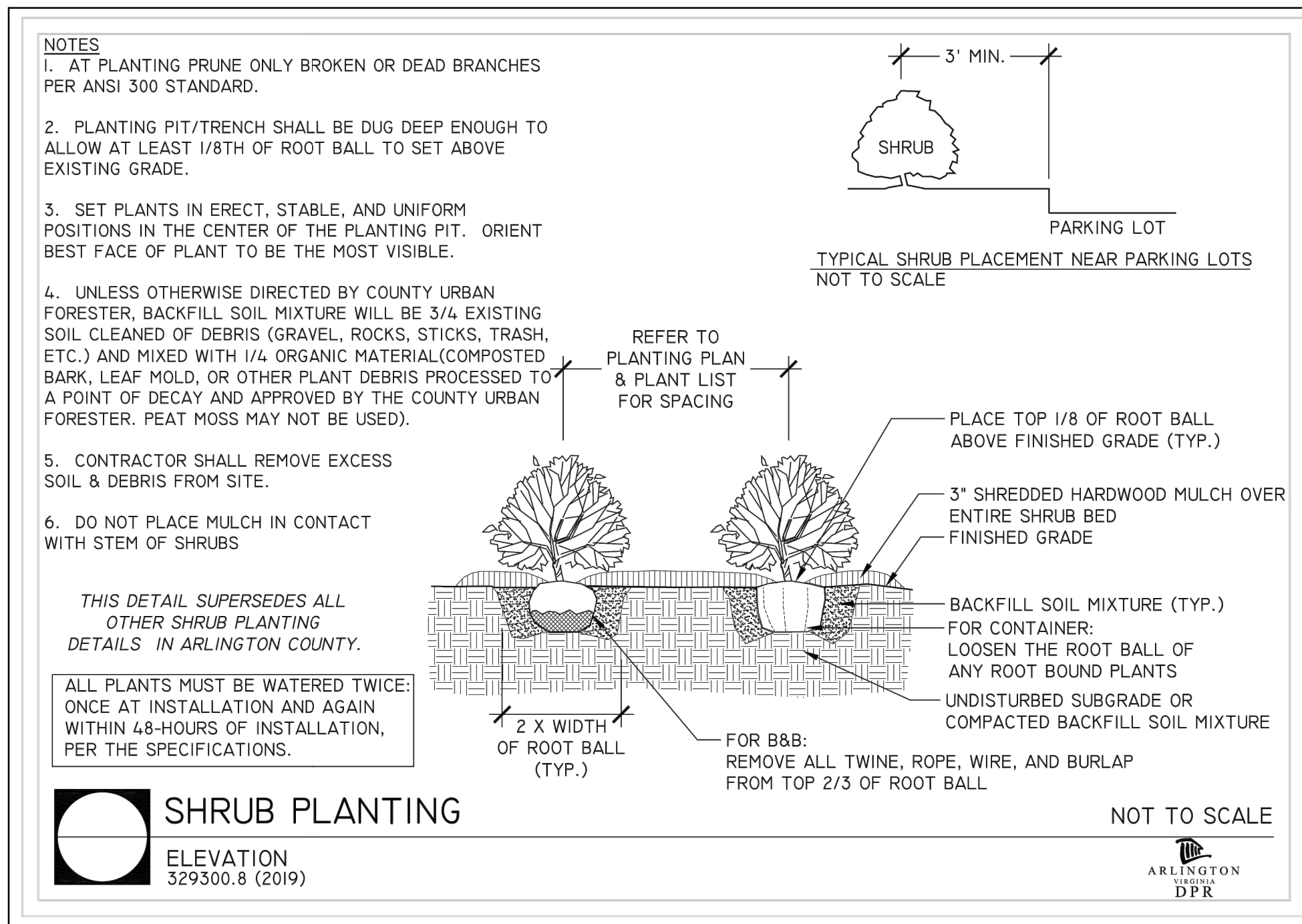
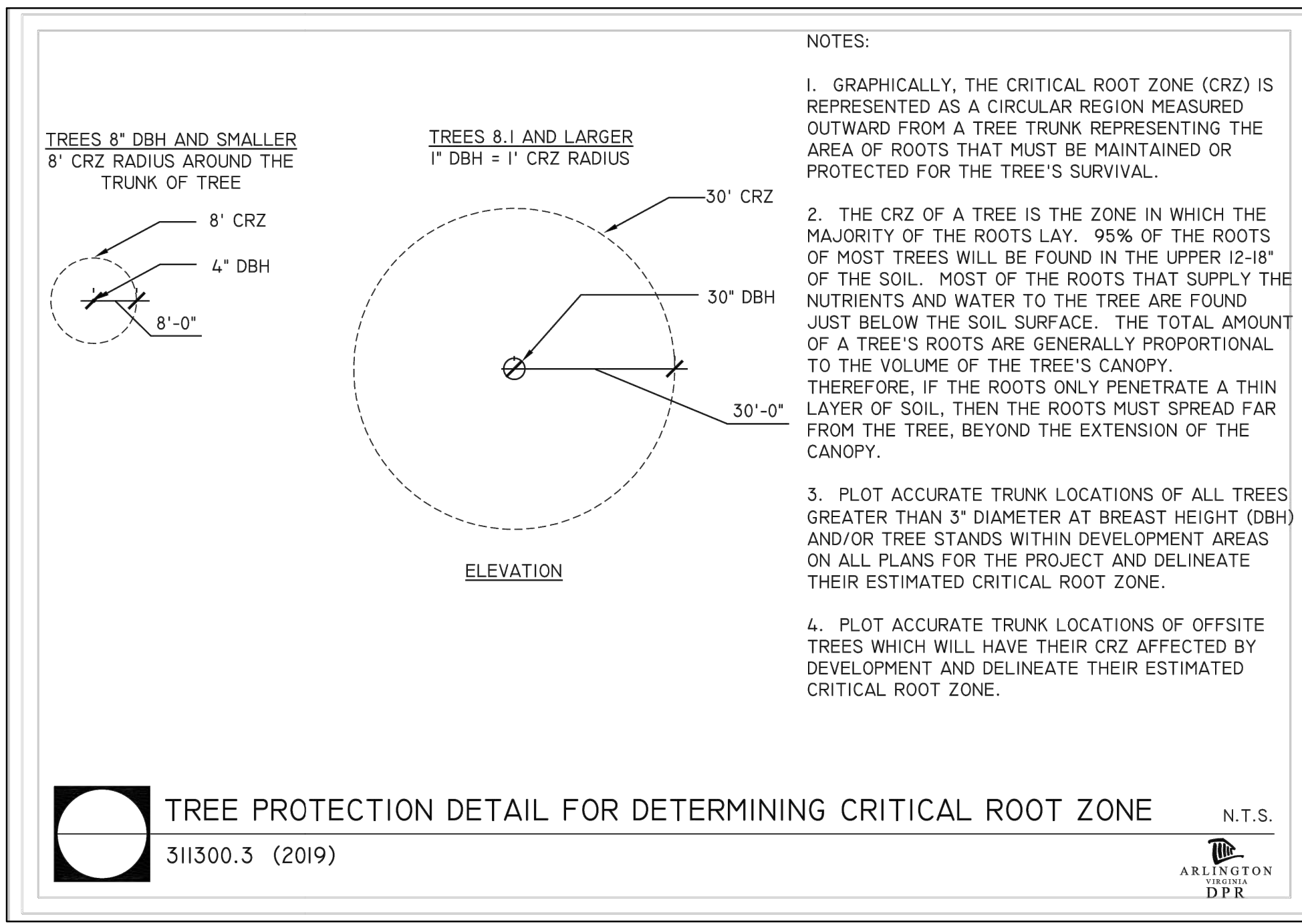
VCS-83

DEWBERRY REVISIONS

ARLINGTON COUNTY, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES

TREE INVENTORY & PRESERVATION PLAN
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN
 C-900
 21 OF 28



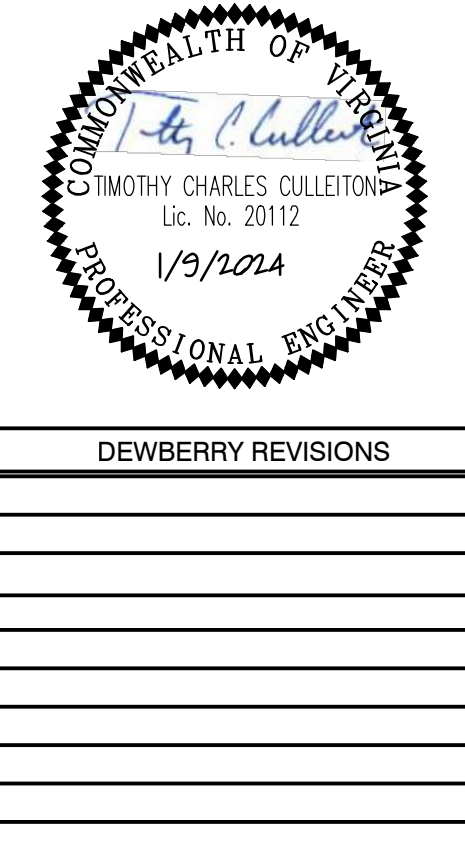
P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site Streets\CEP-XC-902_LANDSCAPE AND TREE PRESERVATION DETAILS.dwg Jan 10, 2024 - 2:02pm

TREE CONSERVATION NOTES:

- BEFORE ANY GRADING, DEMOLITION, OR OTHER DISTURBANCE, INCLUDING TREE REMOVAL, A PRECONSTRUCTION MEETING SHALL BE HELD WITH AN ARLINGTON COUNTY URBAN FORESTER. CHANGES TO THE PLAN, BASED ON FIELD CONDITIONS, MAY BE REQUESTED BY THE URBAN FORESTER AT THE TIME OF THE PRECONSTRUCTION MEETING.
- TREE PROTECTION SHALL BE INSTALLED PER PLAN, WITH ANY CHANGES REQUESTED AT THE PRECONSTRUCTION MEETING, AND INSPECTED BY AN ARLINGTON COUNTY URBAN FORESTER. EROSION AND SEDIMENT CONTROLS ARE INSPECTED BY THE DEPARTMENT OF ENVIRONMENTAL SERVICES.
- REMOVAL OF TREES, NOTED FOR REMOVAL ON THE PLAN, INSIDE A TREE PRESERVATION AREA SHALL BE PERFORMED, BY HAND, WITHOUT GROUND DISTURBANCE, OR DISTURBANCE TO NEARBY PRESERVED TREES. TREES IN THESE AREAS SHALL BE CUT FLUSH TO THE GROUND, WITHOUT STUMP GRINDING.
- NO CHANGES SHALL BE MADE TO TREE PRESERVATION OR PROPOSED LANDSCAPE UNLESS DIRECTED BY AN ARLINGTON COUNTY URBAN FORESTER.
- DO NOT REMOVE TREES ON OTHER PROPERTIES, OR RIGHTS-OF-WAY, WITHOUT WRITTEN PERMISSION OF THE OWNER.
- TREE PROTECTION AREAS SHALL HAVE ALL NON-NATIVE INVASIVE VINES REMOVED AT THE END OF THE PROJECT. WHERE DEEMED NECESSARY BY THE COUNTY URBAN FORESTER TO ENSURE TREE SURVIVAL, THE PROTECTION AREA SHALL BE COVERED WITH SHREDDED HARDWOOD MULCH, OR OTHER ORGANIC MULCH AS APPROVED BY THE COUNTY URBAN FORESTER.
- AT THE END OF THE PROJECT, PRESERVED AND PLANTED TREES MUST BE INSPECTED AND APPROVED BY AN ARLINGTON COUNTY URBAN FORESTER.

ISSUED FOR BID 11-10-2023

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE: 8/4/2023		DESIGNED: BWB	PROJECT/FILE NO. LDAP23-00146
		CHECKED: TCC	
SCALE IN FEET AS SHOWN			
1 INCH			



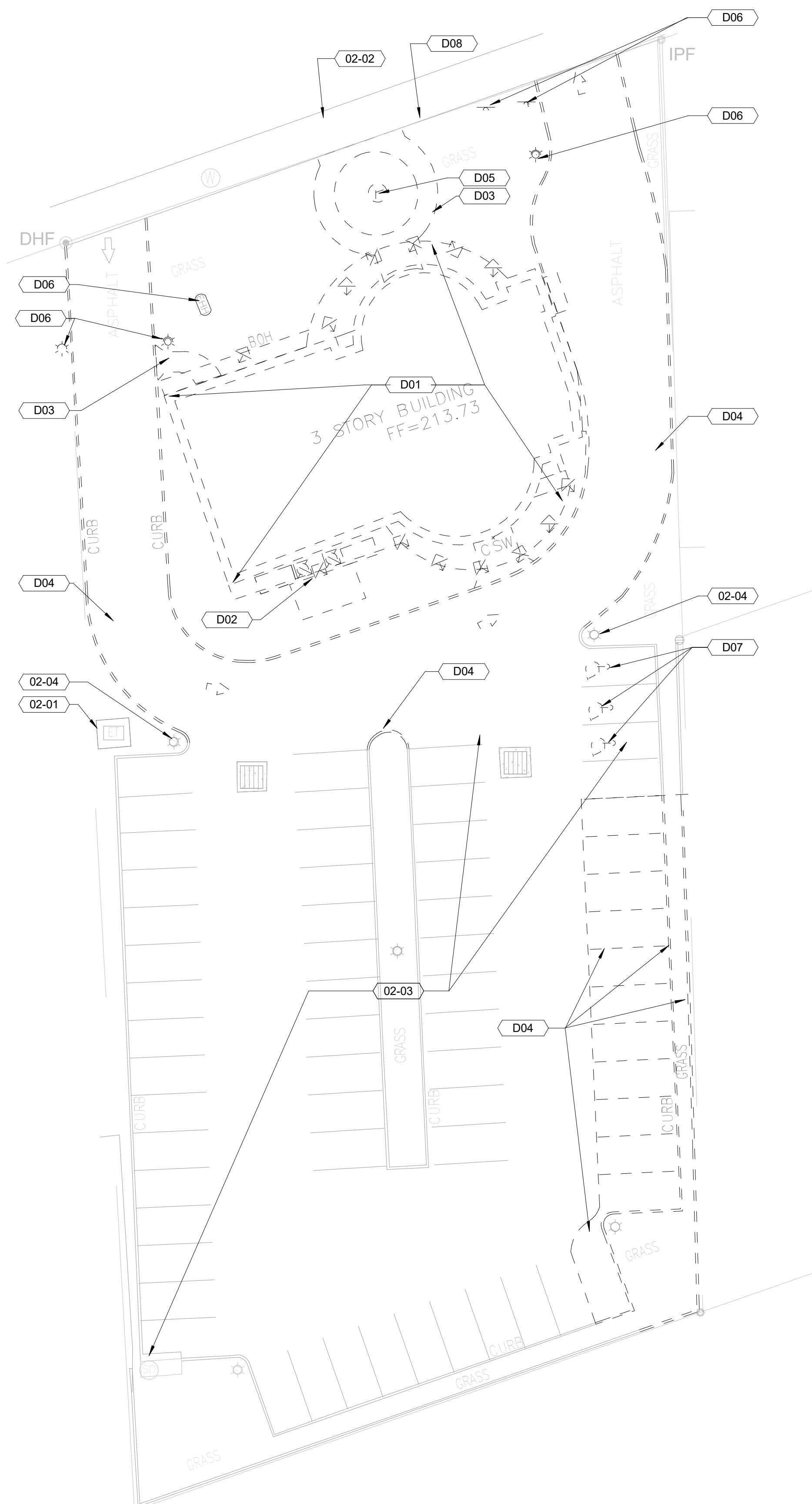
Dewberry Dewberry Engineers Inc.
8401 ARLINGTON BLVD. FAIRFAX, VA 22031 PHONE: 703.849.0100 FAX: 703.849.0518

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LANDSCAPE AND TREE PRESERVATION DETAILS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-902** 23 OF 28

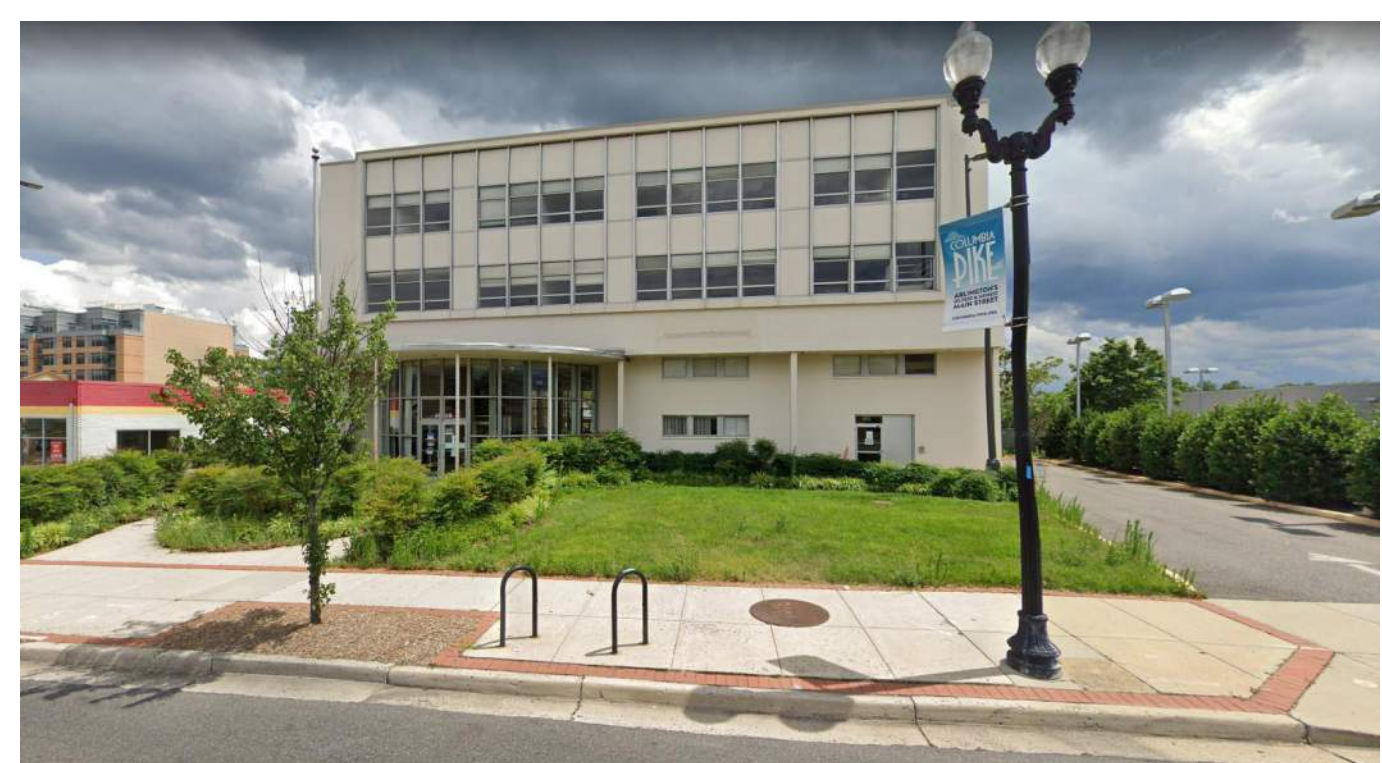
E
D
C
B
A



A1 DEMOLITION PLAN
Scale: 1" = 20'-0"



D3 NORTH-EAST ELEVATION @ COLUMBIA PIKE
Scale: N.T.S.



C3 NORTH ELEVATION @ COLUMBIA PIKE
Scale: N.T.S.



B3 SOUTH ELEVATION FROM PARKING LOT
Scale: N.T.S.



A3 SOUTH-WEST ELEVATION FROM PARKING LOT
Scale: N.T.S.



B4 EXISTING MECHANICAL YARD
Scale: N.T.S.



A4 EXISTING LOBBY
Scale: N.T.S.

KEYNOTES PER SHEET	
NOTE	DESCRIPTION
02-01	EXISTING TRANSFORMER AND PAD TO REMAIN. PROTECT FROM DAMAGE DURING WORK.
02-02	EXISTING SIDEWALK TO REMAIN EXCEPT AS NOTED ON CIVIL.
02-03	EXISTING PAVED PARKING AREA TO REMAIN. SEE CIVIL FOR LIMITS OF DEMOLITION.
02-04	EXISTING LIGHT POLE TO REMAIN.
D01	DEMOLISH ALL OF THE EXISTING STRUCTURE, INCLUDING ABOVE AND BELOW GRADE ELEMENTS, OVERHANGS, AND PAVING MATERIAL UNDER OVERHANGS.
D02	DEMOLISH EQUIPMENT AND EQUIPMENT PADS IN EXISTING MECHANICAL YARD AREA. COORDINATE SHUT OFF AND REMOVAL OF UTILITIES FOR THE EQUIPMENT WITH THE APPLICABLE UTILITY PROVIDERS. REFER TO SPEC SECTION 024116 FOR THE REFRIGERANT RECOVERY FOR THE MECHANICAL SYSTEM PRIOR TO DEMOLITION.
D03	DEMOLISH EXISTING SIDEWALK.
D04	DEMOLISH EXISTING PAVING AND CURBS TO EXTENT SHOWN. REFER TO CIVIL FOR MORE INFORMATION AND EXANT LIMITS OF DEMOLITION.
D05	DEMOLISH EXISTING FLAGPOLE IN ITS ENTIRETY, INCLUDING BELOW GRADE FOUNDATION.
D06	SITE ELEMENT, SEE CIVIL.
D07	REMOVE PAVEMENT MARKING AND SIGNAGE PER CIVIL.
D08	DEMOLISH EDGE OF SIDEWALK AS REQUIRED BY CIVIL. REFER TO CIVIL.

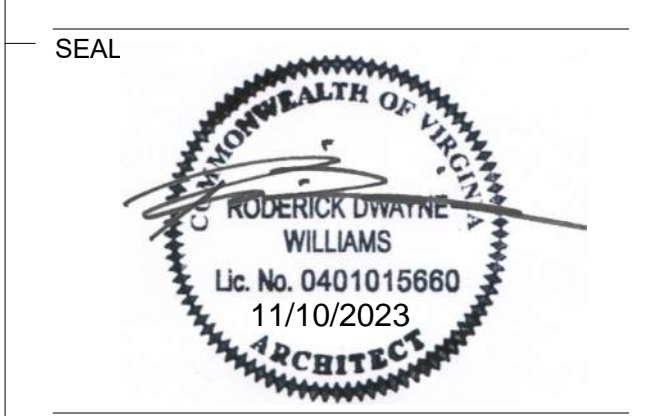
DEMOLITION PLAN GENERAL NOTES	
1.	SITE PLAN IS SHOWN TO CONVEY THE GENERAL EXTENT OF THE EXISTING STRUCTURE TO BE DEMOLISHED. PLANS ARE BASED ON AVAILABLE EXISTING DOCUMENTATION BUT IS NOT A WARRANTY OF EXISTING CONDITIONS AT THE TIME OF CONSTRUCTION. CONTRACTOR SHALL FIELD VERIFY ALL CONDITIONS.
2.	DEMOLITION SCOPE INCLUDES ALL EXISTING BUILDING ELEMENTS WHETHER SHOWN OR NOT, TO INCLUDE BUT NOT LIMITED TO FOUNDATIONS AND BEARING MATERIAL, ELECTRICAL SERVICE BACK TO TRANSFORMER.
3.	REFER TO CIVIL DRAWINGS FOR DEMOLITION SCOPE FOR SITE WORK, PAVEMENTS, SITE UTILITIES, TREE PRESERVATION, GRADING, AND ALL OTHER ITEMS OUTSIDE THE BUILDING ENVELOPE.
4.	SEE CIVIL DWGS FOR SITE ELEMENTS TO BE DEMOLISHED, REMOVED, STORED, AND/OR RELOCATED.



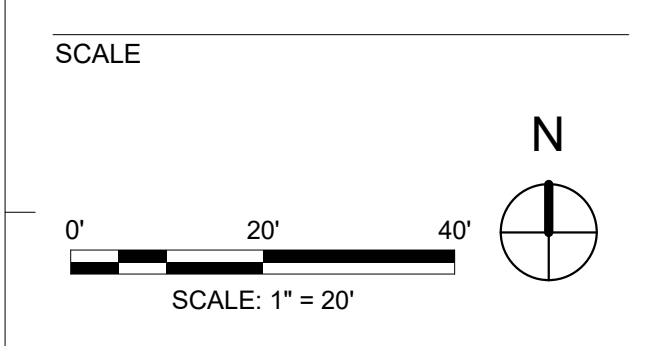
Dewberry Architects Inc.
8401 ARLINGTON BLVD
FAIRFAX, VA 22031
703.698.9050

Dewberry Engineers Inc.
8401 ARLINGTON BLVD.
FAIRFAX, VA 22031
PHONE: 703.649.0100
FAX: 703.649.0519

ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON, VA 22204
ISSUED FOR BID



KEY PLAN



REVISIONS		
NO.	DESCRIPTION	DATE

DRAWN BY: VJW
APPROVED BY: RW
CHECKED BY: CT
DATE: NOVEMBER 10, 2023

TITLE
DEMOLITION PLAN

PROJECT NO. 50156517

AD-111

SHEET NO.

01 - ELECTRICAL LEGEND			
	ELECTRIC PHOTOCCELL		KILOWATT HOUR METER
	WALL MOUNTED INCANDESCENT OR H.I.D. FIXTURE		MOLDED CASE CIRCUIT BREAKER
	EXTERIOR LIGHT FIXTURE		DRAW OUT TYPE CIRCUIT BREAKER
	120/208V PANELBOARD		
	277/480V PANELBOARD		
	TELEPHONE CABINET		
	DRY TYPE TRANSFORMER - SIZE AS INDICATED		
	BRANCH CIRCUIT WIRING CONCEALED IN CEILING OR WALL - CROSSMARKS DENOTE NUMBER OF CONDUCTORS.		
	EMT CONDUIT WITH CONDUCTORS UNDER FLOOR		
	HOME RUN TO PANELBOARD - NUMBER OF ARROWS DENOTES NUMBER OF CIRCUITS (2 SHOWN) - NUMBER OF CROSSMARKS DENOTES NUMBER OF WIRES WHEN MORE THAN TWO - GROUNDING CONDUCTOR IS NOT TYPICALLY INDICATED WITH CROSSMARK		
	GROUND CONNECTION		

02 - ELECTRICAL ABBREVIATIONS			
A	AMPS	IG	ISOLATED GROUND
AF	AMP FRAME	JB	JUNCTION BOX
A.F.F.	ABOVE FINISHED FLOOR	KVA	KILO-VOLT-AMPERES
AHJ	AUTHORITY HAVING JURISDICTION	KW	KILOWATT
ARCH	ARCHITECT	LAS	LIGHTNING ARRESTOR
AT	AMP TRIP	LTG	LIGHTING
ATC, BMS, EMCS	DIV. 15 CONTROLS	MCA	MINIMUM CIRCUIT AMPACITY
ATS	AUTOMATIC TRANSFER SWITCH	MCB	MAIN CIRCUIT BREAKER
A/V	AUDIO-VISUAL	MCC	MOTOR CONTROL CENTER
BLDG	BUILDING	+ OR MH	MOUNTING HEIGHT
C	CONDUIT	MI	MINERAL INSULATED
(C)	CEILING MOUNTED	MLO	MAIN LUGS ONLY
C/B	CIRCUIT BREAKER	MOP	MAXIMUM OVERCURRENT PROTECTION
CD	CANDELA	MS	MAIN SWITCHBOARD
CKT	CIRCUIT	(N)	NEW
COMM	COMMUNICATIONS	N.C.	NORMALLY CLOSED
CU	COPPER	NEC	NATIONAL ELECTRICAL CODE
DED.	DEDICATED	NF	NON-FUSED
DN	DOWN	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
DO	DITTO/DO OVER	NFSS	NON-FUSED SAFETY SWITCH
DPV	DRY PIPE VALVE CABINET	NIC	NOT IN CONTRACT
DWG.	DRAWING	N.O.	NORMALLY OPEN
(E)	EXISTING	NO OR #	NUMBER
EA	EACH	OCPD	OVERCURRENT PROTECTION DEVICE
EC	EMPTY CONDUIT	P	POLE
ELEV.	ELEVATOR	PE	PASSENGER ELEVATOR
EMER	EMERGENCY	Ø OR PH	PHASE
EMR	ELEVATOR MACHINE ROOM	PNL	PANEL
EMT	ELECTRIC METALLIC TUBING	RECEPT	RECEPTACLE
EPO	EMERGENCY POWER OFF	RM	ROOM
EUH	ELECTRIC UNIT HEATER	SE	SERVICE ELEVATOR
EWG	ELECTRIC WATER COOLER	SN	SOLID NEUTRAL
EWH	ELECTRIC WATER HEATER	ST	SHUNT TRIP
F	FUSE	SWBD	SWITCHBOARD
FA	FIRE ALARM	TEL	TELEPHONE
F.C.A.	FAULT CURRENT AVAILABLE	TELECOM	TELECOMMUNICATIONS
F.C.R.	FAULT CURRENT RATING	THD	TOTAL HARMONIC DISTORTION
FLUOR	FLUORESCENT	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
FPTD	FAN POWER TERMINAL DEVICE	TYP	TYPICAL
FSS	FUSED SAFETY SWITCH	UL	UNDERWRITERS LABORATORIES
F.T.L.	FEED THRU LUGS	U.N.O.	UNLESS NOTED OTHERWISE
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SOURCE
GFI	GROUND FAULT INTERRUPTER	V	VOLTS ALTERNATING CURRENT
GFP	GROUND FAULT PROTECTION	VFC	VARIABLE FREQUENCY CONTROLLER
G, GND, GRD	GROUND	(w)	WALL MOUNTED
HZ	HERTZ	W/	WITH
HP	HORSEPOWER	WP	WEATHERPROOF
IBC	INTERNATIONAL BUILDING CODE	XFMR	TRANSFORMER

03 - DRAWING REFERENCE SYMBOLS	
SYMBOL	DESCRIPTION
	TYPE TERMINAL DEVICE
	HEAT (KVA)
	EQUIPMENT NUMBER (KITCHEN, REPRODUCTION EQUIPMENT ETC., REFER TO SCHEDULES)
	GENERAL NOTE
	SPECIFIC
	REFERENCE NUMBER SECTION
	DRAWING NUMBER
	DIRECTION OF VIEW
	REFERENCE NUMBER DETAIL/PARTIAL PLAN
	DRAWING NUMBER
	LIMITS OF PARTIAL PLAN
	DETAIL REFERENCE
	DETAIL REFERENCE NUMBER
	DRAWING NUMBER
	REVISION MARK
	REVISION CLOUD

SHEET INDEX	
Sheet Number	Sheet Title
E-001	ELECTRICAL COVER SHEET
E-002	ELECTRICAL NOTES
E-101	ELECTRICAL SITE PLAN
E-102	LIGHTING PHOTOMETRIC SITE PLAN
E-501	ELECTRICAL DETAILS

Dewberry Dewberry Engineers Inc.
 8401 ARLINGTON BLVD.
 FAIRFAX, VA 22031
 PHONE: 703.949.0100
 FAX: 703.949.0518

ISSUED FOR BID 11-10-2023

DAVID WERNLI
 Lic. No. 57308
 08/04/2023
 PROFESSIONAL ENGINEER

DEWBERRY REVISIONS

NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			
SUBMITTED DATE:	DESIGNED: EH	PROJECT/FILE NO.	
8/3/2023	CHECKED: DW	LDAP23-00146	
SCALE IN FEET			
1" = 20'			
1 INCH			
VCS-83			

ARLINGTON COUNTY, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES

ELECTRICAL COVER SHEET
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **E-001** 24 OF 28

TENANT ELECTRICAL NOTES

GENERAL

- 1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES AS ADOPTED AND MODIFIED BY THE LOCAL CODE AUTHORITY. REFER TO THE ARCHITECTURAL DOCUMENTS FOR ADDITIONAL CODE AND LOCAL CODE AUTHORITY REQUIREMENTS. ALL TRADES SHALL COORDINATE ON PLACEMENT OF NEW EQUIPMENT, REFER TO THE TENANT GENERAL NOTES AND TENANT DEMOLITION NOTES FOR ADDITIONAL REQUIREMENTS.
2. ANY ARCHITECTURAL GENERAL CONDITIONS SHALL GOVERN ALL PRODUCTS AND THE EXECUTION OF WORK.
3. UNLESS NOTED OTHERWISE ALL EXISTING ELECTRICAL FIXTURES AND DEVICES SHALL REMAIN (THOSE INSTALLED UNDER PREVIOUS CONTRACT).
4. ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS, DIMENSIONS, AND METHOD OF MOUNTING FOR LIGHTING FIXTURES, FIRE ALARM DEVICES, CEILING DEVICES, RECEPTACLES, SWITCHES, EXIT SIGNS, TELEPHONE, AND DATA OUTLETS.
5. CONTRACTOR SHALL VISIT SITE PRIOR TO BID TO DETERMINE EXACT SCOPE OF WORK.
6. ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO CREATE MINIMAL POWER OUTAGES FOR THE OWNER. ALL SUCH OUTAGES SHALL BE CAREFULLY COORDINATED WITH THE OWNER SO THAT POWER TO ESSENTIAL SERVICES CAN BE MAINTAINED.
7. CONTRACTOR SHALL GUARANTEE HIS WORKMANSHIP AND ALL MATERIALS AND EQUIPMENT FOR A PERIOD OF ONE YEAR IN WRITING COMMENCING UPON ACCEPTANCE OF INSTALLATION BY OWNER.
8. CONTRACTOR SHALL MAINTAIN ACCESS, SAFETY, AND CLEANLINESS IN AREA THAT AFFECTS THE FLOW OF PEDESTRIAN TRAFFIC IN THE BUILDING, DUE TO RENOVATION.
9. THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS AND PAY ALL GOVERNMENT SALES TAXES, FEES, AND OTHER COSTS, INCLUDING UTILITY CONNECTIONS OR EXTENSIONS, IN CONNECTION WITH HIS WORK. FILE ALL NECESSARY PLANS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION; OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION OF HIS WORK AND DELIVER SAME TO THE ARCHITECT BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR WORK.
10. ALL MATERIALS AND EQUIPMENT FURNISHED FOR THIS PROJECT SHALL BE NEW EQUIPMENT SHALL BE NEW AND U.L. LISTED AS MANUFACTURED BY CUTLER HAMMER, GENERAL ELECTRIC, SQUARE D, OR SIEMENS.
11. SUBMITTALS SHALL INCLUDE LIGHTING FIXTURES, PANELBOARD, SUBMITTAL DATA SHALL CONTAIN ONLY INFORMATION RELEVANT TO THE PARTICULAR EQUIPMENT OR MATERIALS TO BE FURNISHED FOR THIS SPECIFIC PROJECT. CATALOG SHEETS WHICH DESCRIBE SEVERAL DIFFERENT ITEMS IN ADDITION TO THOSE ITEMS TO BE USED SHALL NOT BE SUBMITTED UNLESS RELEVANT INFORMATION IS CLEARLY MARKED. SIMILAR EQUIPMENT SHALL BE SUBMITTED IN ONE COMPLETE SUBMITTAL PACKAGE (I.E. ALL PANELBOARDS, ALL LIGHTING FIXTURES, ETC.). TOTAL NUMBER OF SUBMITTALS SHALL BE KEPT TO A MINIMUM.

DISTRIBUTION EQUIPMENT AND OVERCURRENT PROTECTION

- 1. MOLDED CASE CIRCUIT BREAKERS SHALL BE OPERATED BY A TOGGLE-TYPE HANDLE AND SHALL HAVE A QUICKMAKE, QUICKBREAK, OVER-CENTER SWITCHING MECHANISM THAT IS MECHANICALLY TRIP-FREE FROM THE HANDLE SO THAT THE CONTACTS CANNOT BE HELD CLOSED AGAINST SHORT CIRCUITS AND ABNORMAL CURRENTS. TRIPPING DUE TO OVERLOAD OR SHORT CIRCUIT SHALL BE CLEARLY INDICATED BY THE HANDLE AUTOMATICALLY ASSUMING A POSITION MIDWAY BETWEEN THE MANUAL ON AND OFF POSITIONS. ALL LATCH SURFACES SHALL BE GROUND AND POLISHED. POLES SHALL BE SO CONSTRUCTED THAT THEY CAN OPEN, CLOSE AND TRIP SIMULTANEOUSLY. BREAKERS SHALL BE COMPLETELY ENCLOSED IN A MOLDED CASE WITH THE AMPERE RATINGS CLEARLY VISIBLE. CONTACTS SHALL BE NON-WELDING SILVER ALLOY. BREAKERS SHALL BE UL LISTED FOR USE WITH 75°C AND 90°C INSULATED WIRE. CIRCUIT BREAKER RATINGS, MODIFICATIONS, ETC., SHALL BE AS INDICATED ON THE DRAWINGS. MOLDED-CASE CIRCUIT BREAKERS SHALL BE AS FOLLOWS:
1) THERMAL, MAGNETIC TYPE THAT PROVIDES INVERSE TIME-DELAY OVERLOAD AND INSTANTANEOUS SHORT CIRCUIT PROTECTION BY MEANS OF A THERMAL MAGNETIC ELEMENT
2) AMBIENT COMPENSATED STANDARD THAT PROVIDES INVERSE TIME-DELAY OVERLOAD AND INSTANTANEOUS SHORT CIRCUIT PROTECTION BY MEANS OF A THERMAL MAGNETIC ELEMENT. COMPENSATION SHALL ALLOW THE BREAKER TO CARRY RATED CURRENT BETWEEN 25°C AND 50°C WITH TRIPPING CHARACTERISTICS THAT ARE APPROXIMATELY THE SAME THROUGHOUT THIS TEMPERATURE RANGE
3) MULTI-POLE BREAKERS SHALL BE OF THE COMMON TRIP TYPE HAVING A SINGLE OPERATING HANDLE, EXCEPT THAT 240-VOLT MULTI-POLE BREAKERS SMALLER THAN 50-AMPERES MAY CONSIST OF FACTORY-CONNECTED, SINGLE-POLE BREAKERS WITH A COMMON TRIP HANDLE.
4) ALL CIRCUIT BREAKERS SHALL BE FULL SIZE AND BOLT-ON.

RACEWAYS AND CONDUCTORS

- 1. ALL CONDUCTORS SHALL BE COPPER. ALL CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED. CONDUCTOR SIZES #10 AWG, #12 AWG, AND #14 AWG SHALL BE SOLID. ALL CONDUCTORS SHALL BE STANDARD CODE TYPE "THW," "THWN," "THWN" OR "XHHW" INSULATED EXCEPT AS REQUIRED OTHERWISE PER THE NEC. ALL CONDUCTORS SHALL BE DURABLY MARKED ON THE SURFACE TO INDICATE RATED VOLTAGE, INSULATION CODE, USE, MANUFACTURER, AND AWG SIZE. THE COLOR CODING SHALL BE CONTINUOUS AND SHALL EXTEND TO PANELS AND MOTORS. WHERE INSULATION COLOR CODING IS NOT AVAILABLE FOR CONDUCTORS #8 AWG AND LARGER, USE COLOR CODED PLASTIC TAPE AT EACH CONDUCTOR TERMINATION. ALL #8 AWG AND SMALLER CONDUCTORS SHALL BE SPLICED WITH PREINSULATED SPRING CONNECTORS. CONNECTORS SHALL BE SCOTCHLOK, BUCHANAN B-CAP, OR APPROVED EQUAL. ALL #6 AWG AND LARGER COPPER CONDUCTORS TERMINATED ON LUGS OF PANELBOARDS SHALL BE TERMINATED WITH COPPER U.L. LISTED COMPRESSION CONNECTORS SUCH AS THOMAS & BETTS #54100 OR #54200 SERIES CONNECTORS. ALL #6 AWG AND LARGER COPPER CONDUCTOR TWO WAY SPLICES SHALL BE MADE WITH BARREL CONNECTORS REQUIRING COMPRESSION ON EACH END. ALL #6 AWG AND LARGER COPPER CONDUCTOR TAPPING AND PIGTAILING SHALL BE MADE USING "C" TYPE COMPRESSION TAPS SUCH AS THOMAS AND BETTS #54700 SERIES CONNECTORS. CONNECTOR SHALL BE U.L. LISTED FOR TYPE OF CONDUCTORS TO BE TAPPED. THE MANUFACTURERS RECOMMENDED INSTALLING TOOLS WITH REQUIRED NUMBER OF COMPRESSIONS SHALL BE USED FOR ALL TERMINATIONS.
2. ALL WIRE SIZES INDICATED ARE BASED ON DIRECT PATHS WITH 90° BENDS AS NECESSARY FROM THE OUTLET/UTILIZATION EQUIPMENT TO THE PANELBOARD, WITH A MAXIMUM 2% VOLTAGE DROP ON FEEDER CONDUCTORS AND A MAXIMUM VOLTAGE DROP OF 3% FOR BRANCH CIRCUIT CONDUCTORS. WHERE FIELD CONDITIONS DO NOT ALLOW, OR IF FOR ANY REASON THE ROUTE SELECTED IS DIFFERENT, THE WIRE SIZE AND CONDUIT IF NECESSARY SHALL BE INCREASED TO MAINTAIN THESE MINIMUM VOLTAGE DROP REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER. REGARDLESS, ALL 20 AMP, 120 VOLT HOMERUNS SHALL BE A MINIMUM #12 AWG UNLESS LENGTHS EXCEED 60', THEN CONDUCTORS SHALL BE A MINIMUM #10 AWG. ALL 20 AMP, 277 VOLT HOMERUNS SHALL BE A MINIMUM #12 AWG UNLESS LENGTHS EXCEED 165', THEN CONDUCTORS SHALL BE A MINIMUM #10 AWG.
3. THE ACTUAL NUMBER OF WIRES REQUIRED MAY NOT BE INDICATED FOR ALL CIRCUITS, ONLY THOSE WHERE CLARIFICATION IS NECESSARY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON THE DRAWINGS OR NOT AT NO ADDITIONAL COST.
4. ALL RIGID, EMT AND FLEXIBLE CONDUIT SHALL BE U.L. LISTED. ALL CONDUIT SHALL BE SUITABLE FOR THE INTENDED SERVICE AND LOCATION. ANY MATERIALS LOCATED WITHIN ENVIRONMENTAL AIR PLENUMS SHALL BE U.L. LISTED FOR THE APPLICATION OR APPROVED IN WRITING BY ALL APPLICABLE LOCAL CODE AUTHORITIES. THE CONTRACTOR SHALL COORDINATE ALL RACEWAY SYSTEM COMPONENTS AND LOCATIONS WITH ALL NEW WORK. CONTRACTOR SHALL COORDINATE WITH WORK OF OTHER TRADES. CONTRACTOR SHALL COORDINATE WITH ALL EQUIPMENT, ARCHITECTURAL AND STRUCTURAL ELEMENTS, PLENUM AND CHASE LIMITATIONS AND REQUIREMENTS OF DRAWINGS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR TIMELY PLACEMENT OF SLEEVES, CUTTING AND PATCHING OF NEW CONSTRUCTION TO FIT WORK OF THIS SECTION, LOCATION OF CHASE SPACE FOR VERTICAL ROUTING OF RACEWAY SYSTEMS AND LOCATION OF PLENUM SPACE FOR HORIZONTAL ROUTING OF RACEWAY SYSTEMS. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. DRAWINGS ARE NOT TO BE SCALED. IN PREPARATION OF THE DRAWINGS, A REASONABLE EFFORT TO COORDINATE RACEWAY SYSTEMS HAVE BEEN MADE, HOWEVER, SPACE REQUIREMENTS, EQUIPMENT ARRANGEMENTS, AND SITE CONDITIONS VARY, AND THE RESPONSIBILITY FOR ACCESS, LOCATION, PROPER FIT AND TIMELY COMPLETION RESTS WITH THE CONTRACTOR.

EXTERIOR

ALL EXTERIOR CONDUIT SHALL BE HOT DIPPED GALVANIZED STEEL OR ALUMINUM EMT WITH GALVANIZED COMPRESSION CONNECTORS, UNLESS EXPOSED TO STRIKING OR HARM AND THEN CONDUIT SHALL BE RIGID STEEL.

- 5. FURNISH JUNCTION AND PULL BOXES WHERE REQUIRED BY THE CODE OR WHERE INDICATED OR REQUIRED TO FACILITATE PULLING WIRES REGARDLESS OF WHETHER SHOWN ON THE DRAWINGS OR NOT AT NO ADDITIONAL COST. BOXES SHALL BE STEEL, HOT-DIPPED GALVANIZED AFTER FABRICATION, AND SHALL HAVE INDUSTRY STANDARD KNOCKOUTS NECESSARY TO ACCOMMODATE THE CONDUITS AT POINT OF INSTALLATION. SECTIONALIZED BOXES SHALL BE USED WHEREVER POSSIBLE TO GROUP ADJACENT DEVICES UNDER A SINGLE PLATE. ALL BOXES SHALL HAVE LUGS OR EARS INSIDE TO SECURE COVERS. OUTLET BOXES SHALL BE DEEP TYPE, FOUR INCH SQUARE, AND HAVE DEVICE COVERS WITH CENTER OPENINGS AS REQUIRED. OUTLET BOXES FOR EXPOSED SWITCHES, RECEPTACLES, AND PULL BOXES SHALL BE OF THE CAST ALUMINUM "CONDULET" TYPE, CROUSE-HINDS, STONOCO OR EQUAL. EXPOSED SHALL BE DEFINED AS LOCATED IN VIEW OF A PERSON WITHIN OR OUTSIDE OCCUPIABLE SPACE NOT CONCEALED WITHIN PLENUM OR WALL SPACES. EXPOSED SHALL INCLUDE BOTH INTERIOR AND EXTERIOR LOCATIONS WHERE SURFACE MOUNTING OR CONDUIT SUPPORTED STAND ALONE BOXES ARE REQUIRED. OUTLET BOXES IN OUTDOOR OR WET LOCATIONS SHALL ALSO HAVE GASKETED WEATHERPROOF ALUMINUM CAST-METAL COVERS WITH INDIVIDUAL GASKETED SPRING-LATCHED HINGED OUTLET COVERS. OUTLET BOXES FOR 20 AMPERE 120 VOLT OR 277 VOLT CIRCUITS SHALL HAVE A GREEN INSULATED #12 AWG SOLID COPPER CONDUCTOR GROUNDING POINT WITH GROUND SCREW.
6. THE TENANT RENOVATION EQUIPMENT GROUNDING SYSTEM SHALL CONSIST OF THE ELECTRICALLY CONTINUOUS METALLIC CONDUIT SYSTEM TOGETHER WITH INSULATED EQUIPMENT GROUNDING CONDUCTORS. EVERY ITEM OF EQUIPMENT SERVED BY THE ELECTRICAL SYSTEM SHALL BE BONDED TO THE BUILDING EQUIPMENT GROUND. THE EQUIPMENT GROUNDING SYSTEM SHALL BE DESIGNED SO ALL METALLIC STRUCTURES, ENCLOSURES, RACEWAYS, JUNCTION BOXES, OUTLET BOXES, CABINETS, MACHINE FRAMES, PORTABLE EQUIPMENT AND OTHER CONDUCTIVE ITEMS IN CLOSE PROXIMITY WITH ELECTRICAL CIRCUITS OPERATE CONTINUOUSLY AT GROUND POTENTIAL, AND PROVIDE A LOW IMPEDANCE PATH FOR POSSIBLE GROUND FAULT CURRENTS. THE SYSTEM SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE. ALL BRANCH CIRCUITS AND FEEDERS SHALL HAVE A GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH THE NEC.

LIGHTING

- 1. LIGHTING FIXTURES, REMOTE BALLASTS, REMOTE TRANSFORMERS, AND ACCESSORIES, WHETHER INDICATED IN THE LIGHTING FIXTURE SCHEDULE OR NOT AND LOCATED IN A DAMP OR WET LOCATION AS DEFINED BY THE NEC, SHALL BE U.L. LISTED FOR DAMP OR WET LOCATION ACCORDINGLY.

SHOP DRAWING SUBMITTAL REQUIREMENTS:

- 1. CONTRACTOR SHALL PROVIDE ELECTRICAL SHOP DRAWING SUBMITTAL PACKAGES AS REQUIRED FOR THIS PROJECT. THE ELECTRICAL SHOP DRAWING SUBMITTAL PACKAGE SHALL BE SUBMITTED TO THE ENGINEER UNDER ONE SUBMITTAL PACKAGE. REFER TO THE ELECTRICAL NOTES AND DOCUMENTS FOR ADDITIONAL SUBMITTAL PACKAGE INFORMATION AND REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ENGINEERING REVIEW TIME ASSOCIATED WITH THE RE-REVIEW OF INCOMPLETE AND/OR INACCURATE SUBMITTAL DATA AND FOR SUBMITTING MULTIPLE PACKAGES OF EACH DISCIPLINE. ALL SHOP DRAWING SUBMITTAL DATA WITHIN EACH SUBMITTAL PACKAGE SHALL BE CERTIFIED BY THE OWNER, PARTNER, CORPORATE OFFICER, OR OTHER PERSON DULY AUTHORIZED TO SIGN LEGALLY BINDING DOCUMENTS FOR THE CONTRACTOR(S). THE CERTIFICATION STATEMENT SHALL READ EXACTLY AS FOLLOWS:

I HEREBY CERTIFY THAT THIS SHOP DRAWING, PRODUCT DATA, AND/OR SAMPLE HAS BEEN CHECKED PRIOR TO SUBMITTAL AND THAT IT HAS BEEN COORDINATED WITH EXISTING CONDITIONS AND COMPLIES IN ALL RESPECTS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND PHYSICAL SPACE LIMITATIONS FOR THE PROJECT.

(NAME OF THE SUBCONTRACTOR)
SIGNED: _____
NAME: _____
POSITION: _____
DATE: _____

A MINIMUM PERIOD OF TWO (2) WEEKS, EXCLUSIVE OF TRANSMITTAL TIME, WILL BE REQUIRED IN THE ENGINEER'S OFFICE EACH TIME A SHOP DRAWING, PRODUCT DATA AND/OR SAMPLES ARE SUBMITTED OR RESUBMITTED FOR REVIEW. THIS TIME PERIOD WILL COMMENCE ONCE THE SHOP DRAWING, PRODUCT DATA AND/OR SAMPLES ARE RECEIVED IN THE ENGINEER'S OFFICE CONTINGENT UPON THE SHOP DRAWING, PRODUCT DATA AND/OR SAMPLES BEING RECEIVED IN THE ENGINEER'S OFFICE BEFORE 3:00 PM. IF THE SHOP DRAWING, PRODUCT DATA AND/OR SAMPLES ARE RECEIVED IN THE ENGINEER'S OFFICE AFTER 3:00 PM, THE TIME PERIOD WILL NOT START UNTIL THE NEXT BUSINESS DAY. THIS TIME PERIOD SHALL BE CONSIDERED BY THE CONTRACTOR WHEN SCHEDULING THE WORK.

SHOP DRAWING AND PRODUCT DATA - SUBMITTAL REVIEW STATUS:

SHOP DRAWING AND PRODUCT DATA SUBMITTALS WILL BE RETURNED MARKED "REVIEWED NO EXCEPTIONS", "REVIEWED EXCEPTIONS NOTED", "INFORMATION ONLY", "REVISE AND RESUBMIT", OR "REJECTED".

IF STAMPED "REVISE AND RESUBMIT" OR "REJECTED", THE SHOP DRAWING OR PRODUCT DATA SHALL BE REVISED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. IF MARKED "REVIEWED, EXCEPTIONS NOTED" DOCUMENTATION THAT ADDRESSES ONLY THE NOTED EXCEPTIONS IN THE FORM OF A LETTER, SUPPLEMENTAL INFORMATION, OR COMPLETE RESUBMITTAL SHALL BE FORWARDED TO THE OWNER, ARCHITECT AND ENGINEER FOR RECORD PURPOSES ONLY. IF MARKED "REVIEWED NO EXCEPTIONS" OR "INFORMATION ONLY" NO ADDITIONAL SUBMITTAL WILL BE REQUIRED.

IF THE COPY STAMPED "REVIEWED NO EXCEPTIONS" OR "INFORMATION ONLY" IS ALTERED FOR ANY REASON AFTER IT HAS BEEN STAMPED, THE "REVIEWED NO EXCEPTIONS" OR "INFORMATION ONLY" SHALL AUTOMATICALLY BE VOIDED AND THE SUBMITTAL STATUS REVISED TO "REVIEWED EXCEPTIONS NOTED", "REVISE AND RESUBMIT", OR "REJECTED" DEPENDING ON THE ALTERATIONS.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH SHOP DRAWINGS STAMPED "REVIEWED NO EXCEPTIONS", "REVIEWED EXCEPTIONS NOTED", OR "INFORMATION ONLY" INsofar AS THESE ARE IN AGREEMENT WITH THE CONTRACT DOCUMENTS. WHEREVER DIFFERENCES OCCUR BETWEEN THE SHOP DRAWINGS AND THE CONTRACT DOCUMENTS, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK.

ELECTRICAL DEMOLITION NOTES

- 1. THE CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.
2. WHERE EXISTING EQUIPMENT IS TO BE RELOCATED, EXTREME CARE SHALL BE TAKEN TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER. ALL ITEMS SHALL BE THOROUGHLY CLEANED, REPAIRED AND IF REQUIRED, PAINTED BEFORE BEING INSTALLED AT THEIR NEW LOCATION.
3. ALL EQUIPMENT REMOVED THAT IS NOT BEING REUSED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STORED OR DISPOSED OF AS DIRECTED.
4. EXCEPT AS OTHERWISE NOTED, ALL EXISTING ELECTRICAL WORK WHICH WILL NOT BE RENDERED OBSOLETE AND WHICH MAY BE DISTURBED DUE TO ANY CHANGES REQUIRED UNDER THIS CONTRACT, SHALL BE RESTORED TO ITS ORIGINAL OPERATING CONDITION. OTHER ELECTRICAL WORK OR MATERIAL RENDERED OBSOLETE SHALL BE ABANDONED WHERE CONCEALED AND REMOVED WHERE EXPOSED. OLD UNUSED WIRING AND DEVICES SHALL BE CONCEALED AND REMOVED WHERE EXPOSED. OLD UNUSED WIRING AND DEVICES SHALL BE REMOVED FROM THE ABANDONED (CONCEALED) CONDUITS. OUTLETS SHALL BE PROVIDED WITH BLANK COVERS. ANY CONDUITS STUBBED OUT OF MASONRY SURFACE SHALL BE CUT INTO SURFACE AND PATCHED.
5. WHERE EXISTING ELECTRICAL WORK INTERFERES WITH NEW WORK AND WHERE SUCH INSTALLATIONS ARE TO REMAIN IN USE, THE INSTALLATIONS SHALL BE DISCONTINUED AND RELOCATED AND/OR RECONNECTED TO COORDINATE WITH THE WORK INDICATED ON THE CONTRACT DRAWINGS AND AS SPECIFIED.
6. WHERE EXISTING RACEWAYS THAT ARE NOT TO BE REUSED INTERFERE WITH NEW WORK, THESE RACEWAYS SHALL BE REMOVED BACK TO THE NEAREST JUNCTION BOX OR PULL BOX AND THE OPENINGS BLANKED.
7. EXISTING RACEWAYS AND/OR WIRING MAY BE REUSED WHERE PRACTICABLE. EXCEPT AS OTHERWISE INDICATED, PANELBOARD CABINETS SHALL NOT BE USED FOR OTHER PURPOSES THAN CIRCUIT PROTECTION AND DISTRIBUTION POINTS AND SHALL NOT BE USED AS JUNCTION OR PULL BOXES.
8. ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO CREATE MINIMAL POWER OUTAGES FOR THE OWNER. ALL SUCH OUTAGES SHALL BE CAREFULLY COORDINATED WITH THE OWNER SO THAT POWER TO ESSENTIAL SERVICES CAN BE MAINTAINED.
9. CONTRACTOR SHALL MAINTAIN CONTINUITY OF BRANCH CIRCUITS SERVING MULTIPLE ITEMS OF WHICH ONE OR MORE ARE BEING DEMOLISHED. CONDUCTORS AND CONDUITS FOR THOSE ITEMS BEING DEMOLISHED SHALL BE REMOVED AS FAR AS PRACTICABLE.
10. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE ALL EXISTING ELECTRICAL EQUIPMENT NOT REUSED OR NOT NECESSARY FOR THE COMPLETION OF THIS PROJECT.
11. ALL EQUIPMENT INDICATED TO REMAIN IN PLACE SHALL REMAIN IN NORMAL OPERATION AT ALL TIMES DURING CONSTRUCTION. IF ANY BRANCH CIRCUIT WIRING FEEDING THIS EQUIPMENT IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE WITH NEW BRANCH CIRCUIT WIRING OF THE SAME SIZE AND TYPE AS EXISTING AT NO COST TO THE OWNER.
12. REFER TO THE GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.



ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES

ELECTRICAL NOTES 3108 COLUMBIA PIKE DEMOLITION 3108 COLUMBIA PIKE ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN E-002 25 OF 28

ISSUED FOR BID 11-10-2023

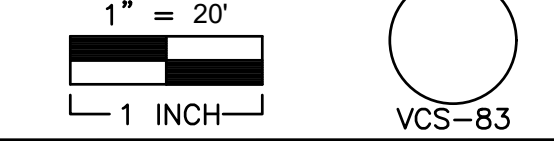


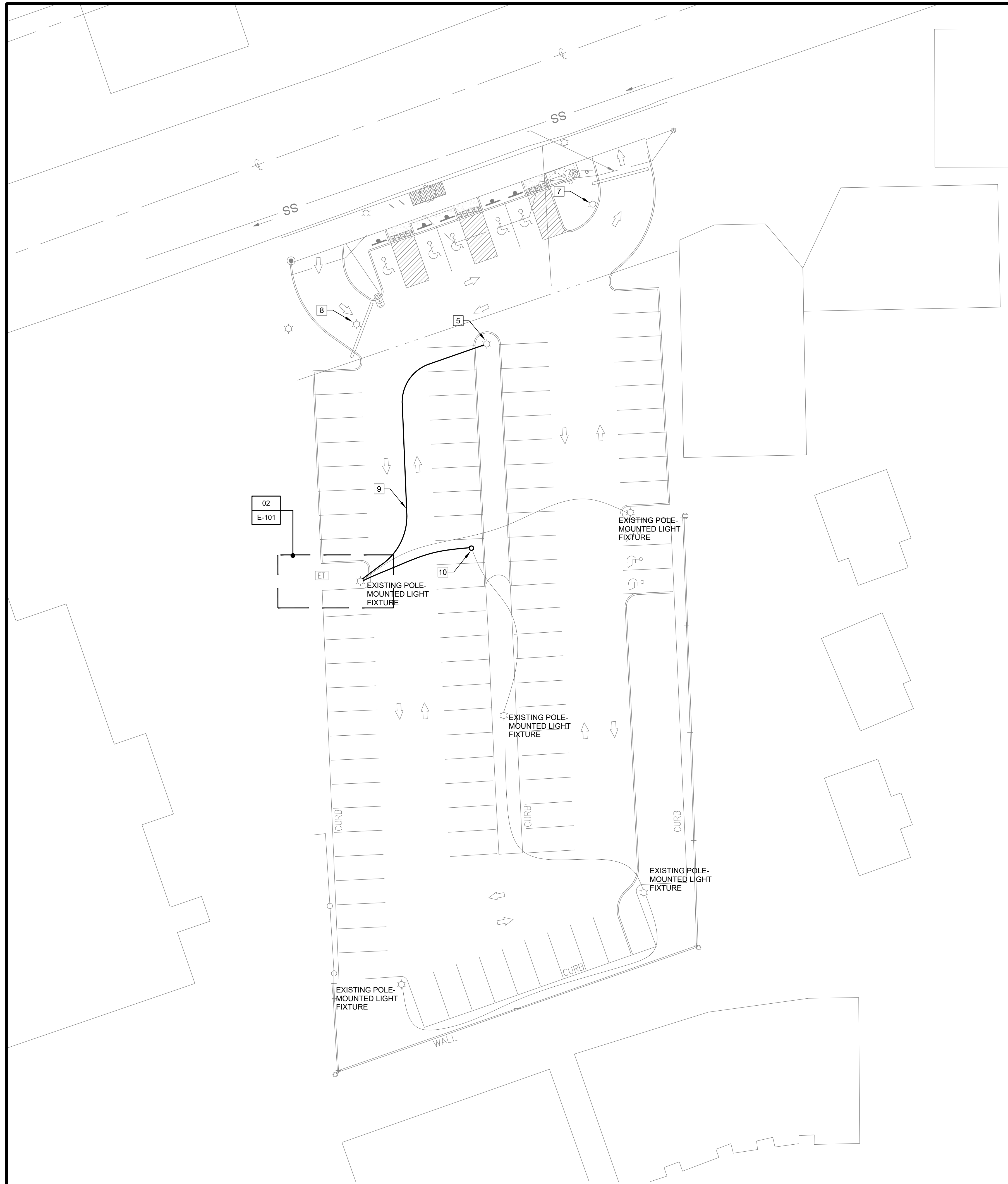
DEWBERRY REVISIONS

Table with 4 columns: NO., DATE, DESCRIPTION, BY

Table with 3 columns: SUBMITTED DATE: 8/3/2023, DESIGNED: EH, CHECKED: DW, PROJECT/FILE NO. LDAP23-00146

SCALE IN FEET 1" = 20'





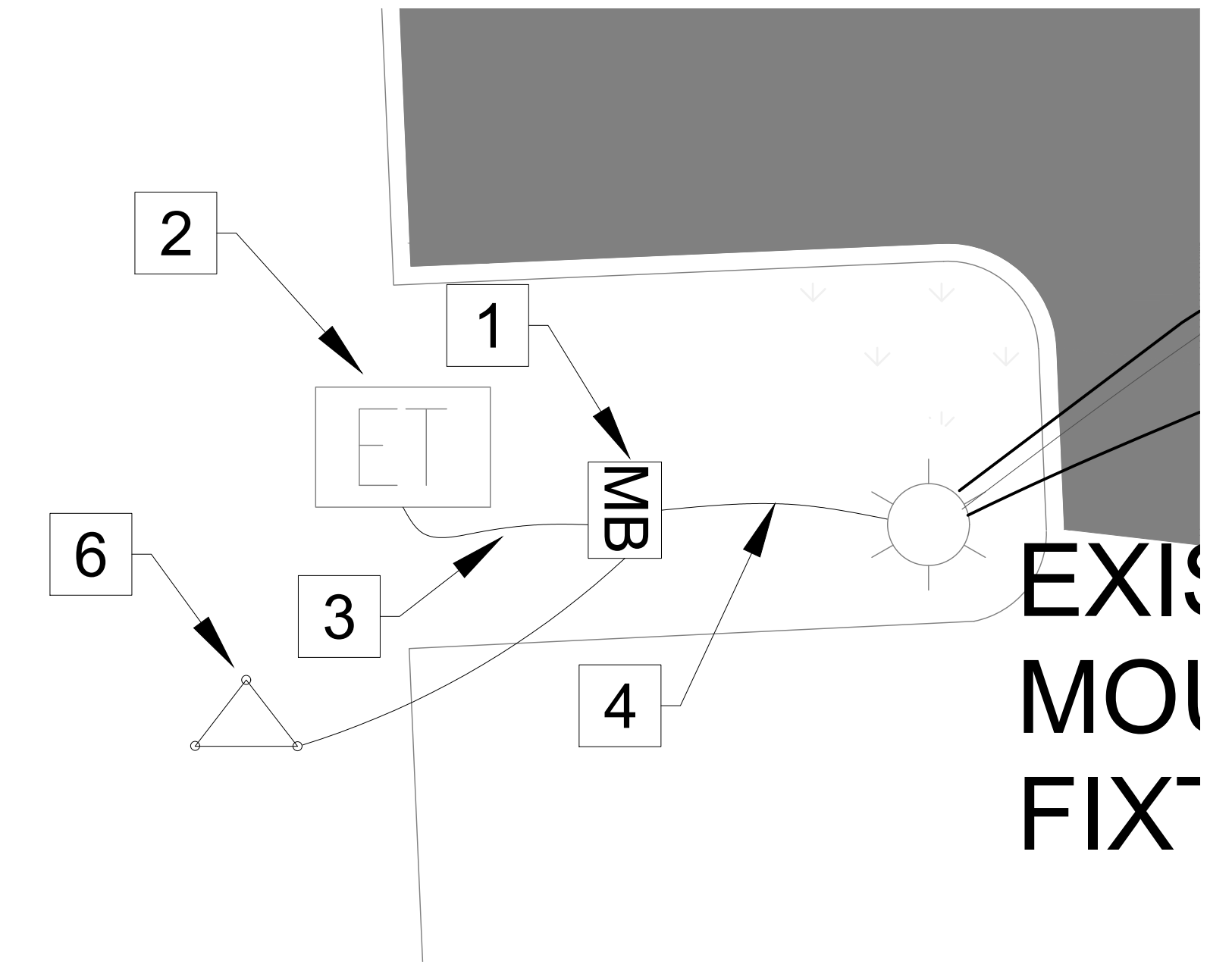
01 - ELECTRICAL SITE PLAN

GENERAL NOTES:

1. TEST PITS ARE TO BE UTILIZED FOR POLE FOUNDATIONS WITH POTENTIAL UTILITY CONFLICTS BEFORE EXCAVATION. ENGINEER OF RECORD IS TO BE NOTIFIED IF CONFLICTS ARE IDENTIFIED.
2. ALL NEW BRANCH CIRCUIT WIRING SHALL BE 2#8+#8G IN 1" SCH40 PVC CONDUIT, U.O.N. CONDUCTOR INSULATION SHALL BE TYPE XHHW OR RHW2. INSTALL MINIMUM OF 24" BELOW GRADE. PROVIDE METAL TRACE-TAPE ABOVE ALL NON-METALLIC CONDUIT.
3. CONDUIT SHOWN AS THIN AND GRAY IS EXISTING UNDERGROUND CONDUIT.

KEY NOTES:

1. PROVIDE NEW UTILITY METER BASE, SERVICE DISCONNECT, AND LOAD CENTER "P/NL-SITE". COORDINATE METER AND UTILITY INTERFACE REQUIREMENTS WITH ELECTRICAL UTILITY PROVIDER. REFER TO DETAIL 1, E-501 FOR FURTHER INFORMATION. CONFIRM VOLTAGE FOR LIGHTS IN FIELD AND COORDINATE SERVICE VOLTAGE APPROPRIATELY.
2. EXISTING UTILITY TRANSFORMER.
3. PROPOSED ELECTRICAL FROM EXISTING UTILITY TRANSFORMER. PROVIDE (2) 4" DIRECT-BURIED FROM UTILITY POLE BASE TO METER BASE LOCATION. COORDINATE EXACT REQUIREMENTS AND ROUTING WITH ELECTRICAL UTILITY. REFER TO DETAIL 3, E-501 FOR CONDUIT ARRANGEMENT, CONDUCTORS AND TIE-IN FROM UTILITY TRANSFORMER TO METER BASE BY UTILITY. COORDINATE ROUTING AND ADDITIONAL REQUIREMENTS WITH UTILITY.
4. PROVIDE CIRCUITING FOR LIGHTING FIXTURES ROUTED BELOW GRADE. PROVIDE 2#8+#8G IN 1" CONDUIT. CIRCUIT SHALL EXIT SERVICE DISCONNECT AND ROUTE TO NEAREST LIGHTING FIXTURE. MAINTAIN MINIMUM 24" OF COVER AT ALL TIMES. REFER TO DETAIL 6, E-501 FOR CONNECTION TO LIGHTING FIXTURE POLE BASE.
5. NEW LOCATION OF RELOCATED POLE-MOUNTED LIGHTING FIXTURE. REFER TO DETAIL 6, E-501 FOR MOUNTING, GROUNDING, AND CIRCUITING DETAIL.
6. PROVIDE GROUNDING ELECTRODES FROM MAIN SYSTEM BONDING JUMPER AND GROUND BUS. REFER TO DETAIL 2, E-501 FOR FURTHER INFORMATION.
7. EXISTING DUAL-HEAD LIGHT FIXTURE AND POLE SHALL BE RELOCATED. REFER TO DRAWING FOR NEW LOCATION. DEMOLISH EXISTING BASE AND ASSOCIATED CONDUIT.
8. DEMOLISH EXISTING SINGLE-HEAD LIGHTING FIXTURE, POLE AND BASE AND ASSOCIATED CONDUIT.
9. PROVIDE CIRCUITING FOR LIGHTING FIXTURES ROUTED BELOW GRADE. PROVIDE 2#8+#8G IN 1" CONDUIT. REFER TO DETAIL 6, E-501 FOR CONNECTION TO LIGHTING FIXTURE POLE BASE.
10. INTERCEPT EXISTING CONDUIT AT THIS POINT AND EXTEND CONDUIT AND CONDUCTOR USING 2#8+#8G IN 1" CONDUIT. TO EXISTING LIGHT POLE AS SHOWN IN DETAIL 01 ON THIS DRAWING.



02 - ENLARGED PLAN

Dewberry Dewberry Engineers Inc.
 8401 ARLINGTON BLVD.
 FAIRFAX, VA 22031
 PHONE: 703.949.0100
 FAX: 703.949.0518

ISSUED FOR BID 11-10-2023



ARLINGTON COUNTY, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES

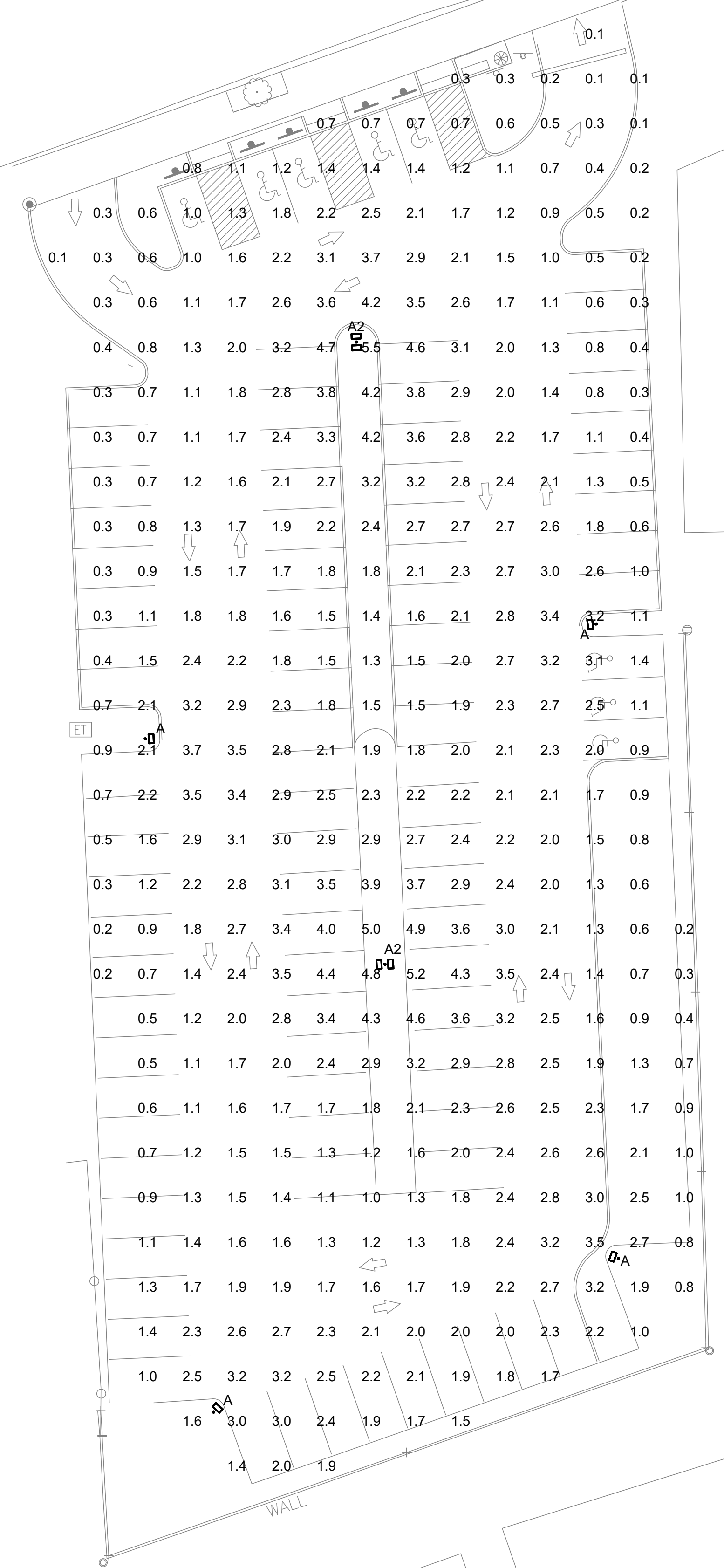
ELECTRICAL SITE PLAN
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN E-101 26 OF 28

NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			

SUBMITTED DATE: 8/3/2023 DESIGNED: EH PROJECT/FILE NO. LDAP23-00146
 CHECKED: DW

SCALE IN FEET
 1" = 20'



01 - LIGHTING PHOTOMETRIC SITE PLAN

DRAWING GENERAL NOTES :

1. LIGHTING PHOTOMETRIC DATA IS BASED ON A GENERIC LED FIXTURE WITH TYPE 3 DISTRIBUTION AND APPROXIMATELY 11,285 TOTAL LUMEN OUTPUT. ALL LIGHTING ON SITE IS EXISTING FIXTURES TO REMAIN OR BE RELOCATED, AND EXACT MODEL DATA IS NOT KNOWN AT THIS TIME.
2. PHOTOMETRIC STATISTICS ARE BASED UPON A POLE HEIGHT OF 25'.
3. CONTRIBUTIONS FROM EXISTING STREET LIGHTING AND LIGHTING FROM ADJACENT PROPERTIES ARE NOT INCLUDED IN THE PHOTOMETRIC ANALYSIS.

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	4	Lithonia Lighting	RSX2 LED P1 40K R3S	RSX Area Luminaire Size 2 P1 Lumen Package 4000K CCT Type R3S Distribution		1	RSX2 LED P1 40K R3S.ies	11285	0.8	72
	A2	2	Lithonia Lighting	RSX2 LED P1 40K R3S	RSX Area Luminaire Size 2 P1 Lumen Package 4000K CCT Type R3S Distribution		2	RSX2 LED P1 40K R3S.ies	11285	0.8	144

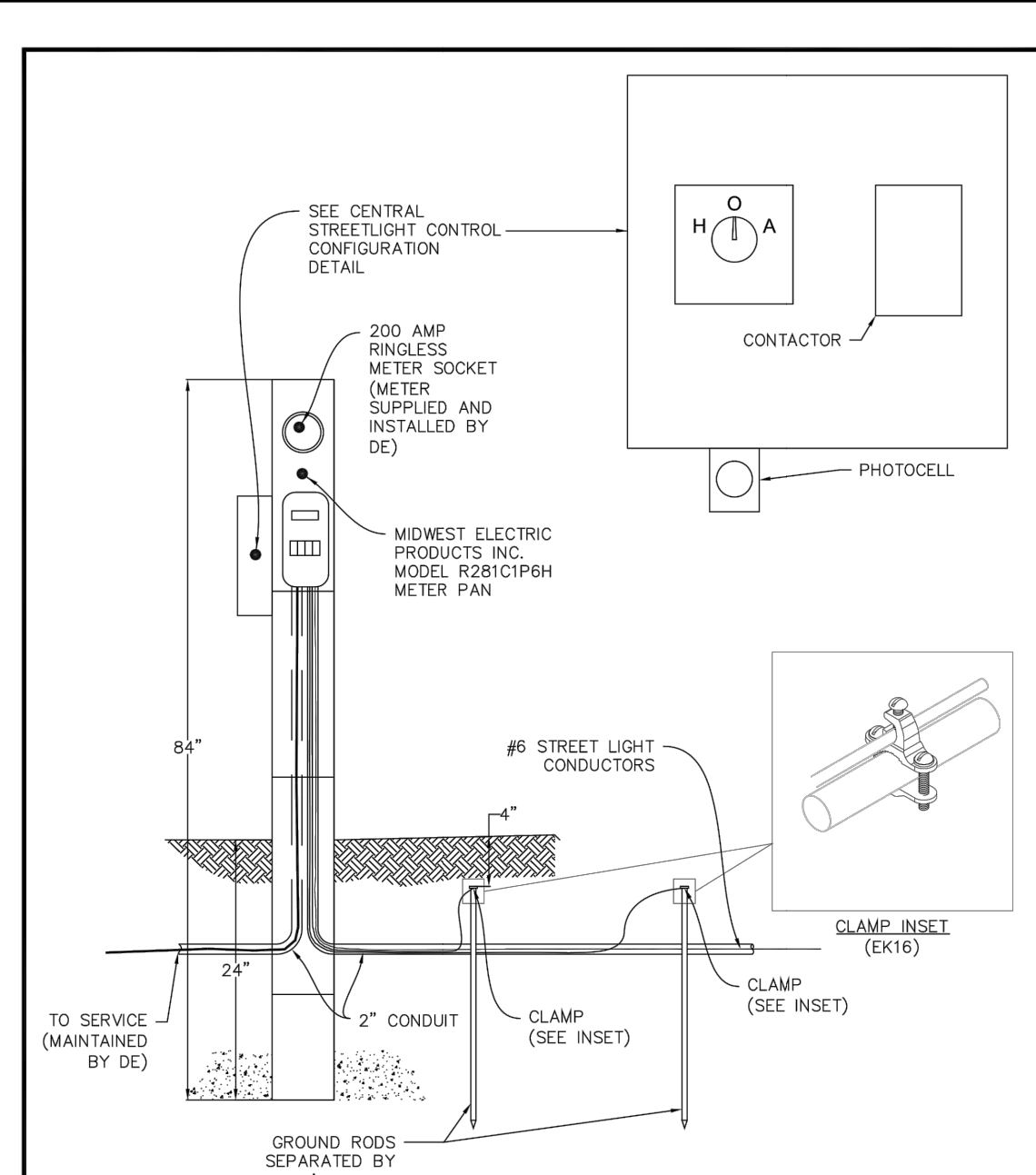
Statistics						
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking Lot	+	1.7 fc	4.9 fc	0.1 fc	49.0:1	17.0:1



ISSUED FOR BID 11-10-2023			ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	
			LIGHTING PHOTOMETRIC SITE PLAN 3108 COLUMBIA PIKE DEMOLITION 3108 COLUMBIA PIKE ARLINGTON COUNTY, VIRGINIA 22204	
		SCALE: AS-SHOWN		E-102
				27 OF 28
COUNTY REVISIONS NO. DATE DESCRIPTION BY		DEWBERRY REVISIONS		
SUBMITTED DATE: 8/3/2023		DESIGNED: EH CHECKED: DW		PROJECT/FILE NO. LDAP23-00146
SCALE IN FEET 1" = 20' 		 VCS-83		

480/277V, 1PH, 3W UTILITY SERVICE CONDUCTORS

- NOTES:
- DETAIL IS DIAGRAMMATIC ONLY. COORDINATE EXACT REQUIREMENTS WITH SITE CONDITIONS AND UTILITY.
 - PROVIDE MILBANK METER PEDESTAL, SERVICE RATED, 100A M.C.B., 480V/277, 8 POLE, 42KAIC METER PEDESTAL AND LOAD CENTER IN TYPE 3R ENCLOSURE, OR SIMILAR AS APPROVED BY ELECTRICAL UTILITY. COMPLY WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS IN ADDITION TO REQUIREMENTS OF DRAWINGS AND ELECTRICAL UTILITY. CONTRACTOR SHALL VERIFY APPROVAL OF PEDESTAL WITH ELECTRICAL UTILITY PRIOR TO PROCUREMENT.
 - PROVIDE COMPATIBLE CIRCUIT BREAKERS AS INDICATED ON ELECTRICAL LOAD SCHEDULES BELOW.
 - SERVICE DISCONNECT SHALL BE SEPARATED BY PERMANENT BARRIER FROM ADJOINING COMPARTMENTS.
 - PEDESTAL SHALL BE SET ON CONCRETE PAD. CONTRACTOR SHALL PROVIDE PAD AND BACKFILL AROUND INSTALLATION TO ENSURE PEDESTAL IS PLUMB AND PAD IS LEVEL WITH ADJACENT GRADE.
 - ENSURE ADEQUATE WORKING SPACE AS REQUIRED BY NEC 110.26 IS MAINTAINED UPON COMPLETION.

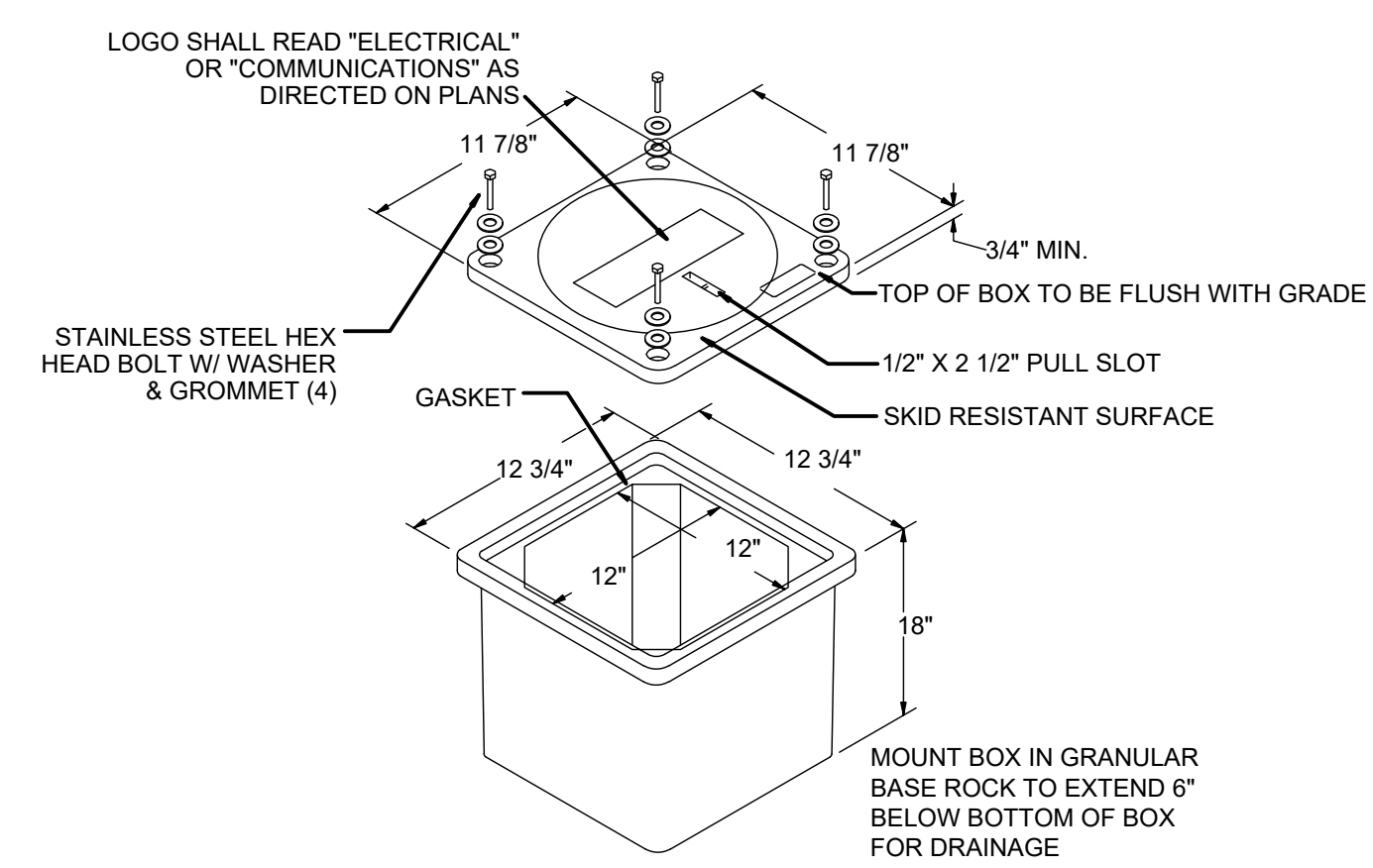


NOTES:

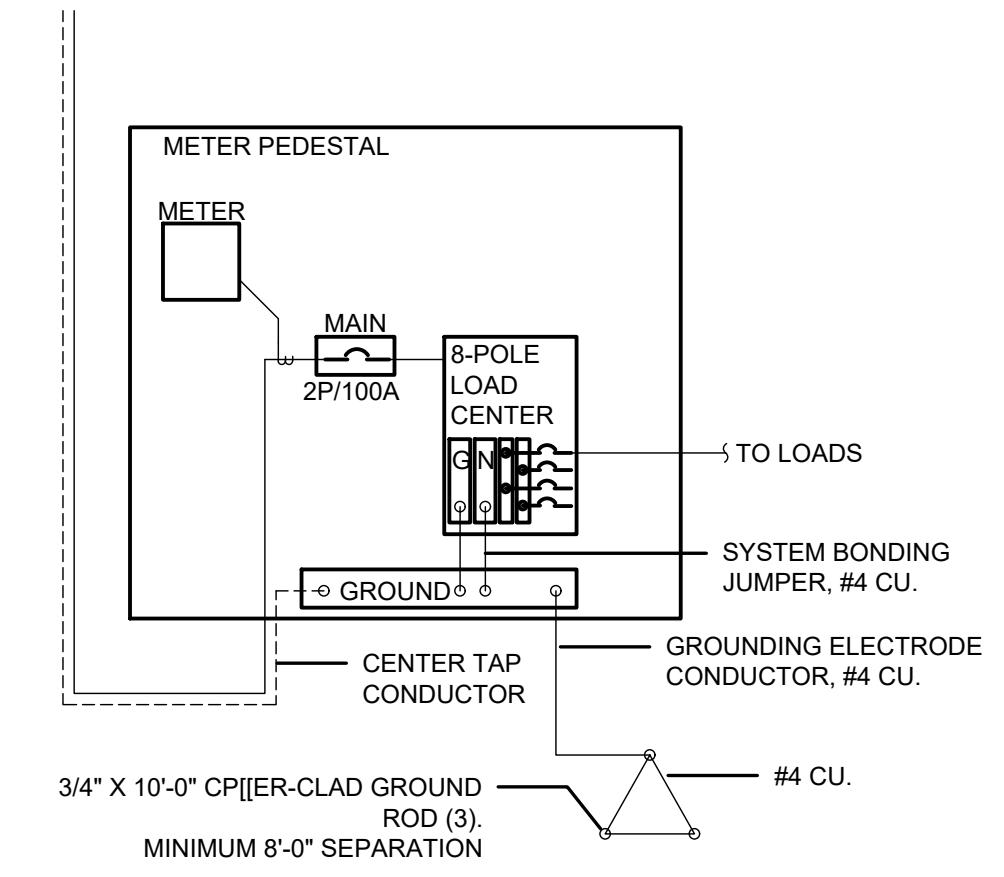
- RESISTANCE TEST SHALL BE CARRIED OUT DURING THE METER PEDESTAL INSTALLATION.
- MAXIMUM RESISTANCE SHALL NOT EXCEED 25 OHMS.

ELECTRICAL SERVICE		REVISION & DATE
ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES		DRAWING NO. 14100-01

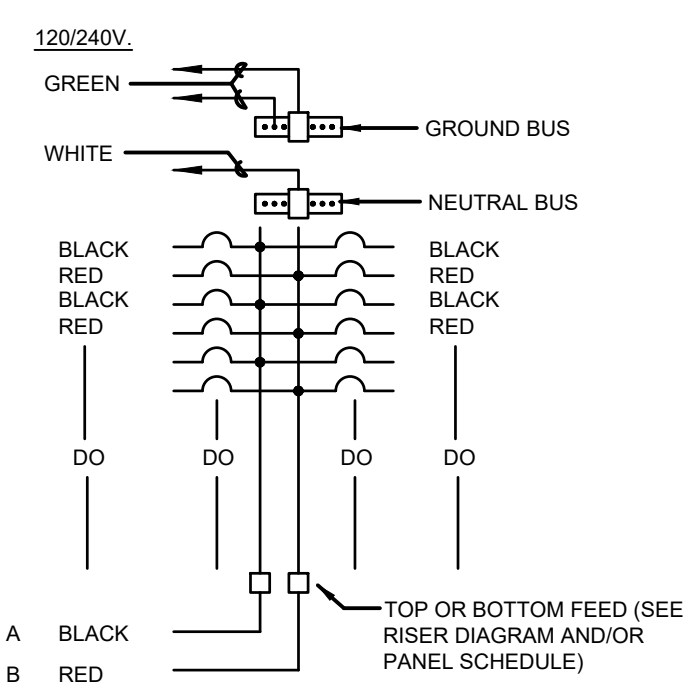
1 METER PEDESTAL DETAIL
NOT TO SCALE



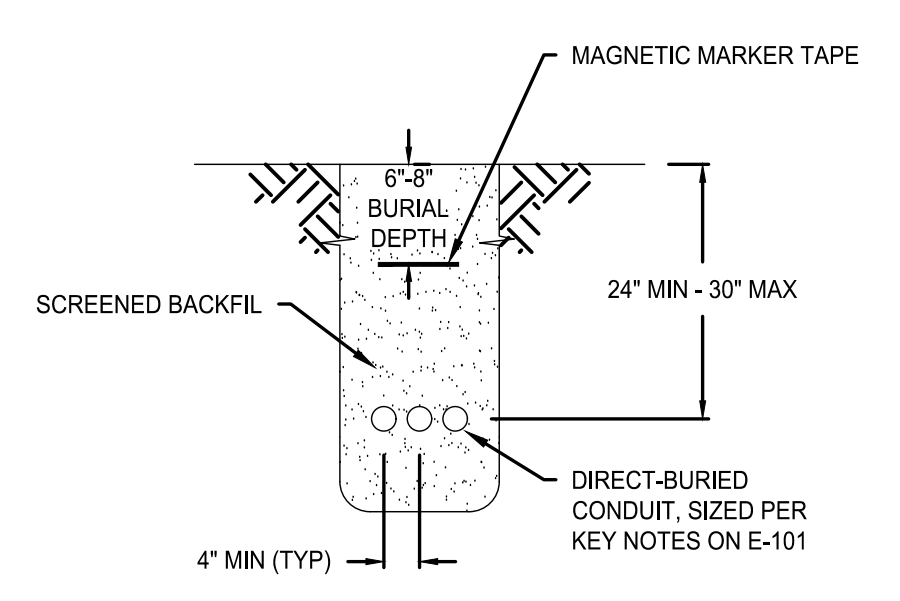
7 ELECTRICAL HAND HOLE DETAIL
NOT TO SCALE



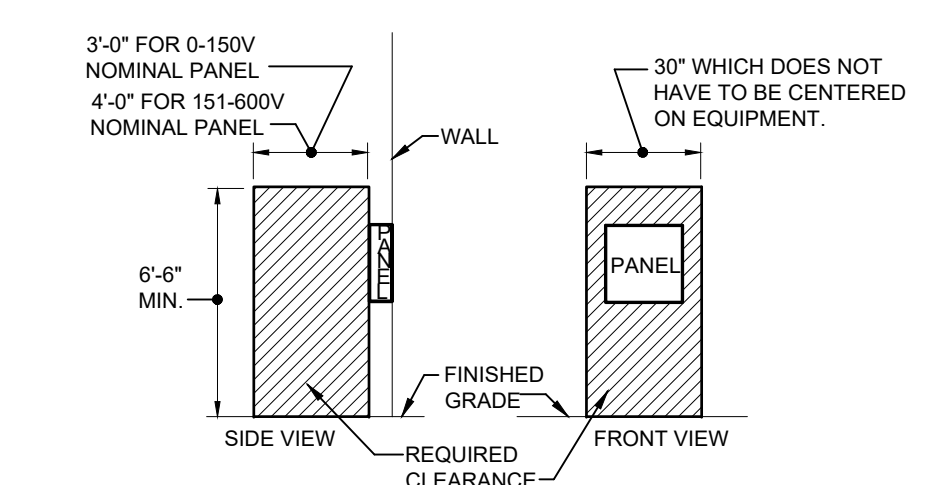
2 ELECTRICAL DISTRIBUTION AND GROUNDING DIAGRAM
NOT TO SCALE



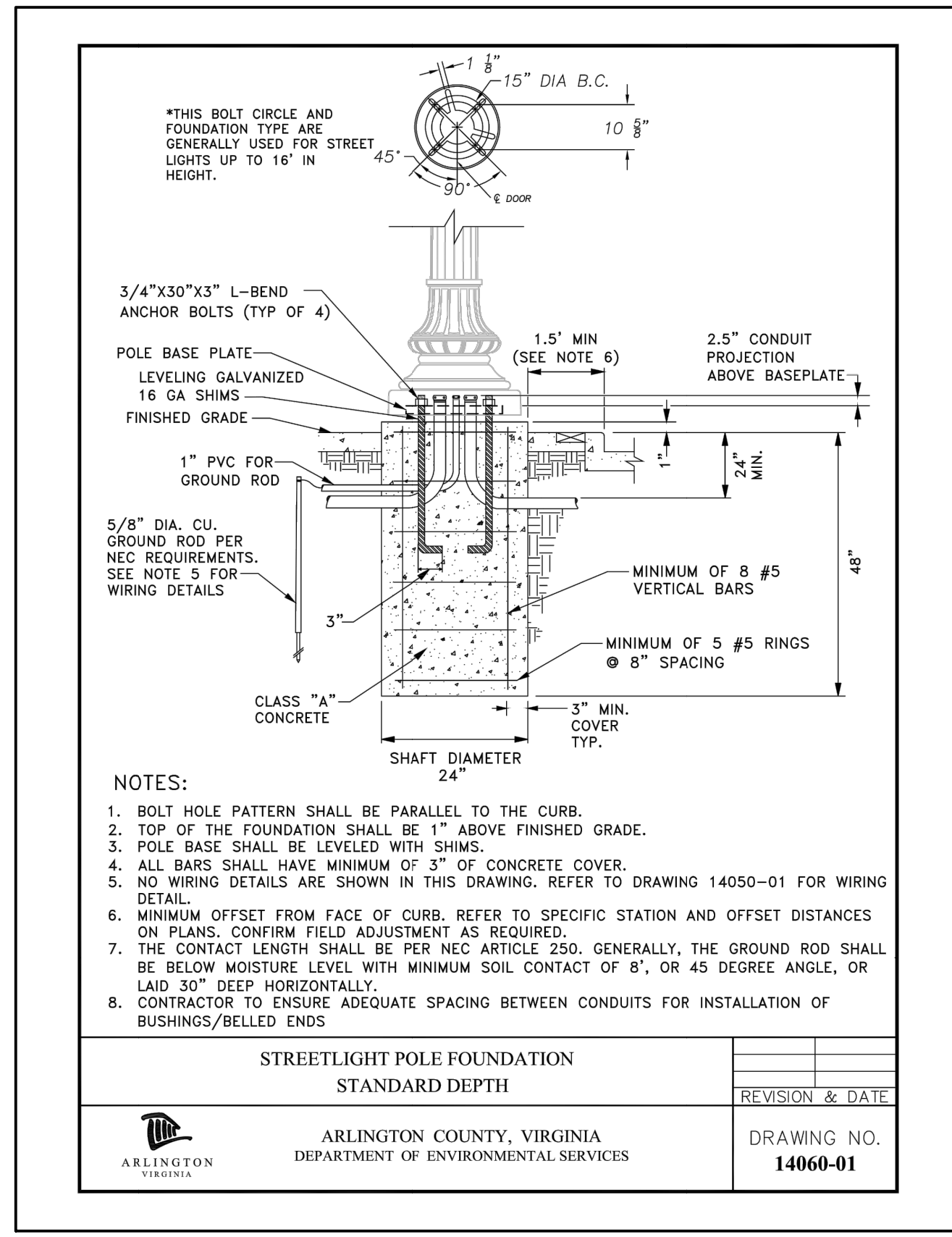
4 ELECTRICAL PANEL COLOR CODE DETAIL
NOT TO SCALE



3 ELECTRICAL DIRECT BURIED CONDUIT
NOT TO SCALE



5 TYPICAL PANELBOARD CLEARANCE DETAIL
NOT TO SCALE



6 LIGHTING POLE BASE DETAIL
NOT TO SCALE

PANEL L1A1																
CONDUIT SIZE		WIRE SIZE	SERVING	KVA AD	KVA BD	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA AD	KVA BD	SERVING	WIRE SIZE	CONDUIT SIZE
3/4"	2#8	PARKING LTG.	1.50		2P-20	1	C			2	1P-20			SPARE		
		SPARE		1.50		3	C			4	1P-20			SPARE		
		SPARE			1P-20	5				6				SPACE		
		SPARE			1P-20	7				8				SPACE		

CONNECTED KVA		NEC DEMAND FACTOR	DEMAND (kVA)
CONTINUOUS LOADS (C)	3.00	125%	3.75
NON-CONTINUOUS LOADS (NC)	0.00	100%	0.00
RECEPTACLES LOADS (R)	0.00	10KVA + 50%	0.00
KITCHEN LOADS (K)	0.00	100%	0.00
LARGEST MOTOR (LM)	0.00	125% OF LARGEST	0.00
ELEVATOR (EL)	0.00	100%	0.00

FEED THRU LUGS: AD, BD, UTILITY METER BASE
L1A1 TOTAL 3 KVA
TOTAL CONNECTED = 3 KVA
TOTAL DEMAND = 4 KVA

NOTES:
-SUB-PANEL LOADS ARE INCLUDED IN THE CONNECTED AND DEMAND CALCULATIONS.
-THE LOAD DESCRIPTION IN THE PANEL DIRECTORY CARD FOR EACH CIRCUIT SHALL HAVE DETAIL TO ALLOW EACH CIRCUIT TO BE DISTINGUISHABLE FROM ALL OTHERS.
-THE PANEL SHALL BE MARKED TO INDICATE THE DEVICE OR EQUIPMENT WHERE THE POWER SUPPLY ORIGINATES.
-THE PANEL SHALL BE LEGIBLY MARKED WITH THE MAXIMUM AVAILABLE FAULT CURRENT, INCLUDING THE DATE THE CALCULATION WAS PERFORMED.

8 ELECTRICAL HAND HOLE DETAIL
NOT TO SCALE



ISSUED FOR BID 11-10-2023			ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	
			ELECTRICAL DETAILS 3108 COLUMBIA PIKE DEMOLITION 3108 COLUMBIA PIKE ARLINGTON COUNTY, VIRGINIA 22204	
		DEWBERRY REVISIONS		SCALE: AS-SHOWN
				E-501
				28 OF 28
NO. DATE DESCRIPTION BY				
COUNTY REVISIONS				
SUBMITTED DATE: 8/3/2023		DESIGNED: EH CHECKED: DW		PROJECT/FILE NO. LDAP23-00146
SCALE IN FEET 1" = 20' 1 INCH VCS-83				



COMMONWEALTH of VIRGINIA
DEPARTMENT OF LABOR AND INDUSTRY

Gary G. Pan
 COMMISSIONER

Main Street Centre
 600 East Main Street, Suite 207
 Richmond, Virginia 23219
 PHONE (804) 371-2327
 FAX (804) 371-6524

Virginia Department of Labor and Industry Wage Determination Decision

Project Name	3108 Columbia Pike Demolition
County Project Code	24-DES-ITBPW-487
DOLI Project Number	ARLC-23-0026 UPDATE
County or Independent City	Arlington County
Publication Date	03/04/2024
Construction Type	Highway

Wage Determinations	Wage	Fringe
Carpenter, Includes Form Work	\$20.97	
Cement Mason/Concrete Finisher	\$20.70	\$8.03
Electrician, Includes Traffic Signalization	\$30.55	\$11.51
Fence Erector	\$15.28	
Ironworker, Reinforcing	\$34.18	
Ironworker, Structural	\$34.18	
Laborer: Asphalt, Includes Raker, Shoveler, Spreader and Distributor	\$19.06	\$1.75
Laborer: Common or General	\$21.94	\$8.32
Laborer: Grade Checker	\$14.88	
Laborer: Pipelayer	\$20.48	
Laborer: Power Tool Operator	\$15.69	
Operator: Asphalt Spreader and Distributor	\$20.58	\$2.31
Operator: Backhoe/Excavator/Trackhoe	\$23.93	

Wage Determinations	Wage	Fringe
Operator: Bobcat/Skid Steer/Skid Loader	\$19.00	\$3.49
Operator: Broom/Sweeper	\$17.40	\$2.01
Operator: Bulldozer, Including Utility	\$20.64	
Operator: Crane	\$29.46	
Operator: Drill	\$24.89	
Operator: Gradall	\$19.26	
Operator: Grader/Blade	\$23.21	
Operator: Hydroseeder	\$16.64	
Operator: Loader	\$18.92	
Operator: Mechanic	\$22.84	
Operator: Milling Machine	\$23.19	\$2.94
Operator: Pavement Planer	\$21.14	
Operator: Pavement Planer Groundsmen	\$19.75	
Operator: Paver (Asphalt, Aggregate, and Concrete)	\$20.33	\$2.81
Operator: Piledriver	\$21.83	\$4.08
Operator: Roller	\$18.92	
Operator: Roller (Finishing)	\$18.73	\$3.23
Operator: Screed	\$22.13	\$4.89
Pavement Marking Operator	\$22.16	
Pavement Marking Truck Driver	\$18.78	
Traffic Control: Flagger	\$13.64	
Traffic Sign Mechanic	\$23.00	
Truck Driver: 1/Single Axle Truck	\$19.35	
Truck Driver: Fuel and Lubricant Service	\$18.25	
Truck Driver: Heavy 7CY & Under	\$15.53	
Truck Driver: Heavy Over 7CY	\$18.05	
Truck Driver: Multi Axle	\$20.34	\$2.89

Additional Notes

All wage rates to be used on a contract will be set at the time the contract is awarded. While DOLI maintains a list of wage determinations online for reference purposes, only the wage determinations made in an official Wage Determination Decision, sent by DOLI to the contracting agency, can be used to ascertain the exact rates to be paid for a specific contract.

All rates are determined by DOLI and any appeals of specific classifications may be made through the Wage Determination Appeal form available at <http://www.doli.virginia.gov/wp-content/uploads/2021/04/Appeal-for-Wage-Determination-Clarification.pdf>

Any additional classifications may be requested through the Additional Wage Classification form available at <http://www.doli.virginia.gov/wp-content/uploads/2021/04/Request-for-Additional-Wage-Classification.pdf>

Understand your duties as a contractor under Virginia law by referencing our Contractor Responsibilities information sheet available at <http://www.doli.virginia.gov/wp-content/uploads/2021/04/PREVAILING-WAGE-CONTRACTOR-RESPONSIBILITIES.pdf>

Your employees have specific rights, which can be found on our List of Employee Rights information sheet available at <http://www.doli.virginia.gov/wp-content/uploads/2021/04/PREVAILING-WAGE-EMPLOYEE-RIGHTS.pdf>
Any further questions should be directed to PrevailingWage@doli.virginia.gov



Pre-Demolition Limited Regulated Hazardous Materials Survey Report

for

**Commercial Office with Attached Bank Branch
3108 Columbia Pike
Arlington, VA 22206**

Prepared for

**Department of Environmental Services – Facilities Design & Construction
1400 N. Uhle Street, Suite 403
Arlington, VA 22201**



Prepared by

**JSK Environmental Consulting, LLC
13130 Peach Leaf Place
Fairfax, VA 22030**

June 6, 2022

JSK Project Number JSK-2022-28



June 6, 2022

Arlington County Government
2100 Clarendon Blvd, Suite 511
Arlington, VA 22201

Attn: Ms. Maire Bourque
Facilities Project Specialist
Phone: 703-228-3988
E-mail: MBourke@arlingtonva.us

Sub: Pre-Demolition Limited Regulated Hazardous Materials Survey Report
Commercial Office with Attached Bank Branch
3108 Columbia Pike
Arlington, VA 22206
JSK Project Number JSK-2022-28

Dear Ms. Bourque:

JSK Environmental Consulting, LLC (JSK) performed the Pre-Demolition Regulated Hazardous Materials Survey that you requested. This included a Limited Pre-Demolition Asbestos, Lead-based Paint and Hazardous Materials Survey at the subject property. JSK provided its services in general accordance with our proposal (JSK Proposal No.: JSK-2022-31), dated April 16, 2022.

JSK thanks you for choosing us as your consultant for this project. Please contact us at 703-980-0573 if you have any questions or we may be of further service.

Respectfully Submitted,

JSK ENVIRONMENTAL CONSULTING, LLC.

A handwritten signature in black ink that reads "Nand Kaushik". The signature is written in a cursive style.

Nand Kaushik
Principal

TABLE OF CONTENTS

1	EXECUTIVE SUMMARY	1
2	INTRODUCTION	5
	2.1 SCOPE OF SERVICES	5
	2.2 PURPOSE	6
	2.3 AUTHORIZATION	6
	2.4 LIMITATIONS	6
	2.5 WARRANTY	7
3	GENERAL BUILDING AND SURVEY INFORMATION	9
	3.1 BUILDING INFORMATION.....	9
	3.2 INSPECTION INFORMATION.....	9
4	METHODOLOGY.....	10
	4.1 RECORD DOCUMENT REVIEW.....	10
	4.2 ASBESTOS SURVEY METHODOLOGY	10
	4.3 LEAD-BASED PAINT SURVEY METHODOLOGY.....	12
	4.4 OTHER HAZARDOUS MATERIALS SURVEY METHODOLOGY.....	13
5	FINDINGS.....	14
	5.1 ASBESTOS RESULTS	14
	5.2 LBP SCREENING RESULTS	21
	5.3 OTHER HAZARDIOUS MATERIALS SURVEY RESULTS	22
6	CONCLUSIONS & RECOMMENDATIONS	26
	6.1 CONCLUSIONS.....	26
	6.2 RECOMMENDATIONS	26

LIST OF APPENDICES

- APPENDIX A – REPORT OF BULK SAMPLE ANALYSIS FOR ASBESTOS AND CHAIN OF CUSTODY
- APPENDIX B – SITE LAYOUT AND SAMPLE LOCATION DRAWING
- APPENDIX C – XRF FIELD LOG FOR THE LEAD BASED PAINT SURVEY AND LOCATION DRAWINGS
- APPENDIX D – INSPECTOR AND LABORATORY CERTIFICATIONS
- APPENDIX E – PHOTOLOG of ACM, LBP AND HAZARDOUS MATERIALS

1 EXECUTIVE SUMMARY

JSK Environmental Consulting, LLC was retained by the Arlington County Government to conduct a pre-demolition regulated materials survey that included asbestos-containing materials (ACM), limited lead-based paint (LBP) screening, polychlorinated biphenyls (PCBs), and a visual hazardous materials survey within the subject property located at 3108 Columbia Pike in Arlington, Virginia. The subject property was a former commercial office with an attached Bank Branch. It is currently not operational. The survey was conducted on May 20, 2022, by Mr. Michael Allshouse, EPA-accredited and State of Virginia licensed asbestos inspector and LBP risk assessor and Mr. Nand Kaushik, EPA-accredited and State of Virginia licensed asbestos inspector.

The subject property is improved with a three-story office building that also includes a mezzanine area and a basement level. Common areas at the subject property consist of the small lobby, basement, elevator cab, stairwells, corridors, and elevator lobbies. In addition, restrooms are provided on each floor except for bank level. Corridor finishes consist of vinyl and carpet flooring, painted gypsum board walls, and acoustical tile ceilings. Common area finishes consist of tile flooring, painted gypsum board walls, and acoustical tile ceilings. All spaces are currently vacant. Former tenant occupancy included whole-floor tenants and multi-floor tenants. At one time it appeared the building was configured for five tenants. The tenant space flooring consists of carpet, ceramic tile, wood plank and vinyl sheet or vinyl tile. Walls are typically painted gypsum board with some areas of vinyl wall covering and stone panels in the bank space are also present. Ceilings are typically suspended acoustic tiles. It appears that the construction of the building dates back to 1961. JSK understands that the client plans to demolish the building.

The Regulated Hazardous Material survey was conducted within the building that is proposed to be demolished. The purpose of the regulated material survey was to identify the presence of ACM, LBP, PCB, and other hazardous materials (petroleum products, VOC's, or other materials and chemicals labeled "hazardous") in exposed and/or accessible areas within the structure

Asbestos Survey Summary

The asbestos inspection and sampling were conducted on May 20, 2022, by asbestos inspectors Mr. Michael Allshouse and Mr. Nand Kaushik.

A total of 51 samples were collected from 24 suspect homogenous materials (HM) from the interior, exterior and the roof of the residential building during the asbestos survey. The samples were analyzed by polarized light microscopy (PLM). The U.S. Environmental Protection Agency (EPA), the U.S. Occupational Safety and Health Administration (OSHA) and State of Virginia define an ACM as any material containing greater than one percent (>1%) asbestos.

Laboratory analysis indicated the following ACMs at the subject property building:

- **Silver Roof Vent Coating (HM3)** located on the building roof.
- **9" by 9" brown vinyl floor tile with black mastic (HM7)** located all throughout the stairwell (on west side), and throughout Mezzanine Level and portions of the 3rd Floor.
- **Gray Pebble Pattern Resilient Sheet Flooring over Brown Vinyl Floor tiling with black mastic (HM10)** located in the Building Main Floor Corridor near Elevator.

- **9" by 9" White Vinyl Floor Tile with Black Mastic (HM18)** located in the Building Mezzanine Floor, Office Space
- **12" by 12" White Mottled Vinyl Floor Tile with Black Mastic and Gray/White Leveling Compound (HM19) (only the black mastic was found to be asbestos-containing)**, located throughout the building 2nd floor.
- **9" by 9" Green Vinyl Floor Tile with Black Mastic (HM20)** located throughout the Building stairwell on East Side.
- **Tan carpet glue with black mastic (HM21)** located throughout the Building 3rd floor Office Areas.
- **White Setting Bed with Black Mastic (HM22)** located in the Building 3rd Floor Break Room on West Side and throughout the 3rd floor office areas.
- **12" by 12" Gray/Black Specs Vinyl Floor Tile with Yellow Mastic over Gray Vinyl Floor Tile with Black Mastic over Gray Vinyl Floor Tile with Yellow Mastic over Cream Resilient Floor Sheet with Black Mastic (HM23), (only the black mastic was found to be asbestos-containing)**, located in the Building 3rd Floor Office Space on Northwest Corner.
- **Gray Interior Window Glazing (HM24)** located in the interior windows on the 3rd floor and throughout the building.

As evidenced from the above results, the black mastic that is present in the flooring throughout the building was found to be asbestos containing. In many locations the flooring has been built up over the years when renovation activities were conducted, and the mastic is found within those layers. JSK did not observe any assumed ACMs within the facility.

Limited Lead-Containing Paint Screening

In 1978, the Consumer Product Safety Commission banned the sale of lead-based paint to consumers, and its application to areas where consumers have direct access to painted surfaces. As a result of this ban, buildings painted prior to 1978 are suspected of containing leaded paint. The EPA and the U.S. Department of Housing and Urban Development (HUD) define a LBP as any coating having 0.5% lead by weight with laboratory analysis.

The LBP testing was performed using an x-ray fluorescence analyzer (XRF) to test painted, stained, or varnished interior permanent building components for the presence of lead. In addition, a visual assessment for paint condition was conducted in all rooms. The limited LBP Inspection was conducted in general accordance with the U.S. Department of Housing & Urban Development (HUD) "Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing", 2012 Edition (HUD Guidelines) to identify LBP. While the HUD Guidelines were developed specifically for housing, both the Virginia Department of Environmental Quality (DEQ) and the U.S. Environmental Protection Agency (EPA) references these guidelines when testing for LBP in many facilities. According to DEQ Regulations, paint or varnishes are considered to be "lead-based" if lead levels of 1.0 mg/cm² or greater are measured using an XRF.

A total of 112 XRF readings, including calibrations, were performed. This survey was limited in nature and was not intended to be a comprehensive survey of all painted components within the facility. The condition of the painted surfaces was found to be generally in an intact condition. However, the exterior painted surfaces were generally in a deteriorated condition. The results of the XRF survey are discussed in more details in Section 5.2 A total of nine (9) XRF readings of component coatings, from the structures, tested had XRF readings equal to or greater than the "positive" classification of 1.0 mg/cm². Of these, two were interior components and the remaining 7 were exterior component surfaces. This is summarized below:

Interior Readings

- Cream wooden stair riser in the stairwell on the east side leading from the 1st floor to the 2nd floor: Reading of 5.8 mg/cm². The paint on this was in a deteriorated condition (10%).
- Cream metal stair riser in the stairwell on the east side leading from the 2nd floor to the 3rd floor: Reading of 3.4 mg/cm². The paint on this was in an intact condition.

Exterior Readings

- White metal column at the building rear entrance: Reading of 1.3 mg/cm². The paint on this was in a deteriorated condition (10%).
- Cream metal I-beam at the building rear entrance: Reading of 1.7 mg/cm². The paint on this was in a deteriorated condition (25%).
- Cream metal I-beam at the building front entrance: Reading of 1.8 mg/cm². The paint on this was in a deteriorated condition (10%).
- White metal window lintel at the building front entrance: Reading of 2.1 mg/cm². The paint on this was in an intact condition.
- White metal column at the building front entrance: Reading of 1.3 mg/cm². The paint on this was in a deteriorated condition (20%).
- Cream metal door casing at the building side entrance (East side): Reading of 1.2 mg/cm². The paint on this was in a deteriorated condition (10%).
- Cream metal door lintel at the building side entrance (East side): Reading of 1.7 mg/cm². The paint on this was in a deteriorated condition (5%).

Polychlorinated Biphenyls (PCBs) Caulking and Sealants Survey Summary

EPA regulations implementing the Toxic Substance Control Act (TSCA) prohibit the use of PCBs in caulk and other building materials manufactured with PCBs at levels greater than or equal to 50 ppm, including the continued use of such materials that are already in place.

JSK observed that the windows and the metal window frames did not have any caulking around them. Therefore, no caulk samples were collected for analysis of PCB's.

Other Hazardous Material Survey Summary

The purpose of this limited visual survey for other hazardous materials was to provide general information for this facility regarding the presence of suspect hazardous materials and chemicals. A visual survey was conducted to provide general information for this facility regarding the presence of suspect hazardous materials.

The following materials were considered suspect:

- Fire/emergency lights throughout the subject property (total of 5)
- Smoke detectors throughout the subject property (total of 6)
- Fire extinguishers throughout the subject property (total of 12)
- Fire alarm system on the Building 1st floor.
- Mercury thermostats, mainly on the building 1st floor.

- Fluorescent lighting throughout the subject property. The lights were electronic with non PCB-containing ballasts.
- Motion Sensors.
- Few paint cans in the basement levels along with trash and debris.

This summary does not contain all the information presented in the full report. The report should be read in its entirety to obtain a more complete understanding of the information provided and to aid in any decisions made or actions taken based on this information

2 INTRODUCTION

JSK Environmental Consulting, LLC was tasked by the Arlington County Government, Department of Environmental Services (DES), Facilities Design and Construction Department to conduct a pre-demolition regulated Hazardous Materials survey at the subject property located at 3108 Columbia Pike in Arlington, Virginia. The subject property was a former commercial office with an attached Bank Branch. It is currently not operational. The survey was completed by a USEPA accredited and state of Virginia-licensed asbestos inspector and LBP risk assessor.

This survey report is organized into the following sections:

- Section 3 discusses the General Building and Survey Information.
- Section 4 discusses the Methodology.
- Section 5 discusses survey findings.
- Section 6 discusses conclusions and recommendations from the survey.

The following appendices were added to this report as supplemental information:

- Appendix A contains the laboratory report of the bulk sample analysis for asbestos and chain of custody.
- Appendix B contains a schematic layout of the facility and sample collection locations.
- Appendix C contains the XRF Field Log for the LBP survey and a schematic layout of the facility showing LBP locations.
- Appendix D contains the inspector and laboratory certifications; and
- Appendix E contains the Photo log of the asbestos samples collected from the facility, the LBP locations and hazardous materials identified at the subject property.

2.1 SCOPE OF SERVICES

The scope of services for this project consisted of conducting an asbestos, lead paint PCBs, and other hazardous materials survey, including inspection, sampling and analysis of accessible and exposed interior areas at the subject building that will be impacted by the demolition operations, including exterior materials and the roof.

The investigation included a review of client provided records or documents (if available), visual inspection of the subject area(s), asbestos sample collection, PLM asbestos sample analysis, quantification of ACMs, LBP assessment, and report preparation and review. No sampling was conducted for other suspect hazardous materials within the scope of this investigation.

Asbestos Survey

This survey was intended to identify all asbestos containing materials (ACM) as required by the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP), the US Occupational Safety and Health Administration (OSHA) and the State of Virginia. Additional information relative to friability, quantity and condition is also provided to assist the owner or his representative in the appropriate decisions involved with renovation and demolition. Regulations pertaining to asbestos renovation and demolition surveys include 40

CFR Part 61 (EPA NESHAP), 29 CFR 1926.1101 (OSHA Asbestos in Construction) and applicable State of Virginia regulations.

Lead Paint Survey

This survey was intended to identify LBP in general accordance with the EPA, OSHA and the HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing.

Polychlorinated Biphenyls Caulking and Sealants Survey

This survey was intended to identify PCBs in caulking and sealants in general accordance with the EPA TSCA regulations.

Hazardous Materials Investigation

The purpose of the proposed scope of services was to visually inspect the extent and identify hazardous materials. JSK visually inspected for and quantify chemicals found at the location, including but not limited to: cleaning chemicals, maintenance chemicals, paints, hydraulic equipment, above ground storage tanks, underground storage tanks, batteries, acids and photographic development; PCB and mercury containing items (ballasts, fluorescent light bulbs, thermostats, smoke detectors, exit signs); blood borne pathogens containers and the identification and quantification of containers/storage vessels associated with the spaces. No sampling was conducted for this assessment.

2.2 PURPOSE

The purpose of this survey was to provide general information for the subject building regarding the presence, condition, and quantity of accessible and/or exposed building materials that contain asbestos, LBP and other hazardous materials, prior to the planned demolition of the building.

2.3 AUTHORIZATION

Authorization to perform this work was given on May 12, 2022, through the issuance of a Standard Purchase Order Number 296066 issued by the Arlington County Government. The project was conducted in accordance with the scope, terms and conditions of JSK's signed Proposal No. JSK-2022-31, revision 1, dated April 16, 2022.

2.4 LIMITATIONS

Asbestos

This asbestos survey was intended to meet the requirements of the EPA National Emission Standards for Hazardous Air Pollutants (NESHAP) for Asbestos demolition or renovation. The survey included a thorough inspection of accessible interior, exterior and roof areas of the subject property prior to demolition.

The survey included the interior, exterior and roof of the facility.

Destructive sampling, such as behind finished surfaces (plaster/drywall walls, above hard ceilings, etc.); inside mechanical chases, behind mirrored walls, under carpet or tiled floors, etc., was generally conducted to try to assess inaccessible or concealed materials. Void spaces which were evaluated included locations of suspected pipe or HVAC chases, wall cavities where fireproofing or other ACM was suspected, above finished ceiling systems where ACM was likely to exist, within pipe trenches or within concealed locations. Although JSK made an attempt to identify all areas of ACM, an exhaustive investigation of void spaces was not included in the scope of services for this project. There may exist conditions which were unable to be identified within the scope of this survey.

Inaccessible is defined as areas of the building that were locked, or where admittance was not permitted. It also includes areas/materials that could not be tested (sampled) without destruction of the structure or a portion of the structure, and areas/materials that could not be safely reached by the inspector or inspection team. In the event that access to a portion of the building was not obtained (which otherwise would have been tested), such limitations specifically are identified in the Findings Section of this report.

JSK did not sample any system which presented a hazard to the inspection team such as energized electrical systems or within confined spaces.

JSK did not collect samples from building elements where the intended use would be compromised by testing, such as fire rated doors, vapor barriers, mirror mastics, etc.

Lead Paint

The limited inspection for lead-containing paints was not intended to be an exhaustive survey of all paints on the exterior of the building but a representation of the type of materials and components painted with lead-containing paint. The scope was not intended to comply with the strict requirements of a HUD lead-based paint inspection.

Polychlorinated Biphenyls

Limited sampling of potential PCB-containing caulking and sealants was proposed to be conducted from select window frames within the subject property building. However, JSK observed that the windows had been recently replaced in the past 10 years or so and the wooden window frames did not have any caulking around them. Therefore, no caulk samples were collected for analysis of PCB's.

Other Hazardous Materials

The other hazardous materials investigation was a visual survey only, no sampling was conducted.

2.5 WARRANTY

The field and laboratory results reported herein are considered sufficient in detail and scope to determine the presence of accessible and/or exposed suspect ACM associated with the building structure. JSK warrants that the findings contained herein have been prepared in general accordance with accepted professional practices at the time of its preparation as applied by professionals in the community. Changes in the state of the art or in applicable regulations cannot be anticipated and have not been addressed in this report.

The survey and analytical methods have been used to provide the client with information regarding the presence of accessible and/or exposed suspect ACM existing at the time of the inspection. Test results are valid only for the material(s) tested. There is a distinct possibility that conditions may exist which could not be identified within the scope of the study or which were not apparent during the site visit. This inspection covered only those areas that were exposed and/or physically accessible to the Inspector. The study is also limited to the information available from the client at the time it was conducted.

No other warranties are implied or expressed.

3 GENERAL BUILDING AND SURVEY INFORMATION

3.1 BUILDING INFORMATION

<u>Subject Property:</u>	Commercial Office with Attached Bank Branch 3108 Columbia Pike Arlington, VA 22206
<u>Facility Construction Date:</u>	According to the Arlington County property records the subject property building was originally constructed in 1961.
<u>Previous Renovation Dates:</u>	It has been renovated over the years, but the last renovation date is unknown.
<u>Number of Floors:</u>	Three with a mezzanine level.
<u>Approximate Size (SF)</u>	17,600 SF total for all 3 levels and mezzanine with an additional 2,400 SF in the basement. Net rentable area of 15,200 SF.
<u>Construction Type</u>	Concrete masonry unit (CMU) load bearing walls & steel columns. Concrete filled metal deck on steel beams at floors Metal deck on open web steel joists at roof. Façade of painted brick masonry. Corridor finishes consist of vinyl and carpet flooring, painted gypsum board walls, and acoustical tile ceilings. Common area finishes consist of tile flooring, painted gypsum board walls, and acoustical tile ceilings
<u>Building Occupant(s):</u>	All spaces are currently vacant. Former tenant occupancy included whole-floor tenants and multi-floor tenants.
<u>Additional Information:</u>	The scope of the survey included the interior, exterior and roof of the building only.

3.2 INSPECTION INFORMATION

<u>Name of JSK Inspector(s):</u>	Mr. Michael Allshouse Virginia Asbestos Inspector License Number: 3303003902. Virginia LBP Inspector License: 3356001040 Mr. Nand Kaushik Virginia Asbestos Inspector License Number: 3303004514
<u>Date(s) of Inspection:</u>	May 20, 2022
<u>Escort:</u>	JSK was unescorted during the survey.

4 METHODOLOGY

Inspection and sampling procedures were performed in general accordance with the guidelines published by the U.S. Environmental Protection Agency (EPA). The inspection and survey described below was performed by an EPA accredited and State of Montana-licensed asbestos inspector.

4.1 RECORD DOCUMENT REVIEW

Prior to conducting the visual inspection, JSK reviewed documents provided by the client, including drawings, floor plans, historical data, maintenance records, previous survey reports, laboratory reports, etc. for information regarding construction history and building materials.

The following documents were reviewed as a part of this Asbestos Survey:

- Property Condition Report, dated January 21, 201 – Provided by the Client.

4.2 ASBESTOS SURVEY METHODOLOGY

Inspection Procedures

An initial individual building structure walkthrough was conducted to determine the presence of suspect asbestos-containing materials that were accessible and/or exposed within the interior, exterior and roof of the building.

Destructive investigation, such as behind finished surfaces (plaster/drywall walls, above hard ceilings, etc.); inside mechanical chases, behind mirrored walls, under carpet or tiled floors, etc., was generally conducted in a limited fashion to try to assess inaccessible or concealed materials. The inspection team selected a few representative areas to perform an intrusive evaluation of void spaces within the building or structure. Such inspections were made by creating an opening of sufficient size to determine the presence, condition and quantity of suspect ACM within. Although JSK made an attempt to identify all areas of ACM, an exhaustive investigation of void spaces was not included in the scope of services for this project. There may exist conditions which were unable to be identified within the scope of this survey. JSK did not collect samples from building elements where the intended use would be compromised by testing, such as fire rated doors, vapor barriers, mirror mastics, etc.

Materials which were similar in color, texture, general appearance and which appear to have been installed at the same time were grouped in Homogeneous Sampling Areas. Such materials are termed "homogeneous materials" by the EPA. During this walkthrough, the approximate locations of these homogeneous materials were also noted.

The inspector evaluated the overall condition of the material and determined whether the materials were friable or non-friable by touching the material, where practical. A friable material is defined as any material able to be crushed, crumbled, pulverized or reduced to a powder by hand press when dry.

Each material was further assessed for overall condition. Conditions were rated as good, damaged or significantly damaged. JSK's inspector also identified the EPA classification of the material: Regulated ACM (RACM), Category I non-friable ACM, and Category II non-friable ACM, based on the materials current condition. JSK's inspector provided estimated quantities of the materials identified as ACM, based only on materials that were accessible and exposed.

Sampling Procedures

Following the walkthrough, the Inspector collected samples of suspect materials.

EPA guidelines were used to determine the sampling protocol. Sampling locations were chosen to be representative of the homogeneous sampling area. While an effort was made to collect samples randomly, samples were taken preferentially from areas already damaged or areas which were the least visible to minimize disturbance of the material.

Each sample location was sprayed with amended water and was kept wet during the entire sampling process. Samples were collected by coring through the material from the surface down to the base substrate. All layers of the material were extracted in placed into a sample container for transport to the laboratory. Sample containers were sealed and labeled with a unique sample identification number. Where appropriate, sampled materials were sealed with an encapsulant or covered with tape after sampling. JSK is not responsible for restoring the sampled areas to their pre-sampled condition.

Laboratory Analysis

All samples were analyzed at Aerobiology Laboratory located at 43760 Trade Center Place, Suite 100, Sterling, VA. The Aerobiology Laboratory is a National Voluntary Laboratory Accreditation Program (NVLAP) Accredited and an American Industrial Hygiene Association (AIHA) Accredited Laboratory. A copy of the Laboratory's Accreditation certificate is included in Appendix C.

The samples were analyzed for asbestos on a "positive-stop" basis by polarized light microscopy (PLM) in accordance with the "EPA Method for the Determination of Asbestos in Bulk Building Materials" (EPA/600/R-93/116 July 1993). Analysis was performed by visually observing the bulk samples with a stereoscope followed by slide preparation(s) for microscopic examination and identification.

Using a stereoscope, the microscopist visually estimated relative amounts of each constituent by determining the volume of each constituent in proportion to the total volume of the sample. Next, the samples were mounted on slides and then analyzed for asbestos (chrysotile, amosite, crocidolite, anthophyllite, actinolite/tremolite), and fibrous non-asbestos constituents (mineral wool, fiberglass, cellulose, etc.). Asbestos was identified by refractive indices, morphology, color, pleochroism, birefringence, extinction characteristics, and signs of elongation. The same characteristics were used to identify the non-asbestos constituents.

The EPA method allows samples which are visually determined to have less than 10% asbestos to be quantified using a Point Count procedure. An ocular reticule (cross hair or point array) is used to visually superimpose a point or points on the microscope field of view. A total of 400 points superimposed on either asbestos fibers or non-asbestos matrix material must be counted over at least eight different preparations of representative subsamples. If an asbestos fiber and matrix particle overlap so that a point is superimposed on their visual intersection, a point is scored for both categories. Point counting provides a quantification of the area percent asbestos. No samples were point counted for this survey.

4.3 LEAD-BASED PAINT SURVEY METHODOLOGY

Survey Methodology

JSK inspected all accessible areas of the subject property building. The survey was conducted in general accordance with HUD Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (HUD 1995). The JSK inspector used an LPA-1 XRF Spectrum Analyzer manufactured by RMD to perform the LBP testing. The LPA-1 is an XRF spectral analyzing system for quantitative measurement of lead in paint on various substrates. In each interior area of the building, XRF testing was performed on representative components with painted, stained, or varnished surfaces. Representative components are considered those in the same room, type of component, substrate, and visible color of paint. The inspector also assessed the general condition of the painted surfaces, according to the following guidelines:

- Good indicates there is no damage to the paint
- Fair indicates that the paint is cracking but not peeling
- Poor indicates that the paint is cracked and peeling

Sampling Methodology

Paint containing greater than or equal to 1.0 mg/cm² (or 0.5 percent by weight) lead by XRF testing or by laboratory analysis is considered LBP. The JSK inspector operated the XRF device in “Quick Mode” for testing (standardized in accordance with the equipment instruction manual) and programmed the unit with an action level of 1.0 mg/cm². In “Quick Mode,” the XRF device seeks the shortest time period to assure a definitive measurement with 95 percent confidence (2 sigma). The LPA-1 analyzer concludes a measurement once the 2-sigma confidence level is achieved, typically between 2 to 4 seconds, depending on the lead content.

XRF calibration checks against known LBP standards were performed on the LPA-1 according to the instrument’s operating guidelines. The quality control readings were used to monitor the performance of the LPA-1. The calibration-check readings were taken before testing began and after the testing was completed using a Standard Reference Material paint film, developed by the National Institute of Standards and Technology. All calibration check readings were within acceptable limits.

XRF testing values were collected by placing the LPA-1 scanner on the surface to be tested and exposing the paint film to gamma radiation. XRF analyzers are usually capable of penetrating up to 3/8 inch of paint to determine lead content. At the conclusion of each test, the shutter closes and the display on the control console shows the lead concentration in mg/cm² for manual tabulation. Test readings of 0.9 mg/cm² or below are negative for LBP. Test readings of 1.0 mg/cm² or above are positive for LBP.

There were no areas where XRF readings were inconclusive, therefore, no paint chip samples were collected for laboratory analysis.

Section 5.2 provides a summary of the LBP survey results for the facility

4.4 OTHER HAZARDOUS MATERIALS SURVEY METHODOLOGY

Inspection Procedures

JSK conducted a hazardous material inspection which included a visual inspection to determine the extent and identify hazardous materials. JSK visually inspected for and quantified chemicals found within the buildings, including but not limited to: cleaning chemicals, maintenance chemicals, paints, hydraulic equipment, above ground storage tanks, underground storage tanks, batteries, acids and photographic development; Polychlorinated Biphenyls (PCB) and mercury containing items (ballasts, fluorescent light bulbs, thermostats, smoke detectors, exit signs); blood borne pathogens containers and the identification and quantification of containers/storage vessels associated with the spaces.

No sampling was conducted for hazardous materials within the scope of this investigation.

5 FINDINGS

5.1 ASBESTOS RESULTS

JSK collected a total of 51 samples from 24 suspect homogenous materials (HM) from the subject property. Table 1 lists the materials that were sampled, along with the results of the inspection and laboratory analysis.

Laboratory analysis indicated the following ACMs at the subject property building:

- **Silver Roof Vent Coating (HM3)** located on the building roof.
- **9" by 9" brown vinyl floor tile with black mastic (HM7)** located all throughout the stairwell (on west side), and throughout Mezzanine Level and portions of the 3rd Floor.
- **Gray Pebble Pattern Resilient Sheet Flooring over Brown Vinyl Floor tiling with black mastic (HM10)** located in the Building Main Floor Corridor near Elevator.
- **9" by 9" White Vinyl Floor Tile with Black Mastic (HM18)** located in the Building Mezzanine Floor, Office Space
- **12" by 12" White Mottled Vinyl Floor Tile with Black Mastic and Gray/White Leveling Compound (HM19) (only the black mastic was found to be asbestos-containing)**, located throughout the building 2nd floor.
- **9" by 9" Green Vinyl Floor Tile with Black Mastic (HM20)** located throughout the Building stairwell on East Side.
- **Tan carpet glue with black mastic (HM21)** located throughout the Building 3rd floor Office Areas.
- **White Setting Bed with Black Mastic (HM22)** located in the Building 3rd Floor Break Room on West Side and throughout the 3rd floor office areas.
- **12" by 12" Gray/Black Specs Vinyl Floor Tile with Yellow Mastic over Gray Vinyl Floor Tile with Black Mastic over Gray Vinyl Floor Tile with Yellow Mastic over Cream Resilient Floor Sheet with Black Mastic (HM23), (only the black mastic was found to be asbestos-containing)**, located in the Building 3rd Floor Office Space on Northwest Corner.
- **Gray Interior Window Glazing (HM24)** located in the interior windows on the 3rd floor and throughout the building.

As evidenced from the above results, the black mastic that is present in the flooring throughout the building was found to be asbestos containing. In many locations the flooring has been built up over the years when renovation activities were conducted and the mastic is found within those layers.

JSK did not observe any assumed ACMs within the facility.

The "Report of Bulk Sample Analysis for Asbestos", Sample Location diagram and Photographs are included in the Appendices. Table 1 on the following pages list the suspect asbestos-containing materials observed throughout the building that will be impacted by the demolition operations. Table 1 lists the materials that were sampled, along with the results of the inspection and laboratory analysis. The table also gives a description of the materials, their general locations, condition, friability, EPA NESHAP Category, and estimated quantity for abatement.

Inaccessible Areas

JSK did not encounter any inaccessible areas.

Regulatory Guidelines

ACM Definition - The EPA & OSHA consider a material to be asbestos-containing if at least one sample from the homogeneous area shows asbestos in an amount greater than 1%.

Point Count Quantification - If a material is found to contain less than 10% asbestos via visual estimation, it can be treated as non-ACM per EPA Regulations, if verified to contain 1% or less asbestos by the Point Count Quantification Procedure. If not point counted, a sample in which asbestos was visually detected and estimated (including trace to $\leq 1\%$) must be assumed to be greater than 1% and treated as ACM. Please refer to the laboratory analyses for a more detailed description of the microscopic analysis of individual samples. No samples were quantified by the Point Count Procedure in this Asbestos Survey.

EPA NESHAP Category - EPA classifies ACM into the following categories:

- **RACM** is any (a) Friable asbestos material, (b) Category I non-friable ACM that has become friable, (c) Category I non-friable ACM that will be or has been subjected to sanding, grinding, cutting, or abrading, or (d) Category II non-friable ACM that has a high probability of becoming or has become crumbled, pulverized, or reduced to powder by the forces expected to act on the material in the course of demolition or renovation operations.
- **Category I Non-friable ACM** includes packings, gaskets, resilient floor covering, and asphalt roofing products which contain more than one percent asbestos.
- **Category II Non-friable ACM** includes any material, except for a Category I non-friable ACM, which contains more than one-percent asbestos and cannot be reduced to a powder by hand pressure when dry.

OSHA – OSHA requires all suspect materials to be analyzed by layer, even materials such as drywall/joint compound, which may sometimes be composited per the EPA. If any layer contains asbestos in a concentration $>1\%$, the material is considered an ACM.

OSHA has a classification system (I thru IV) for ACM depending on the type of material and the disturbance as follows:

- **'Class I'** work is defined as activities involving the removal of ACM or presumed ACM (PACM) that is thermal system insulation (TSI) and surfacing materials.
- **'Class II'** activities involve removal of ACM/PACM other than TSI or surfacing material.
- **'Class III'** work includes repair and maintenance operations which are likely to disturb ACM/PACM.
- **'Class IV'** work includes maintenance and custodial activities during which employees contact but do not disturb ACM/PACM.

Materials where asbestos is detected, but where point counting is conducted and determined that the concentration is $\leq 1\%$ asbestos, are not considered to be ACM by OSHA. However, these materials are considered unclassified asbestos work per OSHA. Some OSHA work control practices and prohibitions will still apply, with the extent

depending on whether the worker's exposure to airborne asbestos exceeds the OSHA permissible exposure limit (PEL).

Additional details of the OSHA asbestos regulations related to the construction industry can be found in 29 CFR part 1926.1101.

Quantification

Quantification of suspect asbestos-containing materials was conducted using visual estimation by a licensed asbestos inspector. This visual estimation was performed in accordance with generally accepted practices in the asbestos industry based on materials that were accessible and exposed. These values are sufficiently accurate for the purpose of documenting the presence of asbestos within its space for the purpose of identifying abatement control conditions or for general policy considerations. Actual quantities may differ between visually estimated values and physical measurements. If a licensed asbestos abatement contractor is engaged to remove asbestos containing materials, the abatement contractor is responsible for verifying reported quantities of ACM.

TABLE 1 – SUSPECT ACMs SAMPLED – Commercial Office Building, 3108 Columbia Pike, Arlington, VA 22004

HM NUMBER (SAMPLE NUMBERS)	MATERIAL DESCRIPTION	MATERIAL SAMPLE LOCATION	F/NF¹	COND.²	% ASBESTOS & TYPE³	EPA NESHAP CAT⁴	ESTIMATED QUANTITY
HM 1 (HM1-1 to HM1-2)	Built up Roof Field	Building Roof	NF	Good	NAD	N/A	N/A
HM 2 (HM2-1 to HM2-2)	White/Black Curbing/Flashing	Building Roof	NF	Good	NAD	N/A	N/A
HM 3 (HM3-1 to HM3-2)	Silver Roof Vent Coating	Building Roof	NF	Good	3% CH	Cat I NF	25 SF
HM 4 (HM4-1 to HM4-2)	Black Vent Pipe Mastic	Building Roof	NF	Good	NAD	N/A	N/A
HM 5 (HM5-1 to HM5-3)	Gray Spray-on Fire Proofing	Building Basement, Boiler Room, Corridor, Electrical Room	F	Good	NAD	N/A	N/A
HM 6 (HM6-1 to HM6-2)	Cream Pipe Insulation Mastic	Building Basement, Boiler Room, Corridor	NF	Good	NAD	N/A	N/A
HM 7 (HM7-1 to HM7-2)	9" by 9" brown vinyl floor tile with black mastic	Building Stairwell, west side; Present all throughout stairwell and throughout Mezzanine Level and portions of 3rd Floor	NF	Good	VFT: 3% CH Mastic: 5% CH	Cat I NF	3,200 SF
HM 8 (HM8-1 to HM8-2)	Gray HVAC Duct Seam Mastic	Building Basement, HVAC Room Number 1	NF	Good	NAD	N/A	N/A
HM 9 (HM9-1 to HM9-2)	Black/Gray/Yellow Mastic	Building Elevator	NF	Good	NAD	N/A	N/A

TABLE 1 – SUSPECT ACMs SAMPLED – Commercial Office Building, 3108 Columbia Pike, Arlington, VA 22004

HM NUMBER (SAMPLE NUMBERS)	MATERIAL DESCRIPTION	MATERIAL SAMPLE LOCATION	F/NF ¹	COND. ²	% ASBESTOS & TYPE ³	EPA NESHAP CAT ⁴	ESTIMATED QUANTITY
HM 10 (HM10-1 to HM10-2)	Gray Pebble Pattern Resilient Sheet Flooring (RSF) over Brown Vinyl Floor tiling with black mastic	Building Main Floor, Corridor near Elevator	NF	Good	RSF: 50% CH VFT: 3% CH Mastic: 4% CH	Cat I NF	250 SF
HM 11 (HM11-1 to HM11-3)	Plaster Gray Base White Skim Coat on Wall	Building Main Floor, Corridor near Elevator, and throughout West Side Stairwell	F	Good	NAD	N/A	N/A
HM 12 (HM12-1 to HM12-2)	12" by 12" Gray Mottled Vinyl Floor Tile with Tan Mastic	Building Main Floor, Flooring in Office Area on West Side of Building	NF	Good	NAD	N/A	N/A
HM 13 (HM13-1 to HM13-2)	4" Gray Vinyl Cove Base with Gray Mastic	Building Main Floor, Flooring in Office Area on West Side of Building	NF	Good	NAD	N/A	N/A
HM 14 (HM14-1 to HM14-2)	Gray Sink Bowl Coating	Building Main Floor, Break Room on West Side, 2nd floor, Break Room on East Side	NF	Good	NAD	N/A	N/A
HM 15 (HM15-1 to HM15-2)	4" Brown Vinyl Cove Base with Brown Mastic	Building Main Floor, Flooring in Some of the Office Area on West Side of Building, and the Central Customer Area	NF	Good	NAD	N/A	N/A

TABLE 1 – SUSPECT ACMs SAMPLED – Commercial Office Building, 3108 Columbia Pike, Arlington, VA 22004

HM NUMBER (SAMPLE NUMBERS)	MATERIAL DESCRIPTION	MATERIAL SAMPLE LOCATION	F/NF¹	COND.²	% ASBESTOS & TYPE³	EPA NESHAP CAT⁴	ESTIMATED QUANTITY
HM 16 (HM16-1 to HM16-2)	Brown/Tan/Black Floor Mastic	Building Main Floor, Main Customer Area	NF	Good	NAD	N/A	N/A
HM 17 (HM17-1 to HM17-3)	White Drywall with Associated White Joint Compound	Building Main Floor, 2nd Floor, 3rd Floor (Throughout all Building Floors)	F	Good	NAD	N/A	N/A
HM 18 (HM18-1 to HM18-2)	9" by 9" White Vinyl Floor Tile with Black Mastic	Building Mezzanine Floor, Office Space	NF	Good	VFT: 2% CH Mastic: 3% CH	Cat I NF	200 SF
HM 19 (HM19-1 to HM19-2)	12" by 12" White Mottled Vinyl Floor Tile with Black Mastic and Gray/White Leveling Compound	Building 2 nd Floor (Throughout the entire 2 nd Floor office space)	NF	Good	VFT: NAD Mastic: 5% CH Leveling Compound: NAD	Cat I NF	4,800 SF
HM 20 (HM20-1 to HM20-2)	9" by 9" Green Vinyl Floor Tile with Black Mastic	Building stairwell on East Side (Throughout stairwell)	NF	Good	VFT: 2% CH Mastic: 4% CH	Cat I NF	450 SF
HM 21 (HM21-1 to HM21-2)	Tan carpet glue with black mastic	Building 3rd floor, Throughout the offices	NF	Good	Mastic: 4% CH	Cat I NF	2,500 SF
HM 22 (HM22-1 to HM22-2)	White Setting Bed with Black Mastic	Building 3rd Floor, Break Room on West Side (Throughout 3rd floor Office Areas)	NF	Good	Mastic: 5% CH	Cat I NF	2,250 SF
HM 23 (HM23-1 to HM23-2)	12" by 12" Gray/Black Specs Vinyl Floor Tile with Yellow Mastic over Gray Vinyl Floor Tile	Building 3rd Floor, Office Space on Northwest Corner	NF	Good	RSF: 60% CH Mastic: 4% CH	Cat I NF	350 SF

TABLE 1 – SUSPECT ACMs SAMPLED – Commercial Office Building, 3108 Columbia Pike, Arlington, VA 22004							
HM NUMBER (SAMPLE NUMBERS)	MATERIAL DESCRIPTION	MATERIAL SAMPLE LOCATION	F/NF¹	COND.²	% ASBESTOS & TYPE³	EPA NESHAP CAT⁴	ESTIMATED QUANTITY
	with Black Mastic over Gray Vinyl Floor Tile with Yellow Mastic over Cream Resilient Sheet Flooring with Black Mastic	(Four Layers of Flooring)					
HM 24 (HM24-1 to HM24-2)	Gray Interior Window Glazing	Throughout Building	F	Poor	Glazing: 3% CH	RACM	80 windows

¹ F = Friable; NF = Non-friable.

² Cond. = Condition of Materials: Either good, dam = damaged., sig. dam. = significant damage

³ NAD = No Asbestos Detected, Ch = Chrysotile, Am = Amosite, DW = Drywall; JW = Joint Compound; VFT = Vinyl Floor Tile; CB = Cove Base; CFT = Ceramic Floor Tile; CWT = Ceramic Wall Tile; LCT = Lay-in Ceiling Tile; RSF = Resilient Sheet Flooring; LF = Linear Feet; SF = Square Feet.

⁴ NESHAP Category - Regulated ACM (RACM), Cat I NF=Category I Non-Friable ACM, Cat II NF= Category II Non-Friable ACM.

Sample identification is the HM Number followed by the Sample Number (e.g. HM1 (1-1 to 1-3))

5.2 LBP SCREENING RESULTS

JSK visually inspected and tested representative painted, stained, or varnished structural building components accessible at the subject property Building. A total of 132 XRF readings, including calibrations, were performed. This survey was limited in nature and was not intended to be a comprehensive survey of all the painted components within the facility. The condition of the painted surfaces was found to be generally in an intact condition. LBP was detected in just one exterior surface tested within the building.

Painted surfaces were tested using an XRF instrument operated in “Quick Mode.” XRF test readings of 0.9 milligram per square centimeter (mg/cm^2) or below are negative for lead-based paint. XRF test readings of $1.0 \text{ mg}/\text{cm}^2$ or above are positive for lead-based paint. Painted surfaces testing greater than $1 \text{ mg}/\text{cm}^2$ (or 0.5 percent by weight) are considered to be lead-based by USEPA, HUD, and IDPH. XRF test results are included in Appendix C.

As part of the Limited LBP Inspection, painted surfaces were visually examined for general condition and were generally categorized as being in intact or deteriorated condition. The condition of the painted surfaces was found to be generally in an intact condition. However, the exterior painted surfaces were generally in a deteriorated condition. The results of the XRF survey are discussed in more details in Section 5.2. A total of nine (9) XRF readings of component coatings, from the structures, tested had XRF readings equal to or greater than the “positive” classification of $1.0 \text{ mg}/\text{cm}^2$. Of these, two were interior components and the remaining 7 were exterior component surfaces. This is summarized below:

Interior Readings

- Cream wooden stair riser in the stairwell on the east side leading from the 1st floor to the 2nd floor: Reading of $5.8 \text{ mg}/\text{cm}^2$. The paint on this was in a deteriorated condition (10%).
- Cream metal stair riser in the stairwell on the east side leading from the 2nd floor to the 3rd floor: Reading of $3.4 \text{ mg}/\text{cm}^2$. The paint on this was in an intact condition.

Exterior Readings

- White metal column at the building rear entrance: Reading of $1.3 \text{ mg}/\text{cm}^2$. The paint on this was in a deteriorated condition (10%).
- Cream metal I-beam at the building rear entrance: Reading of $1.7 \text{ mg}/\text{cm}^2$. The paint on this was in a deteriorated condition (25%).
- Cream metal I-beam at the building front entrance: Reading of $1.8 \text{ mg}/\text{cm}^2$. The paint on this was in a deteriorated condition (10%).
- White metal window lintel at the building front entrance: Reading of $2.1 \text{ mg}/\text{cm}^2$. The paint on this was in an intact condition.
- White metal column at the building front entrance: Reading of $1.3 \text{ mg}/\text{cm}^2$. The paint on this was in a deteriorated condition (20%).
- Cream metal door casing at the building side entrance (East side): Reading of $1.2 \text{ mg}/\text{cm}^2$. The paint on this was in a deteriorated condition (10%).
- Cream metal door lintel at the building side entrance (East side): Reading of $1.7 \text{ mg}/\text{cm}^2$. The paint on this was in a deteriorated condition (5%).

Regulatory Guidelines

LBP Definition –

The EPA and HUD defines "lead-based paint" as any "paint, surface coating that contains lead equal to or exceeding one milligram per square centimeter (1.0 mg/cm²) or 0.5% lead by weight."

EPA – Renovation, Repair and Painting Program

EPA's Lead Renovation, Repair and Painting Rule (RRP Rule) requires that firms performing renovation, repair, and painting projects that disturb lead-based paint in homes, child care facilities and pre-schools built before 1978 have their firm certified by EPA (or an EPA authorized state), use certified renovators who are trained by EPA-approved training providers and follow lead-safe work practices.

OSHA –

The current OSHA standard (29 CFR 1926.62) for lead exposure in construction has a permissible exposure limit (PEL) of 50 micrograms per cubic meter of air (50 µg/m³), measured as an 8-hour time-weighted average (TWA). As with all OSHA health standards, when the PEL is exceeded, the hierarchy of controls requires employers to institute feasible engineering and work practice controls as the primary means to reduce and maintain employee exposures to levels at or below the PEL. When all feasible engineering and work practice controls have been implemented but have proven inadequate to meet the PEL, employers must nonetheless implement these controls and must supplement them with appropriate respiratory protection. The employer also must ensure that employees wear the respiratory protection provided when it is required.

HUD –

The *Guidelines for the Evaluation and Control of Lead-Based Paint Hazards in Housing (2012 Edition)* enforce HUD's vision to reduce hazards in housing in a cost-effective manner while protecting the health of children. These guidelines are used by those who are required to identify and control lead paint hazards, as well as property owners, landlords, and child-care center operators. Helpful advice on renovations in older housing, lead-based paint inspections and risk assessments, and where to go for help can be found in the guidelines. The guidelines also outline what users have to do to meet requirements and recommendations; identify training – and if applicable, certification – required for people who conduct the work; and describe how the work should be done.

5.3 OTHER HAZARDOUS MATERIALS SURVEY RESULTS

A visual survey for hazardous materials was performed to determine the presence and locations of suspect hazardous materials in the subject building. No materials were found to be suspect within the interior of the subject property.

Regulatory Guidelines

Hazard Materials Definition –

By definition, EPA determined that some specific wastes are hazardous. These wastes are incorporated into lists published by the EPA. These lists are organized into three categories:

1. The F-list (non-specific source wastes). This list identifies wastes from common manufacturing and industrial processes, such as solvents that have been used in cleaning or degreasing operations. Because the processes producing these wastes can occur in different sectors of industry, the F-listed wastes are known as wastes from non-specific sources. Wastes included on the F-list can be found in the regulations at 40 CFR §261.31.
2. The K-list (source-specific wastes). This list includes certain wastes from specific industries, such as petroleum refining or pesticide manufacturing. Certain sludges and wastewaters from treatment and production processes in these industries are examples of source-specific wastes. Wastes included on the K-list can be found in the regulations at 40 CFR §261.32.
3. The P-list and the U-list (discarded commercial chemical products). These lists include specific commercial chemical products in an unused form. Some pesticides and some pharmaceutical products become hazardous waste when discarded. Wastes included on the P- and U-lists can be found in the regulations at 40 CFR §261.33.

Waste that have not been specifically listed may still be considered a hazardous waste if exhibits one of the four characteristics defined in 40 CFR Part 261 Subpart C - ignitability (D001), corrosivity (D002), reactivity (D003), and toxicity (D004 - D043).

1. Ignitability - Ignitable wastes can create fires under certain conditions, are spontaneously combustible, or have a flash point less than 60 °C (140 °F). Examples include waste oils and used solvents.
2. Corrosivity - Corrosive wastes are acids or bases (pH less than or equal to 2, or greater than or equal to 12.5) that are capable of corroding metal containers, such as storage tanks, drums, and barrels.
3. Reactivity - Reactive wastes are unstable under "normal" conditions. They can cause explosions, toxic fumes, gases, or vapors when heated, compressed, or mixed with water.

Toxicity - Toxic wastes are harmful or fatal when ingested or absorbed (e.g., containing mercury, lead, etc.). When toxic wastes are land disposed, contaminated liquid may leach from the waste and pollute ground water. Toxicity is defined through a laboratory procedure called the Toxicity Characteristic Leaching Procedure (TCLP) (Method 1311). The TCLP helps identify wastes likely to leach concentrations of contaminants that may be harmful to human health or the environment.

Polychlorinated Biphenyls (PCB's)

- A visual inspection of a “representative number” of light fixtures and ballasts, and inspection for transformers, hydraulic lifts, etc. was performed to determine the possible presence of PCBs. The visual

inspection was conducted with a Phillips Advanced handheld ballast checker, which indicates whether a ballast is magnetic or electronic. The device is aimed at the light fixture and the LED turns green if the light source is powered by an electronic ballast; or turns orange if powered by an electromagnetic ballast. Electronic ballasts are non-PCB so they can be immediately ruled-out as suspect PCBs. The electromagnetic ballasts may or may not contain PCBs and are considered to be suspect PCB-containing.

Mercury

- A visual inspection was performed for the purpose of identifying the potential presence, location and estimated quantity of fluorescent light bulbs, mercury thermostats and exit signs. During the assessment, JSK observed and quantified suspect mercury bulbs and mercury vapor lamps associated with fluorescent light fixtures. No sampling was performed of the lamps or bulbs. Reportable quantities of mercury are often found in fluorescent lamps, high intensity discharge lamps and thermostats. Because of this fact, the fluorescent lamps found at the site should be considered a hazardous waste for mercury under the Resource Conservation and Recovery Act (RCRA); 40 CFR 261. Unless Toxic Characteristic Leachate Procedure (TCLP) testing for mercury is performed, the light tubes located at the property should be assumed to exceed the regulatory limit of 0.2 milligrams per liter for mercury. These tubes must be disposed of as mercury containing waste unless testing proves otherwise.

A summary of the hazardous materials and chemicals found at the facility is as follows.

Material	Observed Yes/No	Estimated Quantity	General Location
PCB Fluorescent Light Ballasts	No	N/A	N/A
Fluorescent Light Bulbs	Yes	Main level: 140 Mezzanine: 90 2 nd Floor: 90 3 rd Floor: 92 Basement: 12	Throughout the subject property on all 3 floors and mezzanine area.
Fire Extinguishers	Yes	Main level: 3 Mezzanine: 4 2 nd Floor: 4 3 rd Floor: 4 Basement: 3	Throughout the subject property on all 3 floors and mezzanine area.
Pull-down switches		Main level: 3 Mezzanine: 3 2 nd Floor: 3 3 rd Floor: 2 Basement: 2	Throughout the subject property on all 3 floors and mezzanine area.
Mercury Vapor Lights	No	N/A	N/A
Household Cleaning Chemicals, commercially available	Yes	Few spray bottles	Mostly in the janitorial closet on the Mian level
Wall-mounted radiator units	Yes	About 25	Mostly on the 3 rd floor of the Building.
Miscellaneous paint cans and primers	Yes	About 15	Basement

Table 2: Hazardous Materials Summary – Commercial Office Building, 3108 Columbia Pike, Arlington, VA 22004

Material	Observed Yes/No	Estimated Quantity	General Location
Mercury Thermostats/ Thermometers	Yes	Twp	Building Main Level
Smoke Detectors	Yes	Main level: 4 Mezzanine: 1 2 nd Floor: 4 3 rd Floor: 0 Basement:	Throughout the subject property on all 3 floors and mezzanine area.
Motion Sensors	Yes	Main level: 1 Mezzanine: 6 2 nd Floor: 6 3 rd Floor: 6 Basement: 0	Throughout the subject property on all 3 floors and mezzanine area.
Fire/Emergency Lighting	Yes	Main level: 4 Mezzanine: 3 2 nd Floor: 5 3 rd Floor: 4 Basement: 2	Throughout the subject property on all 3 floors and mezzanine area.
Fire Alarm System	Yes	1	One in the Building Main Level
Domestic Water Heater	Yes	1	Basement of the Building
Old CRT Monitor	Yes	1	One in the Building Main Level

6 CONCLUSIONS & RECOMMENDATIONS

6.1 CONCLUSIONS

Asbestos

ACM was found throughout the 3 floors and mezzanine, and on the roof of the subject property building that will be impacted by the demolition operations.

JSK did not observe any assumed ACMs within the subject property Building.

Materials with low concentrations of asbestos (trace to 1%) were not identified in the subject property Building.

Lead-Based Paint Screening

Lead was detected above the regulatory level for an LBP in paint tested in the subject property Building that will be impacted by the demolition operations.

PCB Caulking

Samples for PCB caulking and sealants were not collected within the subject property building. As indicated earlier, JSK observed that the windows and the wooden window frames did not have any caulking around them. Therefore, no caulk samples were collected for analysis of PCB's.

Suspect Hazardous Materials

Some hazardous materials were identified in the Subject Property Building that will be impacted by the demolition operations.

6.2 RECOMMENDATIONS

The following recommendations are provided for the Asbestos, LBP or other Hazardous Materials that were detected or identified during this investigation.

Asbestos

JSK found asbestos containing materials during the survey. The identified regulated ACM (RACM) and Cat I and Cat II Non-Friable ACM should be maintained in a good non-damaged condition until the building is demolished.

The identified RACM and other materials containing asbestos (Cat I and Cat II Non-Friable) must be properly removed by a licensed asbestos abatement contractor prior to renovations or demolition that would disturb the material. Federal, State and Local regulations and guidelines should be strictly adhered to when removing the ACM.

Prior to any future maintenance, renovation, or demolition activities, and newly discovered suspect ACMs or previously identified materials that were not sampled in the renovation location should be tested. Any areas that were noted as being inaccessible during this project or any concealed areas, such as behind walls, where suspect ACMs are discovered, will require a survey for ACM.

Prior to the initiation of a project that would involve abatement, a detailed engineering cost estimate and project design is recommended. The engineering cost estimate will incorporate such variables as scheduling and phasing of the project, the size, and extent of the project, seasonal factors, operation factors, and other restrictions, respiratory protection, alternate abatement options, and type of replacement material. An engineering cost estimate would also include professional fees, such as for project design and management, and other expenses, such as on-site air monitoring and construction supervision.

If, during demolition or renovation activities, previously unidentified suspect ACMs are discovered in concealed areas, such as behind walls, they should be sampled for asbestos, or they must be treated as ACM.

Lead Paint

Several approaches can be taken when dealing with LBP and leaded coatings that are intact and in good condition. LBP/leaded coatings can be removed, encapsulated, or enclosed. Worker protection and construction of an airtight containment around the work site, with few exceptions, are required where there is a disturbance. Depending on the abatement technique, airborne lead concentrations may be generated that may exceed the OSHA Lead in Construction Standard (29 CFR 1926.62).

Waste resulting from LBP coated component removal or removal of LBP by chemical stripping/mechanical removal is likely to result in the requirement for disposal in a hazardous waste facility. All lead paint and debris, whether from chemical or mechanical removal from its substrate, or whole component removal, must be tested to determine proper disposal. Waste characterization testing should be performed on all materials prior to making a disposal decision. Materials that are to be disposed of should be tested by the Toxicity Characteristic Leachate Procedure (TCLP) per EPA requirements to determine disposal requirements.

Note: OSHA regulates workers exposure to lead paint concentrations in any detectable amount. Therefore, in order to satisfy OSHA requirements, worker protection and monitoring may be required for work activities that disturb paints that contain lead in any amount. In accordance with the OSHA Construction Standard for Lead (29 CFR 1926.62), it is the contractors' responsibility to protect their workers when an employee may be occupationally exposed to lead.

PCB Caulking

Based on the findings of this assessment, no further action is required for PCBs at the Subject Property.

Other Hazardous Materials

JSK recommends disposing the hazardous materials identified on the site in accordance with applicable regulations. Any unknown containers present on the site need to be verified through testing followed by proper disposal in accordance with applicable regulations.



APPENDIX A – REPORT OF BULK SAMPLE ANALYSIS FOR ASBESTOS AND CHAIN OF CUSTODY



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM1-1	22018937-001a	Coated Black Tarry Semi-Fibrous Material	Yes	1	35	ND1	ND1	SYN (15) FBG (10)	75	T, C, B, OP
	22018937-001b	Black Tarry Semi-Fibrous Material	Yes	1	35	ND1	ND1	SYN (10) FBG (10) CELL (5)	75	T, C, B, OP
	22018937-001c	Grey Fibrous Material	Yes	1	10	ND1	ND1	CELL (60) FBG (15)	25	C, OP, Foam
	22018937-001d	White Semi-Fibrous Material	Yes	1	20	ND1	ND1	FBG (20)	80	C, OP, G
HM1-2	22018937-002a	Coated Black Tarry Semi-Fibrous Material	Yes	1	30	ND1	ND1	SYN (15) FBG (20)	65	T, C, B, OP
	22018937-002b	Black Tarry Semi-Fibrous Material	Yes	1	30	ND1	ND1	SYN (15) FBG (10) CELL (5)	70	T, C, B, OP
	22018937-002c	Grey Fibrous Material	Yes	1	10	ND1	ND1	CELL (60) FBG (15)	25	C, OP, Foam
	22018937-002d	White Semi-Fibrous Material	Yes	1	30	ND1	ND1	FBG (20)	80	C, OP, G
HM2-1	22018937-003a	Coated Black Tarry Semi-Fibrous Material	Yes	1	30	ND1	ND1	SYN (10) FBG (15)	75	T, C, B, OP
	22018937-003b	Black Tarry Semi-Fibrous Material	Yes	1	70	ND1	ND1	SYN (10) FBG (10) CELL (3)	77	T, C, B, OP

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

A = Amosite
AC = Actinolite
AN = Anthophyllite
CR = Crocidolite
TR = Tremolite
ND1 = None Detected
Trace = Less Than 1%

CELL = Cellulose
MW = Mineral Wool
FBG = Fiberglass
SYN = Synthetic
WO = Wollastonite
NTR = Non-Asbestiform TR
NAC = Non-Asbestiform AC
FT = Fibrous Talc
AH = Animal Hair

Q = Quartz
C = Carbonates
V = Vermiculite
G = Gypsum
M = Mica
T = Tar
P = Perlite
O = Organic
B = Binder
OP = Opaques
D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM2-2	22018937-004a	Coated Black Tarry Semi-Fibrous Material	Yes	1	30	ND1	ND1	SYN (15) FBG (15)	70	T, C, B, OP
	22018937-004b	Black Tarry Semi-Fibrous Material	Yes	1	70	ND1	ND1	SYN (10) FBG (10) CELL (3)	77	T, C, B, OP
HM3-1	22018937-005	Silver Paint	Yes	1	100	3	ND1	CELL (2)	95	T, C, B, OP
HM3-2	22018937-006	Not Analyzed - Prior Positive								
HM4-1	22018937-007	Black Mastic	Yes	1	100	ND1	ND1		100	T, C, B, OP
HM4-2	22018937-008	Black Mastic	Yes	1	100	ND1	ND1	FBG (1)	99	T, C, B, OP
HM5-1	22018937-009	Grey Fibrous Material	Yes	1	100	ND1	ND1	MW (40)	60	C, OP
HM5-2	22018937-010	Grey Fibrous Material	Yes	1	100	ND1	ND1	MW (40)	60	C, OP
HM5-3	22018937-011	Grey Fibrous Material	Yes	1	100	ND1	ND1	MW (40)	60	C, OP
HM6-1	22018937-012	Off-White Mastic	Yes	1	100	ND1	ND1	WO (3) MW (3)	94	C, B, OP

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

A = Amosite
AC = Actinolite
AN = Anthophyllite
CR = Crocidolite
TR = Tremolite
ND1 = None Detected
Trace = Less Than 1%

CELL = Cellulose
MW = Mineral Wool
FBG = Fiberglass
SYN = Synthetic
WO = Wollastonite
NTR = Non-Asbestiform TR
NAC = Non-Asbestiform AC
FT = Fibrous Talc
AH = Animal Hair

Q = Quartz
C = Carbonates
V = Vermiculite
G = Gypsum
M = Mica
T = Tar
P = Perlite
O = Organic
B = Binder
OP = Opaques
D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM6-2	22018937-013	Off-White Mastic	Yes	1	100	ND1	ND1	WO (3) MW (2)	95	C, B, OP
HM7-1	22018937-014a	Brown Floor Tile	Yes	1	95	3	ND1		97	C, B, OP
	22018937-014b	Black Mastic	Yes	1	5	5	ND1		95	T, C, B, OP
HM7-2	22018937-015	Not Analyzed - Prior Positive								
HM8-1	22018937-016	Grey Mastic	Yes	1	100	ND1	ND1		100	C, B, OP
HM8-2	22018937-017	Grey Mastic	Yes	1	100	ND1	ND1		100	C, B, OP
HM9-1	22018937-018a	Yellow and Dark Grey Mastic	Yes	1	40	ND1	ND1	CELL (2) SYN (1)	97	C, B, OP
	22018937-018b	Grey Non-Fibrous Material	Yes	1	60	ND1	ND1		100	C, B, OP, G
HM9-2	22018937-019a	Yellow and Dark Grey Mastic	Yes	1	25	ND1	ND1	CELL (2)	98	C, B, OP
	22018937-019b	Grey Non-Fibrous Material	Yes	1	75	ND1	ND1		100	C, B, OP, G

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

A = Amosite
AC = Actinolite
AN = Anthophyllite
CR = Crocidolite
TR = Tremolite
ND1 = None Detected
Trace = Less Than 1%

CELL = Cellulose
MW = Mineral Wool
FBG = Fiberglass
SYN = Synthetic
WO = Wollastonite
NTR = Non-Asbestiform TR
NAC = Non-Asbestiform AC
FT = Fibrous Talc
AH = Animal Hair

Q = Quartz
C = Carbonates
V = Vermiculite
G = Gypsum
M = Mica
T = Tar
P = Perlite
O = Organic
B = Binder
OP = Opaques
D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM10-1	22018937-020a	Beige Sheet Flooring	Yes	1	25	ND1	ND1		100	C, B, OP
	22018937-020b	White Fibrous Backing	Yes	1	25	50	ND1	CELL (2)	48	C, OP
	22018937-020c	Brown Floor Tile	Yes	1	45	3	ND1		97	C, B, OP
	22018937-020d	Black Mastic	Yes	1	5	4	ND1		96	T, C, B, OP
HM10-2	22018937-021	Not Analyzed - Prior Positive								
HM11-1	22018937-022a	White Plaster	Yes	1	80	ND1	ND1		100	C, OP, G
	22018937-022b	Beige Plaster	Yes	1	20	ND1	ND1		100	P, Q, C, OP, G
HM11-2	22018937-023a	White Plaster	Yes	1	30	ND1	ND1		100	C, OP, G
	22018937-023b	Beige Plaster	Yes	1	70	ND1	ND1	CELL (2)	98	P, Q, C, OP, G

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

A = Amosite
AC = Actinolite
AN = Anthophyllite
CR = Crocidolite
TR = Tremolite
ND1 = None Detected
Trace = Less Than 1%

CELL = Cellulose
MW = Mineral Wool
FBG = Fiberglass
SYN = Synthetic
WO = Wollastonite
NTR = Non-Asbestiform TR
NAC = Non-Asbestiform AC
FT = Fibrous Talc
AH = Animal Hair

Q = Quartz
C = Carbonates
V = Vermiculite
G = Gypsum
M = Mica
T = Tar
P = Perlite
O = Organic
B = Binder
OP = Opaques
D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM11-3	22018937-024a	White Plaster	Yes	1	20	ND1	ND1		100	C, OP, G
	22018937-024b	Beige Plaster	Yes	1	80	ND1	ND1	CELL (1)	99	P, Q, C, OP, G
HM12-1	22018937-025a	Grey Floor Tile	Yes	1	95	ND1	ND1		100	C, B, OP
	22018937-025b	Yellow Mastic	Yes	1	5	ND1	ND1	CELL (2)	98	C, B, OP
HM12-2	22018937-026a	Grey Floor Tile	Yes	1	95	ND1	ND1		100	C, B, OP
	22018937-026b	Yellow Mastic	Yes	1	5	ND1	ND1	CELL (3)	97	C, B, OP
HM13-1	22018937-027a	Brown Cove Base	Yes	1	95	ND1	ND1		100	C, B, OP
	22018937-027b	Light Yellow Mastic	Yes	1	5	ND1	ND1		100	C, B, OP
HM13-2	22018937-028a	Brown Cove Base	Yes	1	95	ND1	ND1		100	C, B, OP
	22018937-028b	Light Yellow Mastic	Yes	1	5	ND1	ND1		100	C, B, OP

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

A = Amosite
AC = Actinolite
AN = Anthophyllite
CR = Crocidolite
TR = Tremolite
ND1 = None Detected
Trace = Less Than 1%

CELL = Cellulose
MW = Mineral Wool
FBG = Fiberglass
SYN = Synthetic
WO = Wollastonite
NTR = Non-Asbestiform TR
NAC = Non-Asbestiform AC
FT = Fibrous Talc
AH = Animal Hair

Q = Quartz
C = Carbonates
V = Vermiculite
G = Gypsum
M = Mica
T = Tar
P = Perlite
O = Organic
B = Binder
OP = Opaques
D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM14-1	22018937-029	Off-White Semi-Fibrous Material	Yes	1	100	ND1	ND1	CELL (20)	80	C, B, OP
HM14-2	22018937-030	Off-White Semi-Fibrous Material	Yes	1	100	ND1	ND1	CELL (20)	80	C, B, OP
HM15-1	22018937-031a	Grey Cove Base	Yes	1	90	ND1	ND1		100	C, B, OP
	22018937-031b	Brown Mastic	Yes	1	10	ND1	ND1		100	B, OP
HM15-2	22018937-032a	Grey Cove Base	Yes	1	90	ND1	ND1		100	C, B, OP
	22018937-032b	Brown Mastic	Yes	1	10	ND1	ND1		100	B, OP
HM16-1	22018937-033	Black and Yellow Mastic	Yes	1	100	ND1	ND1	SYN (2)	98	C, B, OP
HM16-2	22018937-034	Black and Yellow Mastic	Yes	1	100	ND1	ND1	CELL (1) SYN (1)	98	C, B, OP
HM17-1	22018937-035a	White Drywall	Yes	1	60	ND1	ND1	CELL (15) FBG (2)	83	C, OP, G
	22018937-035b	White Joint Compound	Yes	1	40	ND1	ND1		100	P, C, OP, M

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

A = Amosite
AC = Actinolite
AN = Anthophyllite
CR = Crocidolite
TR = Tremolite
ND1 = None Detected
Trace = Less Than 1%

CELL = Cellulose
MW = Mineral Wool
FBG = Fiberglass
SYN = Synthetic
WO = Wollastonite
NTR = Non-Asbestiform TR
NAC = Non-Asbestiform AC
FT = Fibrous Talc
AH = Animal Hair

Q = Quartz
C = Carbonates
V = Vermiculite
G = Gypsum
M = Mica
T = Tar
P = Perlite
O = Organic
B = Binder
OP = Opaques
D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM17-2	22018937-036a	White Drywall	Yes	1	80	ND1	ND1	CELL (15) FBG (1)	84	C, OP, G
	22018937-036b	White Joint Compound	Yes	1	20	ND1	ND1		100	P, C, OP, M
HM17-3	22018937-037a	White Drywall	Yes	1	90	ND1	ND1	CELL (15)	85	C, OP, G
	22018937-037b	White Joint Compound	Yes	1	10	ND1	ND1		100	C, OP, M
HM18-1	22018937-038a	White Floor Tile	Yes	1	95	2	ND1		98	C, B, OP
	22018937-038b	Black Mastic	Yes	1	5	3	ND1		97	T, C, B, OP
HM18-2	22018937-039	Not Analyzed - Prior Positive								
HM19-1	22018937-040a	Off-White Floor Tile	Yes	1	80	ND1	ND1		100	C, B, OP
	22018937-040b	Black Mastic	Yes	1	5	5	ND1		95	T, C, B, OP
	22018937-040c	Grey and White Leveling Compound	Yes	1	15	ND1	ND1	CELL (3)	97	C, B, OP, G

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

A = Amosite
AC = Actinolite
AN = Anthophyllite
CR = Crocidolite
TR = Tremolite
ND1 = None Detected
Trace = Less Than 1%

CELL = Cellulose
MW = Mineral Wool
FBG = Fiberglass
SYN = Synthetic
WO = Wollastonite
NTR = Non-Asbestiform TR
NAC = Non-Asbestiform AC
FT = Fibrous Talc
AH = Animal Hair

Q = Quartz
C = Carbonates
V = Vermiculite
G = Gypsum
M = Mica
T = Tar
P = Perlite
O = Organic
B = Binder
OP = Opaques
D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM19-2	22018937-041a	Off-White Floor Tile	Yes	1	80	ND1	ND1		100	C, B, OP
	22018937-041b	Black Mastic	Yes	1	5	4	ND1	CELL (2)	94	T, C, B, OP
	22018937-041c	Grey and White Leveling Compound	Yes	1	15	ND1	ND1	CELL (2)	98	C, B, OP, G
HM20-1	22018937-042a	Green Floor Tile	Yes	1	95	2	ND1		98	C, B, OP
	22018937-042b	Black Mastic	Yes	1	5	4	ND1		96	T, C, B, OP
HM20-2	22018937-043	Not Analyzed - Prior Positive								
HM21-1	22018937-044	Black and Yellow Mastic	Yes	1	100	4	ND1		96	T, C, B, OP
HM21-2	22018937-045	Not Analyzed - Prior Positive								
HM22-1	22018937-046a	White Non-Fibrous Material	Yes	1	95	ND1	ND1		100	Q, C, B, OP, G
	22018937-046b	Black Mastic	Yes	1	5	5	ND1		95	T, C, B, OP

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

A = Amosite
AC = Actinolite
AN = Anthophyllite
CR = Crocidolite
TR = Tremolite
ND1 = None Detected
Trace = Less Than 1%

CELL = Cellulose
MW = Mineral Wool
FBG = Fiberglass
SYN = Synthetic
WO = Wollastonite
NTR = Non-Asbestiform TR
NAC = Non-Asbestiform AC
FT = Fibrous Talc
AH = Animal Hair

Q = Quartz
C = Carbonates
V = Vermiculite
G = Gypsum
M = Mica
T = Tar
P = Perlite
O = Organic
B = Binder
OP = Opaques
D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM22-2	22018937-047a	White Non-Fibrous Material	Yes	1	95	ND1	ND1	CELL (1)	99	Q, C, B, OP, G
	22018937-047b	Black Mastic	Yes	1	5	4	ND1	CELL (1)	95	T, C, B, OP

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

- A = Amosite
- AC = Actinolite
- AN = Anthophyllite
- CR = Crocidolite
- TR = Tremolite
- ND1 = None Detected
- Trace = Less Than 1%
- CELL = Cellulose
- MW = Mineral Wool
- FBG = Fiberglass
- SYN = Synthetic
- WO = Wollastonite
- NTR = Non-Asbestiform TR
- NAC = Non-Asbestiform AC
- FT = Fibrous Talc
- AH = Animal Hair
- Q = Quartz
- C = Carbonates
- V = Vermiculite
- G = Gypsum
- M = Mica
- T = Tar
- P = Perlite
- O = Organic
- B = Binder
- OP = Opaques
- D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM23-1	22018937-048a	Off-White Floor Tile	Yes	1	25	ND1	ND1		100	C, B, OP
	22018937-048b	Yellow Mastic	Yes	1	5	ND1	ND1	CELL (2)	98	C, B, OP
	22018937-048c	Off-White Floor Tile	Yes	1	15	ND1	ND1		100	C, B, OP
	22018937-048d	Clear Mastic	Yes	1	3	ND1	ND1		100	C, B, OP
	22018937-048e	Beige Floor Tile	Yes	1	25	ND1	ND1		100	C, B, OP
	22018937-048f	Yellow Mastic	Yes	1	5	ND1	ND1	CELL (2)	98	C, B, OP
	22018937-048g	Tan Sheet Flooring	Yes	1	7	ND1	ND1		100	C, B, OP
	22018937-048h	Beige Fibrous Backing	Yes	1	10	60	ND1	CELL (1)	39	C, OP
	22018937-048i	Black Mastic	Yes	1	3	4	ND1		96	T, C, B, OP
HM23-2	22018937-049	Not Analyzed - Prior Positive								

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

A = Amosite
AC = Actinolite
AN = Anthophyllite
CR = Crocidolite
TR = Tremolite
ND1 = None Detected
Trace = Less Than 1%

CELL = Cellulose
MW = Mineral Wool
FBG = Fiberglass
SYN = Synthetic
WO = Wollastonite
NTR = Non-Asbestiform TR
NAC = Non-Asbestiform AC
FT = Fibrous Talc
AH = Animal Hair

Q = Quartz
C = Carbonates
V = Vermiculite
G = Gypsum
M = Mica
T = Tar
P = Perlite
O = Organic
B = Binder
OP = Opaques
D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

Test Requested: 3002, Asbestos in Bulk Samples

Method: Polarized Light Microscopy (PLM): EPA 600/R-93/116: Method for Asbestos in Bulk Building Materials, EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method for Asbestos in Bulk Insulation Samples

Sample Identification		Physical Description of Sample; Additional Comments	Homo- geneous (yes/no)	Number of Layers	Percentage of Sample (%)	Asbestos Detected		Non-Asbestos Fibers (area %)	Non-Fibrous Material (area %)	Matrix Material (composition)
Client	Lab Sample Number					Chrysotile (%)	Amphibole (%)			
HM24-1	22018937-050	Grey Non-Fibrous Material	Yes	1	100	3	ND1		97	C, B, OP
HM24-2	22018937-051	Not Analyzed - Prior Positive								

Ashley Dodson
Ashley Dodson
Laboratory Analyst

Cathleen Piccione
Cathleen Piccione
Technical Supervisor

- A = Amosite
- AC = Actinolite
- AN = Anthophyllite
- CR = Crocidolite
- TR = Tremolite
- ND1 = None Detected
- Trace = Less Than 1%
- CELL = Cellulose
- MW = Mineral Wool
- FBG = Fiberglass
- SYN = Synthetic
- WO = Wollastonite
- NTR = Non-Asbestiform TR
- NAC = Non-Asbestiform AC
- FT = Fibrous Talc
- AH = Animal Hair
- Q = Quartz
- C = Carbonates
- V = Vermiculite
- G = Gypsum
- M = Mica
- T = Tar
- P = Perlite
- O = Organic
- B = Binder
- OP = Opaques
- D = Diatoms



43760 Trade Center Place
Suite 100
Dulles, VA 20166
(877) 648-9150
www.aerobiology.net

Certificate of Analysis

JSK Environmental Services, LLC
13130 Peach Leaf Place
Fairfax, VA 22030
Attn: Nand Kaushik
Client Project Name: 22204



Date Collected: 05/23/22
Date Received: 05/23/22
Date Analyzed: 05/26/22
Date Reported: 05/27/22
Project ID: 22018937

General Notes

- ◆ **NDI** indicates no asbestos was detected; the method detection limit is 1%.
- ◆ **Trace or "<1"** indicates asbestos was identified in the sample, but the concentration is less than 1% as determined by the minimum counting standards of CVE (calibrated visual estimate) or point counting. Due to the inherent uncertainty of the quantification techniques employed during analysis, verification of the results by a more accurate and precise method is recommended.
- ◆ All regulated asbestos minerals (i.e. chrysotile, amosite, crocidolite, anthophyllite, tremolite, and actinolite) were sought in every layer of each sample, but only those asbestos minerals detected are listed. Amosite is the common name for the asbestiform variety of the mineral grunerite. Crocidolite is the common name used for the asbestiform variety of the mineral riebeckite.
- ◆ Tile, vinyl, foam, plastic, and fine powder samples may contain asbestos fibers of such small diameter (< 0.25 microns in diameter) that these fibers cannot be detected by PLM. For such samples, more sensitive analytical methods (e.g. TEM, SEM, and XRD) are recommended if greater certainty about asbestos content is required. Semi-quantitative bulk TEM floor tile analysis is accepted under the NESHAPS regulations.
- ◆ Samples identified as inhomogeneous (containing more than one layer) shall be divided into individual layers and each layer tested separately. The results for each individual layer shall be listed separately on the report.
- ◆ These results are submitted pursuant to Aerobiology's current terms and conditions of sale, including the company's standard warranty and limitation of liability provisions. No responsibility or liability is assumed for the manner in which the results are used or interpreted.
- ◆ Aerobiology Laboratory shall be responsible for all the information provided in the report, except when information is provided by the customer. Aerobiology Laboratory is not responsible for the sampling activity. Data provided by a customer can affect the validity of results and shall be clearly identified. The report shall not be reproduced except in full without the approval of the laboratory to ensure that parts of a report are not taken out of context.
- ◆ Unless notified in writing to return the samples covered by this report, Aerobiology Laboratory will store the samples for a minimum period of 3 months before discarding. A shipping and handling charge will be assessed for the return of any samples.
- ◆ This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, or any agency of the Federal Government.
- ◆ This test report relates only to the items tested or calibrated.
- ◆ This report is not valid unless it bears the name of a NVLAP-approved signatory.
- ◆ Any reproduction of this document must include the entire document in order for the report to be valid.



22018937
22018937



Page 1 of 4
NVLAP

AHA LAR, LLC
ACCREDITED LABORATORY
LAB #192683 (CO)
LAB #163063 (GA)
LAB #102977 (VA)
LAB #210229 (AZ)
LAB #102747 (NJ)
LAB #218981 (CA)

Aerobiology Client		JSK Environmental Services, LLC				
Field Contact	Nand Kaushik				Collected By/Date	Relinquished By/Date:
Reporting Address	13130 Peach Leaf Place, Fairfax, VA 22030				Relinquished By/Date:	Received By/Date: 5/23/08 @ 8:00am
Billing Address	Same as above				Sampler Type	Andersen <input type="checkbox"/> SAS <input type="checkbox"/>
Phone/Fax	703-980-0573				PO# /Job#:	Sample Aire <input type="checkbox"/> Other <input type="checkbox"/>
Reporting Email(s)	nand@jskenvironmental.com				Project Name:	AeroTrap <input type="checkbox"/> BioCulture <input type="checkbox"/>
Routine	24 Hour	Same Day	4 Hour	2 Hour	5 Day (Asbestos Only)	Notes:
SAMPLING LOCATION ZIP CODE					22204	
					CC Info:	

Sample No.	Test Code	Sample Location	Total Volume/Area
1	3002	Built up roof tie on Building Roof	
2			
3		White/Black Curbing/Flashing on Building Roof	
4			
5		Silver Roof Vent Coating on Building Roof	
6			
7		Black vent pipe mastic on Building Roof	
8			
9		Grayspray on fire proofing in Building Basement	
10			
11			
12		Cream pipe insulation mastic in Basement Boiler Room + Corridor	
13			
14		Brown 9"x9" Vinyl Floor tile with black mastic Building Starwell South side	

1054	Direct, Non-viable Spore Trap	1015	Culture - WATER Legionella
1051	Direct, Qualitative - Swab/Tape	1017	Culture - SWAB Legionella
1050	Direct, Qualitative - Bulk	1010	WATER - Potable - E. coli/total coliforms
1005	AIR Culture - Bacterial Count w/ ID's	1012	SWAB - E. coli/total coliforms
1030	AIR Culture - Fungal Count w/ ID's	1028	SWAB - Sewage Screen (E. coli/Enterococcus/fecal coliforms)
1006	SWAB Culture - Bacterial Count w/ ID's	2056	WATER - Heterotrophic Plate Count
1031	SWAB Culture - Fungal Count w/ ID's	3001	ASBESTOS - Point count
1008	BULK Culture - Bacterial Count w/ ID's	3002	ASBESTOS - PLM Analysis
1033	BULK Culture - Fungal Count w/ ID's	3003	ASBESTOS - Particle characterization
1007	WATER Culture - Bacterial Count w/ID's	3004	ASBESTOS - PCM Analysis

Washington, D.C. (877) 648-9150 Atlanta, GA (770) 947-2838 Denver, CO (303) 232-3746 Phoenix, AZ (602) 441-3700 Cherry Hill, NJ (856) 486-1177 Los Angeles, CA (714) 895-8401



Lab Use
22018937



Page 2 of 4
NVLAP
 NVLAP Lab Code 200860-0 (CO)
 NVLAP Lab Code 200829-0 (VA)
 NVLAP Lab Code 500097-0 (AZ)
 NVLAP Lab Code 201076-1 (CA)
 AIHA LAP, LLC
 ACCREDITED LABORATORY
 19700 S. WILSON AVE.
 WEST VALLEY, CO 80057
 www.aiha.com/labinfo
 LAB #192683 (CO)
 LAB #163063 (GA)
 LAB #102977 (VA)
 LAB #210229 (AZ)
 LAB #102747 (NJ)
 LAB #218981 (CA)

Aerobiology Client					Collected By/Date:	Relinquished By/Date:
Field Contact					Relinquished By/Date:	Received By/Date: 5/28/08 8:00pm
Reporting Address					Sampler Type	Andersen <input type="checkbox"/> SAS <input type="checkbox"/> Sample Aire <input type="checkbox"/> AeroTrap <input type="checkbox"/> Other <input type="checkbox"/> BioCulture <input type="checkbox"/>
Billing Address					PO# /Job#:	
Phone/Fax					Project Name:	
Reporting Email(s)					Notes:	
Routine	24 Hour	Same Day	4 Hour	2 Hour	5 Day (Asbestos Only)	
SAMPLING LOCATION ZIP CODE					CC Info:	

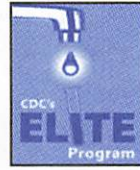
	Sample No.	Test Code	Sample Location	Total Volume/Area
15	1 HM7-2	3002	Brown 9"x9" vinyl floor tile with black mastic Building stairwell, South Side	
16	2 HM8-1	↓	Gray HVAC Duct Seam mastic in Building basement HVAC Rooms	
17	3 HM8-2		————— ————— —————	
18	4 HM9-1		Black/Grey/yellow floor mastic below carpeting in elevator	
19	5 HM9-2		————— ————— —————	
20	6 HM10-1		Gray pebble pattern Resilient Sheet Flooring over Brown VET with black mastic corridor near elevator	
21	7 HM10-2		————— —————	
22	8 HM11-1		Plaster Gray base white skin coat in Building stairwell	
23	9 HM11-2		————— ————— —————	
24	10 HM11-3		————— ————— —————	
25	11 HM12-1		Gray mastic 12"x12" vinyl floor tile with tan mastic, Building main level	
26	12 HM12-2		————— ————— —————	
27	13 HM13-1		Tan 4" vinyl core base with gray mastic, Building main level	
28	14 HM13-2		————— ————— —————	

1054	Direct, Non-viable Spore Trap	1015	Culture - WATER Legionella
1051	Direct, Qualitative - Swab/Tape	1017	Culture - SWAB Legionella
1050	Direct, Qualitative - Bulk	1010	WATER - Potable - E. coli/total coliforms
1005	AIR Culture - Bacterial Count w/ ID's	1012	SWAB - E. coli/total coliforms
1030	AIR Culture - Fungal Count w/ ID's	1028	SWAB - Sewage Screen (E. coli/Enterococcus/fecal coliforms)
1006	SWAB Culture - Bacterial Count w/ ID's	2056	WATER - Heterotrophic Plate Count
1031	SWAB Culture - Fungal Count w/ ID's	3001	ASBESTOS - Point count
1008	BULK Culture - Bacterial Count w/ ID's	3002	ASBESTOS - PLM Analysis
1033	BULK Culture - Fungal Count w/ ID's	3003	ASBESTOS - Particle characterization
1007	WATER Culture - Bacterial Count w/ID's	3004	ASBESTOS - PCM Analysis

Washington, D.C. (877) 648-9150 Atlanta, GA (770) 947-2838 Denver, CO (303) 232-3746 Phoenix, AZ (602) 441-3700 Cherry Hill, NJ (856) 486-1177 Los Angeles, CA (714) 895-8401



Lab Use
22018937



VA - 102977 AZ - 210229
CA - 218951 CO - 192683
NJ - 102747 GA - 163063
FL - 228303 IL - 232279

Aerobiology Client					AZ, CA, CO, FL, GA, IL, VA, NJ	AZ, CA, CO, VA
Field Contact					Collected By/Date:	Relinquished By/Date:
Reporting Address					Relinquished By/Date:	Received By/Date: 5/23/20 8:00 am
Billing Address					Sampler Type: Andersen <input type="checkbox"/> SAS <input type="checkbox"/>	Sample/Aire: AeroTrap <input type="checkbox"/> Other <input type="checkbox"/>
Phone/Fax					PO# /Job#:	
Reporting Email(s)					Project Name:	
<input type="checkbox"/> Routine	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> Same Day	<input type="checkbox"/> 4 Hour	<input type="checkbox"/> 2 Hour	Notes:	
SAMPLING LOCATION ZIP CODE					CC Info:	

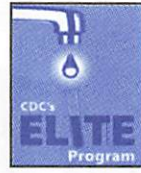
	Sample No.	Test Code	Sample Location	Total Volume/Area
29	1 HM 14-1	3002	Gray Sink Bond coating, Break Room on Main Level and 2nd floor.	
30	2 HM 14-2		— ll —————	
31	3 HM 15-1		Gray 4" vinyl core base with brown mastic, Building main level	
32	4 HM 15-2		— ll ————— ll —————	
33	5 HM 16-1		Brown/tan/black vinyl floor mastic in Building main level	
34	6 HM 16-2		— ll —————	
35	7 HM 17-1		White Drywall with ashite joint compound throughout building	
36	8 HM 17-2		— ll —————	
37	9 HM 17-3		— ll —————	
38	10 HM 18-1		White 9"x9" vinyl floor tile with black mastic in Mezzanine level	
39	11 HM 18-2		— ll —————	
40	12 HM 19-1		White mastic 12"x12" vinyl floor tile with black mastic/Gray & white level compound throughout 2nd floor	
41	13 HM 19-2		— ll ————— ll —————	
42	14 HM 20-1		Green 9"x9" vinyl floor tile with black mastic, building stairwell, north side	

1054	Direct, Non-viable Spore Trap	1015	Culture - WATER Legionella
1051	Direct, Qualitative - Swab/Tape	1017	Culture - SWAB Legionella
1050	Direct, Qualitative - Bulk	1010	WATER - Potable - E. coli/total coliforms
1005	AIR Culture - Bacterial Count w/ ID's	1012	SWAB - E. coli/total coliforms
1030	AIR Culture - Fungal Count w/ ID's	1028	SWAB - Sewage Screen (E. coli/Enterococcus/fecal coliforms)
1006	SWAB Culture - Bacterial Count w/ ID's	2056	WATER - Heterotrophic Plate Count
1031	SWAB Culture - Fungal Count w/ ID's	3001	ASBESTOS - Point count
1008	BULK Culture - Bacterial Count w/ ID's	3002	ASBESTOS - PLM Analysis
1033	BULK Culture - Fungal Count w/ ID's	3003	ASBESTOS - Particle characterization
1007	WATER Culture - Bacterial Count w/ ID's	3004	ASBESTOS - PCM Analysis

Washington, D.C. Atlanta, GA Denver, CO Phoenix, AZ Cherry Hill, NJ Los Angeles, CA Ft. Lauderdale, FL Chicago, IL
(877) 648-9150 (770) 947-2828 (303) 232-3746 (602) 441-3700 (856) 486-1177 (714) 895-8401 (954) 451-3725 (630) 403-6822



Lab Use
22018937



VA - 102877 AZ - 210229
CA - 216951 CO - 192683
NJ - 102747 GA - 163063
FL - 228303 IL - 232279

Aerobiology Client					AZ, CA, CO, FL, GA, IL, VA, NJ	AZ, CA, CO, VA
Field Contact					Collected By/Date:	Relinquished By/Date:
Reporting Address					Relinquished By/Date:	Received By/Date: 5/23/08 8:00am
Billing Address					Sampler Type	Andersen <input type="checkbox"/> SAS <input type="checkbox"/>
Phone/Fax					Sample Aire	AeroTrap <input type="checkbox"/> BioCulture <input type="checkbox"/>
Reporting Email(s)					PO# /Job#:	
					Project Name:	
<input type="checkbox"/> Routine	<input type="checkbox"/> 24 Hour	<input type="checkbox"/> Same Day	<input type="checkbox"/> 4 Hour	<input type="checkbox"/> 2 Hour	Notes:	
SAMPLING LOCATION ZIP CODE					CC Info:	

	Sample No.	Test Code	Sample Location	Total Volume/Area
43	1 HM 20-2		————— 11 ————— 11 —————	
44	2 HM 21-1	300 2	Tan Carpet glue with black mastic throughout offices on 3rd floor.	
45	3 HM 21-2		————— 11 —————	
46	4 HM 22-1		White setting bed with black mastic in break room on Building 3rd floor	
47	5 HM 22-2		————— 11 ————— 11 —————	
48	6 HM 23-1		Grey black specs, 12"x12" VFT yellow mastic over gray VFT black mastic over gray VFT yellow mastic over cream RSP black mastic 3rd floor	
49	7 HM 23-2		————— 11 ————— 11 —————	
50	8 HM 24-1		Gray rotten on window glazing, throughout.	
51	9 HM 24-2		————— 11 ————— 11 —————	
10				
11				
12				
13				
14				

1054	Direct, Non-viable Spore Trap	1015	Culture - WATER Legionella
1051	Direct, Qualitative - Swab/Tape	1017	Culture - SWAB Legionella
1050	Direct, Qualitative - Bulk	1010	WATER - Potable - E. coli/total coliforms
1005	AIR Culture - Bacterial Count w/ ID's	1012	SWAB - E. coli/total coliforms
1030	AIR Culture - Fungal Count w/ ID's	1028	SWAB - Sewage Screen (E. coli/Enterococcus/fecal coliforms)
1006	SWAB Culture - Bacterial Count w/ ID's	2056	WATER - Heterotrophic Plate Count
1031	SWAB Culture - Fungal Count w/ ID's	3001	ASBESTOS - Point count
1008	BULK Culture - Bacterial Count w/ ID's	3002	ASBESTOS - PLM Analysis
1033	BULK Culture - Fungal Count w/ ID's	3003	ASBESTOS - Particle characterization
1007	WATER Culture - Bacterial Count w/ ID's	3004	ASBESTOS - PCM Analysis

Washington, D.C. Atlanta, GA Denver, CO Phoenix, AZ Cherry Hill, NJ Los Angeles, CA Ft. Lauderdale, FL Chicago, IL
 (877) 648-9150 (770) 947-2828 (303) 232-3746 (602) 441-3700 (856) 486-1177 (714) 895-8401 (954) 451-3725 (630) 403-6822



ACM SURVEY BULK SAMPLE LOG

Site Address: 3108 Columbia Pike, Arlington, VA 22204				Date: May 20, 2022			Page 1 of 5	
Company: JSK Environmental Services, LLC			Tel: (703)-980-0573		Collected by: Nand Kaushik & Mike Allshouse			
Project Site: Office Building Columbia Pike, Arlington County							Project No.: JSK-2022-28	
Sample Number	Type of Material Sampled	Sample Location	Friable	Condition of Material	Accessibility	Photo	Comments	
HM1-1	Built up Roof Field	Building Roof	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM1-2	Built up Roof Field	Building Roof	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM2-1	White/Black Curbing/Flashing	Building Roof	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM2-2	White/Black Curbing/Flashing	Building Roof	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM3-1	Silver Roof Vent Coating	Building Roof	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM3-2	Silver Roof Vent Coating	Building Roof	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM4-1	Black Vent Pipe Mastic	Building Roof	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM4-2	Black Vent Pipe Mastic	Building Roof	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM5-1	Gray Spray-on Fire Proofing	Building Basement, Boiler Room	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM5-2	Gray Spray-on Fire Proofing	Building Basement, Corridor	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		



Site Address: 3108 Columbia Pike, Arlington, VA 22204				Date: May 20, 2022			Page 1 of 5	
Company: JSK Environmental Services, LLC			Tel: (703)-980-0573		Collected by: Nand Kaushik & Mike Allshouse			
Project Site: Office Building Columbia Pike, Arlington County							Project No.: JSK-2022-28	
Sample Number	Type of Material Sampled	Sample Location	Friable	Condition of Material	Accessibility	Photo	Comments	
HM5-3	Gray Spray-on Fire Proofing	Building Basement, Electrical Room	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM6-1	Cream Pipe Insulation Mastic	Building Basement, Boiler Room	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM6-2	Cream Pipe Insulation Mastic	Building Basement, Corridor	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM7-1	9" by 9" brown vinyl floor tile with black mastic	Building Stairwell, west side	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Present all throughout stairwell and throughout Mezzanine Level and portions of 3 rd Floor	
HM7-2	9" by 9" brown vinyl floor tile with black mastic	Building Stairwell, west side	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Present all throughout stairwell and throughout Mezzanine Level and portions of 3 rd Floor	
HM8-1	Gray HVAC Duct Seam Mastic	Building Basement, HVAC Room Number 1	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM8-2	Gray HVAC Duct Seam Mastic	Building Basement, HVAC Room Number 2	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM9-1	Black/Gray/Yellow Mastic	Building Elevator	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM9-2	Black/Gray/Yellow Mastic	Building Elevator	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM10-1	Gray Pebble Pattern Resilient Sheet Flooring over Brown Vinyl Floor tiling with black mastic	Building Main Floor, Corridor near Elevator	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		



Site Address: 3108 Columbia Pike, Arlington, VA 22204				Date: May 20, 2022			Page 1 of 5
Company: JSK Environmental Services, LLC		Tel: (703)-980-0573		Collected by: Nand Kaushik & Mike Allshouse			
Project Site: Office Building Columbia Pike, Arlington County						Project No.: JSK-2022-28	
Sample Number	Type of Material Sampled	Sample Location	Friable	Condition of Material	Accessibility	Photo	Comments
HM10-2	Gray Pebble Pattern Resilient Sheet Flooring over Brown Vinyl Floor tiling with black mastic	Building Main Floor, Corridor near Elevator	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
HM11-1	Plaster Gray Base White Skim Coat on Wall	Building Main Floor, Corridor near Elevator	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
HM11-2	Plaster Gray Base White Skim Coat on Wall	Building Main Floor, Corridor near Elevator	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
HM11-3	Plaster Gray Base White Skim Coat on Wall	Building Main Floor, Stairwell on West Side	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout West Side Stairwell
HM12-1	12" by 12" Gray Mottled Vinyl Floor Tile with Tan Mastic	Building Main Floor, Flooring in Office Area on West Side of Building	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
HM12-2	12" by 12" Gray Mottled Vinyl Floor Tile with Tan Mastic	Building Main Floor, Flooring in Office Area on West Side of Building	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
HM13-1	4" Gray Vinyl Cove Base with Gray Mastic	Building Main Floor, Flooring in Office Area on West Side of Building	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
HM13-2	4" Gray Vinyl Cove Base with Gray Mastic	Building Main Floor, Flooring in Office Area on West Side of Building	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
HM14-1	Gray Sink Bowl Coating	Building Main Floor, Break Room on West Side	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	
HM14-2	Gray Sink Bowl Coating	Building 2 nd floor, Break Room on East Side	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	



Site Address: 3108 Columbia Pike, Arlington, VA 22204				Date: May 20, 2022			Page 1 of 5	
Company: JSK Environmental Services, LLC			Tel: (703)-980-0573		Collected by: Nand Kaushik & Mike Allshouse			
Project Site: Office Building Columbia Pike, Arlington County							Project No.: JSK-2022-28	
Sample Number	Type of Material Sampled	Sample Location	Friable	Condition of Material	Accessibility	Photo	Comments	
HM15-1	4" Brown Vinyl Cove Base with Brown Mastic	Building Main Floor, Flooring in Some of the Office Area on West Side of Building	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM15-2	4" Brown Vinyl Cove Base with Brown Mastic	Building Main Floor, Flooring in the Central Customer Area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM16-1	Brown/Tan/Black Floor Mastic	Building Main Floor, Main Customer Area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM16-2	Brown/Tan/Black Floor Mastic	Building Main Floor, Main Customer Area	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM17-1	White Drywall with Associated White Joint Compound	Building Main Floor	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout all Building Floors	
HM17-2	White Drywall with Associated White Joint Compound	Building 2 nd Floor	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout all Building Floors	
HM17-3	White Drywall with Associated White Joint Compound	Building 3 rd Floor	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout all Building Floors	
HM18-1	9" by 9" White Vinyl Floor Tile with Black Mastic	Building Mezzanine Floor, Office Space	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM18-2	9" by 9" White Vinyl Floor Tile with Black Mastic	Building Mezzanine Floor, Office Space	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM19-1	12" by 12" White Mottled Vinyl Floor Tile with Black Mastic and Gray/White Leveling Compound	Building 2 nd Floor	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout the entire 2 nd Floor	



Site Address: 3108 Columbia Pike, Arlington, VA 22204				Date: May 20, 2022			Page 1 of 5	
Company: JSK Environmental Services, LLC			Tel: (703)-980-0573		Collected by: Nand Kaushik & Mike Allshouse			
Project Site: Office Building Columbia Pike, Arlington County							Project No.: JSK-2022-28	
Sample Number	Type of Material Sampled	Sample Location	Friable	Condition of Material	Accessibility	Photo	Comments	
HM19-2	12" by 12" White Mottled Vinyl Floor Tile with Black Mastic and Gray/White Leveling Compound	Building 2 nd Floor	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input checked="" type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout the entire 2 nd Floor	
HM20-1	9" by 9" Green Vinyl Floor Tile with Black Mastic	Building stairwell on East Side	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout stairwell	
HM20-2	9" by 9" Green Vinyl Floor Tile with Black Mastic	Building stairwell on East Side	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout stairwell	
HM21-1	Tan carpet glue with black mastic	Building 3 rd floor, Throughout the offices	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout 3 rd floor Office Areas	
HM21-2	Tan carpet glue with black mastic	Building 3 rd floor, Throughout the offices	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout 3 rd floor Office Areas	
HM22-1	White Setting Bed with Black Mastic	Building 3 rd Floor, Break Room on West Side	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout 3 rd floor Office Areas	
HM22-2	White Setting Bed with Black Mastic	Building 3 rd Floor, Break Room on West Side	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Throughout 3 rd floor Office Areas	
HM23-1	12" by 12" Gray/Black Specs Vinyl Floor Tile with Yellow Mastic over Gray Vinyl Floor Tile with Black Mastic over Gray Vinyl Floor Tile with Yellow Mastic over Cream Resilient Floor Sheet with Black Mastic	Building 3 rd Floor, Office Space on Northwest Corner	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Four Layers of Flooring	
HM23-2	12" by 12" Gray/Black Specs Vinyl Floor Tile with Yellow Mastic over Gray Vinyl Floor Tile with Black Mastic over Gray Vinyl Floor Tile with Yellow Mastic over Cream	Building 3 rd Floor, Office Space on Northwest Corner	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Potentially	<input checked="" type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor	<input checked="" type="checkbox"/> Low <input type="checkbox"/> Medium <input type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Four Layers of Flooring	

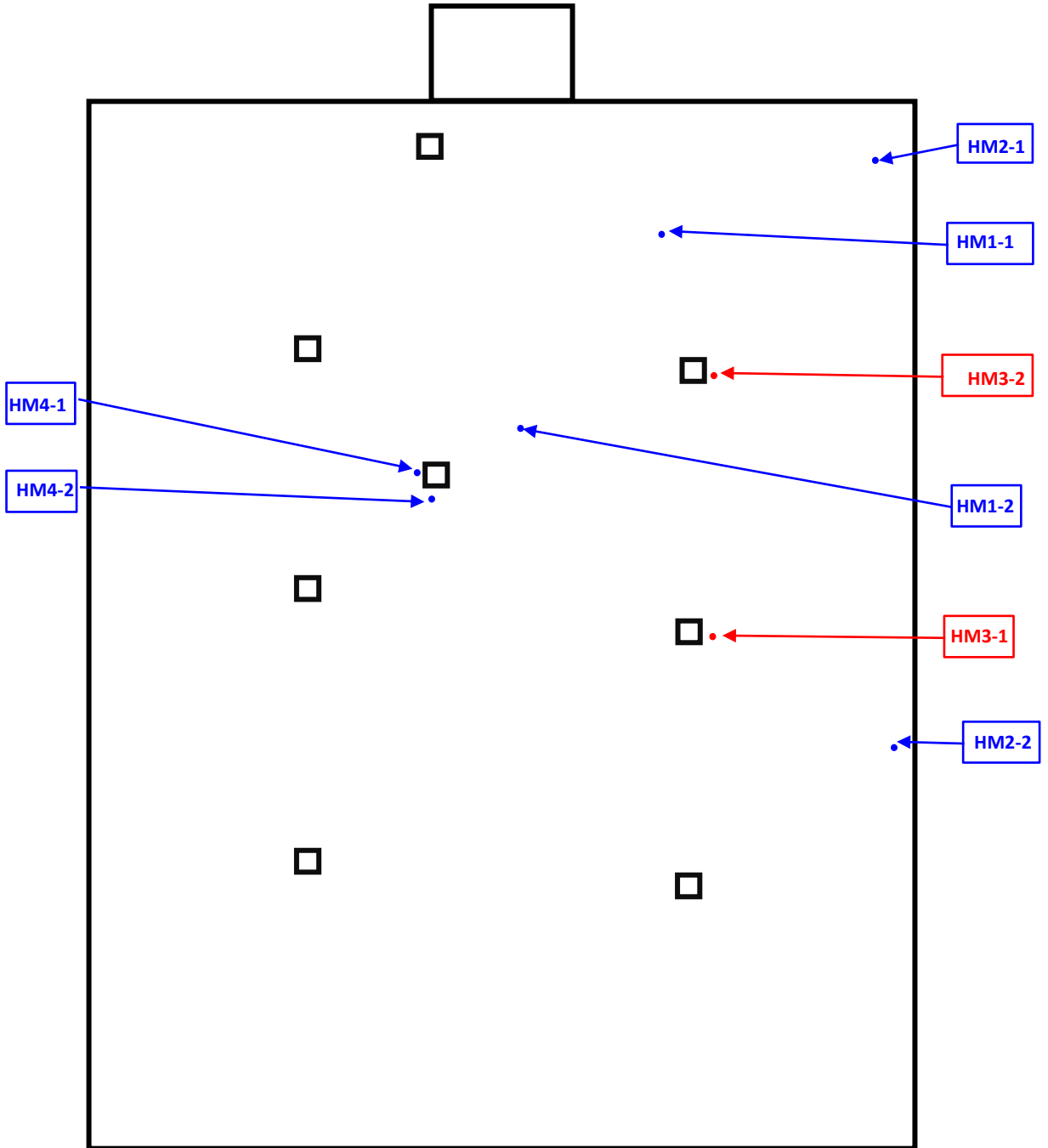


Site Address: 3108 Columbia Pike, Arlington, VA 22204				Date: May 20, 2022			Page 1 of 5	
Company: JSK Environmental Services, LLC			Tel: (703)-980-0573		Collected by: Nand Kaushik & Mike Allshouse			
Project Site: Office Building Columbia Pike, Arlington County							Project No.: JSK-2022-28	
Sample Number	Type of Material Sampled	Sample Location	Friable	Condition of Material	Accessibility	Photo	Comments	
	Resilient Floor Sheet with Black Mastic							
HM24-1	Gray Interior Window Glazing	Throughout Building	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input checked="" type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
HM24-2	Gray Interior Window Glazing	Throughout Building	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Potentially	<input type="checkbox"/> Good <input type="checkbox"/> Fair <input checked="" type="checkbox"/> Poor	<input type="checkbox"/> Low <input type="checkbox"/> Medium <input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		



APPENDIX B – SITE LAYOUT AND ACM SAMPLE LOCATION DRAWING

Figure 1 - Asbestos Sample Location Map, Roof 3108 Columbia Pike, Arlington, VA





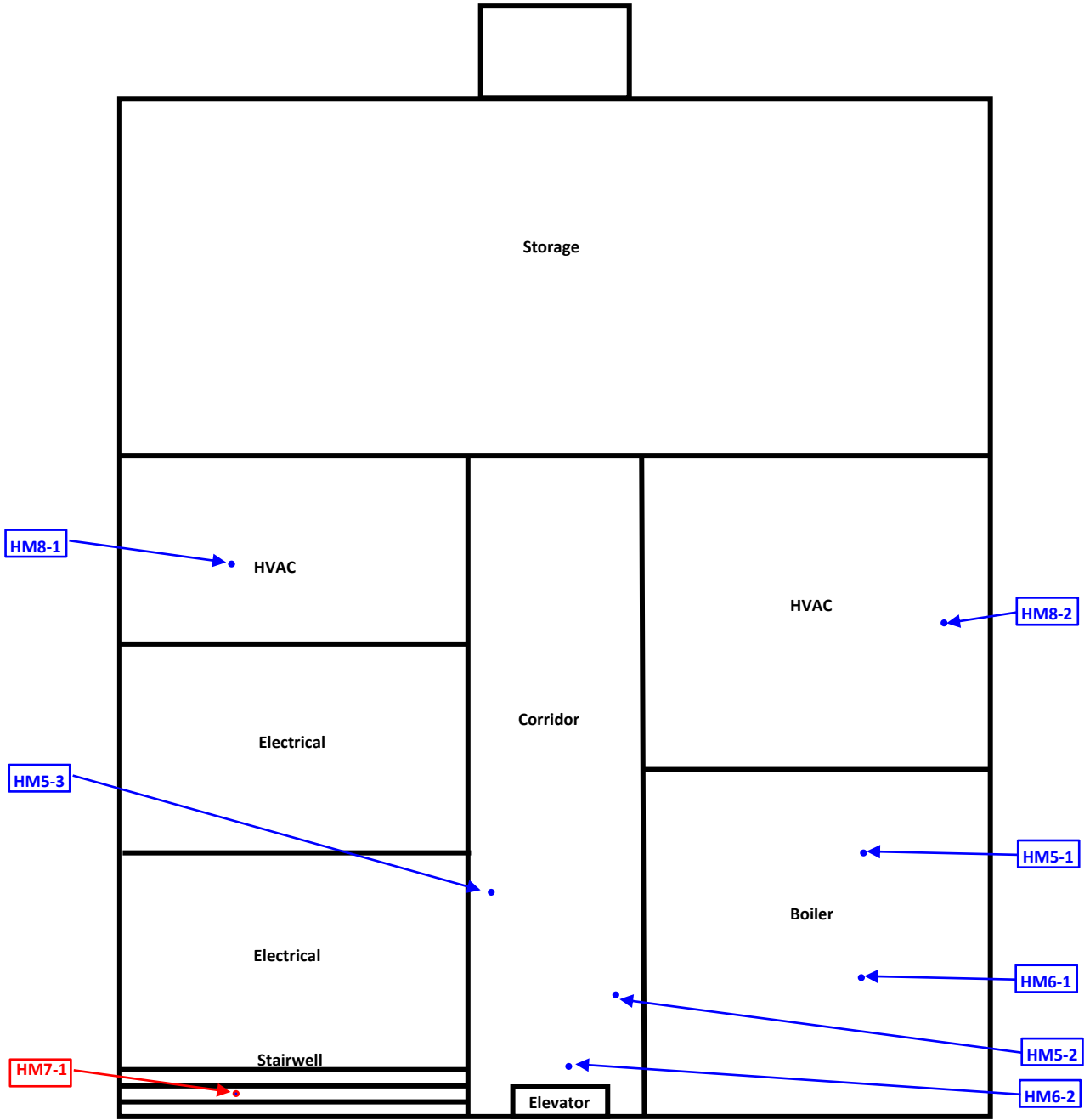
 <p>LEGEND</p> <p>■ ■ - Bulk Sample Location (non-ACM)</p> <p>■ ■ - Bulk Sample Location (ACM)</p>	<p>FIGURE 1</p> <p>Sample Location Site Map (Not to Scale) Office Building - Roof</p>	<p>JSK Project No. : JSK-2022-28</p> <p>3108 Columbia Pike, Arlington, VA</p>	<p>N</p> 
--	--	---	--

Figure 2 - Asbestos Sample Location Map, Basement 3108 Columbia Pike, Arlington, VA



HM 7 Throughout Stairwell

HM 5 Throughout Basement



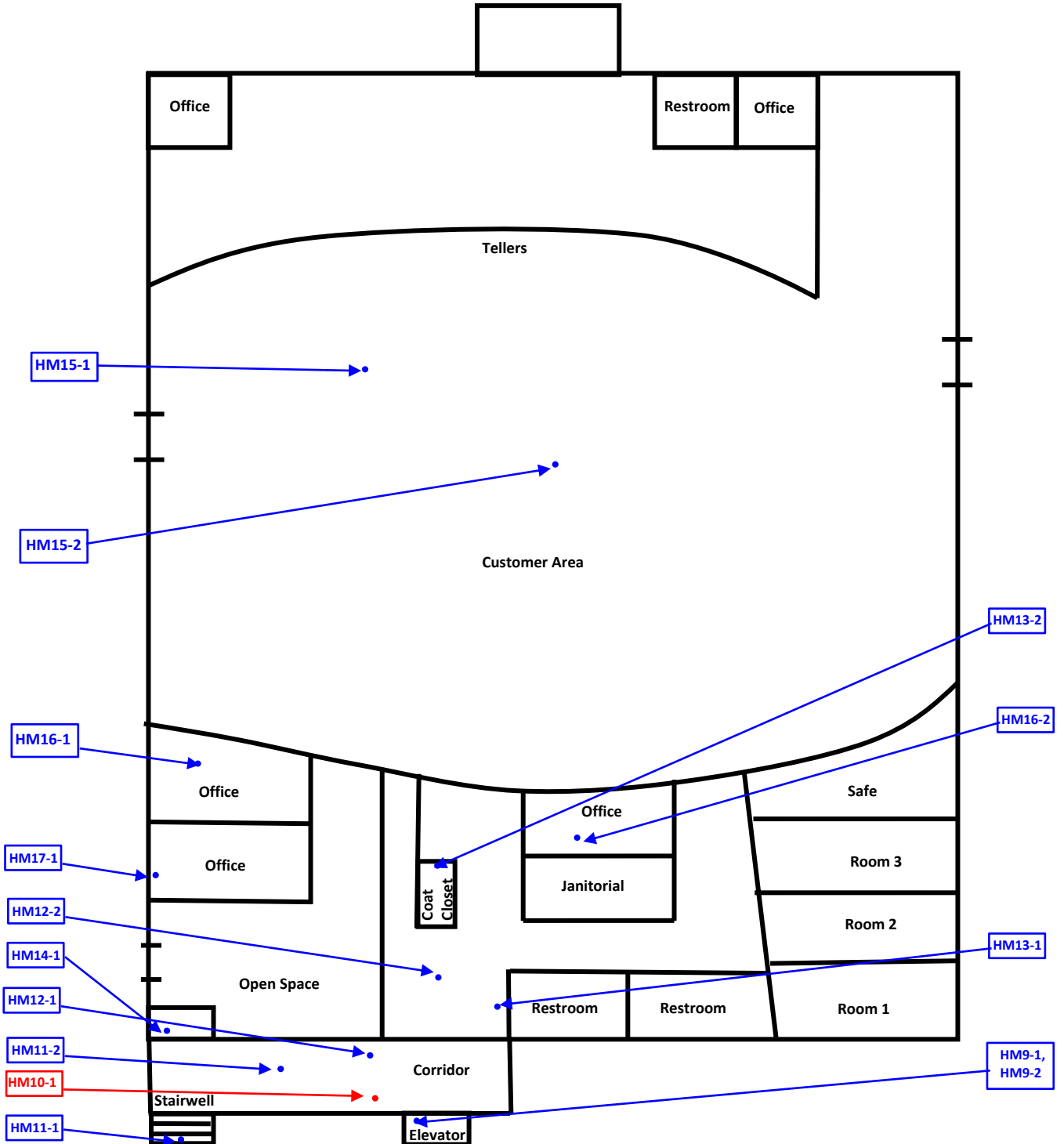
 <p>LEGEND</p> <ul style="list-style-type: none"> .. - Bulk Sample Location (non-ACM) .. - Bulk Sample Location (ACM) 	<p>FIGURE 2</p> <p>Sample Location Site Map (Not to Scale) Office Building - Basement</p>	<p>JSK Project No. : JSK-2022-28</p> <p>3108 Columbia Pike, Arlington, VA</p>	<p>N</p> 
--	--	--	--

FIGURE 3 - ASBESTOS Sample Location Map, Main Floor

3108 Columbia Pike, Arlington, VA





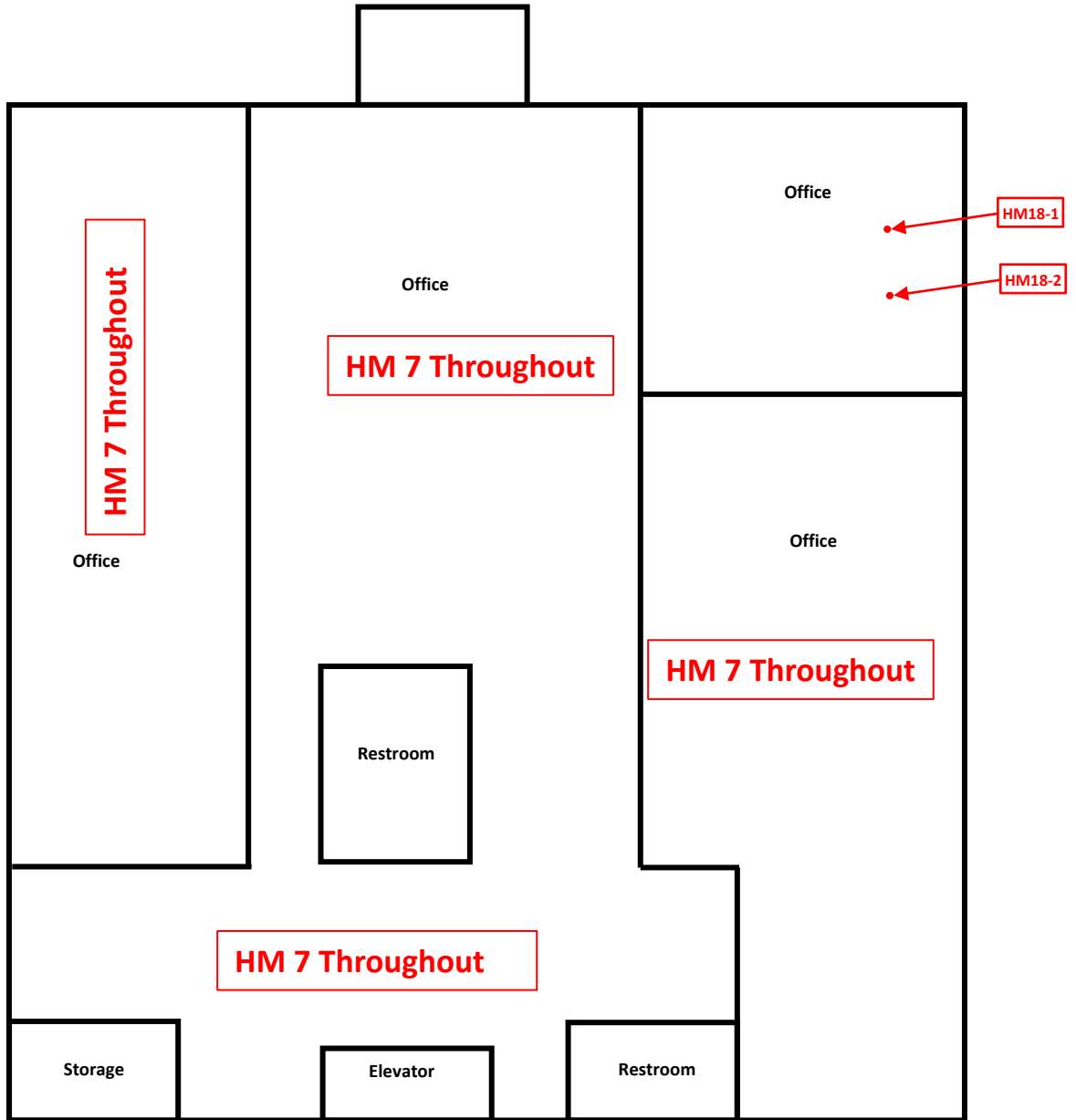
 <p>LEGEND</p> <ul style="list-style-type: none">••• Bulk Sample Location (non-ACM)••• Bulk Sample Location (ACM)	<p>FIGURE 3</p> <p>Sample Location Site Map (Not to Scale) Office Building –Main Floor</p>	<p>JSK Project No. : JSK-2022-28</p> <p>3108 Columbia Pike, Arlington, VA</p>	<p>N</p> 
--	---	---	--

Figure 4 - Asbestos Sample Location Map, Mezzanine Area 3108 Columbia Pike, Arlington, VA





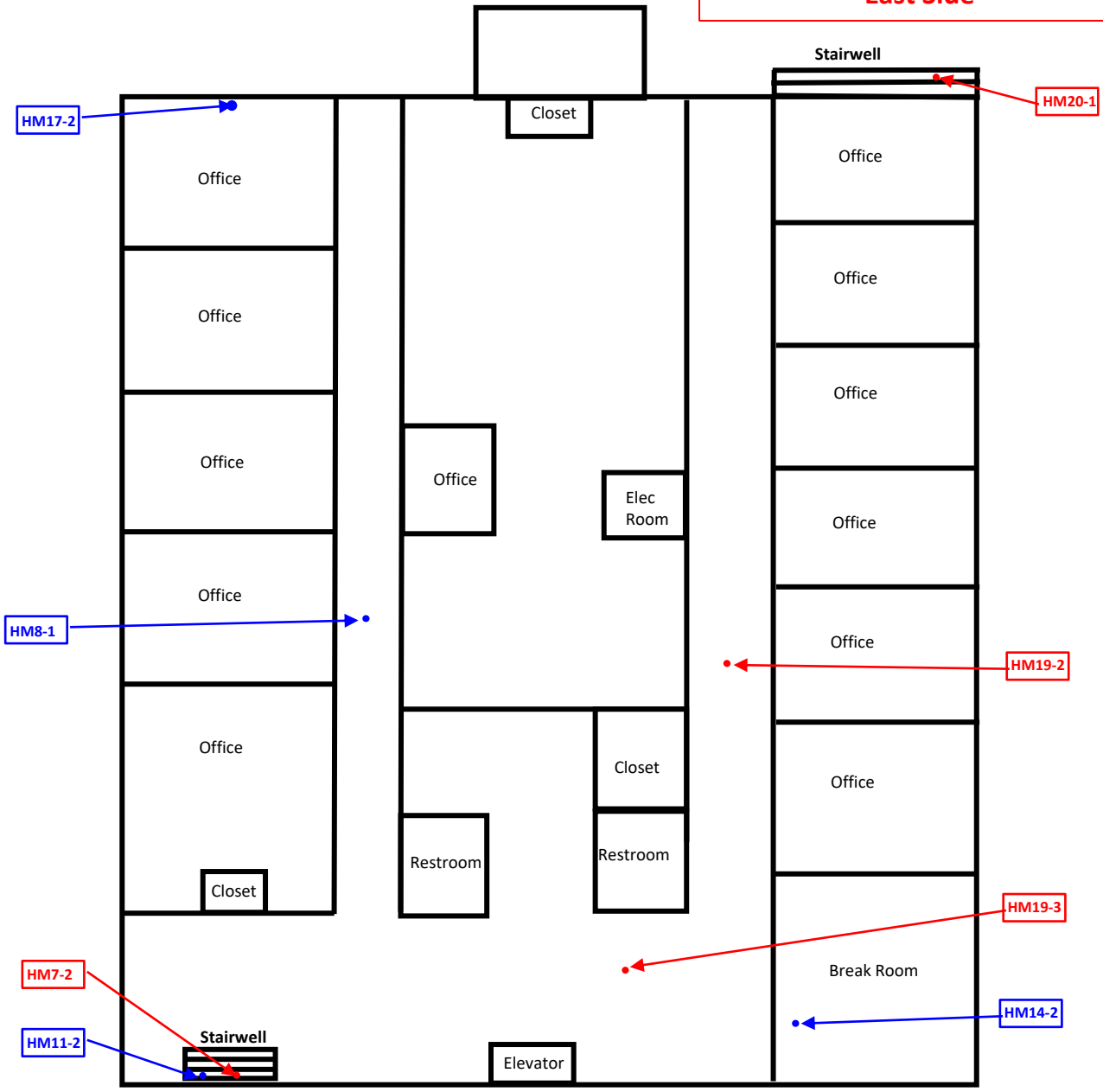
 <p>LEGEND</p> <p>== Bulk Sample Location (non-ACM)</p> <p>== Bulk Sample Location (ACM)</p>	<p>FIGURE 4 Sample Location Site Map (Not to Scale) Office Building - Mezzanine</p>	<p>JSK Project No. : JSK-2022-28 3108 Columbia Pike, Arlington, VA</p>	<p>N</p> 
--	--	--	--

Figure 5 - Asbestos Sample Location Map, 2nd Floor 3108 Columbia Pike, Arlington, VA

**HM 20 Throughout Stairwell,
East Side**



HM 19 Throughout 2nd Floor



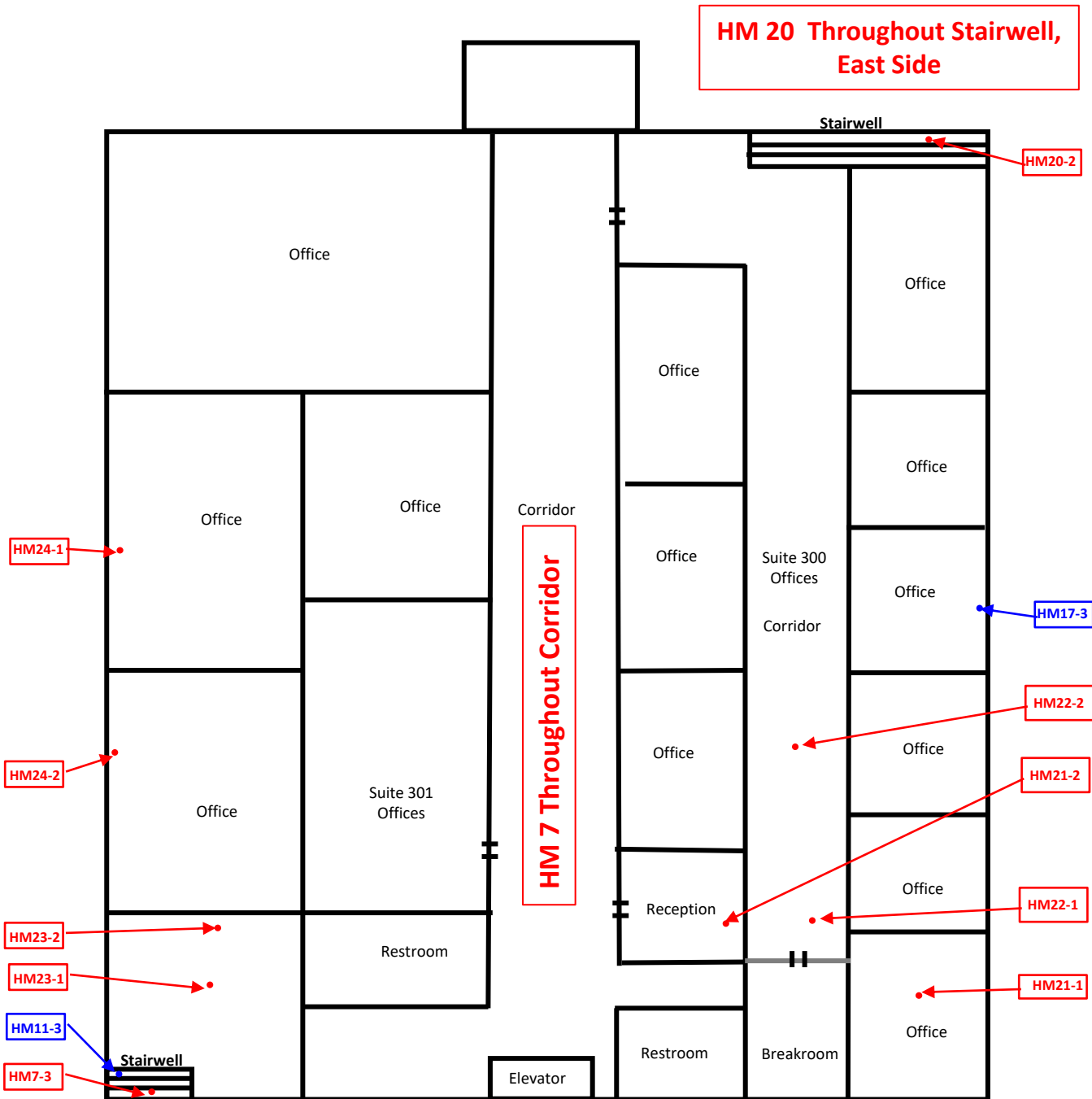


	<p>LEGEND</p> <p>••• - Bulk Sample Location (non-ACM)</p> <p>••• - Bulk Sample Location (ACM)</p>	<p>FIGURE 5</p> <p>Sample Location Site Map (Not to Scale) Office Building – 2nd Floor</p>	<p>JSK Project No. : JSK-2022-28</p> <p>3108 Columbia Pike, Arlington, VA</p>	<p>N</p> 
---	--	--	---	--

Figure 6 - Asbestos Sample Location Map, 3rd Floor 3108 Columbia Pike, Arlington, VA



HM 21 & HM 22 Throughout 3rd Floor Offices

 <p>LEGEND</p> <ul style="list-style-type: none"> .. - Bulk Sample Location (non-ACM) .. - Bulk Sample Location (ACM) 	<p>FIGURE 6</p> <p>Sample Location Site Map (Not to Scale) Office Building – 3rd Floor</p>	<p>JSK Project No. : JSK-2022-28</p> <p>3108 Columbia Pike, Arlington, VA</p>	<p>N</p> 
--	--	---	--



**APPENDIX C – XRF SURVEY RESULTS FOR LBP ASSESSMENT AND LBP LOCATION
DRAWING**

Table 1: Lead Based Paint Survey XRF Readings

Project Number: JSK-2022-28
 Project: Office Building
 Address: 3108 Columbia Pike
Arlington, VA 22204
 XRF Unit Started: 10.10 AM

Date: May 20, 2022
 Operator: Michael Allshouse
 XRF Total Readings: 112
 XRF Unit Ended: 11.15 AM

Reading Date	Reading Number	Interior/ Exterior	Room ID	Structure	Substrate	Color	Paint Condition ^(A)	Reading (mg/cm ²) ^(B)	Result ^(C)
05/20/2022	1		Calibration					0.9	Average of 0.9
05/20/2022	2		Calibration					1.0	
05/20/2022	3		Calibration					0.9	
			<u>BUILDING MAIN LEVEL (1ST FLOOR)</u>						
05/20/2022	4	Interior	Customer Area, Back Office Behind Tellers	Wall	Plaster	White	Intact	- 0.1	Negative
05/20/2022	5	Interior	Restroom	Door	Wood	White	Intact	- 0.2	Negative
05/20/2022	6	Interior	Restroom	Door Casing	Metal	White	Intact	0.2	Negative
05/20/2022	7	Interior	Restroom	Ceiling	Plaster	White	Intact	- 0.3	Negative
05/20/2022	8	Interior	Operations Room	Wall	Drywall	Tan	Intact	- 0.1	Negative
05/20/2022	9	Interior	Operations Room	Wall	Plaster	Tan	Intact	- 0.3	Negative
05/20/2022	10	Interior	Customer Room 3	Door Casing	Metal	Cream	Intact	0.4	Negative
05/20/2022	11	Interior	Room with Safe	Wall	Drywall	Tan	Intact	- 0.2	Negative
05/20/2022	12	Interior	Men's Restroom Near Elevator	Door	Wood	Cream	Intact	- 0.1	Negative
05/20/2022	13	Interior	Men's Restroom Near Elevator	Door Casing	Metal	Cream	Intact	- 0.3	Negative
05/20/2022	14	Interior	Janitorial Room	Wall	Drywall	Cream	Intact	0.1	Negative
05/20/2022	15	Interior	Janitorial Room	Shelf	Wood	Tan	Intact	- 0.0	Negative
05/20/2022	16	Interior	Elevator	Door	Metal	Cream	Intact	- 0.2	Negative
05/20/2022	17	Interior	Elevator	Door Casing	Metal	Cream	Intact	- 0.2	Negative
05/20/2022	18	Interior	Elevator	Ceiling	Plaster	Cream	Intact	- 0.2	Negative
05/20/2022	19	Interior	Stairway	Stringer	Metal	Cream	Intact	- 0.1	Negative

Reading Date	Reading Number	Interior/Exterior	Room ID	Structure	Substrate	Color	Paint Condition ^(A)	Reading (mg/cm ²) ^(B)	Result ^(C)
05/20/2022	20	Interior	Stairway	Stair Riser	Wood	Cream	Deteriorated (10%)	5.8	Positive
05/20/2022	21	Interior	Stairway	Wall	Concrete	Cream	Intact	- 0.4	Negative
			<u>BUILDING MEZZANINE AREA</u>						
05/20/2022	22	Interior	Wall Near Elevator	Wall	Plaster	Cream	Intact	- 0.1	Negative
05/20/2022	23	Interior	Wall Near Elevator	Wall Trim	Wood	White	Intact	0.3	Negative
05/20/2022	24	Interior	Men's Restroom	Door Casing	Metal	White	Intact	- 0.1	Negative
05/20/2022	25	Interior	Men's Restroom	Ceiling	Plaster	Cream	Intact	- 0.2	Negative
05/20/2022	26	Interior	Men's Restroom	Ceiling Trim	Wood	White	Intact	- 0.0	Negative
05/20/2022	27	Interior	Hallway	Wall	Drywall	Yellow	Intact	- 0.1	Negative
05/20/2022	28	Interior	Office to left of Elevator	Wall	Plaster	Yellow	Intact	- 0.2	Negative
05/20/2022	29	Interior	Office to left of Elevator	Crown Molding	Wood	White	Intact	- 0.0	Negative
05/20/2022	30	Interior	Office to left of Elevator	Chair Rail	Wood	White	Intact	- 0.1	Negative
05/20/2022	31	Interior	Office to left of Elevator	Wall Cap	Wood	White	Intact	0.1	Negative
05/20/2022	32	Interior	Office to left of Elevator	Door Casing	Metal	Cream	Intact	- 0.2	Negative
05/20/2022	33	Interior	Janitorial Room	Wall	Drywall	White	Intact	- 0.2	Negative
05/20/2022	34	Interior	Janitorial Room	Door Casing	Wood	White	Intact	- 0.3	Negative
05/20/2022	35	Interior	Office to the Right of Elevator	Wall	Plaster	Cream	Intact	- 0.3	Negative
05/20/2022	36	Interior	In-Between Office	Door	Wood	White	Intact	- 0.2	Negative
05/20/2022	37	Interior	In-Between Office	Door Casing	Wood	White	Intact	- 0.2	Negative
05/20/2022	38	Interior	Elevator at Mezzanine	Door	Metal	Brown	Intact	- 0.2	Negative
05/20/2022	39	Interior	Elevator at Mezzanine	Door Casing	Metal	Brown	Intact	- 0.2	Negative
			<u>BUILDING 2ND FLOOR</u>						
05/20/2022	40	Interior	Men's Restroom	Door	Wood	Cream	Intact	- 0.2	Negative
05/20/2022	41	Interior	Men's Restroom	Door Casing	Wood	Cream	Intact	0.1	Negative
05/20/2022	42	Interior	Men's Restroom	Wall	Plaster	Cream	Intact	- 0.2	Negative
05/20/2022	43	Interior	Near Elevator	Wall	Drywall	Cream	Intact	- 0.1	Negative
05/20/2022	44	Interior	Interior Office	Wall	Drywall	White	Intact	- 0.3	Negative
05/20/2022	45	Interior	Interior Office	I-Beam	Metal	Grey	Intact	- 0.3	Negative
05/20/2022	46	Interior	Interior Office	Door	Wood	White	Intact	0.0	Negative

Reading Date	Reading Number	Interior/ Exterior	Room ID	Structure	Substrate	Color	Paint Condition ^(A)	Reading (mg/cm ²) ^(B)	Result ^(C)
05/20/2022	47	Interior	Interior Office	Door Casing	Metal	White	Intact	- 0.0	Negative
05/20/2022	48	Interior	Interior Office	Wall	Drywall	White	Intact	- 0.2	Negative
05/20/2022	49	Interior	Another Different Interior Office	Wall	Plaster	Purple	Intact	- 0.3	Negative
05/20/2022	50	Interior	End Office	Door	Wood	White	Intact	- 0.3	Negative
05/20/2022	51	Interior	End Office	Door Casing	Metal	White	Intact	- 0.1	Negative
05/20/2022	52	Interior	End Office	Wall	Plaster	White	Intact	- 0.2	Negative
05/20/2022	53	Interior	Stairway	Stair Stringer	Metal	Cream	Intact	- 0.3	Negative
05/20/2022	54	Interior	Stairway	Stair Riser	Metal	Cream	Intact	3.4	Positive
05/20/2022	55	Interior	Another Different Interior Office	Door	Wood	White	Intact	- 0.4	Negative
05/20/2022	56	Interior	Another Different Interior Office	Door Casing	Metal	White	Intact	0.2	Negative
05/20/2022	57	Interior	Another Different Interior Office	Wall	Drywall	White	Intact	- 0.1	Negative
05/20/2022	58	Interior	Another Different Interior Office	Wall	Plaster	White	Intact	- 0.2	Negative
05/20/2022	59	Interior	Another Different Interior Office	Door	Wood	White	Intact	- 0.1	Negative
05/20/2022	60	Interior	Another Different Interior Office	Door Casing	Metal	White	Intact	- 0.3	Negative
05/20/2022	61	Interior	Another Different Interior Office	Wall	Plaster	White	Intact	- 0.1	Negative
05/20/2022	62	Interior	Break Room	Door	Wood	White	Intact	- 0.2	Negative
05/20/2022	63	Interior	Break Room	Door Casing	Metal	White	Intact	- 0.2	Negative
05/20/2022	64	Interior	Break Room	Wall	Drywall	White	Intact	0.0	Negative
05/20/2022	65	Interior	Break Room	Wall	Plaster	White	Intact	- 0.3	Negative
			<u>BUILDING 3RD FLOOR</u>						
05/20/2022	66	Interior	Men's Restroom	Door Casing	Metal	Cream	Intact	- 0.1	Negative
05/20/2022	67	Interior	Men's Restroom	Wall	Plaster	Cream	Intact	- 0.1	Negative
05/20/2022	68	Interior	Corridor	Wall	Drywall	Cream	Intact	- 0.4	Negative
05/20/2022	69	Interior	Suite 301 office entrance	Door	Wood	White	Intact	- 0.2	Negative
05/20/2022	70	Interior	Suite 301 office entrance	Door Casing	Metal	White	Intact	- 0.1	Negative
05/20/2022	71	Interior	Interior Office	Wall	Drywall	White	Intact	- 0.2	Negative
05/20/2022	72	Interior	Break Room	Door	Wood	White	Intact	- 0.1	Negative
05/20/2022	73	Interior	Break Room	Door Casing	Metal	White	Intact	0.4	Negative
05/20/2022	74	Interior	Break Room	Wall	Plaster	White	Intact	- 0.2	Negative

Reading Date	Reading Number	Interior/Exterior	Room ID	Structure	Substrate	Color	Paint Condition ^(A)	Reading (mg/cm ²) ^(B)	Result ^(C)
05/20/2022	75	Interior	Far End Office	Wall	Drywall	White	Intact	- 0.3	Negative
05/20/2022	76	Interior	Far End Office	Wall	Plaster	White	Intact	- 0.3	Negative
05/20/2022	77	Interior	Far End Office	Door	Wood	White	Intact	- 0.1	Negative
05/20/2022	78	Interior	Far End Office	Door Casing	Metal	White	Intact	- 0.2	Negative
05/20/2022	79	Interior	Suite 300 End Office	Wall	Plaster	Mauve	Intact	- 0.2	Negative
05/20/2022	80	Interior	Suite 300 End Office	Wall	Drywall	Mauve	Intact	- 0.3	Negative
05/20/2022	81	Interior	Suite 300 End Office	Door	Wood	White	Intact	0.0	Negative
05/20/2022	82	Interior	Suite 300 End Office	Door Casing	Metal	White	Intact	- 0.2	Negative
05/20/2022	83	Interior	Reception Area	Wall Cap	Wood	White	Intact	- 0.3	Negative
05/20/2022	84	Interior	Reception Area	Wall	Drywall	White	Intact	- 0.3	Negative
05/20/2022	85	Interior	Break Room	Door	Wood	White	Intact	0.1	Negative
05/20/2022	86	Interior	Break Room	Door Casing	Wood	White	Intact	- 0.1	Negative
			<u>BUILDING BASEMENT</u>						
05/20/2022	87	Interior	Basement Area	Wall	Concrete Masonry	White	Intact	- 0.5	Negative
05/20/2022	88	Interior	Basement Area	Door Casing	Metal	Gray	Deteriorated (50%)	- 0.0	Negative
05/20/2022	89	Interior	Boiler Room	Column	Plaster	White	Deteriorated (25%)	- 0.2	Negative
05/20/2022	90	Interior	Boiler Room	Wall	Brick	White	Deteriorated (10%)	0.0	Negative
05/20/2022	91	Interior	Boiler Room	Panel Box	Metal	White	Deteriorated (65%)	- 0.2	Negative
			<u>BUILDING EXTERIOR</u>						
05/20/2022	92	Exterior	Building Rear Entrance	Column	Metal	White	Deteriorated (15%)	1.3	Positive
05/20/2022	93	Exterior	Building Rear Entrance	I-Beam	Metal	Cream	Deteriorated (25%)	1.7	Positive
05/20/2022	94	Exterior	Building Rear Entrance	Wall	Brick	Cream	Intact	- 0.5	Negative
05/20/2022	95	Exterior	Building Rear Entrance	Windowsill	Concrete	Tan	Intact	- 0.3	Negative
05/20/2022	96	Exterior	Building Rear Entrance	Wall	Brick	White	Intact	- 0.3	Negative
05/20/2022	97	Exterior	Building Side Entrance (West)	I-Beam	Metal	White	Deteriorated (25%)	- 0.3	Negative

Reading Date	Reading Number	Interior/ Exterior	Room ID	Structure	Substrate	Color	Paint Condition ^(A)	Reading (mg/cm ²) ^(B)	Result ^(C)
05/20/2022	98	Exterior	Building Front Entrance	I-Beam	Metal	Cream	Deteriorated (10%)	1.8	Positive
05/20/2022	99	Exterior	Building Front Entrance	Windowsill	Concrete	White	Intact	0.1	Negative
05/20/2022	100	Exterior	Building Front Entrance	Window Lintel	Metal	White	Intact	2.1	Positive
05/20/2022	101	Exterior	Building Front Entrance	Column	Metal	White	Deteriorated (10%)	0.2	Negative
05/20/2022	102	Exterior	Building Front Entrance	Column	Metal	White	Deteriorated (20%)	1.3	Positive
05/20/2022	103	Exterior	Building Side Entrance (East)	Door	Metal	Cream	Deteriorated (10%)	- 0.2	Negative
05/20/2022	104	Exterior	Building Side Entrance (East)	Door Casing	Metal	Cream	Deteriorated (10%)	1.2	Positive
05/20/2022	105	Exterior	Building Side Entrance (East)	Door Lintel	Metal	Cream	Deteriorated (5%)	0.4	Negative
05/20/2022	106	Exterior	Building Side Entrance (East)	Door	Metal	Cream	Deteriorated (10%)	- 0.1	Negative
05/20/2022	107	Exterior	Building Side Entrance (East)	Door Casing	Metal	Cream	Deteriorated (10%)	- 0.2	Negative
05/20/2022	108	Exterior	Building Side Entrance (East)	Door Lintel	Metal	Cream	Deteriorated (5%)	1.7	Positive
05/20/2022	109	Exterior	Building Rear Entrance Canopy	Ceiling	Concrete	White	Deteriorated (20%)	- 0.1	Negative
05/20/2022	110		Calibration					1.1	Average of 1.0
05/20/2022	111		Calibration					1.0	
05/20/2022	112		Calibration					1.0	

Notes:

(A) = Paint Condition: Intact (no damage); Deteriorated (cracked and peeling)

(B) = XRF Lead Results

(C) = Readings shaded in yellow are positive, and are confirmed as lead containing paint because the concentrations exceed 1 mg/cm²

Readings above 0.0 are negative and are not defined as lead containing paint but could present a hazardous condition if disturbed causing exposure to workers, according to OSHA regulations.

Difference between Average and Calibration Block at Entry – 0.1

Difference between Average and Calibration Block at Exit – 0.1



APPENDIX D – INSPECTOR AND LABORATORY CERTIFICATIONS

Department of Professional and Occupational Regulation
9960 Mayland Drive, Suite 400, Richmond, VA 23233
Telephone: (804) 367-8500

EXPIRES ON
03-31-2023

NUMBER
3303004514

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS INSPECTOR LICENSE



NANDKISHORE KAUSHIK
13130 PEACH LEAF PLACE
FAIRFAX, VA 22030



Demetrios J. Mellis
Demetrios J. Mellis, Director

Status can be verified at <http://www.dpor.virginia.gov>

(SEE REVERSE SIDE FOR PRIVILEGES AND INSTRUCTIONS)

DPOR-LIC (02/2017)

(DETACH HERE)

DPOR COMMONWEALTH of VIRGINIA
Department of Professional and Occupational Regulation

BOARD FOR ASBESTOS, LEAD, AND HOME INSPECTORS
ASBESTOS INSPECTOR LICENSE
NUMBER: 3303004514 EXPIRES: 03-31-2023

NANDKISHORE KAUSHIK
13130 PEACH LEAF PLACE
FAIRFAX, VA 22030



(FOLD)

VOID

Status can be verified at <http://www.dpor.virginia.gov>

DPOR-PC (02/2017)

DPOR License Lookup License Number 3303003902

License Details

Name	ALLSHOUSE, MICHEAL DAMIEN
License Number	3303003902
License Description	Asbestos Inspector License
Rank	Asbestos Inspector
Address	CHESTER, VA 23831
Initial Certification Date	2013-12-05
Expiration Date	2022-12-31

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

DPOR License Lookup build 1,452 (built 2021-09-14 01:36:33).

DPOR License Lookup License Number 3356001040

License Details

Name	ALLSHOUSE, MICHEAL DAMIEN
License Number	3356001040
License Description	Lead Risk Assessor License
Rank	Lead Abatement Risk Assessor
Address	CHESTER, VA 23831
Initial Certification Date	2014-02-10
Expiration Date	2022-08-31

The data located on this website are not the public records of the Department of Professional and Occupational Regulation (DPOR). All public records are physically located at DPOR's Public Records Section: 9960 Mayland Drive, Suite 400, Richmond, VA 23233. While DPOR works to ensure the accuracy of the data provided online, the data available on these pages are updated routinely but may not be up to date at all times (due to document processing delays, technical maintenance, etc.).

DPOR assumes no liability for any errors, omissions, or inaccuracies in the information provided or for any reliance on data provided online. While DPOR has attempted to ensure that the data contained herein are accurate and reflect the status of its regulants, DPOR makes no warranties, expressed or implied, concerning the accuracy, completeness, reliability, or suitability of this data. If discrepancies or errors are discovered, please inform DPOR so that appropriate action may be taken.

DPOR License Lookup build 1,452 (built 2021-09-14 01:36:33).



AIHA Laboratory Accreditation Programs, LLC

acknowledges that

Aerobiology Laboratory Associates, Inc.

43760 Trade Center Place, Suite 100, Dulles, VA 20166

Laboratory ID: 102977

along with all premises from which key activities are performed, as listed above, has fulfilled the requirements of the AIHA Laboratory Accreditation Programs (AIHA-LAP), LLC accreditation to the ISO/IEC 17025:2017 international standard, *General Requirements for the Competence of Testing and Calibration Laboratories* in the following:

LABORATORY ACCREDITATION PROGRAMS

- | | |
|---|---------------------------------------|
| <input type="checkbox"/> INDUSTRIAL HYGIENE | Accreditation Expires: |
| <input type="checkbox"/> ENVIRONMENTAL LEAD | Accreditation Expires: |
| <input checked="" type="checkbox"/> ENVIRONMENTAL MICROBIOLOGY | Accreditation Expires: March 01, 2021 |
| <input type="checkbox"/> FOOD | Accreditation Expires: |
| <input type="checkbox"/> UNIQUE SCOPES | Accreditation Expires: |

Specific Field(s) of Testing (FoT)/Method(s) within each Accreditation Program for which the above named laboratory maintains accreditation is outlined on the attached **Scope of Accreditation**. Continued accreditation is contingent upon successful on-going compliance with ISO/IEC 17025:2017 and AIHA-LAP, LLC requirements. This certificate is not valid without the attached **Scope of Accreditation**. Please review the AIHA-LAP, LLC website (www.aihaaccreditedlabs.org) for the most current Scope.

Elizabeth Bair

Elizabeth Bair
Chairperson, Analytical Accreditation Board

Cheryl O. Morton

Cheryl O. Morton
Managing Director, AIHA Laboratory Accreditation Programs, LLC



AIHA Laboratory Accreditation Programs, LLC

SCOPE OF ACCREDITATION

Aerobiology Laboratory Associates, Inc.

43760 Trade Center Place, Suite 100, Dulles, VA 20166

Laboratory ID: **102977**

Issue Date: 02/28/2019

The laboratory is approved for those specific field(s) of testing/methods listed in the table below. Clients are urged to verify the laboratory's current accreditation status for the particular field(s) of testing/Methods, since these can change due to proficiency status, suspension and/or withdrawal of accreditation.

Environmental Microbiology Laboratory Accreditation Program (EMLAP)

Initial Accreditation Date: 10/01/2002

EMLAP Category	Field of Testing (FoT)	Method	Method Description <i>(for internal methods only)</i>
Fungal	Air - Culturable	SOP 3.2	In-house: Analysis of Culturable Air Samples for Fungi
	Bulk - Culturable	SOP 3.4	In-house: Analysis of Culturable Bulk Samples for Fungi
	Surface - Culturable	SOP 3.3	In-house: Analysis of Culturable Surface Samples for Fungi
	Air - Direct Examination	SOP 3.8	In-house: Analysis of Spore Trap
	Bulk - Direct Examination	SOP 3.7	In-house: Bulk Direct Analysis
	Surface - Direct Examination	SOP 3.7	In-house: Surface Direct Analysis
Bacterial	Air - Culturable	SOP 2.2	In-house: Analysis of Culturable Air Samples for Bacterial
	Bulk - Culturable	SOP 2.4	In-house: Analysis of Culturable Bulk Samples for Bacterial
	Surface - Culturable	SOP 2.3	In-house: Analysis of Culturable Surface Samples for Bacterial
	Legionella	SOP 2.22	CDC 2005 Procedures for the Recovery of Legionella from the Environment
		SOP 2.35	CDC 2005 Procedures for the Recovery of Legionella from the Environment

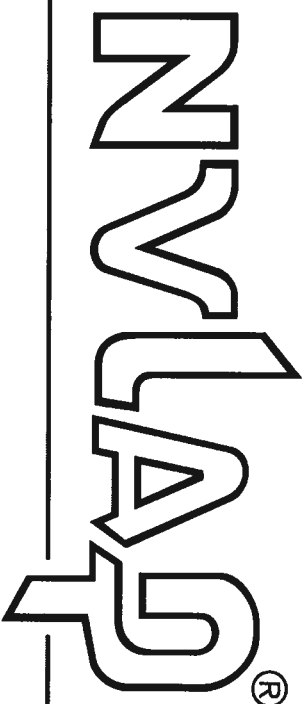
A complete listing of currently accredited Environmental Microbiology laboratories is available on the AIHA-LAP, LLC website at: <http://www.aihaaccreditedlabs.org>

Effective: 03/12/2013

Scope_EMLAP_R6

Page 1 of 1

United States Department of Commerce
National Institute of Standards and Technology



Certificate of Accreditation to ISO/IEC 17025:2017

NVLAP LAB CODE: 200829-0

Aerobiology Laboratory Associates, Inc.
Dulles, VA

is accredited by the National Voluntary Accreditation Program for specific services,
listed on the Scope of Accreditation, for:

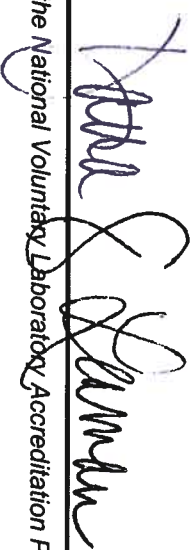
Asbestos Fiber Analysis

*This laboratory is accredited in accordance with the recognized International Standard ISO/IEC 17025:2017.
This accreditation demonstrates technical competence for a defined scope and the operation of a laboratory quality
management system (refer to Joint ISO-ILAC-IAF Communiqué dated January 2009).*

2020-04-01 through 2021-03-31

Effective Dates




For the National Voluntary Laboratory Accreditation Program

**National Voluntary
Laboratory Accreditation Program**



SCOPE OF ACCREDITATION TO ISO/IEC 17025:2017

Aerobiology Laboratory Associates, Inc.

43760 Trade Center Place

Suite 100

Dulles, VA 20166-2119

Ms. Sun Bun Bowling

Phone: 703-648-9150 Fax: 703-648-3919

Email: sunbun@aerobiology.net

<http://www.aerobiology.net>

ASBESTOS FIBER ANALYSIS

NVLAP LAB CODE 200829-0

Bulk Asbestos Analysis

Code

Description

18/A01

EPA -- 40 CFR Appendix E to Subpart E of Part 763, Interim Method of the Determination of Asbestos in Bulk Insulation Samples

18/A03

EPA 600/R-93/116: Method for the Determination of Asbestos in Bulk Building Materials

A handwritten signature in black ink, appearing to read 'Anna S. Laman', is written over a horizontal line.

For the National Voluntary Laboratory Accreditation Program



**APPENDIX E – PHOTOGRAPHIC LOG OF ASBESTOS, LBP & HAZARDOUS MATERIALS
SAMPLES**

PHOTOGRAPHIC LOG
(May 20, 2022)



Homogeneous Material No. 1 – Non-ACM Built up Roof Field located on the roof of the Subject Property



Homogeneous Material No. 2 – Non-ACM White/Black Curbing/Flashing located on the roof of the Subject Property



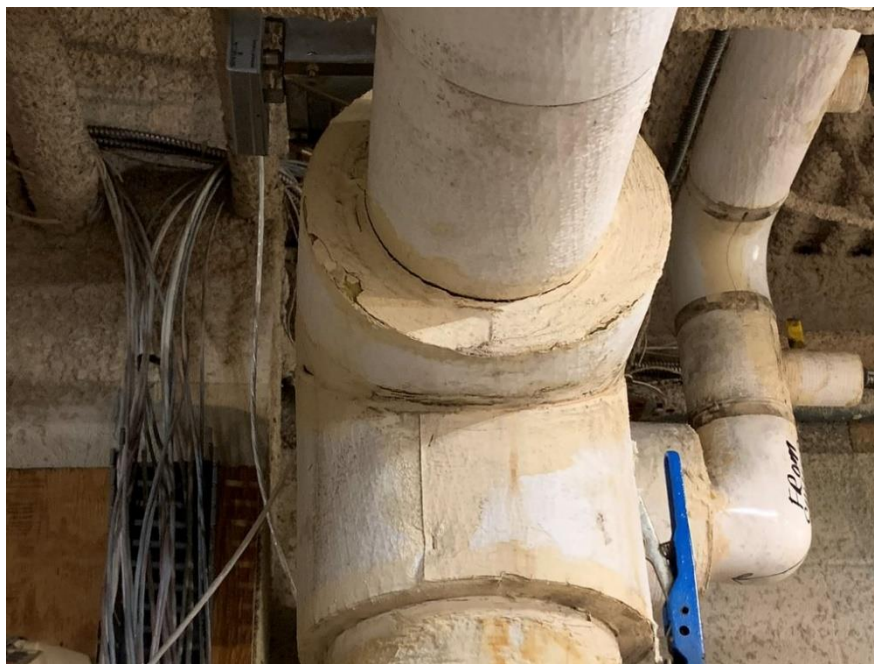
Homogeneous Material No. 3 – ACM Silver Roof Vent Coating located on the roof of the Subject Property



Homogeneous Material No. 4 – Non-ACM Black Vent Pipe Mastic located in the roof of the Subject Property



Homogeneous Material No. 5 – Non-ACM Gray Spray-on Fire Proofing located in the Building Basement Corridor, Electrical Room and Boiler Room of the Subject Property



Homogeneous Material No. 6 – Non-ACM Cream Pipe Insulation Mastic located in the Building Basement, Corridor and Boiler Room of the Subject Property



Homogeneous Material No. 7 –ACM 9” by 9” brown vinyl floor tile with black mastic located in the West Side of the Building Stairwell of the Subject Property



Homogeneous Material No. 8 – Non-ACM Gray HVAC Duct Seam Mastic located in the Building Basement, HVAC Room Number 1 and 2 of the Subject property



Homogeneous Material No. 9 – Non-ACM Black/Gray/Yellow Mastic located in the Building Elevator of the Subject property



Homogeneous Material No. 10 – ACM Gray Pebble Pattern Resilient Sheet Flooring over Brown Vinyl Floor tiling with black mastic located in Building Main Floor, Corridor near Elevator



Homogeneous Material No. 11 – Non-ACM Plaster Gray Base White Skim Coat on Wall located in Building Main Floor, Corridor near Elevator of the Subject Property



Homogeneous Material No. 12 – Non-ACM 12” by 12” Gray Mottled Vinyl Floor Tile with Tan Mastic located in Building Main Floor, Flooring in Office Area on West Side of Building of the Subject Property



Homogeneous Material No. 13 – Non-ACM 4" Gray Vinyl Cove Base with Gray Mastic Located in the Building Main Floor, Flooring in Office Area on West Side of Building of the Subject Property



Homogeneous Material No. 14 – Non-ACM Gray Sink Bowl Coating located in the Building Main Floor, Break Room on West Side and on Building 2nd floor, Break Room on East Side of the Subject Property



Homogeneous Material No. 15 – Non-ACM 4" Brown Vinyl Cove Base with Brown Mastic Located in the Building Main Floor, Flooring in Some of the Office Area on West Side of Building and Central Customer Area of the Subject Property



Homogeneous Material No. 16 – Non-ACM Brown/Tan/Black Floor Mastic located in the Building Main Floor, Main Customer Area of the Subject Property



Homogeneous Material No. 17 – Non-ACM White Drywall with Associated White Joint Compound located in the Building Main Floor, 2nd Floor and 3rd Floor of the Subject Property



Homogeneous Material No. 18 – ACM 9" by 9" White Vinyl Floor Tile with Black Mastic located in the Building Mezzanine Floor, Office Space of the Subject Property



ACM Survey for 3108 Columbia Pike,
Arlington, VA



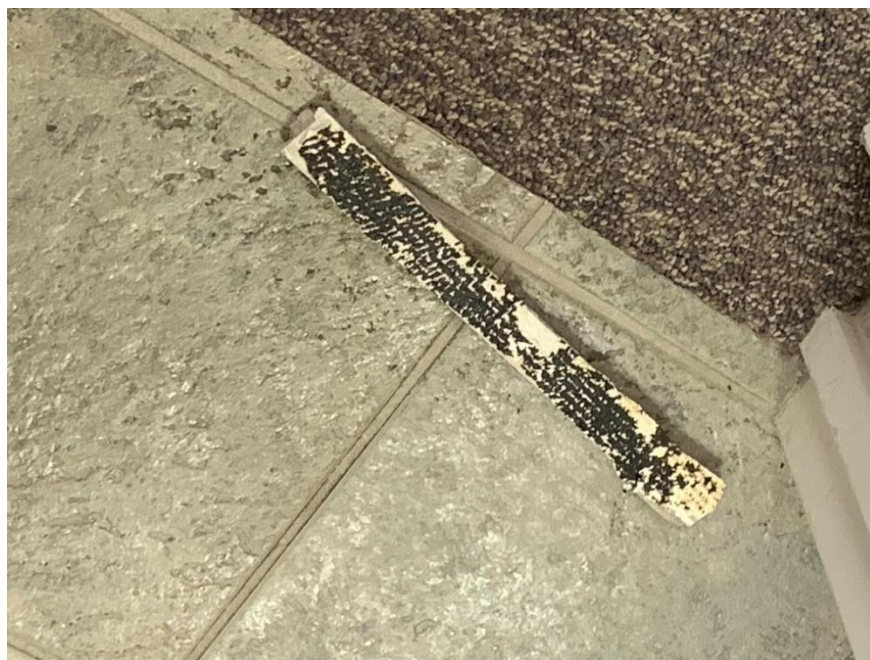
Homogeneous Material No. 19 – ACM 12” by 12” White Mottled Vinyl Floor Tile with Black Mastic and Gray/White Leveling Compound located throughout the Building 2nd Floor Office space of the Subject Property



Homogeneous Material No. 20 – ACM 9” by 9” Green Vinyl Floor Tile with Black Mastic located in the building stairwell on East Side



Homogeneous Material No. 21 – ACM Tan carpet glue with black mastic Located Throughout the offices on the Building 3rd floor of the Subject Property



Homogeneous Material No. 22 – ACM White Setting Bed with Black Mastic located in the Building 3rd Floor Break Room on West Side and throughout the 3rd floor office areas of the Subject Property



Homogeneous Material No. 23 – ACM 12” by 12” Gray/Black Specs Vinyl Floor Tile with Yellow Mastic over Gray Vinyl Floor Tile with Black Mastic over Gray Vinyl Floor Tile with Yellow Mastic over Cream Resilient Floor Sheet with Black Mastic located in the Building 3rd Floor Office Space on Northwest Corner



Homogeneous Material No. 24 – ACM Gray Interior Window Glazing Located in the interior windows on the 3rd floor and throughout the building of the subject property

PHOTOGRAPHIC LOG
(May 20, 2022)



Lead-Containing Paint on the stairwell stair riser on the east side leading from the 1st floor to the 2nd floor.



Lead-Containing Paint on the White metal column at the building rear and front entrance.



Lead-Containing Paint on the cream metal I-beam at the building rear and front entrance.



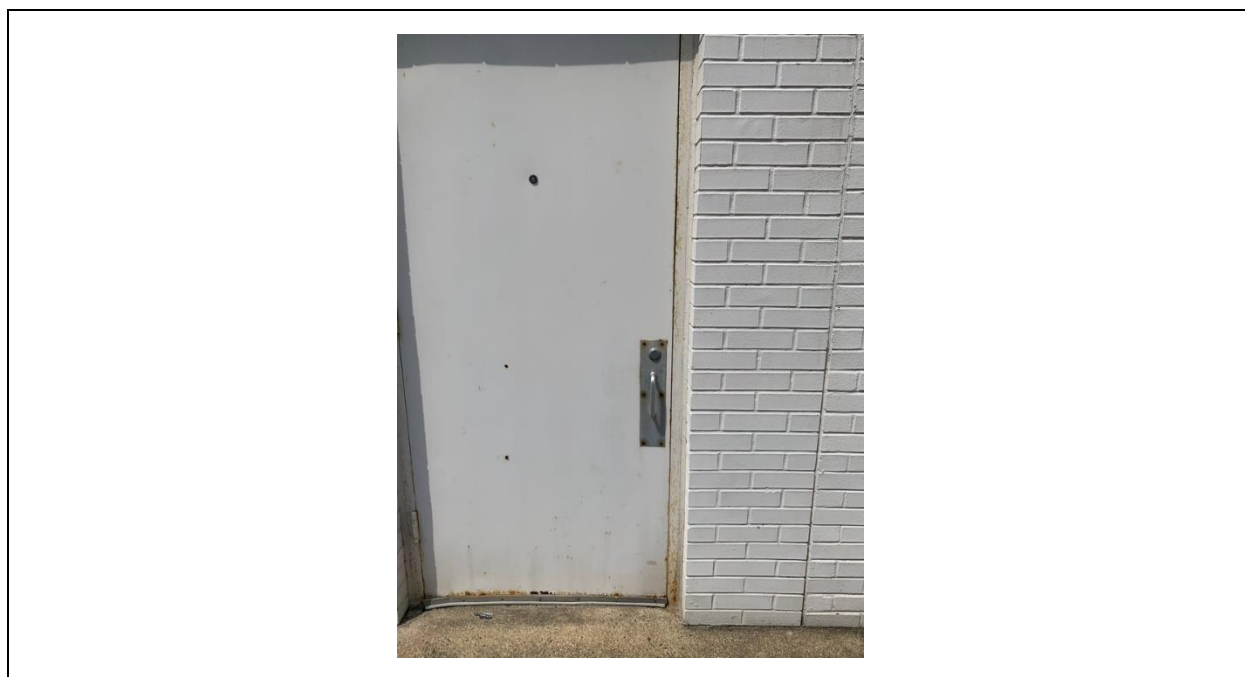
Lead-Containing Paint on the white metal window lintel at the building front entrance.



Lead-Containing Paint on the cream metal I-beam at the building front entrance.



Lead-Containing Paint on the white metal column at the building front entrance.

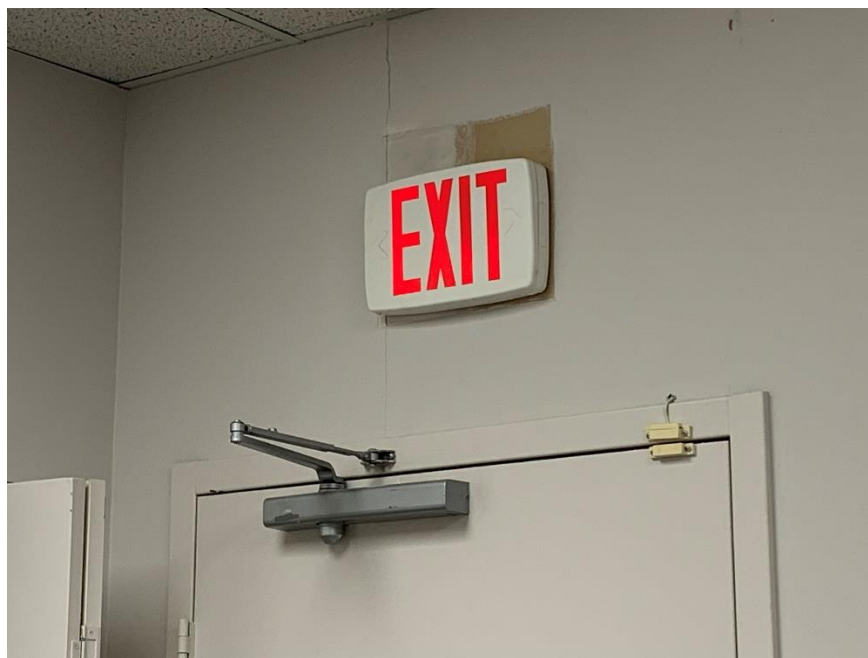


Lead-Containing Paint on the cream metal door casing and door lintel at the building side entrance.

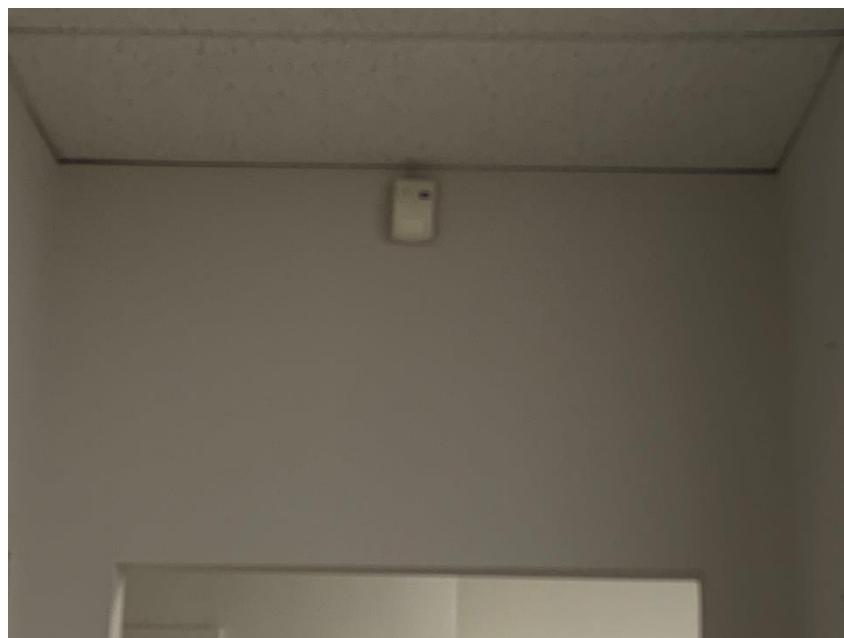


View of the columns and I-Beams at the building rear entrance.

**PHOTOGRAPHIC LOG
(Other Hazardous Materials)**



Typical Lighted Exit Sign at the subject property building.



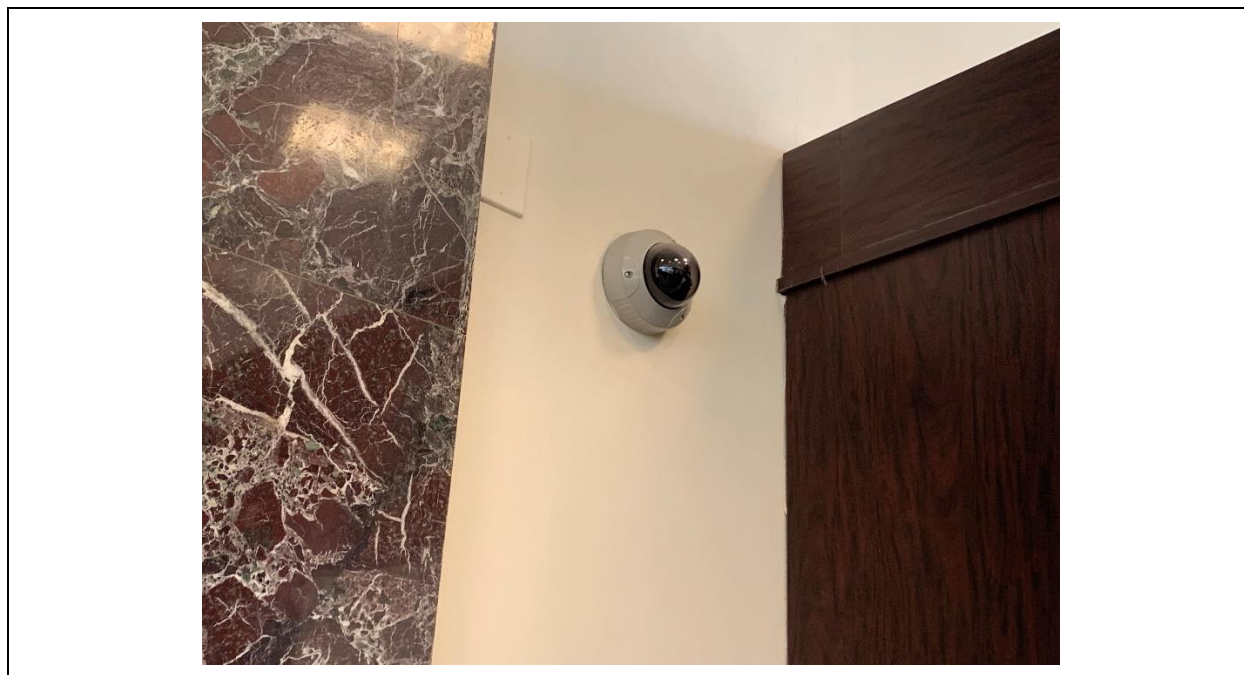
Typical Motion Sensor at the subject property building.



Typical digital thermostat at the subject property building.



Typical Lighted Exit sign and Fire Emergency Pull-Down station at the subject property building.



Typical Fire Emergency lighting at the subject property building.



Typical Fire Extinguisher and Emergency Fire Strobe Lighting at the subject property building.



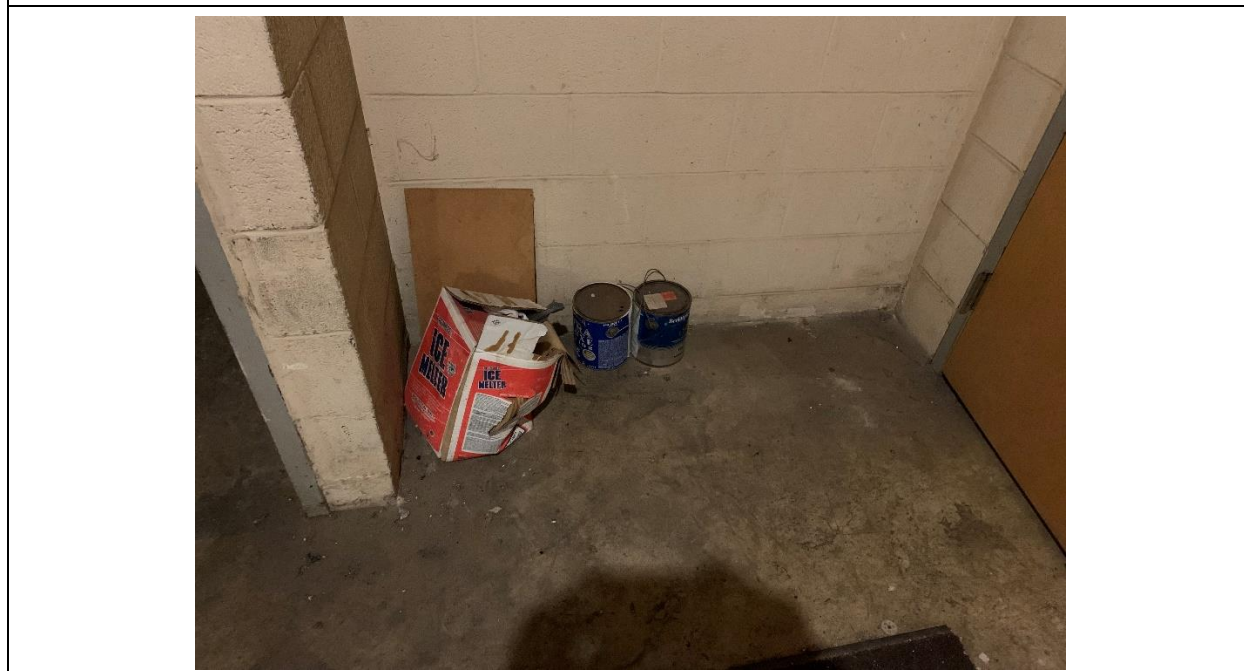
Typical Ceiling-Mounted Smoke Detector at the subject property building.



Wireless Control System components at the subject property building.



Control Box in the elevator room of the subject property building.



Miscellaneous Paint Cans in the Basement of the subject property building.



Domestic water heater (boiler) in the basement of the subject property building.



Fire Control Panel at the subject property building.



Old CRT TV monitor on the Main level of the subject property building.