



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

**CONTRACT AWARD COVERPAGE**

<b>TO:</b> ARDENT COMPANY, LLC.	<b>DATE ISSUED:</b>	MARCH 30, 2022
P.O. Box 879	<b>CONTRACT NO:</b>	22-DES-ITB-474
Mc Lean, VA 22101	<b>CONTRACT TITLE:</b>	Construction services for Northwest Arlington signal upgrades

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**THIS IS A NOTICE OF AWARD OF CONTRACT AND NOT AN ORDER. NO WORK IS AUTHORIZED UNTIL THE VENDOR  
RECEIVES A VALID COUNTY PURCHASE ORDER ENCUMBERING CONTRACT FUNDS.**

The contract documents consist of the terms and conditions of AGREEMENT No. 22-DES-ITB-474 including any attachments or amendments thereto.

**EFFECTIVE DATE:** MARCH 30, 2022

**EXPIRES:** DECEMBER 31, 2023

**RENEWALS:** NONE

**COMMODITY CODE(S):** 97524,92931,91327

**LIVING WAGE:** N

**ATTACHMENTS:**

AGREEMENT No. 22-DES-ITB-474

**EMPLOYEES NOT TO BENEFIT:**

**NO COUNTY EMPLOYEE SHALL RECEIVE ANY SHARE OR BENEFIT OF THIS CONTRACT NOT AVAILABLE TO THE GENERAL PUBLIC.**

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**VENDOR CONTACT:** Arash Hooshangi

**VENDOR TEL. NO.:** (703) 288-3250

**EMAIL ADDRESS:** [arash@ardentcompany.com](mailto:arash@ardentcompany.com)

**COUNTY CONTACT:** Justin McCarthy (DES AND TEO)

**COUNTY TEL. NO.:** (703) 228-3734

**COUNTY CONTACT EMAIL:** [jmccarthy@ARLINGTONVA.US](mailto:jmccarthy@ARLINGTONVA.US)

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**PURCHASING DIVISION AUTHORIZATION**

Sy Gezachew

Title Procurement Officer

Date March 30, 2022



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

**AGREEMENT NO. 22-DES-ITB-474**

THIS AGREEMENT is made, on 3/30/2022, between **Ardent Company, LLC.**, 1307 Dolley Madison Boulevard, Suite 200, Mc Lean, Virginia 22101 ("Contractor") a Virginia Limited Liability Company 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. 22-DES-ITB-474, and all modifications properly incorporated into the Agreement
- Exhibit A – Arlington County Invitation to Bid No. 22-DES-ITB-474, including DES General Conditions, Special Conditions, and Supplementary Specifications, incorporated herein by reference.
- Exhibit B – Specifications, Drawings and Construction Notes
- Exhibit C – Bid Pricing of Contractor
- Exhibit D – VDOT Lane Closure Guidelines
- Exhibit E – County RFI Form
- Exhibit F – List of State and Federal Roads
- Exhibit G – Contractor COVID-19 Vaccination Certification
- Exhibit H – Contractor COVID-19 Vaccination Quarterly Compliance Certification
- Exhibit I – Insurance Requirement Checklist

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 construction services for northwest Arlington County signal upgrades (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 Section 53, Notices, unless the Contractor is otherwise notified in writing.

**4. TIME FOR COMPLETION**

Work under this Agreement shall achieve Substantial Completion no later than five hundred fifty (550) 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 five hundred fifty (550) 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 C 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 45 days after approval of an invoice for completed work which is reasonable and allocable to the Contract. The number of the County Purchase Order pursuant to work has been performed must appear on all invoices.

#### **8. PAYMENT OF SUBCONTRACTORS**

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. 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.

#### **10. 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 \$1,113.00 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 \$1,113.00 per 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 \$518.0 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 \$518.00 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.

**11. PERFORMANCE OF WORK BY THE CONTRACTOR**

The Contractor shall perform on site, and with its own organization, at least fifty percent (50%) of the total direct labor and at least fifty percent (50%) of the total work in place to be performed under the Contract.

The self-performance percentage 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.

**12. 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.

**13. 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).

**14. 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.

**15. 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.

**16. 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.

**17. 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.

**18. 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.

**19. \*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.

**20. COVID-19 VACCINATION POLICY FOR CONTRACTORS**

Due to the COVID-19 pandemic, the County has taken various steps to protect the welfare, health, safety and comfort of the workforce and public at large. As part of these steps, the County has implemented various requirements with respect to health and safety including policies with respect to social distancing, the use of face-coverings and vaccine mandates. All County Contractors, entering County owned, controlled, or leased facilities or facilities operated by a contractor if the services provided at that location are exclusive to Arlington County Government or contractors with public facing responsibilities must adopt these policies for implementation with their employees and subcontractors working on County contracts.

Contractors are required to obtain and maintain the COVID-19 vaccine status of employees or subcontractors, require any unvaccinated or not fully vaccinated employees to follow a weekly testing protocol established by the Contractor to submit to weekly testing, and provide any accommodations as required by law. Contractor should submit the certification of compliance to the Purchasing Agent at the time of contract execution and within five working days of the end of each quarter (see Exhibits G and H). In addition, all Contractor and subcontractor employees subject to the requirements of this section must also comply with the County COVID-19 masking and social distancing protocols, as signed at each County location.

It is recognized that the COVID-19 pandemic is an ongoing health crisis. As such, requirements with respect to health and safety, including vaccines and face-coverings may change over time. Contractors are expected to adhere to the County requirements as they evolve in response to the crisis.

For questions, the Contractor may email [contractorvaccineinfo@arlingtonva.us](mailto:contractorvaccineinfo@arlingtonva.us).

**21. 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.

**22. 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.

**23. 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.

**24. 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.

**25. 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.

**26. 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.

## **27. 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.

## **28. 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.

## **29. 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.

**30. 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.

**31. 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.

**32. 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.

**33. 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.

**34. 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.

**35. 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.

**36. 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.

Whenever possible, proposals must comply with the following guidelines:

- printed double-sided on at least 30% recycled-content and/or tree-free paper
- recyclable and/or easily removable covers or binders made from recycled materials (proposals with glued bindings that meet all other requirements are acceptable)
- avoid use of plastic covers or dividers
- avoid unnecessary attachments or documents or superfluous use of paper (e.g. separate title sheets or chapter dividers)

**37. AUDIT**

The Contractor must retain all books, records and other documents related to this Contract for at least five years, 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 years after the final payment, 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.

**38. 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.

**39. AMENDMENTS**

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

**40. 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.

**41. 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.

**42. 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.

**43. ARBITRATION**

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

**44. 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.

**45. 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.

**46. 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.

**47. 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.

**48. 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.

**49. 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.

**50. 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.

**51. 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:**

Arash Hooshangi  
P.O. Box 879  
Mc Lean, Virginia 22101  
Phone: (703) 288-3250 x210  
Email: [arash@ardentcompany.com](mailto:arash@ardentcompany.com)

**TO THE COUNTY:**

Anup Kafle, Project Officer  
DES – Transportation Engineering and Operations  
2100 Clarendon Boulevard, Suite 900  
Arlington, Virginia 22201  
Phone: (703) 228-7050  
Email: [akafle@arlingtonva.us](mailto:akafle@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](mailto:slewis1@arlingtonva.us)

**TO COUNTY MANAGER’S OFFICE (FOR PROJECT CLAIMS):**

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

**52. NON-DISCRIMINATION NOTICE**

Arlington County does not discriminate against faith-based organizations.

**53. 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.

**54. 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.

**55. COUNTERPARTS**

This Agreement may be executed in one or more counterparts and all of such counterparts shall together constitute one and the same instrument. Original signatures transmitted and received via facsimile or other electronic transmission (e.g., PDF or similar format) are true and valid signatures for all purposes hereunder and shall be effective as delivery of a manually executed original counterpart.

WITNESS these signatures:

THE COUNTY BOARD OF ARLINGTON,  
VIRGINIA

AUTHORIZED  
SIGNATURE: \_\_\_\_\_

DocuSigned by:  
*Sy Gezachev*  
27FC198F4A6D475...

NAME: SY GEZACHEV

TITLE: PROCUREMENT OFFICER

DATE: 3/30/2022

ARDENT COMPANY, LLC.

AUTHORIZED  
SIGNATURE: \_\_\_\_\_

DocuSigned by:  
*Arash Hooshangi*  
12F5717989B046E...

NAME: \_\_\_\_\_

TITLE: Managing Director

DATE: 3/27/2022



Location Maps  
Scale: 1"=600'  
Vicinity

**ARLINGTON**

**ENVIRONMENTAL SERVICES**  
Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 500

Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719

- WILLIAMSBURG BOULEVARD AT NORTH WESTMORELAND STREET
- WILSON BOULEVARD AT PATRICK HENRY DRIVE

DATE: JUNE 2019

## GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION WORK FOR THIS PROJECT SHALL CONFORM TO THE ARIZONA COUNTY AND CITY OF PHOENIX SPECIFICATIONS, CONSTRUCTION STANDARDS AND DEPARTMENT OF TRANSPORTATION (DOT) ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS, THE LATEST EDITION OF EACH RELEVANT MANUAL SHALL BE USED.
  2. THE CONTRACTOR SHALL MAINTAIN ALL UTILITIES AND ALL OTHER EXISTING UTILITIES AND STRUCTURES IN PLACE AND ALL OTHER EXISTING UTILITIES SHALL BE PROTECTED AND MAINTAINED THROUGHOUT THE CONSTRUCTION PERIOD.
  3. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT OFFICER OF ANY DISCREPANCIES BETWEEN ACTUAL UTILITIES CONDITIONS AND THE APPROVED PLANS.
  4. EXISTING UTILITIES SHALL BE MAINTAINED AND PROTECTED THROUGHOUT THE CONSTRUCTION PERIOD. UTILITIES SHALL BE COVERED WITH A MINIMUM OF 18" OF CEMENT OR AT LEAST 24" THICKNESS OF ANY EXCAVATION OR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND STRUCTURES IN THE WORK SITE AREA LOCATED TO OTHER OWNERS THAT ARE THE SERVICES OF MISS ARIZONA. THE CONTRACTOR SHALL LOCATE AND PROTECT THESE SERVICES DURING THE CONSTRUCTION.
  5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT THE WORK AND SHALL RETAIN A SUFFICIENT NUMBER OF PERSONNEL TO MAINTAIN ACCESS TO ALL UTILITIES AND ALL NECESSARY CONSTRUCTION LAYOUTS AND ESTABLISH ALL CONTROL LINES, GRADES, AND ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES AND STRUCTURES FOR REVIEW PER THE SPECIFICATIONS, THE COST OF ALL NECESSARY SURVEYING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
  6. THE LOCATION OF ALL UTILITIES BOWN ON THESE PLANS ARE FOR INFORMATION ONLY AND SHALL BE CONSIDERED TO BE APPROXIMATE. WHEN CONSTRUCTION ACTIVITY COULD BE NEARBY OR WITHIN THE UTILITY RIGHT-OF-WAY, THE CONTRACTOR SHALL MAINTAIN A MINIMUM AHEAD OF THE WORK, UTILITIES SHALL BE MAINTAINED BY THE CONTRACTOR TO VISIT THE EXACT LOCATION AND DEPTHS OF THE UTILITY AND ALLOW FOR POSSIBLE DAMAGE TO THE EXISTING UTILITIES OR THE RELATED STRUCTURES. ALL EXISTING UTILITY OPERATIONS, ANY SYSTEM THAT IS DAMAGED SHALL BE PROMPTLY REPAIRED AT NO COST TO THE OWNER.
  7. EXISTING MANHOLE FRAMES, VALVE BOXES AND OTHER APPURTENANCES SHALL BE PROTECTED. THE COSTS FOR THESE SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND SHALL BE INCORPORATED INTO THE COSTS FOR EXISTING UTILITIES.
  8. THE CONTRACTOR SHALL PROVIDE A SUFFICIENT ACCESS THROUGH OR AROUND THE SITE TO ALL UTILITIES AND STRUCTURES THAT ARE NEARBY AND WITHIN THE RIGHT-OF-WAY ADJACENT TO THE SITE.
  9. THE CONTRACTOR SHALL ENSURE ALL UTILITIES DIPS WITHIN THE PEDESTRIAN WALKWAY SHALL BE ADA-COMPLIANT AND 5:1 SLOPE RATIO.
- FORMER AND ENVIRONMENTAL PROTECTION**
10. THE CONTRACTOR SHALL CONFORM ALL ACTIVITIES AT THE SITE ASSOCIATED WITH THE CONSTRUCTION OF THIS PROJECT TO THE ARIZONA COUNTY AND CITY OF PHOENIX SPECIFICATIONS, CONSTRUCTION STANDARDS AND DEPARTMENT OF TRANSPORTATION (DOT) ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS, THE LATEST EDITION OF EACH RELEVANT MANUAL SHALL BE USED. ACCESS TO THE WORK, EQUIPMENT, ETC. TO WITHIN THE DESIGNATED LIMITS OF WORK (LOW WORK) WITHIN A RESPECTED PROTECTION AREA (RPA) SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 61 OF THE COUNTY CODE (THE CHEESAWE BAY PRESERVATION ACT).

1000

# TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENT PLANS

3788

## Cover Sheet

DESIGNED: ZPH  
DRAWN: ZPH  
CHECKED: ASH  
FILENAME: TSSG-Cover\_Sheet.dwg  
PROJECT: MISS UTILITY TRANSPORTAL #. xxx  
PROJECT LOCATION: 17850 CHESTERBROOK RD, WESTMINSTER, CO 80540  
PROJECT DATE: May 10, 2021  
PROJECTED BY: maitone  
SCALE: As Noted

### AADT

North Side Road	North Westbound Count
12,000 VEHICLES PER DAY (2018)	6,300 VEHICLES PER DAY (2018)
15,000 VEHICLES PER DAY (2038 - Projected)	9,500 VEHICLES PER DAY (2038 - Projected)
DAY: 360 VPH (2018) / 565 VPH (2038)	DAY: 375 VPH (2018) / 505 VPH (2038)

Westbound Road	Westbound Count
6,200 VEHICLES PER DAY (2018)	3,100 VEHICLES PER DAY (2018)
6,200 VEHICLES PER DAY (2038 - Projected)	22,000 VEHICLES PER DAY (2038 - Projected)
DAY: 330 VPH (2018) / 790 VPH (2038)	DAY: 855 VPH (2018) / 1,240 VPH (2038)

Williamsburg Boulevard	Williamsburg Boulevard
7,100 VEHICLES PER DAY (2018)	6,400 VEHICLES PER DAY (2018)
7,100 VEHICLES PER DAY (2038 - Projected)	6,400 VEHICLES PER DAY (2038 - Projected)
DAY: 335 VPH (2018) / 800 VPH (2038)	DAY: 320 VPH (2018) / 535 VPH (2038)

Source: "2018 DOT Daily Traffic Volume Estimates - Jurisdiction Report 09 - Arapingo County/City of Arapahoe"

### STREET CLASSIFICATION

N Gabe Rd, Other Principal Arterial  
N Westminister Rd, Minor Arterial  
Chesterbrook Rd, Local Street  
Williamsburg Blvd (East of N Gabe Rd), Local Street  
Williamsburg Blvd (West of N Gabe Rd), Major Collector

### POSTED SPEED

North Gabe Road: 35 MPH Posted Speed  
North Westminister Street: 30 MPH Posted Speed

9. THE CONTRACTOR SHALL ENSURE THE SAFETY OF ALL THOSE PASSING THROUGH OR ADJACENT TO THE SITE.  
THE CONTRACTOR SHALL ENSURE ALL PEDESTRIAN WALKWAYS WITHIN THE DESIGNATED WALKWAY SHALL BE ADA-COMPLIANT AND SUP-RESISTANT.
10. THE CONTRACTOR SHALL CONFINE ALL ACTIVITIES AT THE SITE ASSOCIATED WITH CONSTRUCTION ACTIVITIES TO INCLUDE STORAGE OF EQUIPMENT AND/OR MATERIALS ACCESS TO THE FORM, WORKFORM, ETC. DOWNTOWN THE DESIGNATED WALKWAY OF WORK (LOW) WITHIN THE DESIGNATED WALKWAY.
11. ANY WORK WITHIN A RESOURCE PROTECTION AREA (RPA) SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 61 OF THE COUNTY CODE (THE CHESAPEAKE PRESERVATION ACT).

10. 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 WORK (LOW).
11. ANY WORK WITHIN A RESOURCE PROTECTION AREA (RPA) SHALL COMPLY WITH THE REQUIREMENTS OF CHAPTER 61 OF THE COUNTY CODE (THE CHESAPEAKE BAY PRESERVATION ORDINANCE).

# AADT

[illegible]

N Giebe Rd: Other Principal Arterial  
Chestbrook Rd (West of N Giebe Rd): Major Collector  
Chestbrook Rd East of N Giebe Rd: Local Street  
N Westmoreland St: Minor Arterial  
Wilson Blvd: Other Principal Arterial  
Patrick Henry Dr: Major Collector

Williamsburg Blvd: Minor Arterial

North Glee Road: 35 MPH Posted Speed  
Cherbrook Road: 25 MPH Posted Speed  
Williamsburg Boulevard: 30 MPH Posted Speed

North Westmoreland Street: 30 MPH Posted Speed  
Wilcox Boulevard: 30 MPH Posted Speed  
Patrick Henry Drive: 25 MPH Posted Speed

SHEET 1 of 31



**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



DATE	APPROVALS	
7/16/2021	<i>[Signature]</i>	APPROVING ENGINEER
07/20/2021	<i>[Signature]</i>	SEWER ENGINEERING MANAGER
07-16-2021	<i>[Signature]</i>	BUREAU CHIEF
07/21/2021	<i>[Signature]</i>	BUREAU CHIEF
07/21/2021	<i>[Signature]</i>	SEWER ENGINEERING MANAGER

REVISIONS DATE

REVISIONS	DATE

## Legend &amp; Notes Sheet

# TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS

SIGNED: ZDH  
 DRAWN: ZDH  
 CHECKED: ASM  
 \$ UTILITY TRANSMITTAL #: XXXX  
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 PATH: Orders\TO\_101\Intersection\Bundled\Legend\Sh  
 DATED: February 18, 2021

SCALE: N.T.S.

HEET 2 of 31

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS

### SYMBOL LEGEND

## INETYPE LEGEND

[illegible]

### HATCH LEGEND

ASPHALT - MILL & OVERLAY

ASPHALT - FULL DEPTH

CONCRETE

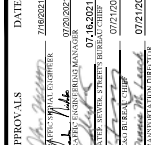
RENOLISH

### LABEL LEGEND

EXISTING		PROPOSED	
SAN STRUC NO.	SAN STRUC NO.	PROP SAN SEW STRUC NO.	PROP SAN SEW STRUC NO.
EXISTING SANITARY STRUCTURE NUMBER	XXXX	PROPOSED SANITARY SEWER STRUCTURE NUMBER	XXXX
STORM SEW STRUC NO.	XXXX	PROPOSED STORM SEW STRUC NO.	XXXX
EXISTING STORM SEWER STRUCTURE NUMBER	XXXX	PROPOSED STORM SEWER STRUCTURE NUMBER	XXXX





[illegible]

### STANDARD DETAILS

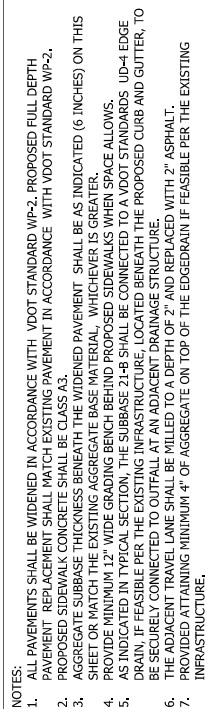
SIGNED: ZDH  
DRAWN: ZDH  
CHECKED: ASM  
ISS UTILITY TRANSMITTAL #: xxx  
FILENAME: T065-Q2-Legend.dwg  
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PLOTTH: Ordres\T065-Q2-Legend.dwg  
PLOTDT: February 23, 2021

**CALE:**

HEET 2B of 31



## DGE OF PAVEMENT @ PROPOSED CURB EXTENSIONS







DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22204  
Phone: 703.226.3344  
Fax: 703.226.3379



APPROVALS	DATE
DESIGNED: ZDH	7/16/2021
CHECKED: ASM	07/16/2021
DRAWN: ASM	07/16/2021
PROJECT ENGINEER	07/16/2021
TRANSPORTATION DIRECTOR	07/16/2021

REVISIONS	DATE

# TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS

DESIGNED: ZDH  
CHECKED: ASM  
DRAWN: ASM  
PROJECT ENGINEER  
TRANSPORTATION DIRECTOR

SCALE:  
SHEET 2D of 31

ASPHALT PAVEMENT WIDENING  
FOR WIDENING SUBJECT TO TRAFFIC

2016 ROAD & BRIDGE STANDARDS

CONSTRUCTION JOINT DETAIL

REMOVE EXISTING ASPHALT LAYERS TO EXISTING SURFACE AND REPLACE WITH PROPOSED ASPHALT WIDENING LAYERS.

PROPOSED ASPHALT LAYERS SHALL BE PLACED IN THE CENTER OF THE EXISTING ASPHALT LAYERS.

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NOTES:

1. ASPHALT PAVEMENT WIDENING SHALL HAVE A FINISHED SECTION IN ACCORDANCE WITH CURRENT MOST PROCEDURES AND BE APPROVED BY THE ENGINEER.

2. THE FINISHED SECTION OF ASPHALT PAVEMENT WIDENING SHALL BE PLACED IN THE CENTER OF THE EXISTING ASPHALT LAYERS.

3. A MINIMUM OF THREE COATS SHALL BE PLACED ALONG THE CENTER OF THE EXISTING ASPHALT LAYERS TO DETERMINE THE TYPE AND THICKNESS OF EXISTING PAVEMENT LAYERS. THESE COATS SHALL BE PLACED IN THE CENTER OF THE EXISTING ASPHALT LAYERS.

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CG-12 DETECTABLE WARNING SURFACE

2016 ROAD & BRIDGE STANDARDS

TYPICAL INSTALLATION FOR SHOULDER PATH WITH SHOULDER

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CG-12 DETECTABLE WARNING SURFACE

2016 ROAD & BRIDGE STANDARDS

TYPICAL INSTALLATION FOR SHOULDER PATH WITH SHOULDER

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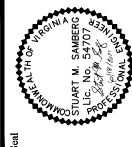
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DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 200  
Arlington, VA 22204  
Phone: 703.228.3344  
Fax: 703.228.3379



APPROVALS DATE  
DESIGNED: ZDH 7/15/2021  
CHECKED: ZDH 8/2/2021  
DRAWN: ASH 07.18.2021  
PROJECT: WATTS POWER STREET WIDENING  
PROJECT NO: 2019-0001  
DATE: 07/15/2021  
BY: ASH  
REVISION: 07/12/2021  
TRANSPORTATION DIVISION

REVISIONS DATE

# TRAFFIC SIGNAL AND INTERSECTION IMPROVEMENTS PLANS

Standard Details

DESIGNED: ZDH  
CHECKED: ZDH  
DRAWN: ASH  
PROJECT: WATTS POWER STREET WIDENING  
PROJECT NO: 2019-0001  
DATE: 07/15/2021  
BY: ASH  
REVISION: 07/12/2021  
TRANSPORTATION DIVISION

SCALE:

SHEET 2E of 31

September 2019

## Typical Traffic Control Turn Lane Closure Operation (Figure TTC-30a)

NOTES

- Guidance:
- Sign spacing should be 150'-150' where the posted speed limit is 45 mph or less, 300'-300' where the posted speed limit is greater than 45 mph.
  - Sign spacing should be 150'-150' for Limited Access highways. For all other roadways, the sign spacing should be 300'-300' where the posted speed limit is greater than 45 mph, and 150'-150' where the posted speed limit is 45 mph or less.
  - When closing lanes on a highway, the sign spacing should be the posted speed limit or less.
  - Crews should be directed to the limits of the work zone to insure maximum possible right-of-way in advance of the transition. When the posted speed limit is 45 mph or less, the sign spacing should be 150'-150' in advance of the transition. When the posted speed limit is greater than 45 mph, the sign spacing should be 300'-300' in advance of the transition.
  - All vehicle, equipment, workers, and their activities should be restricted to one side of the pavement.
- Standard:
- Super length (L) and channelizing device spacing shall be as follows:

Speed Limit (mph)		Super Length (ft)		Channelizing Device Spacing (ft)	
30	45	150	300	30	60
30	45	150	300	30	60
45	60	300	600	60	120
60	75	450	900	90	180
75	90	600	1200	120	240
90	105	750	1500	150	300
105	120	900	1800	180	360
120	135	1050	2100	210	420
135	150	1200	2400	240	480
150	165	1350	2700	270	540
165	180	1500	3000	300	600
180	200	1800	3600	360	720
200	225	2250	4500	450	900
225	250	2700	5400	540	1080
250	300	3300	6600	660	1320
300	350	4050	8100	810	1620

Speed Limit (mph)		Super Length (ft)		Channelizing Device Spacing (ft)	
30	45	150	300	30	60
30	45	150	300	30	60
45	60	300	600	60	120
60	75	450	900	90	180
75	90	600	1200	120	240
90	105	750	1500	150	300
105	120	900	1800	180	360
120	135	1050	2100	210	420
135	150	1200	2400	240	480
150	165	1350	2700	270	540
165	180	1500	3000	300	600
180	200	1800	3600	360	720
200	225	2250	4500	450	900
225	250	2700	5400	540	1080
250	300	3300	6600	660	1320
300	350	4050	8100	810	1620

- Guidance:
- Length of the longitudinal buffer space shall be as follows:
- | Speed Limit (mph) | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' | 700' | 750' | 800' | 850' | 900' | 950' | 1000' |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 30                | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100   |
| 45                | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105   |
| 60                | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110   |
| 75                | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115   |
| 90                | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120   |
| 105               | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125   |
| 120               | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130   |
| 135               | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135   |
| 150               | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140   |
| 165               | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145   |
| 180               | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145  | 150   |
| 200               | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145  | 150  | 155   |
| 225               | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145  | 150  | 155  | 160   |
| 250               | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145  | 150  | 155  | 160  | 165   |
- Support:
- Sign spacing should be 150'-150' where the posted speed limit is 45 mph or less, 300'-300' where the posted speed limit is greater than 45 mph.
  - Sign spacing should be 150'-150' for Limited Access highways. For all other roadways, the sign spacing should be 300'-300' where the posted speed limit is greater than 45 mph, and 150'-150' where the posted speed limit is 45 mph or less.
  - When closing lanes on a highway, the sign spacing should be the posted speed limit or less.
  - Crews should be directed to the limits of the work zone to insure maximum possible right-of-way in advance of the transition. When the posted speed limit is 45 mph or less, the sign spacing should be 150'-150' in advance of the transition. When the posted speed limit is greater than 45 mph, the sign spacing should be 300'-300' in advance of the transition.
  - All vehicle, equipment, workers, and their activities should be restricted to one side of the pavement.

September 2019

## Typical Traffic Control Outside Lane Closure Operation on a Four-Lane Roadway (Figure TTC-30b)

NOTES

- Standard:
- On divided highways having a median wider than 8' right and left sign assemblies shall be required.
  - Sign spacing should be 150'-150' for Limited Access highways. For all other roadways, the sign spacing should be 300'-300' where the posted speed limit is greater than 45 mph, and 150'-150' where the posted speed limit is 45 mph or less.
  - When closing lanes on a highway, the sign spacing should be the posted speed limit or less.
  - Crews should be directed to the limits of the work zone to insure maximum possible right-of-way in advance of the transition. When the posted speed limit is 45 mph or less, the sign spacing should be 150'-150' in advance of the transition. When the posted speed limit is greater than 45 mph, the sign spacing should be 300'-300' in advance of the transition.
  - All vehicle, equipment, workers, and their activities should be restricted to one side of the pavement.
- Guidance:
- Super length (L) and channelizing device spacing shall be as follows:

Speed Limit (mph)		Super Length (ft)		Channelizing Device Spacing (ft)	
30	45	150	300	30	60
30	45	150	300	30	60
45	60	300	600	60	120
60	75	450	900	90	180
75	90	600	1200	120	240
90	105	750	1500	150	300
105	120	900	1800	180	360
120	135	1050	2100	210	420
135	150	1200	2400	240	480
150	165	1350	2700	270	540
165	180	1500	3000	300	600
180	200	1800	3600	360	720
200	225	2250	4500	450	900
225	250	2700	5400	540	1080
250	300	3300	6600	660	1320
300	350	4050	8100	810	1620

Speed Limit (mph)		Super Length (ft)		Channelizing Device Spacing (ft)	
30	45	150	300	30	60
30	45	150	300	30	60
45	60	300	600	60	120
60	75	450	900	90	180
75	90	600	1200	120	240
90	105	750	1500	150	300
105	120	900	1800	180	360
120	135	1050	2100	210	420
135	150	1200	2400	240	480
150	165	1350	2700	270	540
165	180	1500	3000	300	600
180	200	1800	3600	360	720
200	225	2250	4500	450	900
225	250	2700	5400	540	1080
250	300	3300	6600	660	1320
300	350	4050	8100	810	1620

- Guidance:
- Length of the longitudinal buffer space shall be as follows:
- | Speed Limit (mph) | 250' | 300' | 350' | 400' | 450' | 500' | 550' | 600' | 650' | 700' | 750' | 800' | 850' | 900' | 950' | 1000' |
|-------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 30                | 25   | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100   |
| 45                | 30   | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105   |
| 60                | 35   | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110   |
| 75                | 40   | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115   |
| 90                | 45   | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120   |
| 105               | 50   | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125   |
| 120               | 55   | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130   |
| 135               | 60   | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135   |
| 150               | 65   | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140   |
| 165               | 70   | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145   |
| 180               | 75   | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145  | 150   |
| 200               | 80   | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145  | 150  | 155   |
| 225               | 85   | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145  | 150  | 155  | 160   |
| 250               | 90   | 95   | 100  | 105  | 110  | 115  | 120  | 125  | 130  | 135  | 140  | 145  | 150  | 155  | 160  | 165   |
- Support:
- Sign spacing should be 150'-150' where the posted speed limit is 45 mph or less, 300'-300' where the posted speed limit is greater than 45 mph.
  - Sign spacing should be 150'-150' for Limited Access highways. For all other roadways, the sign spacing should be 300'-300' where the posted speed limit is greater than 45 mph, and 150'-150' where the posted speed limit is 45 mph or less.
  - When closing lanes on a highway, the sign spacing should be the posted speed limit or less.
  - Crews should be directed to the limits of the work zone to insure maximum possible right-of-way in advance of the transition. When the posted speed limit is 45 mph or less, the sign spacing should be 150'-150' in advance of the transition. When the posted speed limit is greater than 45 mph, the sign spacing should be 300'-300' in advance of the transition.
  - All vehicle, equipment, workers, and their activities should be restricted to one side of the pavement.

September 2019

## Typical Traffic Control Shoulder Operation with Minor Encroachment (Figure TTC-30c)

NOTES

- Standard:
- For required sign assemblies for multi-lane roadways see Note 1, TTC-4.
  - Sign spacing should be 150'-150' for Limited Access highways. For all other roadways, the sign spacing should be 300'-300' where the posted speed limit is greater than 45 mph, and 150'-150' where the posted speed limit is 45 mph or less.
  - When work takes part of a lane on a high volume roadway, vehicle, worker, vehicle, and equipment should be restricted to the shoulder of the roadway. When the posted speed limit is 45 mph or less, the sign spacing should be 150'-150' in advance of the transition. When the posted speed limit is greater than 45 mph, the sign spacing should be 300'-300' in advance of the transition.
  - The ROAD WORK AHEAD (R2-21) sign on an intersecting roadway may be omitted where drivers exiting from that roadway will encounter another advance warning sign prior to the intersection.
  - A shadow vehicle with other an arrow board operating in the caution mode, or at least one high-intensity amber rotating, flashing, or oscillating light shall be posted 80' - 120' in advance of the transition.
  - Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating light.
  - High-intensity amber rotating, flashing, or oscillating light can be used to supplement the vehicle's high-intensity amber rotating, flashing, or oscillating light.
- Guidance:
- Super length (L) and channelizing device spacing shall be as follows:

Speed Limit (mph)		Super Length (ft)		Channelizing Device Spacing (ft)	
30	45	150	300	30	60
30	45	150	300	30	60
45	60	300	600	60	120
60	75	450	900	90	180
75	90	600	1200	120	240
90	105	750	1500	150	300
105	120	900	1800	180	360
120	135	1050	2100	210	420
135	150	1200	2400	240	480
150	165	1350	2700	270	540
165	180	1500	3000	300	600
180	200	1800	3600	360	720
200	225	2250	4500	450	900
225	250	2700	5400	540	1080
250	300	3300	6600	660	1320
300	350	4050	8100	810	1620

Speed Limit (mph)	Channelizing Device Spacing		Speed Limit (mph)
	Location Spacing	Location Spacing	
30	30	30	30
45	45	45	45
60	60	60	60
75	75	75	75
90	90	90	90
105	105	105	105
120	120	120	120
135	135	135	135
150	150	150	150
165	165	165	165
180	180	180	180
200	200	200	200







DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22204  
Phone: 703.226.3344  
Fax: 703.226.3379



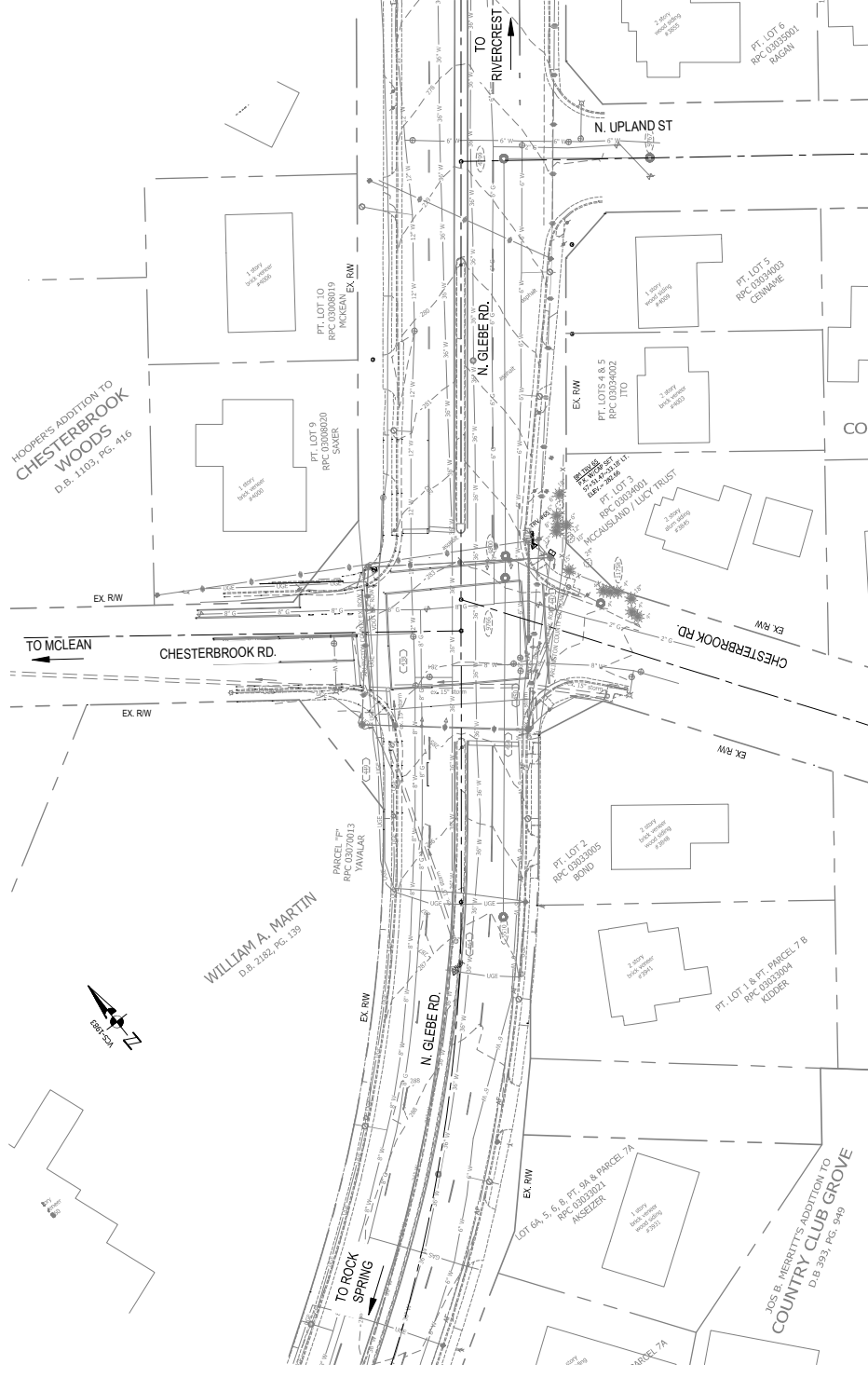
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DESIGNED: ZDH	7/26/2021
DRAWN: ASM	08/02/2021
CHECKED: ASM	07/16/2021
PROJECT MANAGER: JUSTIN MCCARTHY	07/16/2021
DATE: 07/16/2021	
PROJECT: N. GLEBE RD. IMPROVEMENTS	
PROJECT LOCATION: N. GLEBE RD. AT CHESTERBROOK RD.	
PROJECT NUMBER: 2020-0001	
PROJECT DESCRIPTION: TRAFFIC SIGNAL IMPROVEMENTS	

REVISIONS	DATE

Existing Conditions Plan  
N. Glebe Rd. at Chesterbrook Rd.  
TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS

DESIGNED: ZDH  
DRAWN: ASM  
CHECKED: ASM  
PROJECT MANAGER: JUSTIN MCCARTHY  
DATE: 07/16/2021  
PROJECT: N. GLEBE RD. IMPROVEMENTS  
PROJECT LOCATION: N. GLEBE RD. AT CHESTERBROOK RD.  
PROJECT NUMBER: 2020-0001  
PROJECT DESCRIPTION: TRAFFIC SIGNAL IMPROVEMENTS

SCALE: Hor.: 1"=25'  
VERT.: 1"=10'  
GRAPHIC SCALE  
0 25 50  
SHEET 3 of 31



SANITARY SEWER		STORM SEWER	
#4972	TOP = 276.39 C/L IN = 276.73 (8')	#498	TOP = 277.61 15' RCP IN = 276.21 (48)
#480	TOP = 276.63 C/L IN = 276.27 (8')	#438	TOP = 276.57 15' RCP IN = 272.05 (49)
#550	TOP = 281.12 C/L IN = 276.40 (8')	#453	TOP = 276.45 15' RCP IN = 272.05 (49)
#796	TOP = 276.39 C/L IN = 276.08 (8')	#442	TOP = 276.44 15' RCP IN = 272.05 (49)
#972	TOP = 277.63 C/L IN = 276.69 (8')	#449	TOP = 276.47 15' RCP IN = 272.05 (49)
#1798	DATA UNAVAILABLE	#464	TOP = 276.53 15' RCP IN = 272.05 (49)

SURVEY CONTROL	EASTING	ELEV.	DESCRIPTION
65	1172577.19	282.6	BN 65
66	1172577.19	282.6	BN 66

NOTES:







- THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF THE COUNTY SURVEYOR. THE DATA WAS OBTAINED FROM THE COUNTY SURVEYOR'S RECORDS. THE DATA IS PROVIDED FOR INFORMATIONAL PURPOSES ONLY. THE DATA IS NOT TO BE USED FOR ANY OTHER PURPOSES WITHOUT THE WRITTEN CONSENT OF THE COUNTY SURVEYOR.
- HORIZONTAL DATUM: VIRGINIA COORDINATE SYSTEM 1982.
- VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1985.
- CONTOUR INTERVAL: 1'
- BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM A FIELD RUN BOUNDARY SURVEY.



**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



DATE	7/16/2021	DATE	07/16/2021
APPROVALS	 STEPHEN J. HITE CHIEF, ENGINEERING MANAGER	 [illegible] CHIEF, SEWER STREETS BUREAU	 [illegible] CHIEF, BUREAU
DATE	07/20/2021	DATE	07/20/2021
APPROVALS	 [illegible] CHIEF, ENGINEERING MANAGER	 [illegible] CHIEF, SEWER STREETS BUREAU	 [illegible] CHIEF, BUREAU

REVISIONS DATE

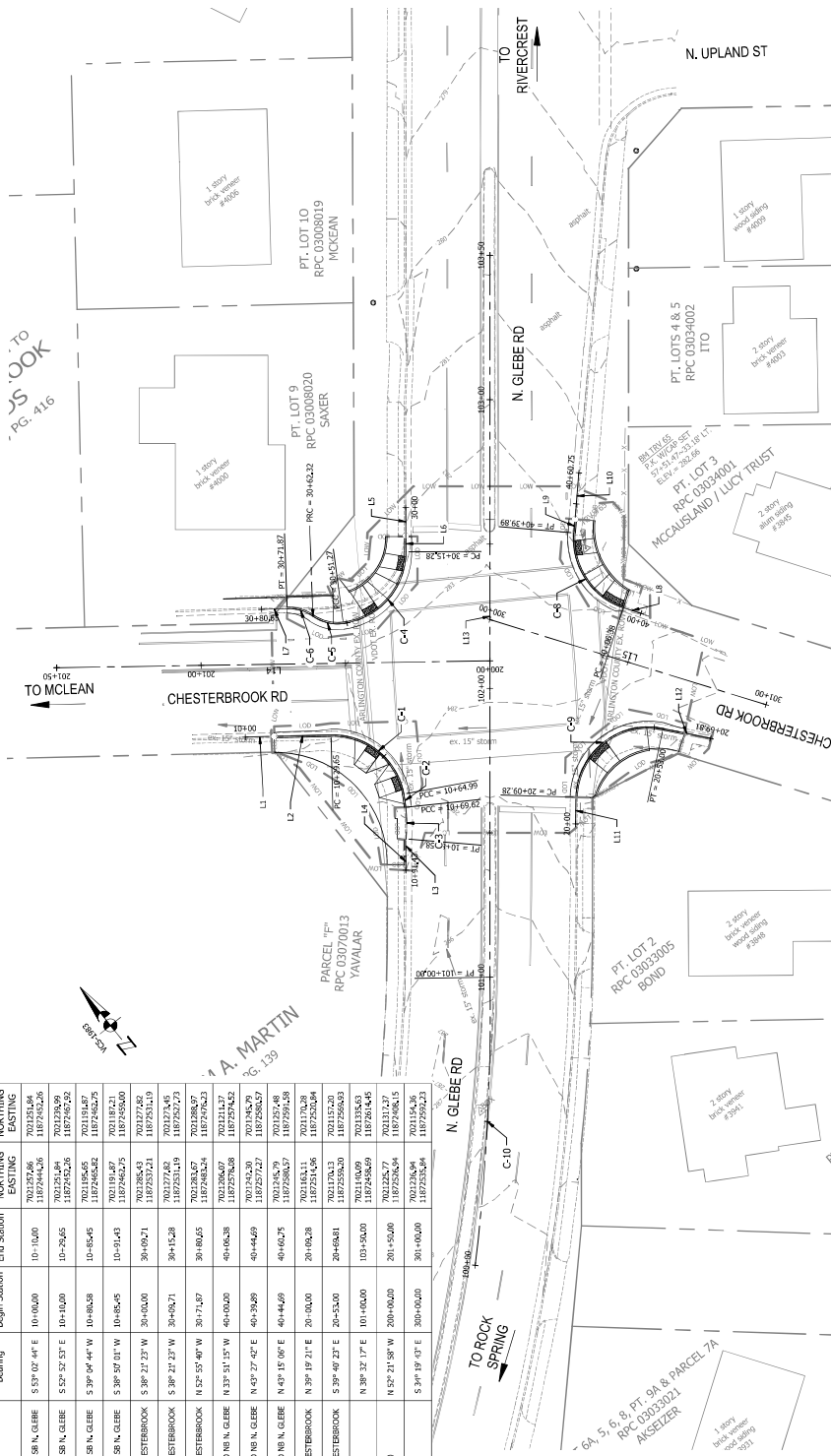
Geometric Control Plan  
N. Giebe Rd. at Chesterbrook Rd.

DESIGNED: KAV  
DRAWN: KAV  
CHECKED: MJA  
THIS IS UTILITY TRANSMITTAL #: xxx

FILENAME: T085-04-Geometric\_Control\_F  
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PATH: C:\Users\T01\_J\Intersect\Bun4\4\ud\GNS  
DOTTED: February 19, 2021

SCALE: 1" = 20'

HEET 4 of 31



Alignment Curve Table															
Curve #	Alignment	PC STATION	PI STATION	PT STATION	DELTA	DEGREE	TANGENT	RADIUS	EXTERNAL	CROSS	LENGTH	MID. ORD.	READING BACK BEARING AHEAD	NORTHING PC PT	EASTING PC PT
C-1	TOC EB CISTERBROOK TO SR N. GLEBE	10+29.65	10+51.00	10+64.09	80° 59' 15"	229° 10' 59"	21.25'	25.05'	7.67'	32.47'	32.47'	5.99'	S55° 52' E 3.7E	7021.976.8666	11871846.4230
C-2	TOC EB CISTERBROOK TO SR N. GLEBE	10+64.09	10+62.20	10+69.62	4° 25' 27"	95° 29' 35"	3.23'	65.05'	0.04'	4.63'	4.63'	0.04'	S59° 10' 17W	7021.976.8666	11871846.4230
C-3	TOC EB CISTERBROOK TO SE N. GLEBE	10+69.62	10+75.11	10+80.26	10° 45' 19"	98° 10' 34"	5.49'	56.38'	0.26'	10.94'	10.96'	0.26'	S39° 10' 27W	7021.976.8666	11871846.4230
C-4	TOC SR N. GLEBE TO WB CISTERBROOK	30+15.28	30+33.19	30+51.27	82° 28' 01"	239° 10' 59"	21.51'	25.05'	8.24'	32.48'	32.48'	0.20'	S39° 21' 27W	7021.976.8666	11871846.4230
C-5	TOC SR N. GLEBE TO WB CISTERBROOK	30+51.27	30+52.26	30+62.32	42° 12' 39"	381° 58' 19"	5.79'	15.05'	1.08'	10.81'	11.06'	1.01'	N65° 10' 37W	7021.976.8666	11871846.4230
C-6	TOC SR N. GLEBE TO WB CISTERBROOK	30+62.32	30+62.26	30+71.67	30° 27' 49"	381° 58' 19"	4.94'	15.05'	0.39'	9.39'	9.39'	0.25'	N45° 56' 58W	7021.976.8666	11871846.4230
C-8	TOC WB CISTERBROOK TO NB N. GLEBE	40+06.18	40+26.19	40+39.89	70° 47' 27"	229° 10' 59"	19.81'	25.05'	6.60'	31.45'	31.51'	5.41'	N32° 15' 44W	7021.976.8666	11871846.4230
C-9	TOC NB N. GLEBE TO SB CISTERBROOK	20+06.28	20+26.18	20+51.00	110° 12' 20"	239° 10' 59"	28.90'	25.05'	13.98'	36.35'	36.35'	8.96'	N40° 07' 11E	7021.976.8666	11871846.4230
													S39° 49' 23E	7021.976.8666	11871846.4230
													N67° 17E	7021.976.8666	11871846.4230

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS

**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



DATE	APPROVALS
07/16/2021	<i>[Signature]</i> REGIONAL ENGINEER
07/20/2021	<i>[Signature]</i> ATLANTIC ENGINEERING MANAGER
07.16.2021	<i>[Signature]</i> WATER, SEWER, STREETS BUREAU CHIEF
07/21/2021	<i>[Signature]</i> BUREAU CHIEF
07/21/2021	<i>[Signature]</i> Travis M. Land

REVISIONS	DATE

TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS

SIGNED: KAV  
AWN: KM  
CHECKED: MJA  
SS UTILITY TRANSMITTAL #: xxx

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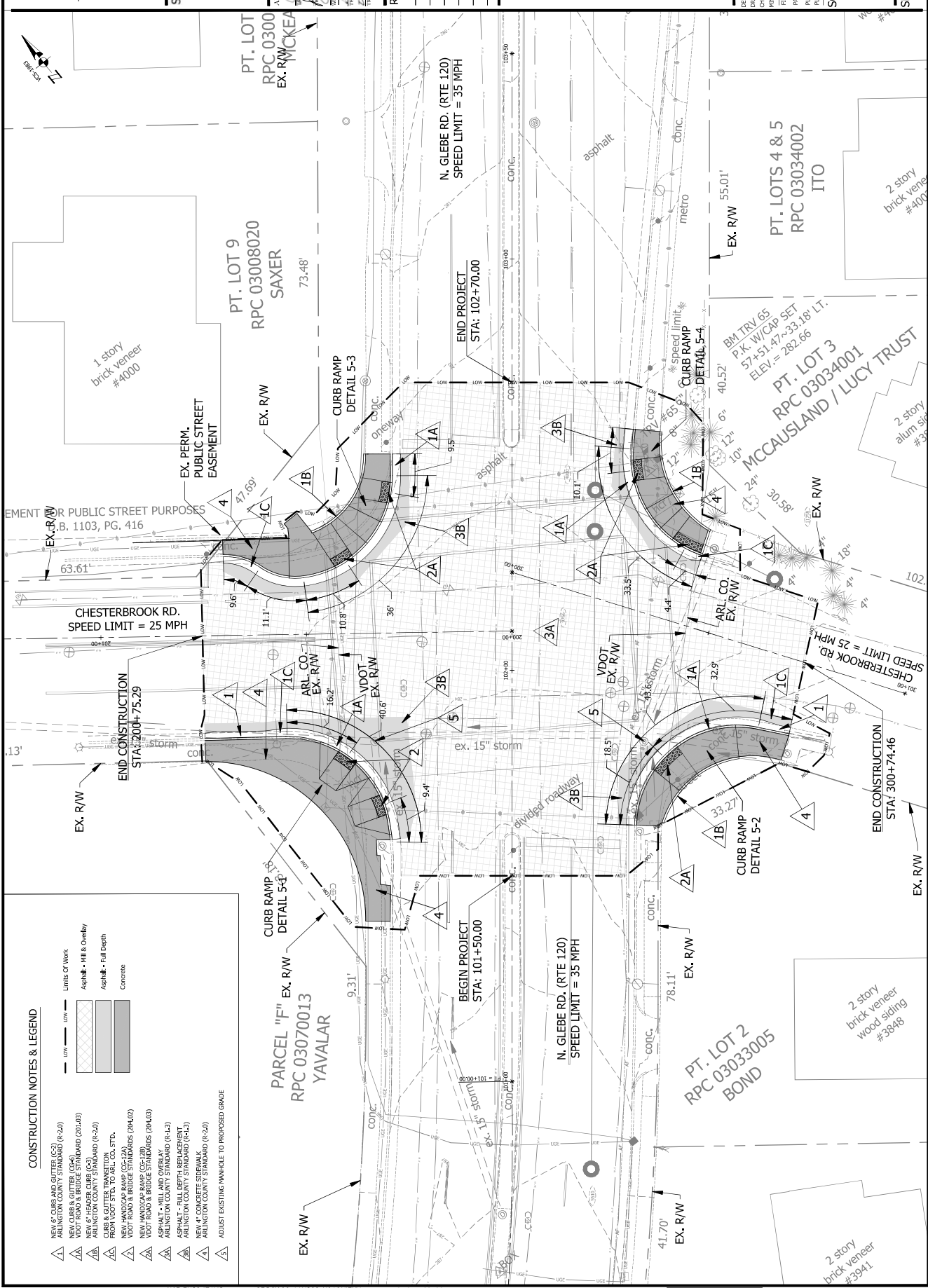
PLOTTED: February 23, 2021

CALE: Hor.: 1"=10'



HEET 5 of 31

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS



## CONSTRUCTION NOTES & LEGEND

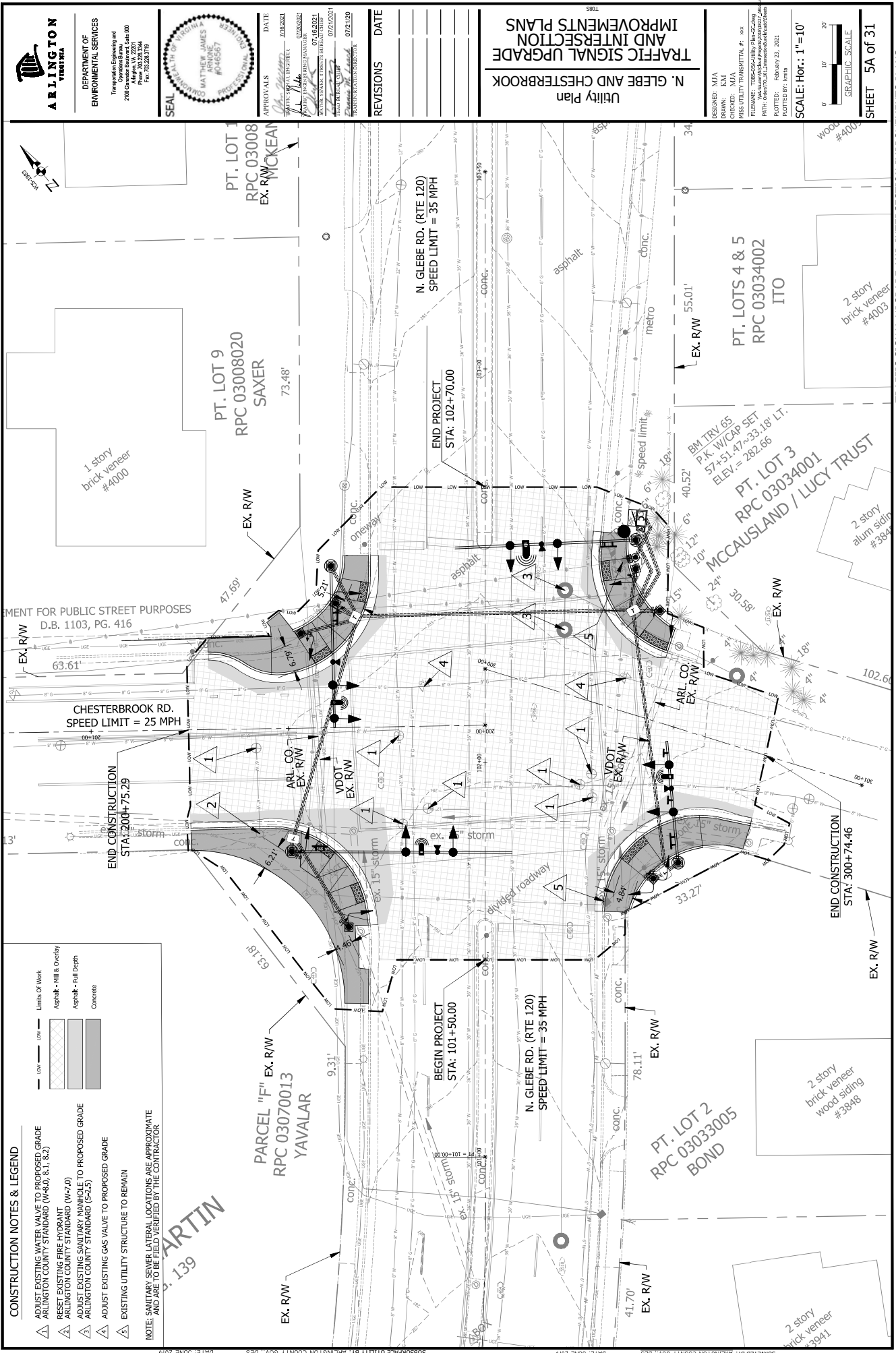
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|---|-----|------|
| 1. NEW 6" CURB AND GUTTER (C-2)<br>ARLINGTON COUNTY STANDARD (R-2.40)   |     |      |
| 2. NEW CURB & GUTTER (C-2)<br>NEW 6" CURB & GUTTER (C-2)<br>NEW 6" HOOKER CURB (C-3)<br>ARLINGTON COUNTY STANDARD (R-2.40)      |     |      |
| 3. CURB & GUTTER TRANSITION<br>FROM 100% STD. TO AIL. CO. STD.  |     |      |
| 4. NEW 18" HIGH CONCRETE CURB<br>NEW 18" HIGH CONCRETE CURB<br>NEW 18" HIGH CONCRETE CURB<br>ARLINGTON COUNTY STANDARD (294.02) |     |      |

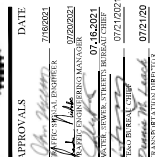
△5 ADJUST EXISTING MANHOLE TO PROPOSED GRADE

DESIGNED BY: RUMMEL, KLEPPER, & KAHL, LLP (703-246-0028)  
SUBSURFACE UTILITY BY: ARLINGTON COUNTY GOV., DES  
DATE: JUNE 2019

PROJECT MANAGER: JUSTIN MCCARTHY, PE (703-228-3734)  
SURVEYED BY: ARLINGTON COUNTY GOV., DES  
DATE: JUNE 2019







REVISIONS	DATE
-----------	------

REVISIONS	DATE
-----------	------

TOC Profiles & Curb Ramp Details

DESIGNED: KAV  
DRAWN: KM  
CHECKED: MJA  
ISSUED: JSS UTILITY TRANSMITTAL #: xxx

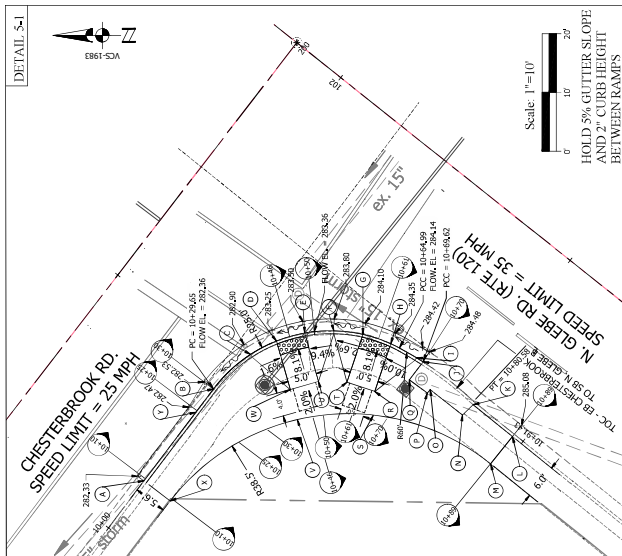
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LOTTED: February 23, 2021  
LOTTED BY: kmia

SCALE: AS SHOWN

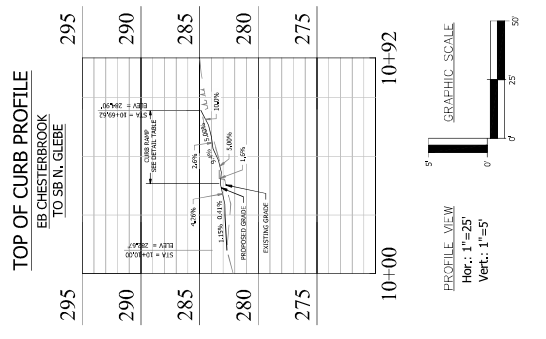
SCALE: AS SHOWN

SHEET 6 of 31

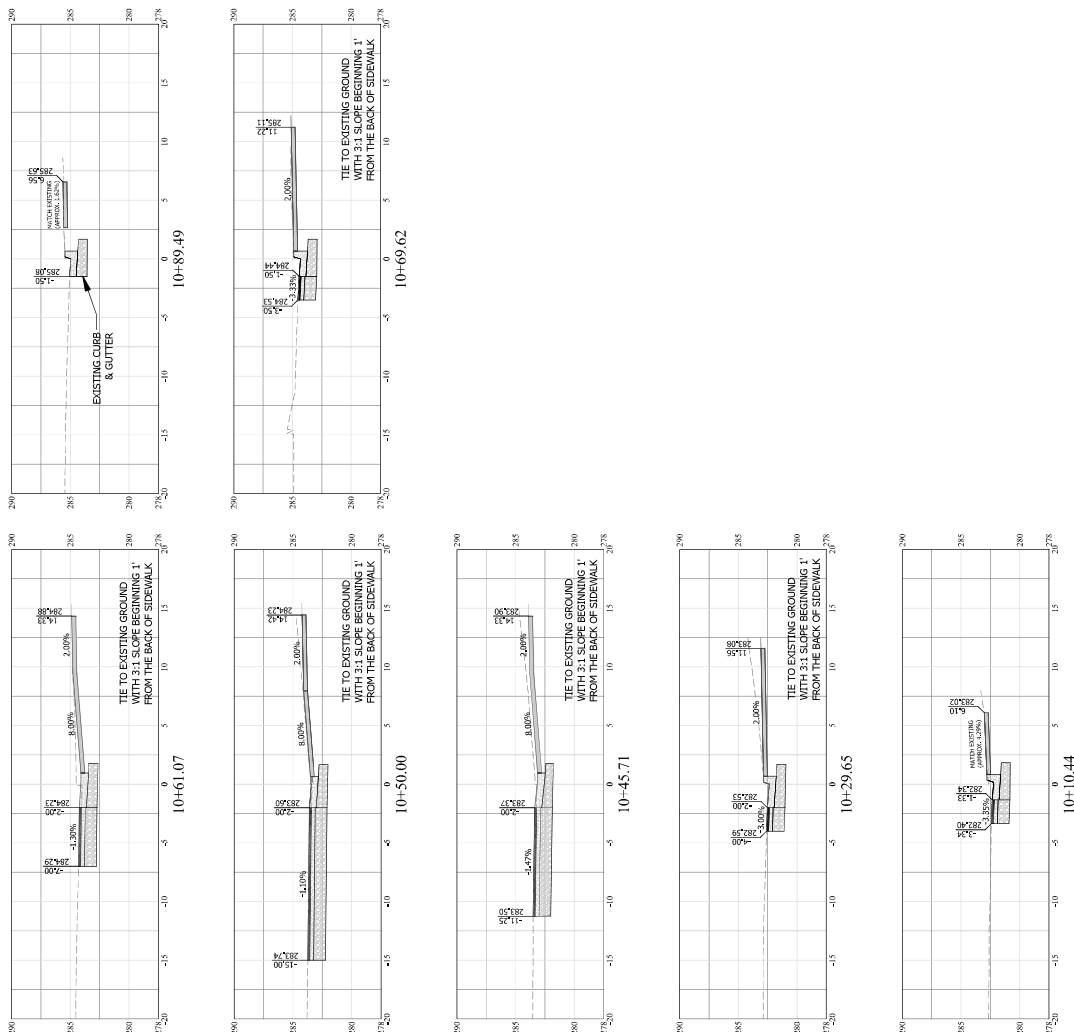


STANDARD CG-12A - E. CHESTERBROOK RD./  
S. GLEBE RD.  
Scale: 1" = 10'

DETAIL	STA.	OFFSET	WALK ELV.	TOT EL.
A	10+10.00	0.00' RT	282.67	
B	10+29.65	0.00' RT	282.86	
C	10+38.31	0.00' RT	283.23	
D	10+43.31	0.00' RT	283.15	
E	10+48.32	0.00' RT	283.40	
F	10+53.31	0.00' RT	283.87	
G	10+58.31	0.00' RT	284.00	
H	10+63.32	0.00' RT	284.25	
I	10+68.32	0.00' RT	284.75	
J	10+69.62	0.00' RT	284.90	
K	10+80.90	0.00' RT	285.35	
L	10+89.52	0.00' RT	285.45	
M	10+89.52	6.46' RT	285.64	
N	10+80.58	3.00' RT	285.29	
O	10+73.44	3.20' RT	285.09	
P	10+73.34	3.99' RT	285.09	
Q	10+69.29	3.84' RT	285.02	
R	10+64.62	8.50' RT	284.90	
S	10+66.81	12.20' RT	284.98	
T	10+57.02	8.50' RT	284.65	
U	10+49.62	8.50' RT	284.05	
V	10+39.72	13.61' RT	283.90	
W	10+42.01	8.50' RT	283.80	
X	10+10.00	5.62' RT	282.95	
	10+24.65	0.00' RT	282.84	



CURB EXTENSION CROSS SECTIONS

SCALE: 1"=5' (H)  
1"=5' (V)

NOTES

- NOTES**
1. Station/Offset data is in reference to the associated TOC baseline unless noted otherwise.

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS



DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 800  
Arlington, VA 22202  
Phone: 703.228.3344  
Fax: 703.228.3716

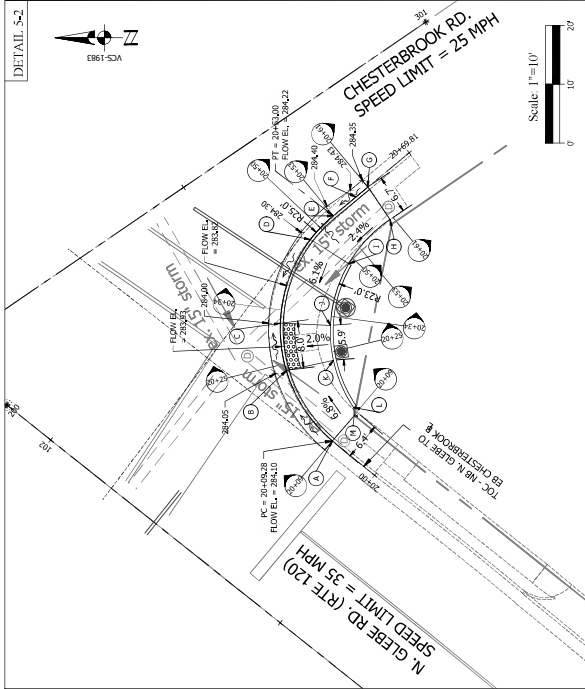


APPROVALS DATE  
PROJECT: 21060201  
DESIGN: 07-18-2021  
DATE: 07-18-2021  
CHECKED: 07/21/2021  
DATE: 07/21/2021  
PROJECT: 21060201  
DESIGN: 07-18-2021  
DATE: 07-18-2021

REVISIONS DATE

TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS

DESIGNED: MJA  
DRAWN: MJA  
CHECKED: MJA  
FILENAME: 21060201.DWG  
PLOT: 07/21/2021  
PLOTTER: HP DesignJet T120  
SCALE: AS SHOWN

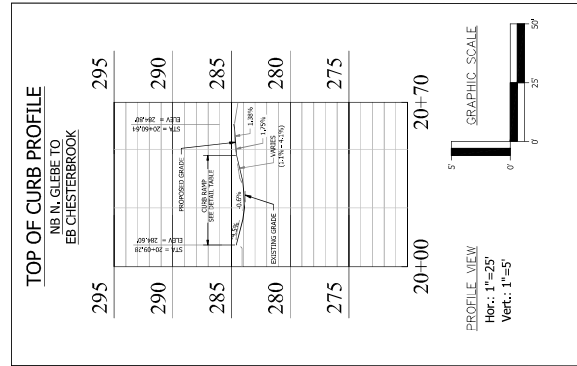


STANDARD CC-12B-N GLEBE RD/  
E CHESTERBROOK RD

DETAIL S-2	STA.	OFFSET	WALK ELEV.	TOC EL.
A	20+09.28	0.00' RT	284.60	
B	20+23.83	0.00' RT	283.95	
C	20+31.97	0.00' RT	283.90	
D	20+47.37	0.00' RT	284.63	
E	20+53.00	0.00' RT	284.73	
F	20+58.00	0.00' RT	284.80	
G	20+60.64	0.00' RT	284.80	
H	20+60.01	6.66' RT	285.00	
I	20+48.36	7.66' RT	284.75	284.75
J	20+31.86	8.56' RT	284.06	284.56
K	20+22.91	8.18' RT	284.10	284.60
L	20+10.46	6.66' RT	284.70	284.70
M	20+09.12	5.70' RT	284.80	

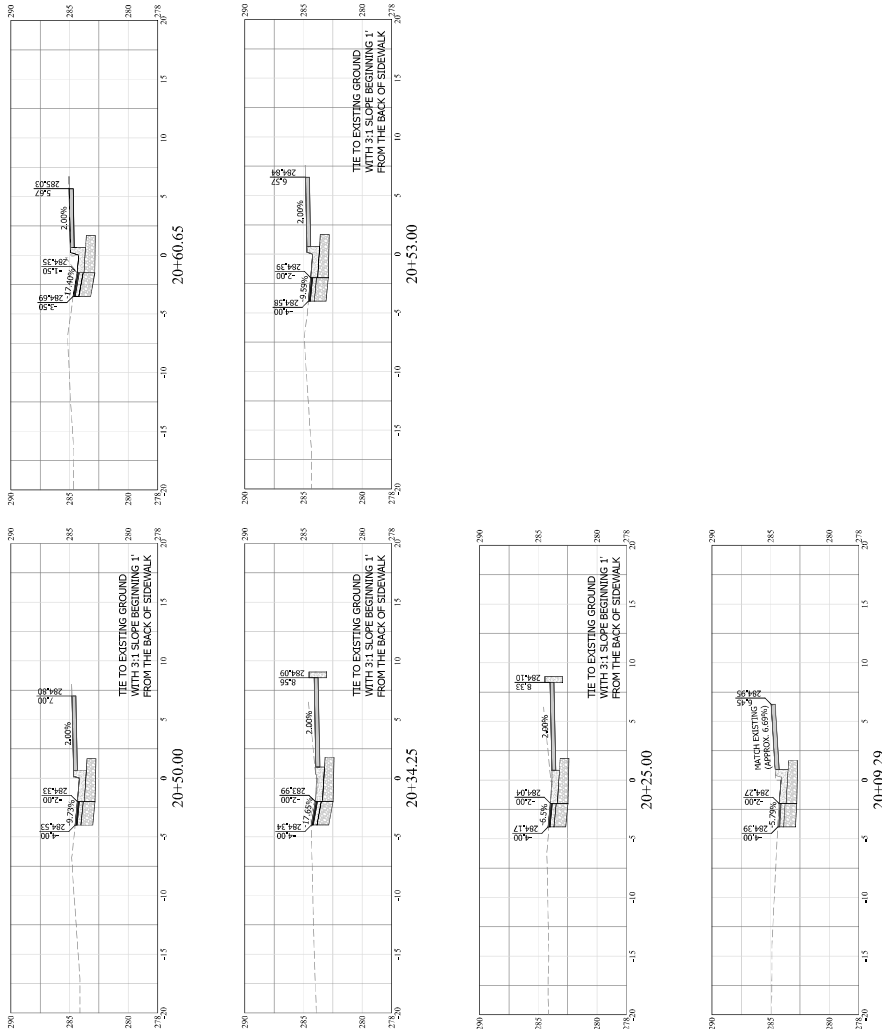
NOTES

- Station/Offset data is in reference to the associated  
TOC baseline unless noted otherwise.



CURB EXTENSION CROSS SECTIONS

SCALE: 1"=5' (H)  
1"=5' (V)





DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Cleveland Boulevard, Suite 800  
Arlington, VA 22202-4344  
Phone: 703.226.5344  
Fax: 703.226.5719

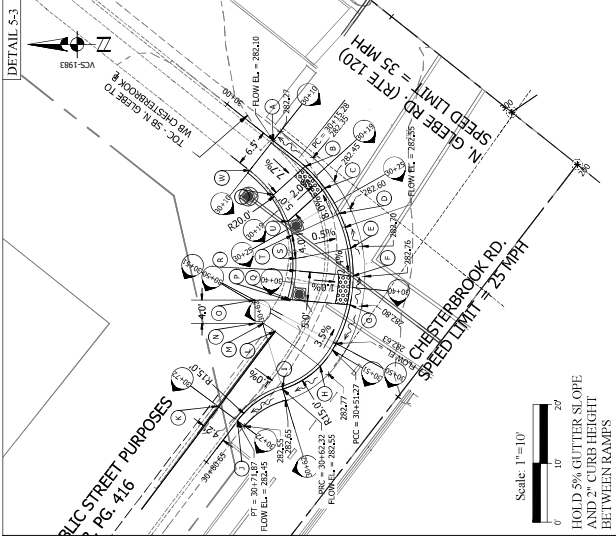


APPROVALS DATE  
PROJECT: N. GLEBE RD. IMPROVEMENTS  
DESIGNED BY: J. RUMMEL  
CHECKED BY: M. KLEPPER  
DATE: 07/16/2021  
DATE: 07/16/2021  
DATE: 07/16/2021  
DATE: 07/16/2021

REVISIONS DATE

TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS

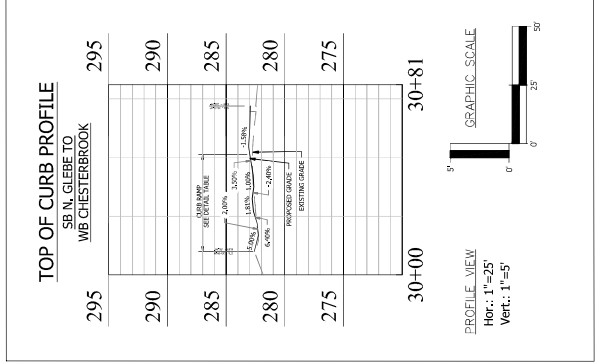
DESIGNED: KAV  
DRAWN: KMA  
CHECKED: MIA  
MISS UTILITY TRANSMITTAL #: xxx  
FILENAME: TSSUC-Sub Detail-Curbs.dwg  
PATH: c:\projects\TSSUC-Sub Detail-Curbs.dwg  
PLOTTED BY: linia  
PLOT DATE: February 24, 2021  
SCALE: AS SHOWN



STANDARD CG+2B - N. GLEBE RD./  
W. CHESTERBROOK RD.

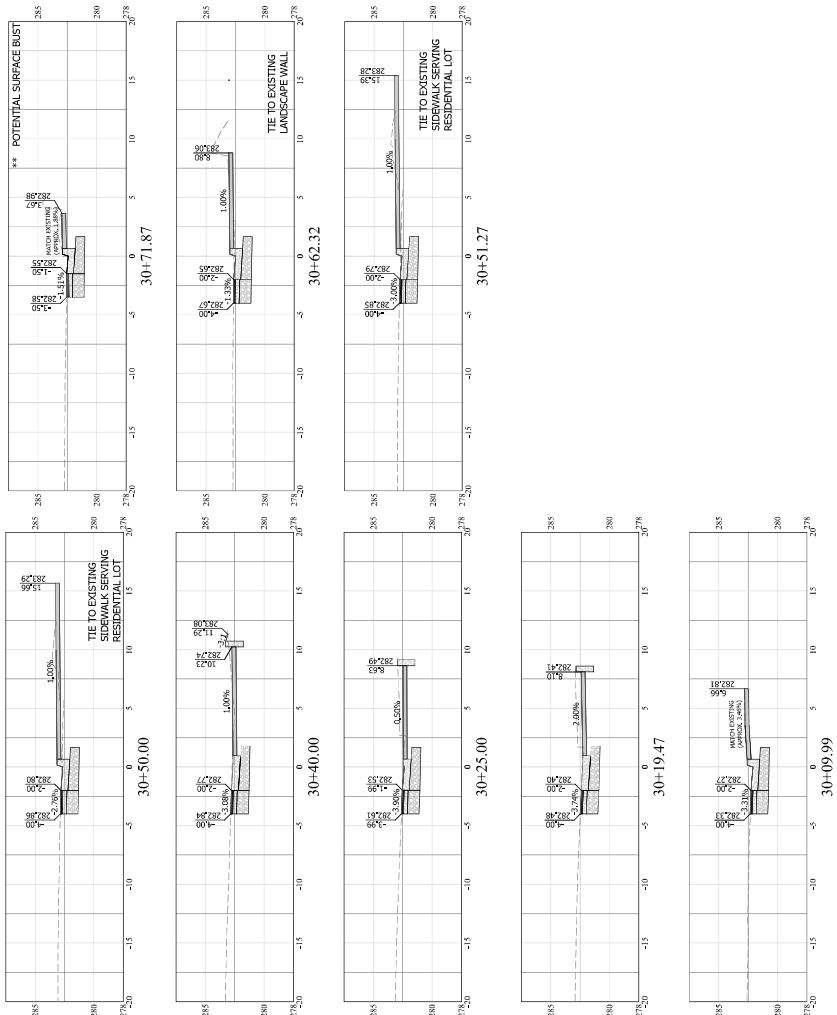
DETAIL 5-3	STA.	WALK OFFSET	ELEV.	TOC EL.
A	30+10.00	0.00' RT	282.60	
B	30+17.00	0.00' RT	282.25	
C	30+22.00	0.00' RT	282.35	
D	30+27.00	0.00' RT	282.67	
E	30+33.27	0.00' RT	282.77	
F	30+38.00	0.00' RT	282.66	
G	30+42.98	0.00' RT	282.70	
H	30+54.74	0.00' RT	283.10	
I	30+62.32	0.00' RT	282.98	
J	30+71.87	0.00' RT	282.94	
K	30+71.90	4.20' RT	283.00	
L	30+57.74	9.53' RT	283.19	
M	30+61.66	11.65' RT	283.25	
N	30+63.01	12.11' RT	MATCH EX.	
O	30+49.77	15.70' RT	MATCH EX.	
P	30+45.36	10.60' RT	282.82	283.32
Q	30+44.99	10.09' RT	282.80	283.30
R	30+36.67	9.77' RT	282.76	283.26
S	30+33.27	9.52' RT	282.80	283.30
T	30+27.00	8.88' RT	282.70	283.20
U	30+23.27	8.39' RT	282.50	283.00
V	30+15.97	7.23' RT	282.35	282.85
W	30+10.00	6.50' RT	282.80	282.80

- NOTES
- Station/Offset data is in reference to the associated TOC baseline unless noted otherwise.



CURB EXTENSION CROSS SECTIONS

SCALE: 1"=5' (H)  
1"=5' (V)





DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 800  
Arlington, VA 22204  
Phone: 703.228.3344  
Fax: 703.228.3719

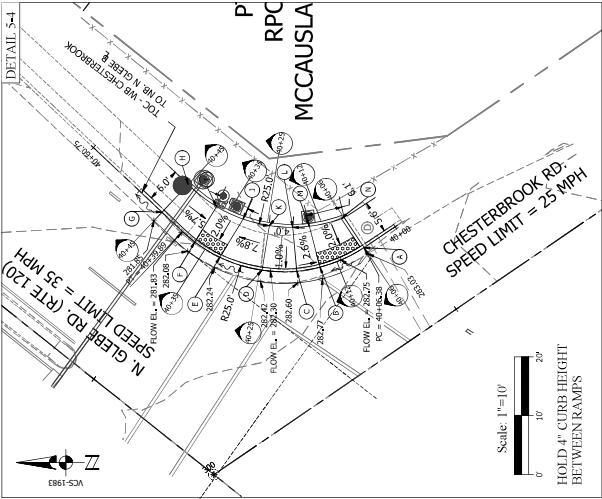


APPROVALS DATE  
DESIGNED: KAV 7/16/2021  
CHECKED: KMI 07/16/2021  
DRAWN: MJA 07/16/2021  
FILENAME: 10856-CURB DMB-CZ-21g  
PLOT: 06/21/2021  
PLOTTER: 06/21/2021  
SCALE: AS SHOWN

REVISIONS DATE

# TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS

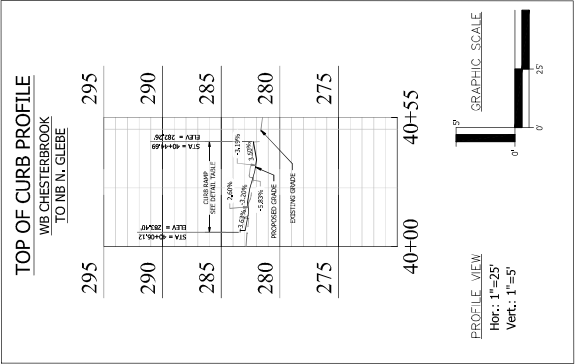
DESIGNED: KAV  
CHECKED: KMI  
DRAWN: MJA  
FILENAME: 10856-CURB DMB-CZ-21g  
PLOT: 06/21/2021  
PLOTTER: 06/21/2021  
SCALE: AS SHOWN



STANDARD CG+2B • W. CHESTERBROOK RD.  
N. GLEBE RD.  
Scale: 1" = 10'

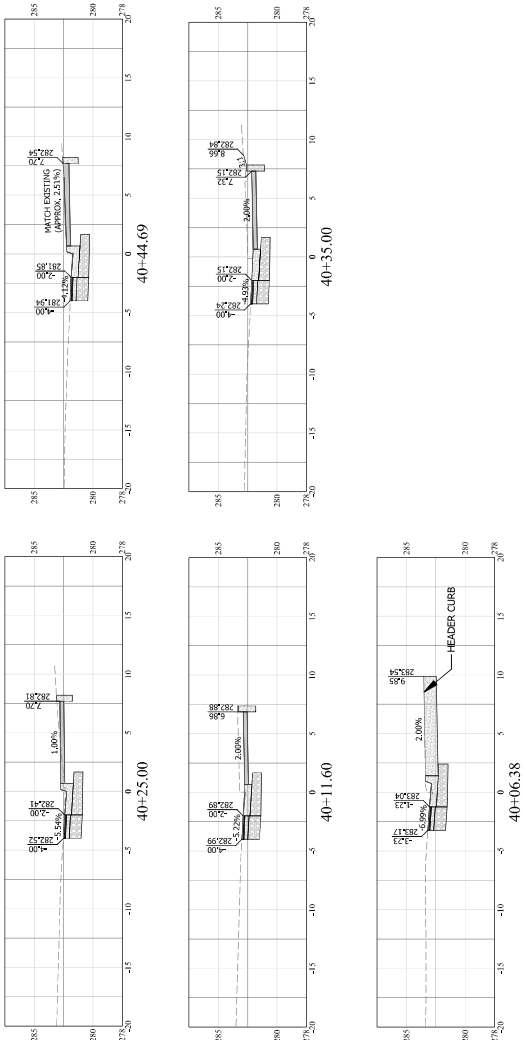
DETAIL 5-4	STA.	OFFSET	WALK ELEV.	TOC EL.
A	40+06.88	0.00' RT	282.95	283.40
B	40+14.65	0.00' RT	282.67	
C	40+18.64	0.00' RT	282.77	
D	40+24.58	0.00' RT	282.58	
E	40+32.12	0.00' RT	282.14	
F	40+37.13	0.00' RT	281.98	
G	40+44.69	0.00' RT	282.24	
H	40+44.69	6.48' RT	282.45	282.45
I	40+38.11	7.03' RT	282.10	282.60
J	40+31.03	7.58' RT	282.29	282.79
K	40+24.37	7.70' RT	282.65	283.15
L	40+18.64	7.50' RT	282.85	283.35
M	40+14.65	7.19' RT	282.80	283.30
N	40+07.05	6.23' RT	283.05	283.55

- NOTES  
1. Station/Offset data is in reference to the associated  
TOC baseline unless noted otherwise.



## CURB EXTENSION CROSS SECTIONS

SCALE: 1"=5' (H)  
1"=5' (V)









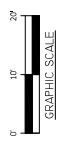
DATE	APPROVALS
07/16/2021	<i>[Signature]</i> ASST. ENGINEERING MANAGER
07/16/2021	<i>[Signature]</i> CHIEF, SEWER-STREETS BUREAU CHIEF
07/21/2021	<i>[Signature]</i> MANAGER OF LEAD

[illegible]

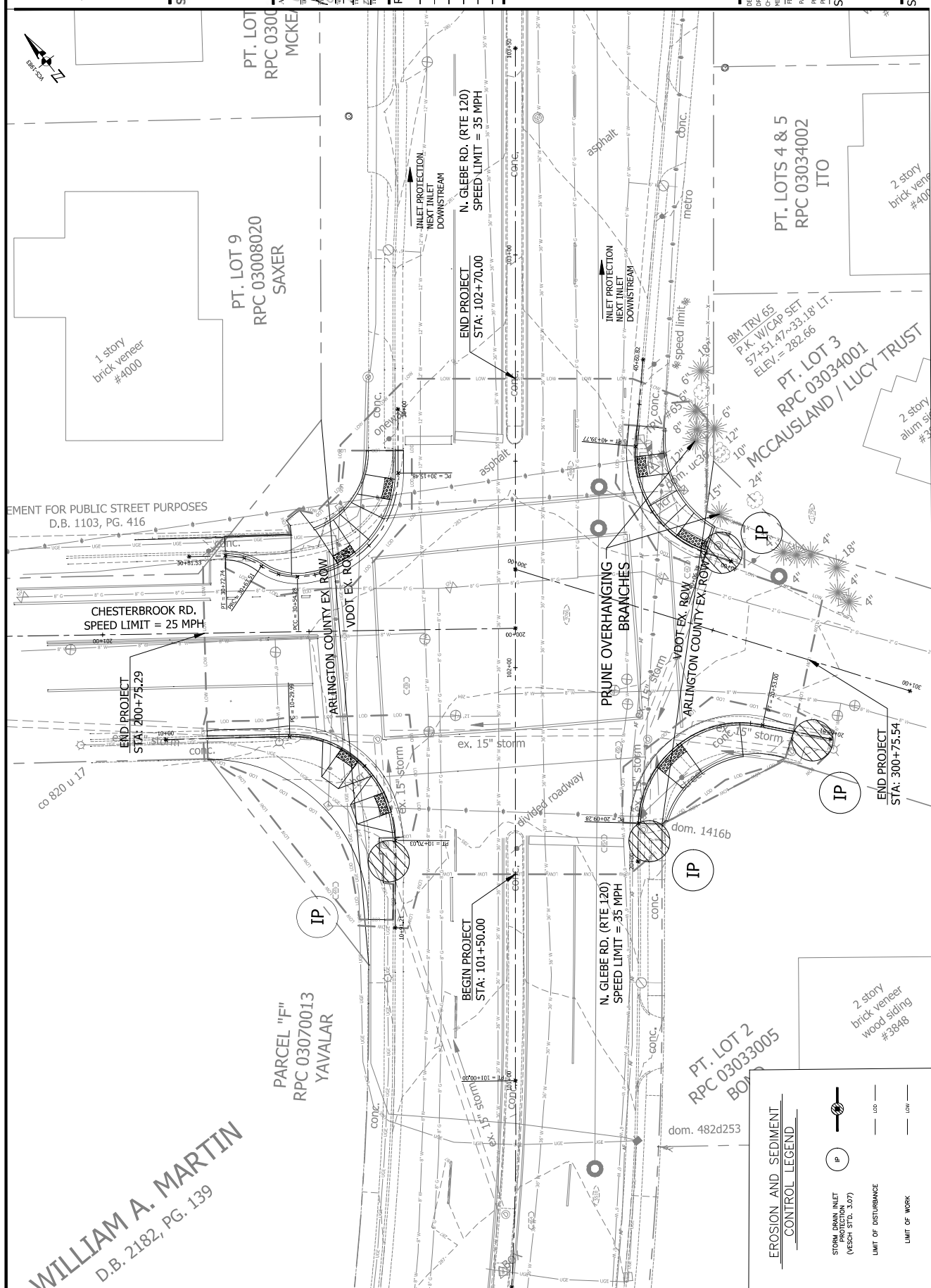
Erosion & Sediment Control Plan  
N. Giebe Rd. at Chesterbrook Rd.  
TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS

DESIGNED: TIS  
DRAWN: TIS  
CHECKED: MJA  
AS UTILITY TRANSMITTAL #: xxx  
FILENAME: T06S-7A-E\_and\_S\_Plan-GG.dwg  
\\w4rks.com\sc\bud\Projects\200181222\_2  
C:\TH: Orders\TO\_401\Intersection\kicads\kicads\Sho  
PLOTTER: February 23, 2021

SCALE: Hor.: 1"=10'



**SHEET 7A of 31**









**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
1100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



DATE	APPROVALS
7/16/2021	<i>[Signature]</i> DISTRICT ENGINEER
07/20/2021	<i>[Signature]</i> DISTRICT INSPECTION MANAGER
07-16-2021	<i>[Signature]</i> NORTH RIVER STREET BUREAU CHIEF
07/21/2021	<i>[Signature]</i> BUREAU CHIEF
07/21/2021	<i>[Signature]</i> District M. Leach

REVISIONS DATE

Stromwater Management Plan  
N. Gleebe Rd. at Chesterbrook Rd.


SIGNED: TIS  
LAWN: TIS  
CHECKED: MJA  
SS UTILITY TRANSMITTAL #: xxx

FILENAME: T08-DBA-SWM-CG.dwg  
\\psd.nk.com\%Client\Projects\2016\18227\_  
PATH: Orders\TO\_01\Transconbioh\psd\ESB

DATED: February 23, 2021

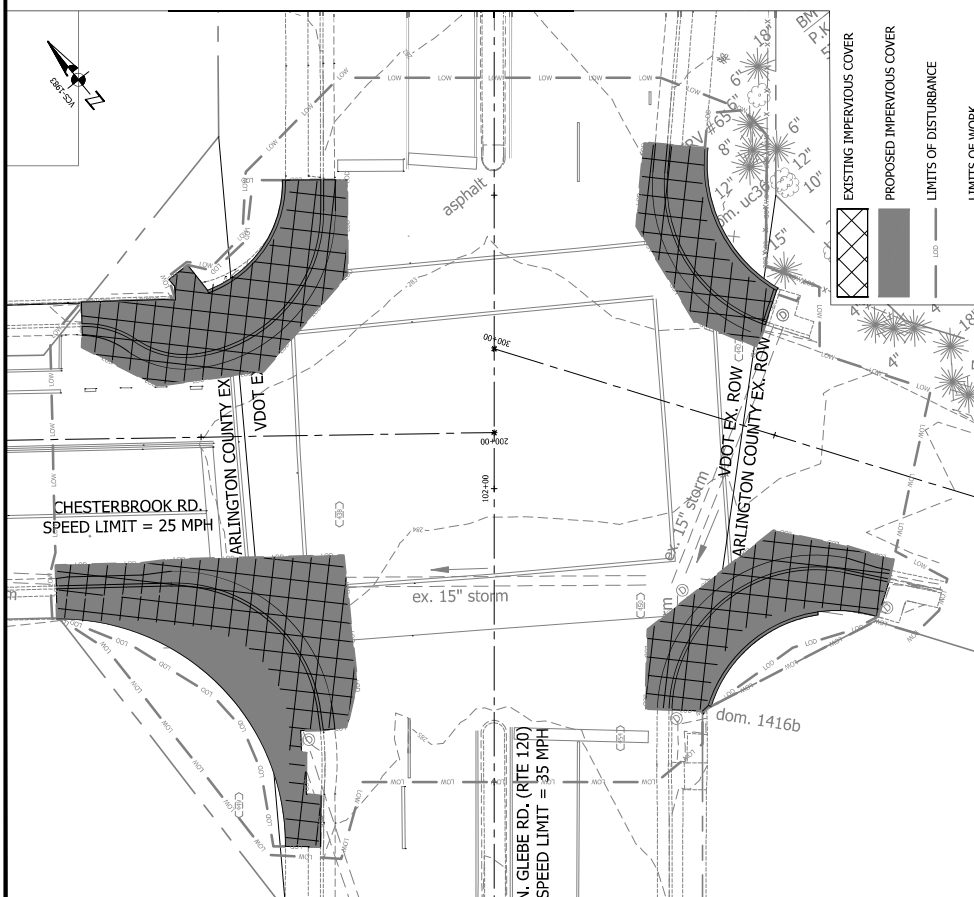
CALIF. HOR.: 1"=10'

GRAPHIC SCALE

A horizontal scale bar with a thick black line. There are tick marks at the left end, at the midpoint, and at the right end. The numbers "10" and "20" are printed below the bar, corresponding to the midpoint and right end respectively.

HFFT 8A of 31

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS



## STORMWATER MANAGEMENT NARRATIVE

FUNDING FOR THE N GLEBE ROAD AT CHESTERSBROOK ROAD PROJECT WAS PROCURED AFTER 7/11/2012. THEREFORE IT IS NOT GRANDFATHERED AND IS SUBJECT TO ARLINGTON'S REVISED STORMWATER MANAGEMENT ORDINANCE, IN ACCORDANCE WITH PART 1B OF THE VIRGINIA STORMWATER MANAGEMENT PROGRAM (VSNP) REGULATION, SEE EROSION AND SEDIMENT CONTROL NARRATIVE SHEET 7, FOR PROJECT DESCRIPTION.

## WATER QUALITY

THE LIMITS OF DISTURBANCE FOR THIS PROJECT FALL WITHIN RIGHT-OF-WAY AND EASEMENTS CONTROLLED BY BOTH VDOT AND THE COUNTY. THE REQUIRED PHOSPHORUS REMOVAL HAS BEEN CALCULATED USING THE VIRGINIA RUNOFF REDUCTION METHOD (VRRM) SHEET(S) SET SEPARATELY FOR EACH JURISDICTION. THE COUNTY WILL MEET THE NUTRIENT REMOVAL REQUIREMENT THROUGH THE PURCHASE OF NUTRIENT CREDITS OF A BMP WITHIN THE SAME WATERSHED. THE TOTAL SITE AREA AS COMPUTED FOR STORMWATER MANAGEMENT PURPOSES IS 0.812 AC AND EXCLUDES AREAS WHERE THE SUBGRADE WILL NOT BE EXPOSED, INCLUDING STAGING AREAS AND MILL AND OVERLAY. THE TOTAL REMOVAL REQUIREMENT IS 0.0420 LBS.

## WATER QUANTITY

**WATER QUANTITY**

THIS PROJECT DRAINS TO THREE OUTFALLS. EACH OUTFALL HAS BEEN ANALYZED TO A POINT WHERE THE DRAINAGE AREA IS 100 TIMES GREATER THAN THE PROTECTING SITE AREA WHERE APPROPRIATE, WHERE SURVEY IS INCOMPLETE OR UNAVAILABLE, REASONABLE ASSUMPTIONS FOR INVERTS AND STRUCTURE

EFPTS ARE BEING MADE. COMPUTATIONS ARE INCLUDED ON SHEET 15.



APPROVALS	DATE
<i>John McLean</i> ASTIC-MATERIAL ENGINEER	7/16/2021
<i>John McLean</i> CHIEF ENGINEERING MANAGER	07/20/2021
<i>John McLean</i> CHIEF, SEVEN, STREET, BUREAU CHIEF	07-16-2021
<i>John McLean</i> CHIEF, BUREAU CHIEF	07/21/2021
<i>John McLean</i> SEVEN, STREET, BUREAU CHIEF	07/21/2021

[illegible]

SIGNED: TIS  
AWN: TIS  
CHECKED: MJA  
IS UTILITY TRANSMITTAL #: xxxx  
ENAME: T06S-DBB-QAM-GC.dwg  
[http://wvarkit.com/MyCloud/Projects/2018/18227\\_2/](http://wvarkit.com/MyCloud/Projects/2018/18227_2/)  
PATH: Orders\TO\_2018\mesecor\Build\kadar\ESB  
DOTTED: February 22, 2021

SCALE: Hor.: 1"=50'



HEET 8B of 31

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS







CABLE & CONDUIT RUNS  
EXISTING CONDUIT (FIBER)  
NEW 12" CONDUIT (FIBER)  
NEW 12" CONDUIT (FIBER) CABLE

- CONSTRUCTION NOTES**
- EXISTING CONDUIT (FIBER) SHALL BE RELOCATED TO THE NEW LOCATION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THIS WORK.
  - INSTALL RELOCATED OPTIC JUNCTION BOX AND SPlice POINT CLEAR OF PROPOSED DRIVE LANDING AREA.
  - ALL PROPOSED CONDUITS SHOULD BE HIDE SCHEDULE 40.
  - ALL PROPOSED CONDUIT SHALL HAVE #6 AWG (ECC) FOR GROUNDING SYSTEM AND SHALL HAVE TIE-IN WITH.
  - PROPOSED CONDUIT SHALL BE HIDE SCHEDULE 40.
  - CONDUIT SYSTEM SHALL BE ADDED TO CONNECT EXISTING COMMUNICATIONS CABLE PLANT TO THE NEW CONTROLLER CABINET LOCATION AS SHOWN ON THE PLANS OR AS DIRECTED BY THE COUNTY ENGINEER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND COORDINATING CONSTRUCTION BY COORDINATING WITH ARLINGTON COUNTY DTS FOR FIBER-RELATED WORK.

DESIGNED BY: RUMBLE, FLEPPER, & KAHL, LLP (703-226-0028) DATE: JUNE 2019  
SUBSURFACE UTILITY BY: ARLINGTON COUNTY GOV. DES.  
PROJECT MANAGER: JUSTIN MCCARTHY, PE (703-226-3735) DATE: JUNE 2019  
SUNWAVE BY: ARLINGTON COUNTY GOV. DES.

**ARLINGTON VIRGINIA**

DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Bureau and  
2100 Clarendon Boulevard, Suite 600  
Arlington, VA 22202  
Phone: 703.226.5344  
Fax: 703.226.3719



APPROVALS	DATE
STUART M. RUMBLES	7/18/2021
DAVID J. FLEPPER	07/16/2021
DAVID J. KAHL	07/16/2021
DAVID J. KAHL	07/16/2021
DAVID J. KAHL	07/16/2021

REVISIONS	DATE

TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS

N. GLEBE RD. at Chesterbrook Rd.

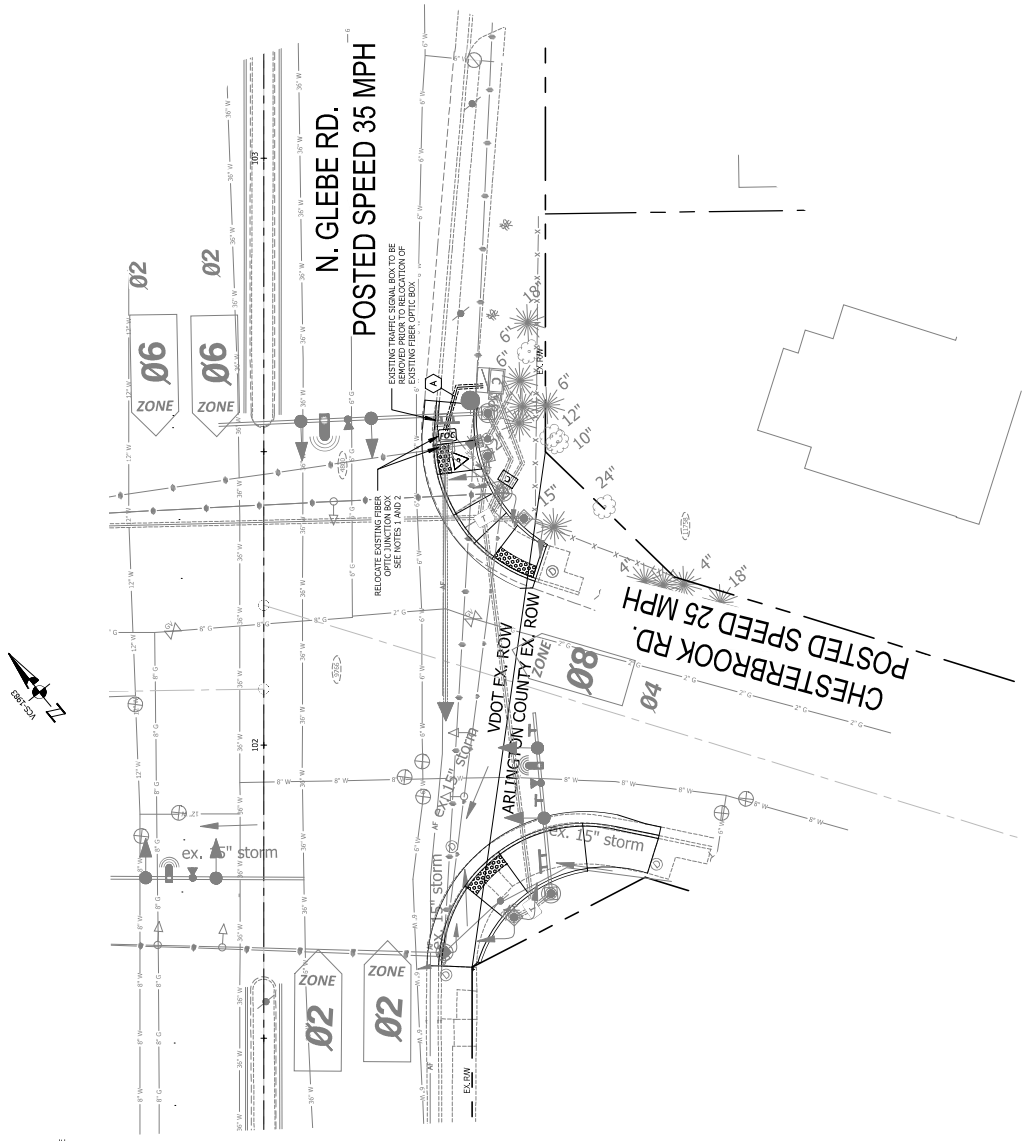
Communications Plan

DESIGNED: JCH  
DRAWN: JCV  
CHECKED: ASM  
MISS UTILITY TRANSMITTAL #: 300  
FILENAME: TSS-108-Communications\_Plan.dwg  
PATH: I:\Projects\2019\TSS-108-Communications\_Plan.dwg  
PLOTTER: February 25, 2021  
PLOTTER BY: Jhuar

SCALE:

SHEET 10B of 31

TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS



**LEGEND**

EXISTING	PROPOSED
CONTROL CABINET	CONTROL CABINET
UNINTERRUPTIBLE POWER SUPPLY (UPS)	UNINTERRUPTIBLE POWER SUPPLY (UPS)
FIBER OPTIC JUNCTION BOX	FIBER OPTIC JUNCTION BOX
CONDUIT RUN	CONDUIT RUN







DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard  
Arlington, VA 22204  
Phone: 703.228.3344  
Fax: 703.228.3179



APPROVALS DATE 7/15/2021  
BY: JEFFREY E. KAHN, P.E.  
PROJECT MANAGER  
DATE: 07-15-2021  
BY: JEFFREY E. KAHN, P.E.  
DATE: 07-15-2021  
BY: JEFFREY E. KAHN, P.E.  
DATE: 07-15-2021  
BY: JEFFREY E. KAHN, P.E.  
DATE: 07-15-2021

REVISIONS DATE  
1. DATE: 07-15-2021  
2. DATE: 07-15-2021  
3. DATE: 07-15-2021  
4. DATE: 07-15-2021  
5. DATE: 07-15-2021

Maintenance of Traffic - Notes  
TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS  
N. GLEBE AND CHESTERBROOK

DESIGNED: KM  
DRAWN: KM  
CHECKED: MJA  
FILENAME: T105-228-37-52.dwg  
PROJECT: N. GLEBE AND CHESTERBROOK  
PLOT DATE: February 18, 2021  
PLOT BY: kima  
SCALE: N.T.S.

SHEET 12 of 31

Work Zone Table		
Zone	TTC #	Comments
Zone A	TTC # 2.1	Utilize TTC-2.1 on Gile Rd
	TTC # 2.2	Utilize TTC-2.2 on Gile Rd
	TTC # 2.3	Utilize TTC-2.3 at the intersection of Gile Rd and Chesterbrook Rd
	TTC # 2.4	Utilize TTC-2.4 at the intersection of Gile Rd and Chesterbrook Rd
	TTC # 2.5	Utilize TTC-2.5 at the intersection of Gile Rd and Chesterbrook Rd
Zone B	TTC # 3.1	Utilize TTC-3.1 on Chesterbrook Rd
	TTC # 3.2	Utilize TTC-3.2 on Chesterbrook Rd
	TTC # 3.3	Utilize TTC-3.3 at the intersection of Gile Rd and Chesterbrook Rd
	TTC # 3.4	Utilize TTC-3.4 at the intersection of Gile Rd and Chesterbrook Rd
	TTC # 3.5	Utilize TTC-3.5 at the intersection of Gile Rd and Chesterbrook Rd
Zone C	TTC # 4.1	Utilize TTC-4.1 on Chesterbrook Rd
	TTC # 4.2	Utilize TTC-4.2 on Chesterbrook Rd
	TTC # 4.3	Utilize TTC-4.3 at the intersection of Gile Rd and Chesterbrook Rd
	TTC # 4.4	Utilize TTC-4.4 at the intersection of Gile Rd and Chesterbrook Rd
	TTC # 4.5	Utilize TTC-4.5 at the intersection of Gile Rd and Chesterbrook Rd
Zone D	TTC # 5.1	Utilize TTC-5.1 on Gile Rd
	TTC # 5.2	Utilize TTC-5.2 on Gile Rd
	TTC # 5.3	Utilize TTC-5.3 at the intersection of Gile Rd and Chesterbrook Rd
	TTC # 5.4	Utilize TTC-5.4 at the intersection of Gile Rd and Chesterbrook Rd
	TTC # 5.5	Utilize TTC-5.5 at the intersection of Gile Rd and Chesterbrook Rd

NOTES:

- SEE SHEETS 2E & 2F FOR TTC TYPICAL APPLICATIONS PER THE VIRGINIA WORK AREA PROTECTION MANUAL
- THE DURATIONS SHOWN WERE DEVELOPED FOR PLANNING AND ESTIMATION PURPOSES ONLY. THE DURATIONS IN NO WAY ALTER THE CONTRACT TIME FOR COMPLETION, OR INFRINGE ON THE CONTRACTOR'S MEANS AND METHODS. THE CONTRACTOR'S SUBMITTED SCHEDULE SUPERSEDES THE ESTIMATED DURATIONS SHOWN.
- TEMPORARY SIGNS AND BARRIERS SHOULD NOT OBSTRUCT PEDESTRIAN PASSAGE ON SIDEWALKS UNLESS SUCH SIGNS OR BARRIERS ARE SPECIFICALLY INTENDED TO CLOSE SUCH SIDEWALK
- CONTRACTOR SHALL CONSTRUCT ONLY ONE CORNER PER PHASE TO MINIMIZE PEDESTRIAN MOVEMENT DISRUPTION
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A TEMPORARY WALKING PATH OR COORDINATE CONSTRUCTION TO PROVIDE A PORTION OF SIDEWALK TO MAINTAIN PEDESTRIAN CONNECTIVITY

Commonwealth of Virginia  
Virginia Department of Transportation  
VERIFICATION OF COMPLETION OF VDOT ADVANCED WORK ZONE  
TRAFFIC CONTROL TRAINING AND FLAGGER CERTIFICATION

This is to verify that Andrew Moy has successfully completed training and an examination by the Department on the proper practices and methods for the installation, maintenance, removal of temporary traffic control devices and flagging operations.

Expiration Date: 2/28/2025  
Verification Number: 021021142

*R. J. Moy*  
State Traffic Engineer

Virginia Department of Transportation  
REVIEW OF WORKING DRAWINGS

Working drawings have been reviewed in accordance with Section 105.10 of the 2016 VDOT Road & Bridge Specifications

☒ REVIEW COMPLETED  
☐ CORRECT & RESUBMIT  
☐ REJECTED - SEE REMARKS

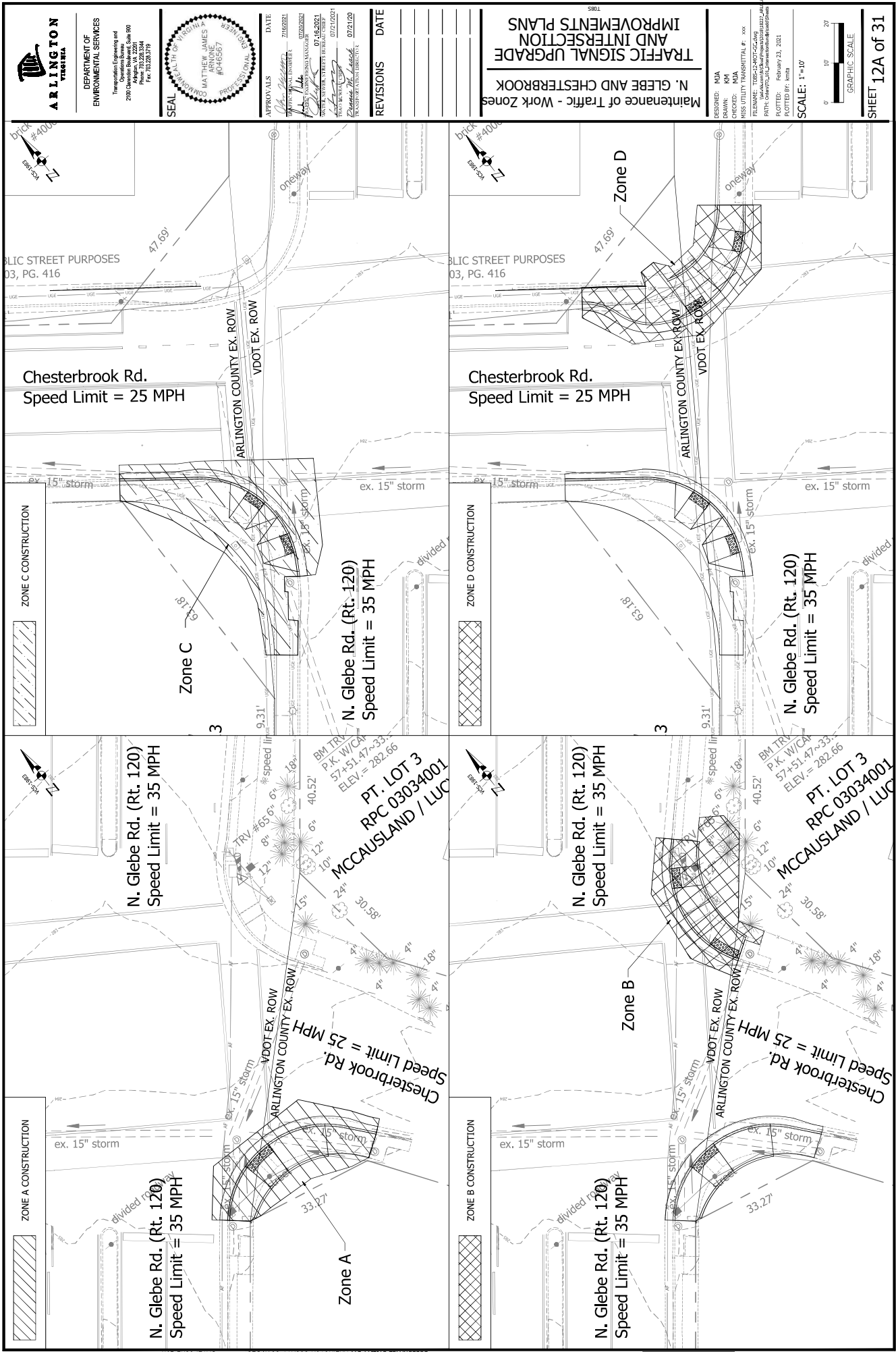
Reviewed by: \_\_\_\_\_ Date: \_\_\_\_\_

**REVIEWED**  
By Brian E. Fry at 10:11 am, May 10, 2021

MOT GENERAL NOTES:

- IT IS NOT THE INTENT OF THE MAINTENANCE OF TRAFFIC PLAN TO ENUMERATE EVERY DETAIL WHICH MUST BE CONSIDERED IN CONSTRUCTION, BUT ONLY TO SHOW THE GENERAL HANDLING OF TRAFFIC. UNLESS OTHERWISE APPROVED OR DIRECTED BY THE COUNTY ENGINEER, THE CONTRACTOR SHALL PLAN AND EXECUTE THE WORK IN ACCORDANCE WITH THIS TEMPORARY TRAFFIC CONTROL PLAN.
- TRAFFIC CONTROL DEVICES AND SAFETY MEASURES SHALL COMPLY WITH THE VIRGINIA WORK AREA PROTECTION MANUAL, VDOT'S GUIDELINES FOR TEMPORARY TRAFFIC CONTROL, FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, ARLINGTON COUNTY STANDARDS, THE TRAFFIC CONTROL PLANS INCLUDED IN THE CONSTRUCTION DRAWINGS, AND/OR AS DIRECTED BY THE PROJECT OFFICER.
- THE CONTRACTOR SHALL SUBMIT A DETAILED SCHEDULE WHICH INDICATES START AND FINISH DATES FOR EACH SEGMENT OF THE WORK. THE SCHEDULE SHALL INDICATE THE DURATION OF ALL LANE OR SHOULDER CLOSURES. THE CONTRACTOR SHALL NOTIFY THE PROJECT OFFICER A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF PROCEEDING TO THE NEXT WORK SEGMENT.
- THE CONTRACTOR SHALL NOTIFY THE COUNTY PROJECT OFFICER OF PARKING RESTRICTION NEEDS A MINIMUM OF 3 BUSINESS DAYS PRIOR TO COMMENCEMENT OF WORK FOR EACH SEGMENT. COUNTY PROJECT OFFICER SHALL RESTRICT PARKING BY CONTACTING DES - PERMITTING SECTION, 703-228-4786.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL MAINTAIN APPROPRIATE SIGHT DISTANCE TO ALL TRAFFIC SIGNS OR PROVIDE FOR TEMPORARY SIGNAGE OR FLAGGERS TO GUIDE TRAFFIC THROUGH WORK ZONE.
- THE CONTRACTOR SHALL MINIMIZE THE DURATION OF ANY BLOCKAGE TO PRIVATE ENTRANCES AND DRIVEWAYS. THE CONTRACTOR SHALL SUBMIT A SCHEDULE OF DRIVEWAY CLOSURE FOR APPROVAL BY THE PROJECT OFFICER. THE PROJECT OFFICER SHALL BE NOTIFIED A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF SUCH ACTIVITIES. THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE TEMPORARY CLOSURE OF ACCESS TO THE PROPERTY. THE CONTRACTOR SHALL MAKE ALL PRIVATE ENTRANCES AND DRIVEWAYS ACCESSIBLE AT THE CONCLUSION OF EACH WORKDAY.
- ALL WORK ZONES MUST BE SPECIFICALLY APPROVED BY THE PROJECT OFFICER TO REMAIN OPEN DURING NORMAL WORKING HOURS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PROTECTED IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL AND AS APPROVED BY THE PROJECT OFFICER.
- PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, INCLUDING ACCESS TO BUS STOP SHELTERS, UNLESS OTHERWISE APPROVED IN THE PLANS.
- PEDESTRIAN TRAFFIC SHALL BE SEPARATED FROM WORK ZONES WITH APPROPRIATE MEASURES IN ACCORDANCE WITH MUTCD.
- ADEQUATE PROVISIONS FOR PERSONS WITH DISABILITIES SHALL BE PROVIDED AT ALL TIMES PER ADA REQUIREMENTS.
- WHEN NECESSARY, PEDESTRIANS SHALL BE APPROPRIATELY DIRECTED WITH ADVANCED WARNING SIGNS PLACED AT INTERSECTIONS, TO CROSS TO THE OPPOSITE SIDE OF THE ROADWAY IN ORDER TO PREVENT CONFLICT WITH MURLOCK WORK SITES.
- PEDESTRIANS SHALL NOT BE LED INTO CONFLICT WITH WORK SITE EQUIPMENT, OPERATIONS, AND/OR VEHICLES MOVING THROUGH OR AROUND THE WORK SITE.
- ALL EXISTING FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MAINTAINED UNOBSTRUCTED AND ACCESSIBLE AT ALL TIMES IN ACCORDANCE WITH SECTIONS 506.5.4 AND 506.5.5 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
- ACCESS TO BUILDINGS FOR FIRE-FIGHTING SHALL BE MAINTAINED AT ALL TIMES. EXISTING FIRE APPARATUS ACCESS ROADS (FIRE LANES) SHALL BE KEPT CLEAR OF OBSTRUCTIONS IN ACCORDANCE WITH SECTION 503.4 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE. ACCESS TO CONSTRUCTION SITES SHALL BE PROVIDED AND MAINTAINED IN ACCORDANCE WITH SECTION 1410 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
- THE EVENT OF AN EXISTING FIRE DEPARTMENT CONNECTIONS OR FIRE APPARATUS ACCESS ROAD (FIRE LANE) MUST BE OBSTRUCTED TO FACILITATE CONSTRUCTION ACTIVITIES. CONTACT THE ARLINGTON COUNTY FIRE DEPARTMENT PROJECT OFFICER AT 703-228-4444 TO COORDINATE REMOVAL AND APPROVAL OF TEMPORARY FIRE DEPARTMENT CONNECTIONS AND/OR FIRE APPARATUS ACCESS ROADS PRIOR TO CREATING THE OBSTRUCTION.
- THE CONTRACTOR SHALL COORDINATE WITH DES - TRANSIT BUREAU AT 703-228-3049 AT LEAST 4 WEEKS PRIOR TO COMMENCEMENT OF WORK WHEN TRANSIT IS AFFECTED OR IF THERE ARE ANY IMPACTS TO TRANSIT STOPS OR ROUTES. NOTE: ALL TEMPORARY AND FINAL BUS TRAVEL LANES MUST BE MINIMUM OF 11' WIDE IN EACH DIRECTION. COORDINATE ALL CONE TAPERS WITH BUS STOP MANAGER AT 703-228-3049.
- SIGNAGED PEDESTRIANS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING VEHICLE DETECTION AT ALL TIMES DURING THE PROJECT. TRAFFIC SENSORS SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION STATE PRIOR TO THE COMPLETION OF THIS PROJECT.
- WORK HOURS ARE RESTRICTED TO 9:00 AM TO 4:00 PM, MONDAY-FRIDAY, UNLESS APPROVED BY THE COUNTY PROJECT OFFICER IN WRITING.
- CONTRACTOR SHALL COVER ANY EXISTING SIGNS WHICH ARE NOT APPLICABLE OR ARE IN CONFLICT WITH OR DO NOT ALIGN WITH THE TEMPORARY PAVEMENT MARKINGS OR NEW TRAFFIC PATTERNS.
- CONTRACTOR SHALL ENCASE AND RE-STRIPE AS NECESSARY ANY EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH OR DO NOT ALIGN WITH THE TEMPORARY PAVEMENT MARKINGS OR NEW TRAFFIC PATTERNS.
- CONTRACTOR SHALL ENCASE ALL TEMPORARY PAVEMENT MARKING, INCLUDING TEMPORARY MARKED CROSSWALKS ONCE THE WORK AREA(S) ASSOCIATED WITH THE MARKINGS HAS BEEN COMPLETED.
- CONTRACTOR SHALL CONTACT ARLINGTON COUNTY DOT 3 BUSINESS DAYS PRIOR TO INSTALLATION OF PERMANENT PAVEMENT MARKINGS.
- CONTRACTOR SHALL NOT DISTURB OR REMOVE ANY TRAFFIC CONTROL SIGNS, PARKING METERS OR COVER ANY OTHER TRAFFIC CONTROL DEVICE UNLESS SPECIFIED ON THE PLANS OR APPROVED BY THE COUNTY PROJECT OFFICER IN WRITING.







**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



DATE	APPROVALS	
07/16/2021	<i>[Signature]</i>	714 P.C. SPECIAL ENGINEER
07/20/2021	<i>[Signature]</i>	714 P.C. ENGINEERING MANAGER
07/16/2021	<i>[Signature]</i>	714 P.C. SUPERVISOR
07/21/2021	<i>[Signature]</i>	714 P.C. CHIEF
07/21/2021	<i>[Signature]</i>	714 P.C. CHIEF

REVISIONS DATE


Williamsville Blvd. at N.  
 Westmoreland St.

DESIGNED: ZDH  
DRAWN: ZDH  
CHECKED: ASM  
S UTILITY TRANSMITTAL #: xxx

FILENAME: T085-13-Existing Conditions-W-1  
\\edw\44.com\161chud\Projects\1018116227\5  
C:\TH: Orders\T0\_101\Intersection\Bundled\50  
DTED: February 18, 2021

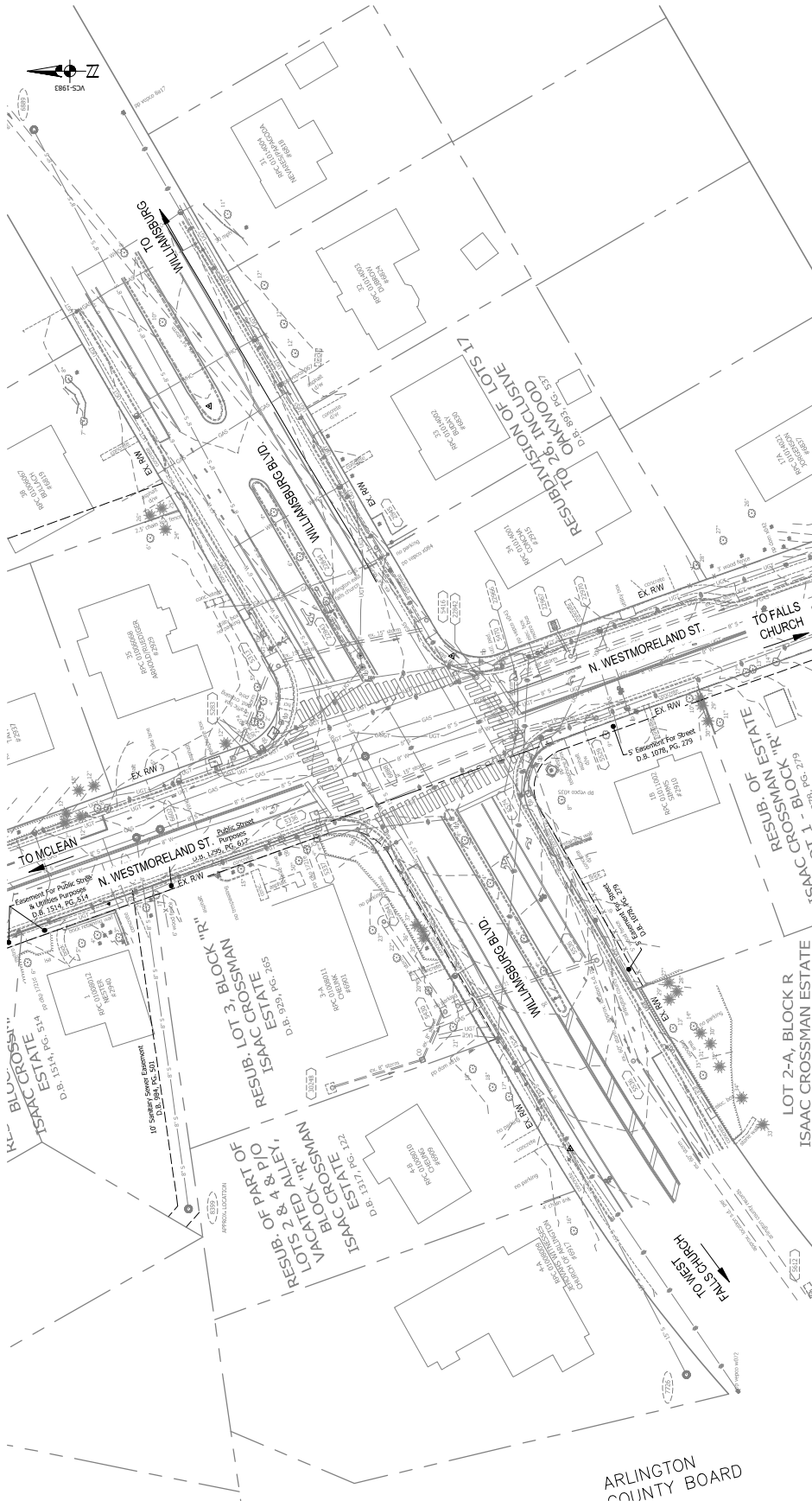
SCALE: Hor.: 1"=25'

GRAPHIC SCALE



A horizontal scale bar with three segments. The first segment is labeled '0', the second '25', and the third '50'.

HEET 13 of 31

[illegible]

SURVEY CONTROL	EXISTING	ELKIV	DESCRIPTION
na	11862861.30	324.42	TRV XX
na	11862961.57	324.95	TRV XX
na	11862942.31	324.68	TRV XX
na	11862942.31	314.18	TRV XX
na	11862942.31	314.18	TRV XX
na	11862942.31	314.17	TRV XX
na	11862942.31	314.17	TRV XX

NOTES:

- THIS TOPOGRAHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF THE COUNTY SURVEYOR. THE DATA WERE OBTAINED FROM THE ORIGINAL SURVEY RECORDS AND THE DATA WERE CHECKED FOR ACCURACY AND COMPLETENESS. THE DATA WERE OBTAINED FROM THE ORIGINAL SURVEY RECORDS AND THE DATA WERE CHECKED FOR ACCURACY AND COMPLETENESS. THE DATA WERE OBTAINED FROM THE ORIGINAL SURVEY RECORDS AND THE DATA WERE CHECKED FOR ACCURACY AND COMPLETENESS.
- HORIZONTAL DATUM: VIRGINIA COORDINATE SYSTEM 1981.
- VERTICAL DATUM: NORTH AMERICAN VERTICAL DATUM 1980.
- CONTOUR INTERVAL: 1'
- BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM EXISTING LAND RECORDS AND GIS DATA AND DOES NOT REPRESENT A FIELD RUN BOUNDARY SURVEY.

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS

**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



DATE	APPROVALS
07/16/2012	<i>[Signature]</i> SENIOR CIVIL ENGINEER
07/20/2012	<i>[Signature]</i> SENIOR ENGINEERING MANAGER
07/16/2012	<i>[Signature]</i> DISTRICT ENGINEER
07/21/2012	<i>[Signature]</i> DISTRICT CHIEF
07/21/2012	<i>[Signature]</i> DISTRICT CHIEF

## REVISIONS

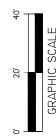
Williamstown Blvd. at N.  
Westmoreland St.

GNED: KAV  
WV: KAV  
CKED: MJA  
UTILITY TRANSMITTAL #: xxx

FILENAME: T085-14-Geometric Control File  
[View File\(s\) @ D:\D\Projects\2018\1827\T085-14-Geo](#)  
URL: Orders\TO\_101\_transactionBundle\cadd65d56f5e5

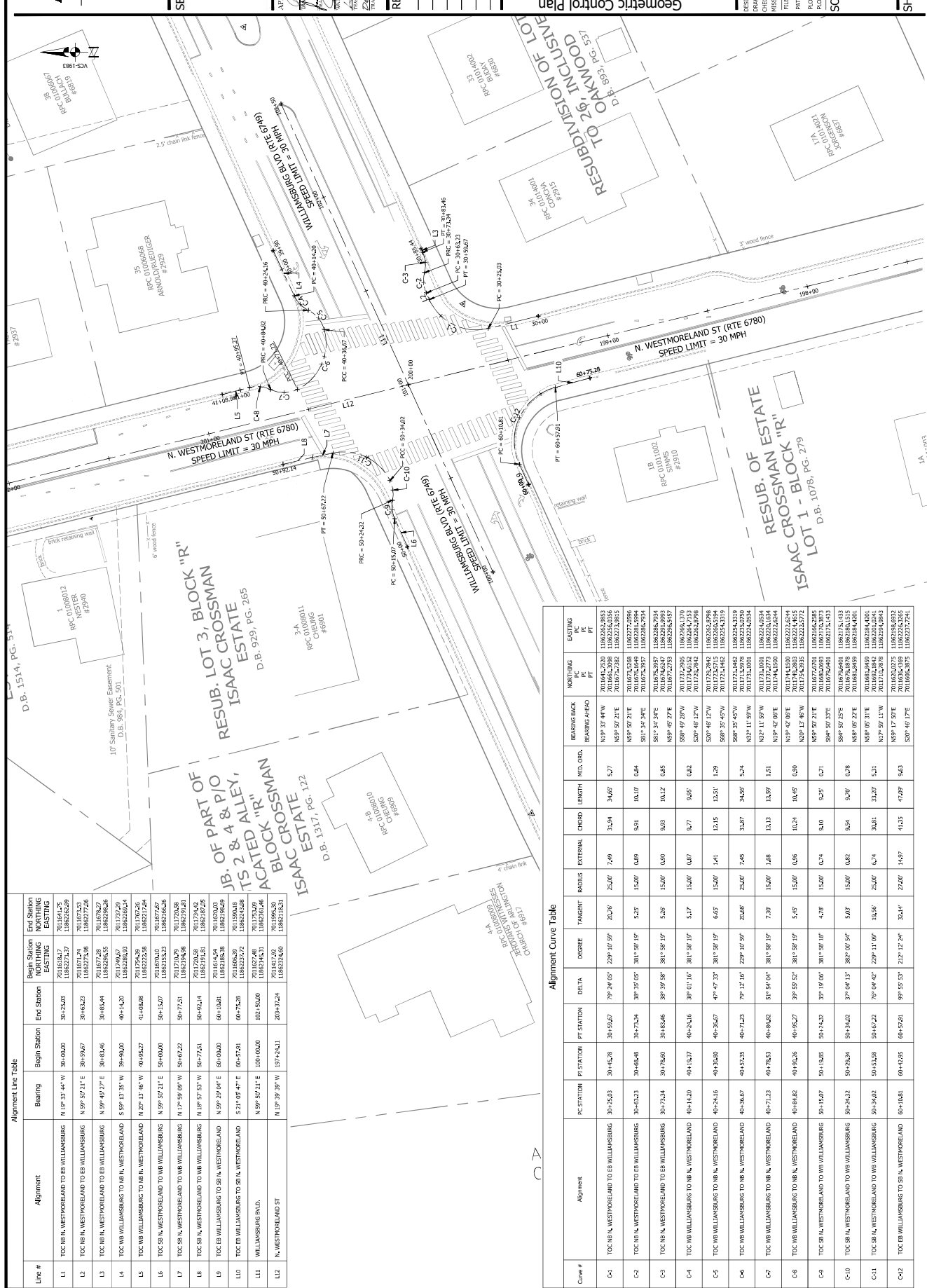
DATED: February 23, 2021

SCALE: Hor.: 1"=20'



HEET 14 of 31

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS



### Alignment Line Table

Line #	Alignment	Bearing	Begin Station	End Station	Begin Station Easting	End Station Easting
L1	TDC NB, WESTMORELAND TO WB WILLIAMSBURG	N 1° 33' 34" W	30+00.00	30+25.03	7011684.67	7011641.25
L2	TDC NB, WESTMORELAND TO EB WILLIAMSBURG	N 59° 50' 11" E	30+25.07	30+63.23	7011671.94	7011862.69
L3	TDC NB, WESTMORELAND TO EB WILLIAMSBURG	N 59° 45' 27" E	30+64.46	30+85.04	7011672.58	7011827.74
L4	TDC NB WILLIAMSBURG TO NB, IN WESTMORELAND	S 59° 13' 30" W	30+86.00	40+14.20	7011737.29	7011826.94
L5	TDC NB WILLIAMSBURG TO NB, IN WESTMORELAND	N 20° 13' 46" W	40+65.27	41+08.08	7011750.26	7011802.24
L6	TDC SB, WESTMORELAND TO NB WILLIAMSBURG	N 59° 50' 21" E	50+00.00	50+15.07	7011670.01	7011667.67
L7	TDC SB, IN WESTMORELAND TO NB WILLIAMSBURG	N 17° 59' 08" W	50+42.22	50+77.51	7011703.98	7011730.58
L8	TDC SB, IN WESTMORELAND TO WB WILLIAMSBURG	N 18° 57' 53" W	50+77.51	50+92.14	7011720.58	7011734.43
L9	TDC SB WILLIAMSBURG TO SB, IN WESTMORELAND	N 59° 29' 04" E	60+10.81	60+75.38	7011643.68	7011620.03
L10	TDC SB WILLIAMSBURG TO SB, IN WESTMORELAND	S 21° 05' 41" E	60+75.61	60+75.38	7011604.39	7011590.01
L11	WILLIAMSBURG ROAD	N 59° 50' 21" E	100+00.00	102+50.00	7011657.46	7011750.09
L12	NB, WESTMORELAND ST	N 19° 39' 39" W	107+24.11	203+37.24	7011437.03	7011996.30

### Alignment Curve Table

Cave #	Alignment	PC STATION	PI STATION	DELTA	DEGREE	TANGENT	RADIUS	EXTERNAL	CHORD	LENGTH	MID. ORD.	BEARING BACK BEARING AHEAD	WORKING PI	EXISTING PI
C-1	TDC NB I WESTMORELAND TO EB WILLIAMSBURG	30+52.3	30+156.7	79° 24' 05"	229° 10' 59"	20.76	25.00'	2.69	31.94	34.65'	5.7'	N19° 33' 44"W N65° 50' 21"E	1810223.306 1810223.306	1810223.306
C-2	TDC NB I WESTMORELAND TO EB WILLIAMSBURG	30+62.3	30+24.4	38° 35' 05"	381° 58' 19"	5.25	15.00'	0.69	5.91	11.10'	0.44	N65° 50' 21"E S81° 34' 31"E	1810227.4596 1810227.4596	1810227.4596
C-3	TDC NB I WESTMORELAND TO EB WILLIAMSBURG	30+72.4	30+76.0	30+18.6	381° 58' 19"	5.25	15.00'	0.00	9.03	10.12'	0.05	N19° 33' 44"W S81° 34' 31"E	1810228.2994 1810228.2994	1810228.2994
C-4	TDC NB WILLIAMSBURG TO NB I WESTMORELAND	40+14.0	40+19.37	40+24.16	381° 58' 19"	5.17	15.00'	0.87	9.77	9.95'	0.82	N19° 33' 44"W S81° 34' 31"E	1810228.908 1810228.908	1810228.908
C-5	TDC NB WILLIAMSBURG TO NB I WESTMORELAND	40+24.16	40+30.80	40+26.67	381° 58' 19"	6.05	15.00'	1.41	12.15	13.51'	1.29	S89° 49' 38"W S20° 48' 12"W	1810229.457 1810229.457	1810229.457
C-6	TDC NB WILLIAMSBURG TO NB I WESTMORELAND	40+36.67	40+57.35	40+71.23	229° 10' 59"	20.68	25.00'	7.45	31.67	34.56'	5.4	S89° 49' 38"W S65° 35' 45"W	1810230.1001 1810230.1001	1810230.1001
C-7	TDC NB WILLIAMSBURG TO NB I WESTMORELAND	40+71.23	40+78.53	40+84.82	51° 54' 04"	7.30	15.00'	1.68	13.13	13.59'	1.51	N19° 42' 06"E N19° 42' 06"E	1810231.452 1810231.452	1810231.452
C-8	TDC NB WILLIAMSBURG TO NB I WESTMORELAND	40+84.82	40+92.26	40+94.27	39° 59' 52"	5.45	15.00'	0.06	10.24	10.45'	0.00	N19° 42' 06"E N19° 42' 06"E	1810232.4534 1810232.4534	1810232.4534
C-9	TDC SB I WESTMORELAND TO WB WILLIAMSBURG	50+15.07	50+15.05	50+14.23	351° 19' 06"	4.78	15.00'	0.74	9.10	9.25'	0.71	N19° 42' 06"E N19° 42' 06"E	1810232.4634 1810232.4634	1810232.4634
C-10	TDC SB I WESTMORELAND TO WB WILLIAMSBURG	50+24.32	50+25.34	37° 04' 13"	380° 05' 54"	5.07	15.00'	0.82	8.54	9.30'	0.78	N65° 50' 21"E S84° 50' 21"E	1810233.7673 1810233.7673	1810233.7673
C-11	TDC SB I WESTMORELAND TO WB WILLIAMSBURG	50+34.02	50+53.58	50+52.22	76° 04' 42"	19.56	25.00'	6.74	30.81	32.02'	5.21	N65° 50' 21"E S84° 50' 21"E	1810234.4201 1810234.4201	1810234.4201
C-12	TDC NB WILLIAMSBURG TO SB I WESTMORELAND	60+10.81	60+10.55	59° 55' 53"	213° 12' 24"	32.47	27.00'	1.67	41.25	42.99'	9.63	N65° 17' 50"E S20° 17' 50"E	1810235.1009 1810235.1009	1810235.1009





DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 800  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



APPROVALS	DATE
PROJECT ENGINEER	7/16/2021
DESIGN ENGINEER	07/16/2021
DATE REVIEWED	07/16/2021
DATE REVIEWED	07/16/2021
DATE REVIEWED	07/16/2021
DATE REVIEWED	07/16/2021
DATE REVIEWED	07/16/2021
DATE REVIEWED	07/16/2021

REVISIONS	DATE

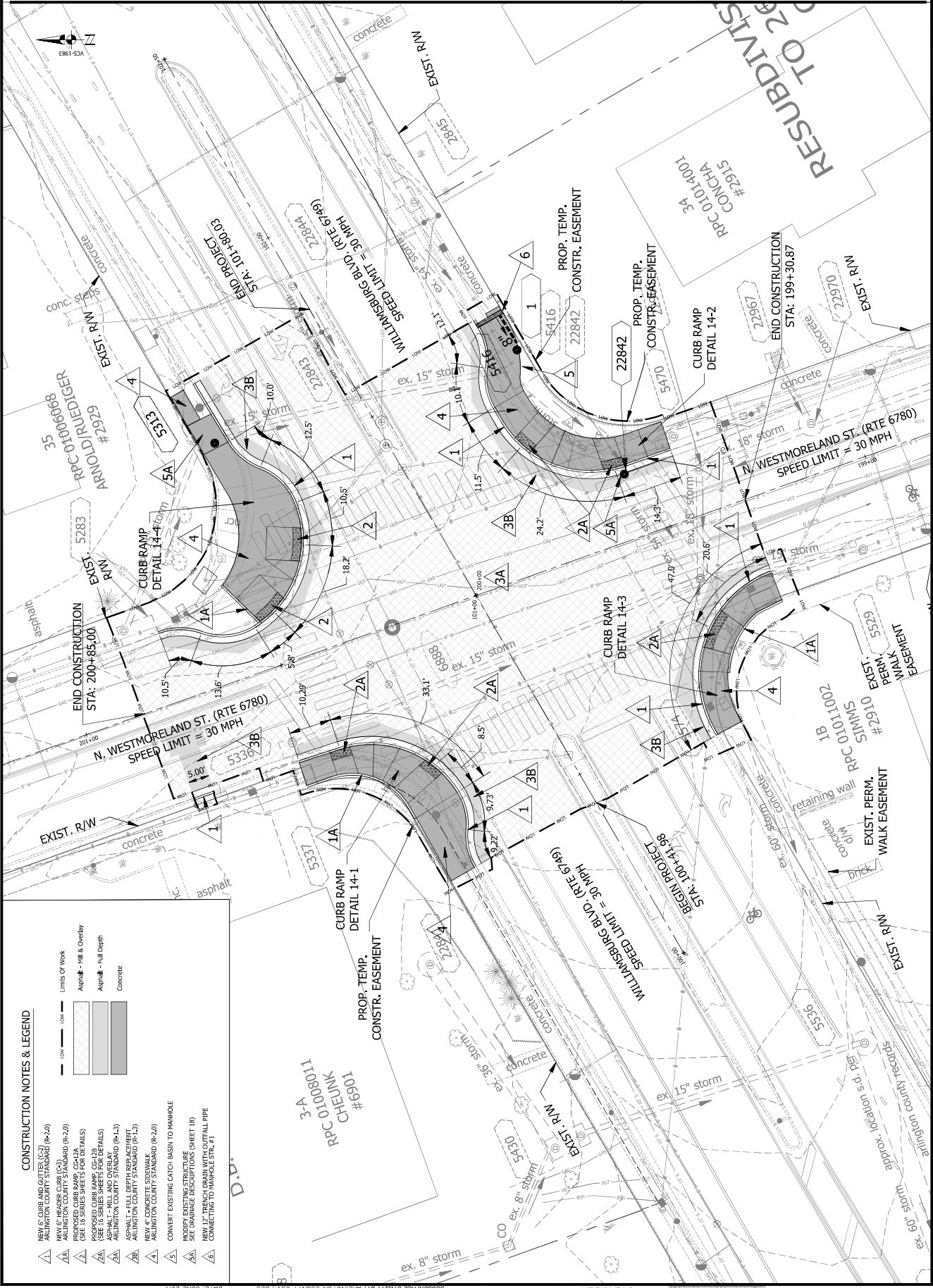
TRAFFIC SIGNAL SIGNAL  
AND INTERSECTION  
IMPROVEMENTS PLANS  
Westmoreland Blvd. at N.  
Williamsborg Blvd. at N.  
Plan

DESIGNED: KAV  
CHECKED: KMA  
DRAWN: MJA  
ISSUE TRANSMITTAL # 100  
FILENAME: TSS-1581-WMAV-  
PATH: C:\Users\joh.johnson\Documents\TSS-1581-WMAV-  
PLOT: May 28, 2021  
PLOT BY: mjohnson

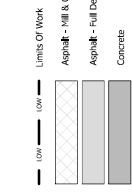
SCALE: Hor.: 1"=10'  
VERT.: 1"=10'

SHEET 15 of 31

TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS



CONSTRUCTION NOTES & LEGEND



- NEW 6" CURB AND GUTTER (R-2.0) ARLINGTON COUNTY STANDARD (R-2.0)
- NEW 6" HEADER CURB (C-3) ARLINGTON COUNTY STANDARD (R-2.0)
- NEW 6" SIDEWALK (S-1) ARLINGTON COUNTY STANDARD (R-2.0)
- PROPOSED CURB RAMP (C-12) (SEE 15 SERIES SHEETS FOR DETAILS)
- PROPOSED CURB RAMP (C-13) (SEE 15 SERIES SHEETS FOR DETAILS)
- ASPHALT - FULL DEPTH REPAVEMENT (R-1.3) ARLINGTON COUNTY STANDARD (R-1.3)
- ASPHALT - FULL DEPTH REPAVEMENT (R-1.3) ARLINGTON COUNTY STANDARD (R-1.3)
- NEW 4" CONCRETE SIDEWALK (S-1) ARLINGTON COUNTY STANDARD (R-2.0)
- CONVERT EXISTING CATCH BASIN TO MANHOLE
- MODIFY EXISTING STRUCTURE (SEE DRAINAGE DESCRIPTIONS SHEET 18)
- NEW 12" TRENCH DRAIN WITH CULVERT PIPE CONNECTING TO MANHOLE STA. #1





DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.1344  
Fax: 703.228.3719



APPROVALS	DATE
PROJECT MANAGER <i>Matthew James A.</i>	7/16/2021
DESIGNER <i>Matthew James A.</i>	07/16/2021
CHECKED <i>Matthew James A.</i>	07/16/2021
IN CHARGE <i>Matthew James A.</i>	07/16/2021
TRANSPORTATION DIVISION	07/16/2021

REVISIONS	DATE

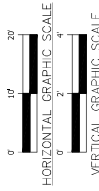
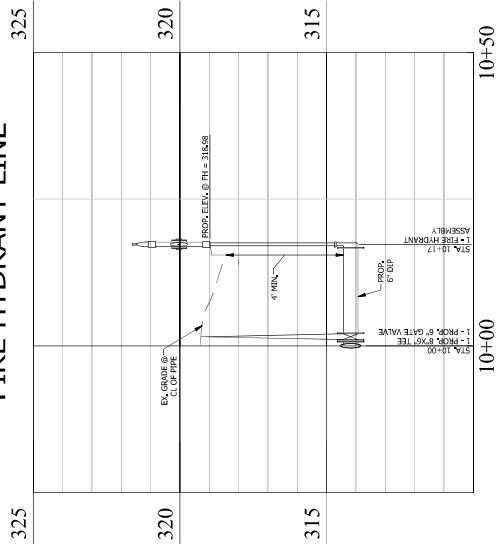
TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS  
Westmoreland St.  
Williamsburg Blvd. at N.  
Utility Plan

DESIGNED: MJA  
DRAWN: KM  
CHECKED: MJA  
ISSUE TRANSMITTAL # 100  
FILENAME: T085-04-Utility Plan-07-16-2021  
PATH: C:\Users\jamesa\Documents\T085-04-Utility Plan-07-16-2021.dwg  
PLOTTER: March 12, 2021  
PLOTTER BY: lmta

SCALE:  
0 10' 20'  
GRAPHIC SCALE

SHEET 15B of 31

N. WESTMORELAND ST.  
FIRE HYDRANT LINE







DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Grand Street, Suite 100  
Burlington, VT 05405  
Phone: 703.228.3344  
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APPROVALS DATE  
PROJECT ENGINEER 7/15/2021  
PROJECT SUPERVISOR 7/15/2021  
DATE 07.15.2021  
DATE 07.15.2021  
DATE 07.15.2021  
DATE 07.15.2021

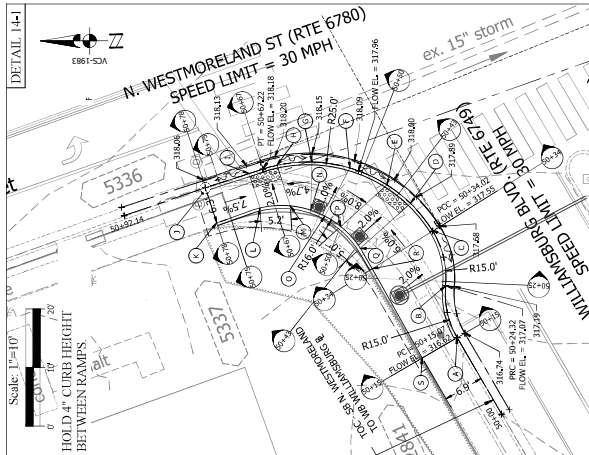
REVISIONS DATE

TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
Westmoreland St.  
Williamsburg Blvd. at N.  
Westmoreland St.

DESIGNED: ###  
DRAWN: MJA  
CHECKED: MJA  
FILENAME: 17085-UP TOC Profile & Curb Ramp  
DETAILS  
PATH: \\bureau\2021\17085-UP TOC Profile & Curb Ramp  
DETAILS  
PLOT DATE: February 23, 2021  
PLOT BY: kmla

SCALE: AS SHOWN

SHEET 16 of 31

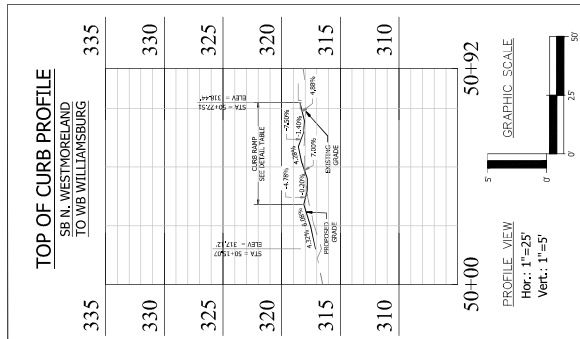


CC+12B - N. WESTMORELAND ST./  
WILLIAMSBURG BLVD.  
SCALE: 1" = 10'

DETAIL 14-1	STA.	OFFSET	ELEV.	TOT. EL.
A	50+15.07	0.00' LT	317.12	
B	50+24.32	0.00' LT	317.12	
C	50+34.02	0.00' LT	318.05	
D	50+40.09	0.00' LT	317.82	
E	50+45.17	0.00' LT	317.93	
F	50+52.17	0.00' LT	318.30	
G	50+58.71	0.00' LT	318.36	
H	50+64.71	0.00' LT	318.13	
I	50+69.72	0.00' LT	318.06	
J	50+77.51	0.00' LT	318.44	
K	50+77.62	6.16' LT	318.77	318.77
L	50+69.72	6.16' LT	318.18	318.68
M	50+63.68	7.24' LT	318.27	318.77
N	50+58.71	8.23' LT	318.44	318.94
O	50+54.93	8.99' LT	318.39	318.89
P	50+49.94	9.96' LT	318.13	318.63
Q	50+41.54	11.44' LT	318.04	318.54
R	50+34.02	12.15' LT	318.28	318.28
S	50+15.07	6.90' LT	317.38	

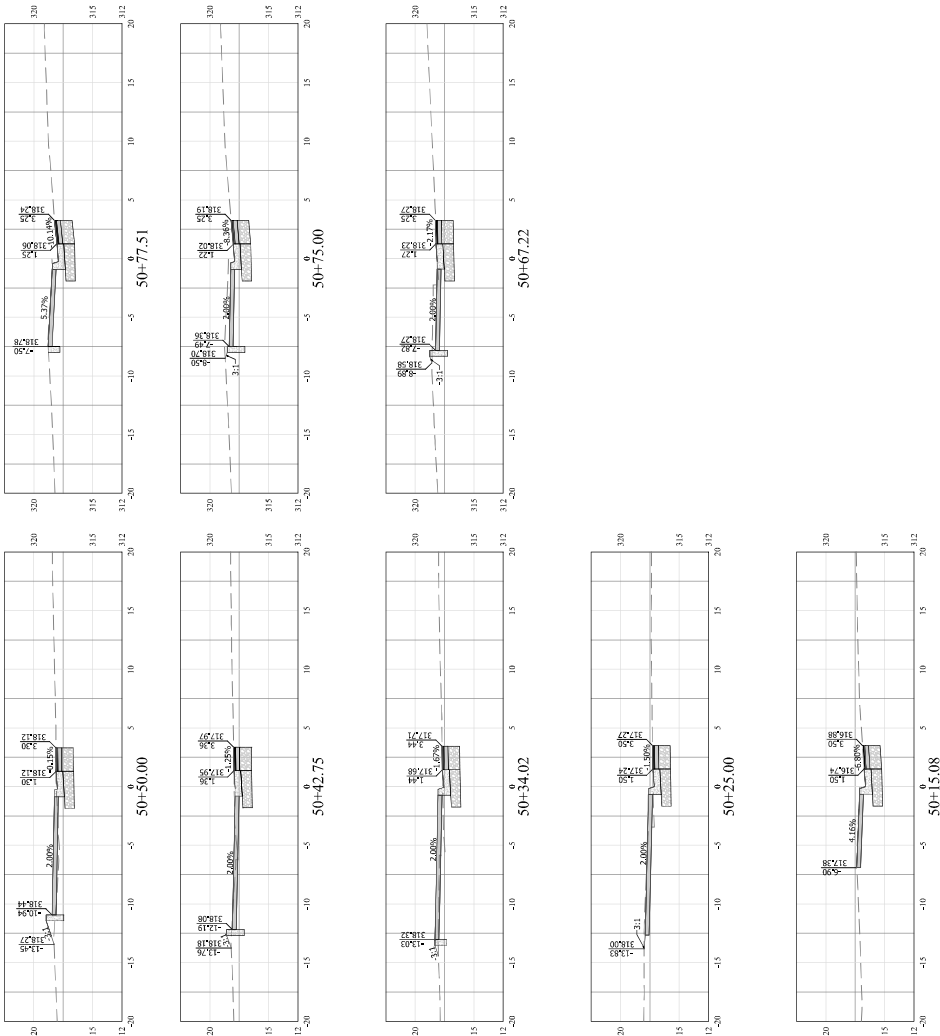
NOTES

- Station/Offset data is in reference to the associated  
TOC baseline unless noted otherwise.



CURB EXTENSION CROSS SECTIONS

SCALE: 1"=5' (H)  
1"=5' (V)





DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
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2100 Clarendon Boulevard, Suite 800  
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Phone: 703.228.5344  
Fax: 703.228.2175



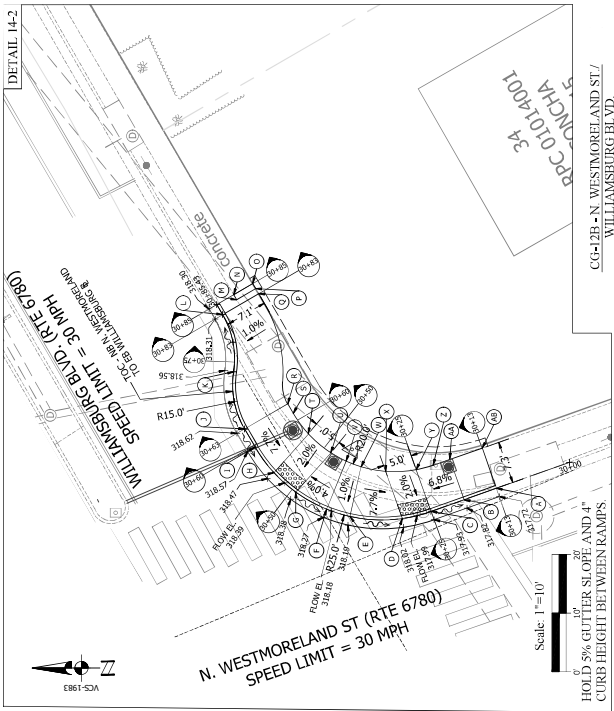
APPROVALS DATE  
PROJECT MANAGER  
DATE  
07-18-2021  
DATE  
07-21-2021  
DATE  
07-21-2021

REVISIONS DATE

TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS

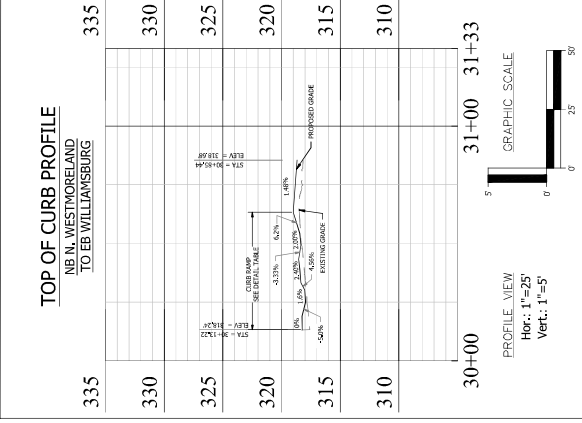
DESIGNED: MIA  
DRAWN: KIM  
CHECKED: MIA  
MISS UTILITY TRANSMITTAL #: xxx  
FILENAME: T085164000 Profile & Curb Ramp Data-Walk-  
RAMP - OVERVIEW.dwg  
PLOT DATE: March 18, 2021  
PLOT BY: imla  
SCALE: AS SHOWN

SHEET 16A of 31



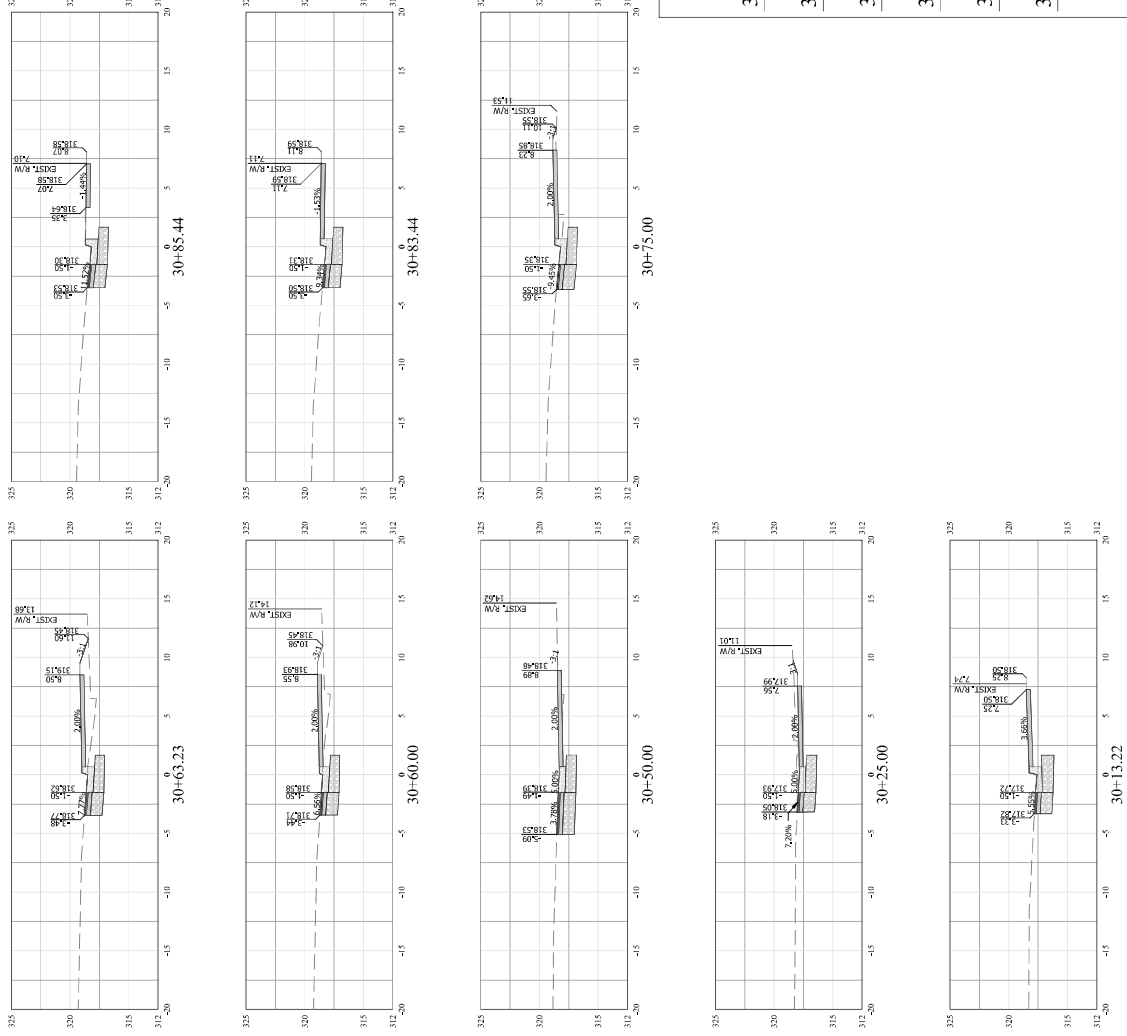
DETAIL 14-2	STA.	OFFSET	WALK	TOCEL.
A	30+13.22	0.00' RT	318.24	
B	30+19.03	0.00' RT	318.25	
C	30+25.03	0.00' RT	317.95	
D	30+30.06	0.00' RT	318.03	
E	30+39.06	0.00' RT	318.44	
F	30+43.23	0.00' RT	318.54	
G	30+49.23	0.00' RT	318.34	
H	30+54.23	0.00' RT	318.44	
I	30+59.67	0.00' RT	318.80	
J	30+63.23	0.00' RT	319.00	
K	30+73.34	0.00' RT	318.94	
L	30+83.44	0.00' RT	318.69	
M	30+84.44	3.35' RT	318.64	
N	30+85.44	3.35' RT	318.65	
O	30+85.44	7.10' RT	318.58	
P	30+84.44	7.10' RT	318.56	
Q	30+83.44	7.11' RT	318.56	
R	30+63.23	8.50' RT	319.08	
S	30+61.37	8.50' RT	318.95	
T	30+55.59	8.76' RT	318.60	
U	30+47.94	8.89' RT	318.50	
V	30+43.23	8.82' RT	318.62	
W	30+39.06	8.67' RT	318.53	
X	30+32.62	8.27' RT	318.20	
Y	30+25.03	7.56' RT	317.99	
Z	30+22.04	7.31' RT	318.25	
AA	30+19.03	7.29' RT	318.40	
AB	30+13.17	7.25' RT	318.50	

NOTES  
1. Station/Offset data is in reference to the associated  
TOC baseline unless noted otherwise.



CURB EXTENSION CROSS SECTIONS

SCALE: 1"=5' (H)  
1"=5' (V)



TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS





**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



APPROVALS	DATE
<i>[Signature]</i> REGIONAL ENGINEER	7/16/2021
<i>[Signature]</i> MANAGER, ENGINEERING MANAGER	07/20/2021
<i>[Signature]</i> WATER SEWER STREETS BUREAU CHIEF	07.16.2021
<i>[Signature]</i> SAC, BUREAU CHIEF	07/21/2021
<i>[Signature]</i> TRANSITATION DIRECTOR	07/21/2021

REVISIONS DATE

100 Profile & curb Ramp Details  
Williamsburg Blvd. at N.  
Westmoreland St.

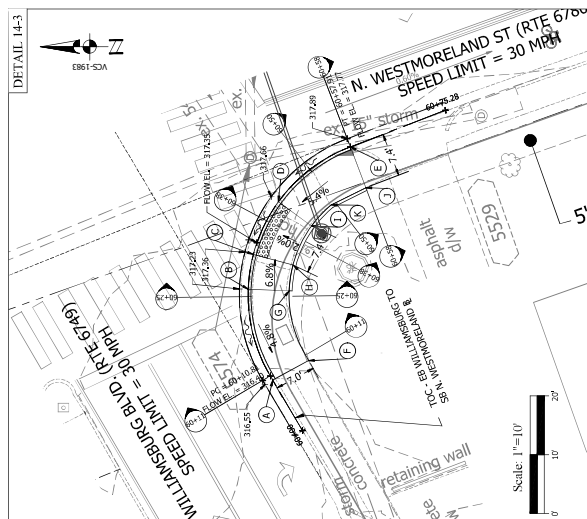
DESIGNED: KAV  
DRAWN: KAV  
CHECKED: MJA  
SSS UTILITY TRANSMITTAL #: xxx

FILENAME: T08S-16-TOC Profile & Curb R/W  
\\s4.cak.com\%Cakad\Projects\2018\2018227\_2  
CATH: Orders\TO\_16\TJmccas\cath\cath01.dwg

LOTTED: February 23, 2021

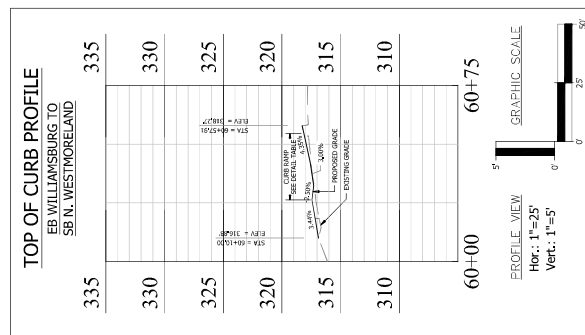
SCALE: AS SHOWN

HEET 16B of 31



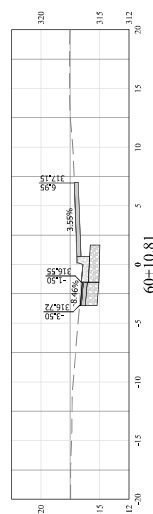
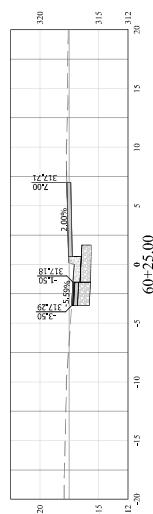
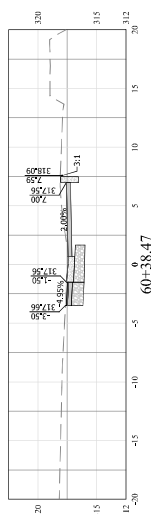
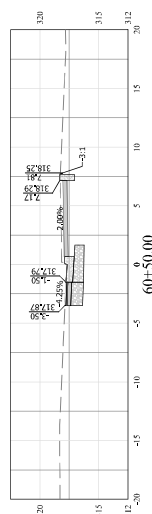
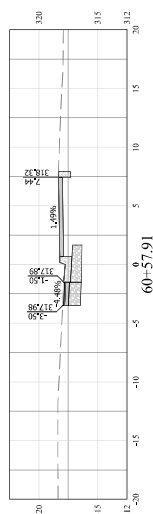
DETAIL 14-3	STA.	OFFSET	WALK ELEV.	TOC EL.
A	60+10.00	0.00' RT	316.88	
B	60+26.27	0.00' RT	317.60	
C	60+32.27	0.00' RT	317.29	
D	60+42.27	0.00' RT	317.59	
E	60+57.91	0.00' RT	318.27	
F	60+09.74	7.00' RT	317.10	
G	60+26.27	7.00' RT	317.40	317.70
H	60+32.27	7.00' RT	317.40	317.90
I	60+42.27	7.00' RT	317.70	318.20
J	60+57.91	7.44' RT	318.32	318.32
K	60+48.93	7.00' RT	317.95	318.25

- NOTES**
- Station/Offset data is in reference to the associated TOC baseline unless noted otherwise.



## CURB EXTENSION CROSS SECTIONS

SCALE: 1"=5' (H)  
1"=5' (V)





**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



APPROVALS	DATE
<i>Alan Mancini</i> CAPTAIN, CIVIL ENGINEER & GENERAL ENGINEERING MANAGER	7/16/2021
<i>John P. Valle</i> GENERAL ENGINEERING MANAGER	07/20/2021
<i>John P. Valle</i> WATER SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>John P. Valle</i> SEWER BUREAU CHIEF	07/21/2021
<i>Dennis M. Loeck</i> SEWER BUREAU CHIEF	07/21/20

REVISIONS	DATE
-----------	------

TOC Profile & Curb Ramp Details  
Williamsburg Blvd. at N.  
Westmoreland St.

DESIGNED: K.A.V.  
DRAWN: K.A.V.  
CHECKED: MJA  
ISS: SS UTILITY TRANSMITTAL #: xxx

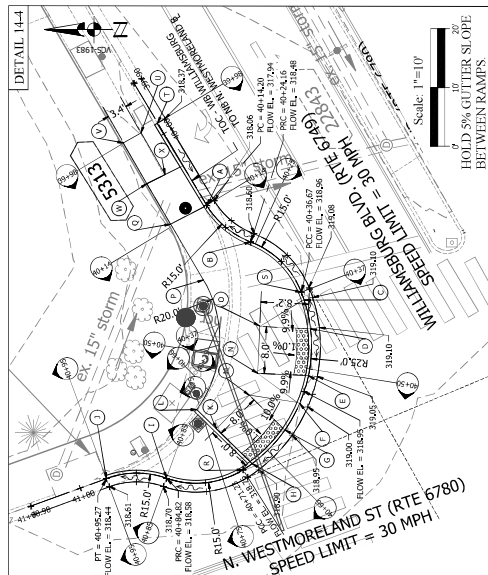
FILENAME: T08S-16-TCC\_Profile & Curb Ramps  
NEWARK: New Jersey Department of Transportation  
PROJECT: NJ Turnpike Authority Project 152072-240  
PATH: C:\Users\KAV\Documents\T08S-16-TCC\_Profile & Curb Ramps

LOTTED: February 23, 2021  
LOTTED BY: kmita

SCALE: AS SHOWN

SCALE: AS SHOWN

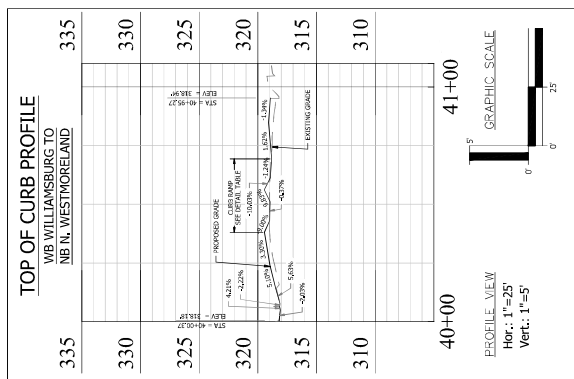
SHEET 16C of 31



CG-12A - W. WILLIAMSBURG BLVD/  
N. WESTMORELAND ST

Scale: 1" = 10'

DETAIL	STA.	OFFSET	WALK ELEV.	TOCEL.
A	40+14.20	0.00' RT	318.44	
B	40+24.16	0.00' RT	318.98	
C	40+38.11	0.00' RT	319.48	
D	40+43.11	0.00' RT	319.03	
E	40+51.15	0.00' RT	318.98	
F	40+56.13	0.00' RT	319.43	
G	40+61.31	0.00' RT	318.88	
H	40+69.35	0.00' RT	318.83	319.33
I	40+84.83	0.00' RT	319.08	
J	40+95.27	0.00' RT	318.94	
K	40+71.48	8.34' RT	318.91	319.41
L	40+79.06	12.58' RT	318.95	318.95
M	40+59.27	8.34' RT	318.96	
N	40+53.25	8.50' RT	319.07	
O	40+41.01	8.50' RT	319.12	
P	40+22.37	11.12' RT	319.08	
Q	40+13.76	6.94' RT	318.57	
R	40+71.23	0.00' RT	319.26	
S	40+36.67	0.00' RT	319.46	
T	39+97.00	0.00' RT	318.74	
U	39+97.87	3.30' RT	319.00	
V	30+97.82	6.80' RT	318.93	
W	40+05.81	6.91' RT	318.80	
X	40+06.07	3.41' RT	318.75	

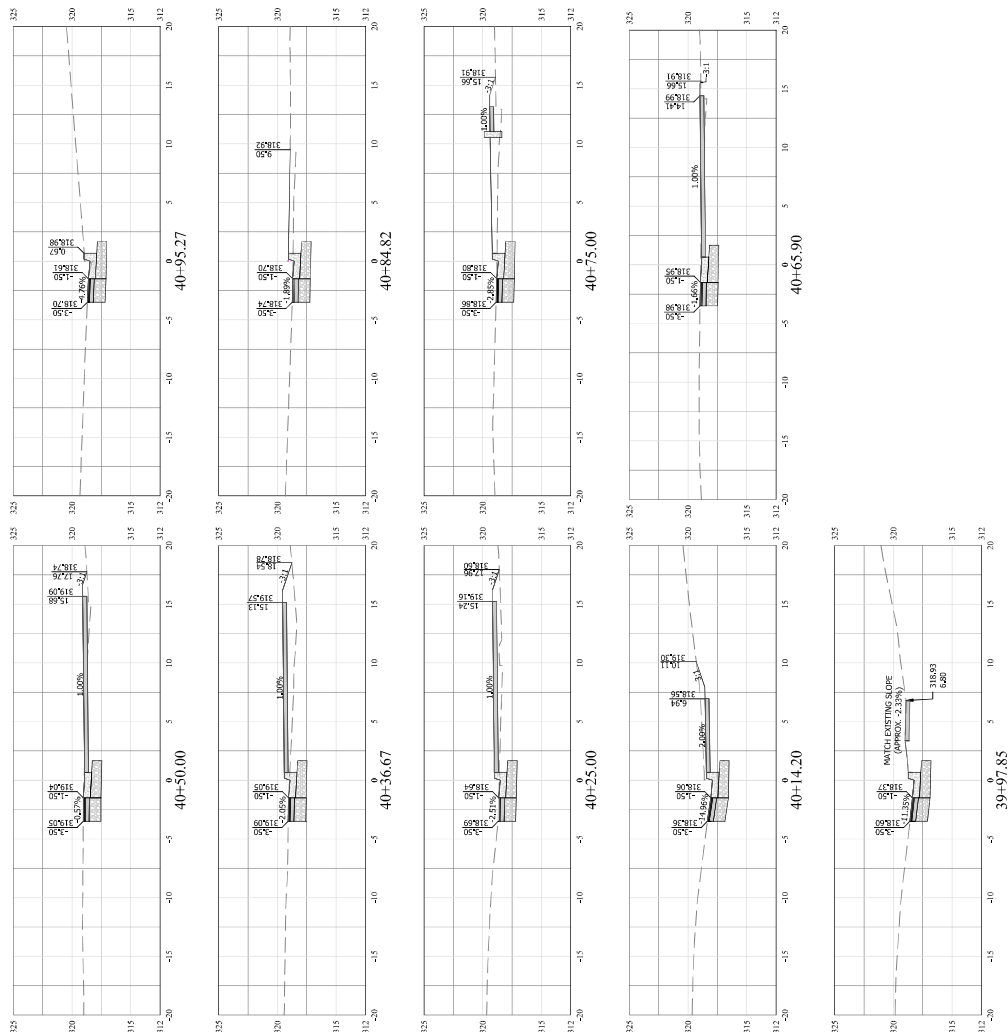


## NOTES

- Station/Offset data is in reference to the associated TOC baseline unless noted otherwise.

## CURB EXTENSION CROSS SECTIONS

SCALE: 1"=5' (H)  
1"=5' (V)







**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



APPROVALS	DATE
<i>[Signature]</i>	7/16/2021

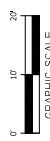
07/20/2021  
07/16/2021  
07/21/2021

REVISIONS	DATE

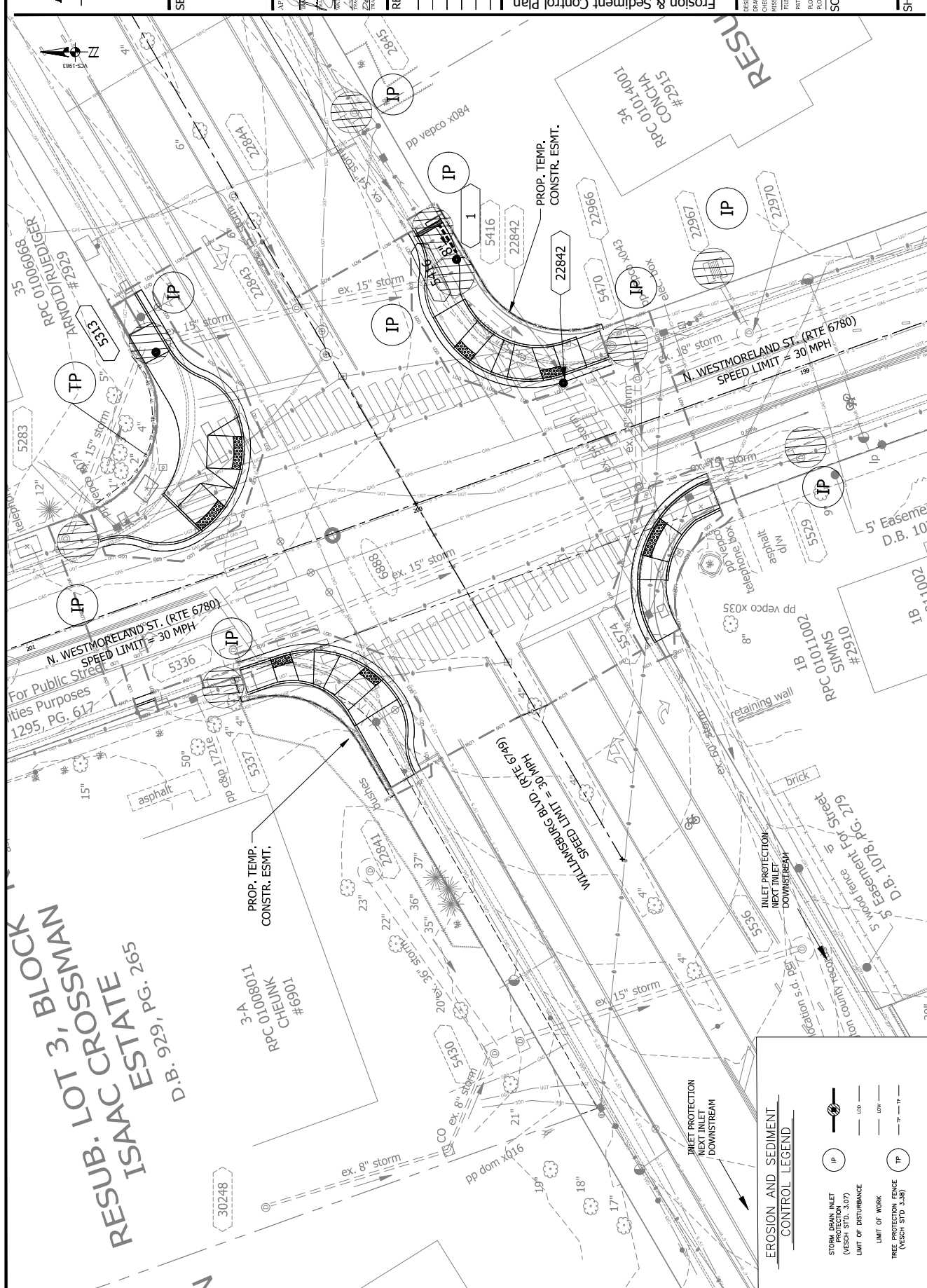
Williamstown Blvd. at N.  
Westmoreland St.

GNED: TIS  
 WNN: TIS  
 CKED: MJA  
 UTILITY TRANSMITTAL #: XXXX  
 USERNAME: T065-17A Erosion & Sediment  
 \user\kiki.com\src\bu\Projects\2018\18227\_  
 H: Ordian\TO\_101\Intersection\kiki\kdr\5be  
 ITTED: March 12, 2021

SCALE: Hor.: 1"=10'



**SHEET 17A of 31**



## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS







**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
2100 Chardon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



DATE	APPROVALS	
07/16/2022		CIVIL ENGINEER
07/20/2022		SAFETY ENGINEERING MANAGER
07.16.2022		WATER SEWER, STREETS BUREAU CHIEF
07/21/2022		SANITARY BUREAU CHIEF
07/21/22		TRANSFORMATION DIRECTOR

REVISIONS	DATE
-----------	------

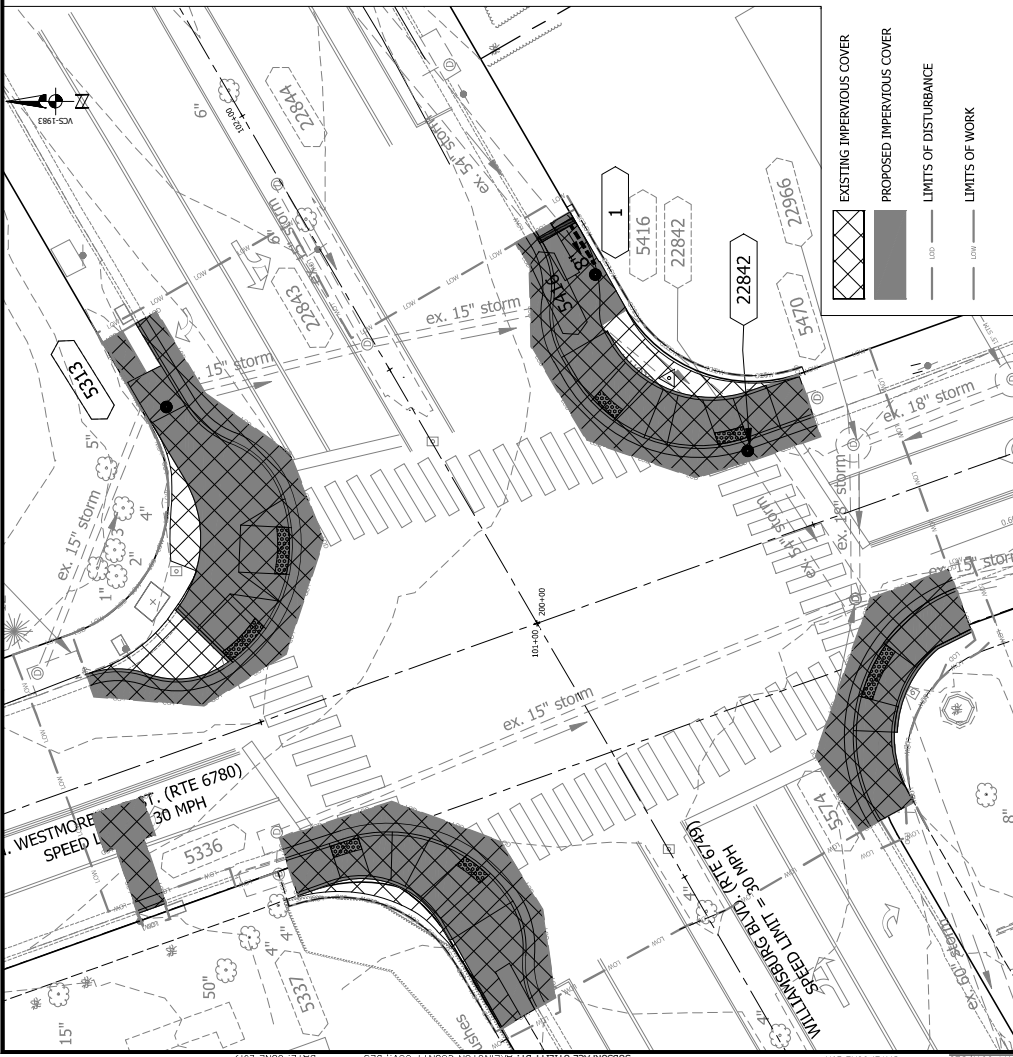
Stormwater Management Plan  
Williamsburg Blvd. at N.  
Westmoreland St.

SIGNED: TIS  
DRAWN: TIS  
CHECKED: MJA  
SS UTILITY TRANSMITTAL #: xxx  
LENAME: T08S-18A-Stormwater Manag  
194rM.com/US/Cbwd/Projects/2015/18227  
ATH: Orders\TO\_101\_Intertec\and\cbwd\SR

CALE: Hor.: 1"=10'

GRAPHIC SCALE

HEET 18A of 31



**STORMWATER MANAGEMENT NARRATIVE**

## WATER QUALITY

[illegible]



APPROVALS	DATE
<i>[Signature]</i> REGIONAL ENGINEER	7/16/2021
<i>[Signature]</i> SAFETY ENGINEERING MANAGER	07/20/2021
<i>[Signature]</i> WATER, SEWER, STREETS BUREAU CHIEF	07_16_2021
<i>[Signature]</i> BUREAU CHIEF	07/21/2021
<i>[Signature]</i> TRANSITION DIRECTOR	07/21/20

REVISIONS	DATE

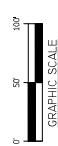
Drainage Area Map  
Williamsburg Blvd. at N.  
Westmoreland St.

DESIGNED: TIS  
DRAWN: TIS  
CHECKED: MJA  
SS UTILITY TRANSMITTAL #: xxx

FILENAME: T06S-18B-DIAM-WW.dwg  
[\\ssd\c\work\16\VC Build\Projects\T020181227\\_18B\T06S-18B-DIAM-WW.dwg](#)  
PATH: Orders\TO\_101\IntersectionBuild\CadFilesheets

PLOTTED: February 22, 2021

CALE: Hor.: 1"=50'



HEET 18B of 31

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS

DEPARTMENT OF  
ENVIRONMENTAL SERVICES

Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



APPROVALS	DATE
-----------	------

<i>[Signature]</i>	7/16/2021
AFFIC SIGNAL ENGINEER	
<i>[Signature]</i>	07/20/2021
AFFIC ENGINEERING MANAGER	
<i>[Signature]</i>	07.16.2021
WATER SEWER STREETS BUREAU CHIEF	
<i>[Signature]</i>	07/21/2021
SO BUREAU CHIEF	
<i>[Signature]</i>	07/21/2021
MANAGER OF PUBLIC UTILITIES	

EVTSIONS DATE

Westmoreland St.  
Williamsburg Blvd. at N.

(SIGNED: ZDH  
 (AWN: ZDH  
 (CHECKED: ASM  
 (SUBMITTAL #): XXXX  
 (EVALUATOR: TOSB-19-Signing & Marking Pl.  
 (VIA: Ash-Koch & Associates, Inc.  
 (E-MAIL: [info@ash-koch.com](mailto:info@ash-koch.com)  
 (URL: <http://www.ash-koch.com>  
 (DATE: 03/10/2021  
 (PRINTED: March 10, 2021  
 (PRINTED BY: Nlsner  
 (SCALE: 1"=25'

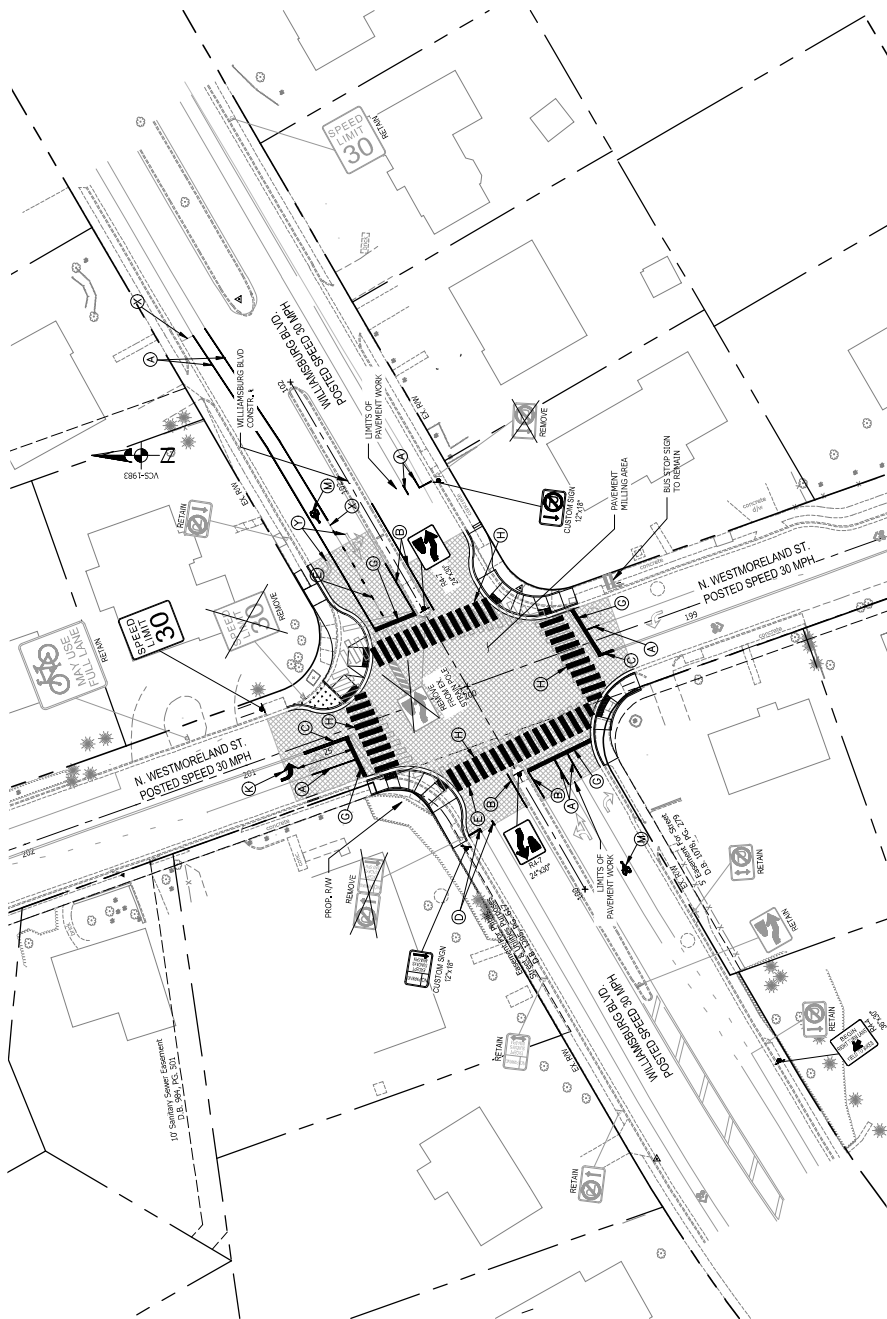
SCALE: 1"=25'

GRAPHIC SCALE

0' 25' 50'

HEET 19 of 31

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS









NOTES:

- [illegible]

## HIGH DENSITY CROSSWALK



## SYNOPSIS | LEGEND

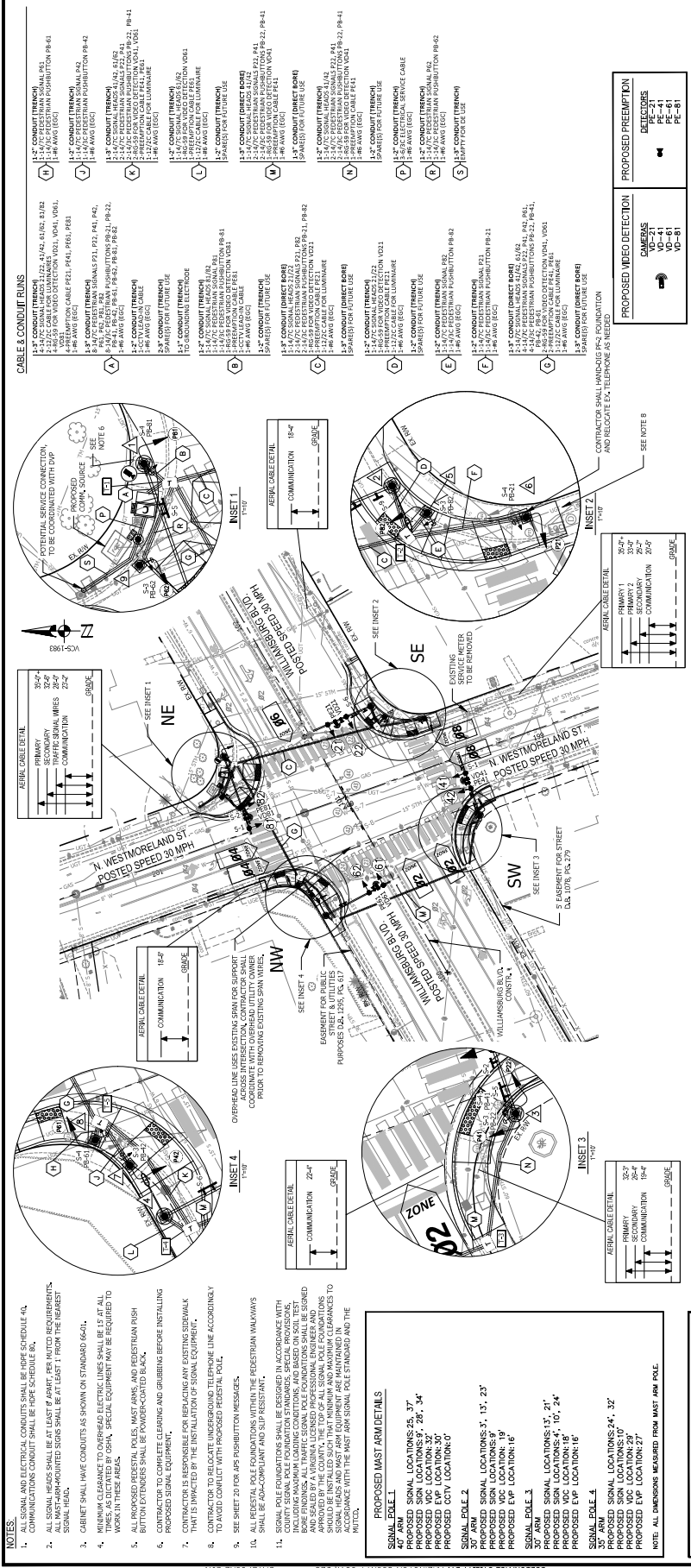
- |   |                                    |
|---|------------------------------------|
|  | EXISTING GROUND MOUNT SIGN SUPPORT |
|  | PROPOSED GROUND MOUNT SIGN SUPPORT |
|  | EXISTING BUS STOP                  |
|  | EXISTING SIGN TO REMAIN            |
|  | EXISTING SIGN TO BE REMOVED        |
|  | PROPOSED SIGN                      |

### STANDARD PAVEMENT MARKING | LEGEND:

- TYPE 0 CLASS 1..... WHITE 4" WIDTH  
TYPE 1 CLASS 1..... YELLOW 4" WIDTH  
TYPE 2 CLASS 1..... YELLOW 4" WIDTH, DOUBLE LINE, 4" SPACING  
TYPE 3 CLASS 1..... WHITE 6" WIDTH  
TYPE 4 CLASS 1..... WHITE 6" WIDTH, 21 LINES, 6 SKIP  
TYPE 5 CLASS 1..... YELLOW 32" WIDTH  
TYPE 6 CLASS 1..... WHITE 24" WIDTH  
TYPE 7 CLASS 1..... WHITE 24" WIDTH  
TYPE 8 CLASS 1..... YELLOW 34" WIDTH  
TYPE 9 CLASS 1..... WHITE SINGLE ARROW  
TYPE 0 CLASS 1..... WHITE SHARED LANE ARROW  
TYPE 0 CLASS 1..... WHITE SHARED LANE BITE SYMBOL  
FRAGMENTATION OF LINEAR MARKING  
FRAGMENTATION OF NON-LINEAR MARKING







TRAFFIC SIGNAL JUNCTION BOX SCHEDULE			
NO.	TYPE	BASELINE, STATION, OFFSET	
1	61-4X, TYPE 3	WILLIAMSBURG BLVD, 101+44.29, 44.29 LT	
2	61-4X, TYPE 3	WILLIAMSBURG BLVD, 101+34.69, 34.69 RT	
3	61-4X, TYPE 3	WILLIAMSBURG BLVD, 100+54.64, 54.64 RT	
4	61-4X, TYPE 3	WILLIAMSBURG BLVD, 100+44.68, 44.68 RT	
5	61-4X, TYPE 3	WILLIAMSBURG BLVD, 100+34.69, 34.69 LT	

COLOR SEQUENCE CHART			
PHASE	1	2	3
61-4X, TYPE 3	W	W	W
61-4X, TYPE 3	W	W	W
61-4X, TYPE 3	W	W	W
61-4X, TYPE 3	W	W	W
61-4X, TYPE 3	W	W	W

EXISTING PHASING DIAGRAM			
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

PROPOSED PHASING DIAGRAM			
1	2	3	4
5	6	7	8
9	10	11	12
13	14	15	16
17	18	19	20

TRAFFIC SIGNAL POLE DETAILS			
NO.	POLE TYPE	FOUNDATION	ORIENTATION
1	MAST ARM POLE 22	SEE NOTE 11	90°
2	MAST ARM POLE 20	SEE NOTE 11	90°
3	MAST ARM POLE 20	SEE NOTE 11	90°
4	PEDESTAL POLE 12	66-04	90°
5	PEDESTAL POLE 12	66-04	90°
6	PEDESTAL POLE 12	66-04	90°

TRAFFIC SIGNAL POLE DETAILS			
NO.	POLE TYPE	FOUNDATION	ORIENTATION
1	MAST ARM POLE 22	SEE NOTE 11	90°
2	MAST ARM POLE 20	SEE NOTE 11	90°
3	MAST ARM POLE 20	SEE NOTE 11	90°
4	PEDESTAL POLE 12	66-04	90°
5	PEDESTAL POLE 12	66-04	90°
6	PEDESTAL POLE 12	66-04	90°

DESIGNED: JZH  
DRAWN: JZH  
CHECKED: ASH  
MISS UTILITY TRANSMITTAL # 300  
FILENAME: TSS-CA-Traffic Signal Plan-Williamsburg Blvd and Westmoreland St.dwg  
PLOT DATE: March 10, 2021  
PLOT BY: Jzh  
SCALE: 1"=25'

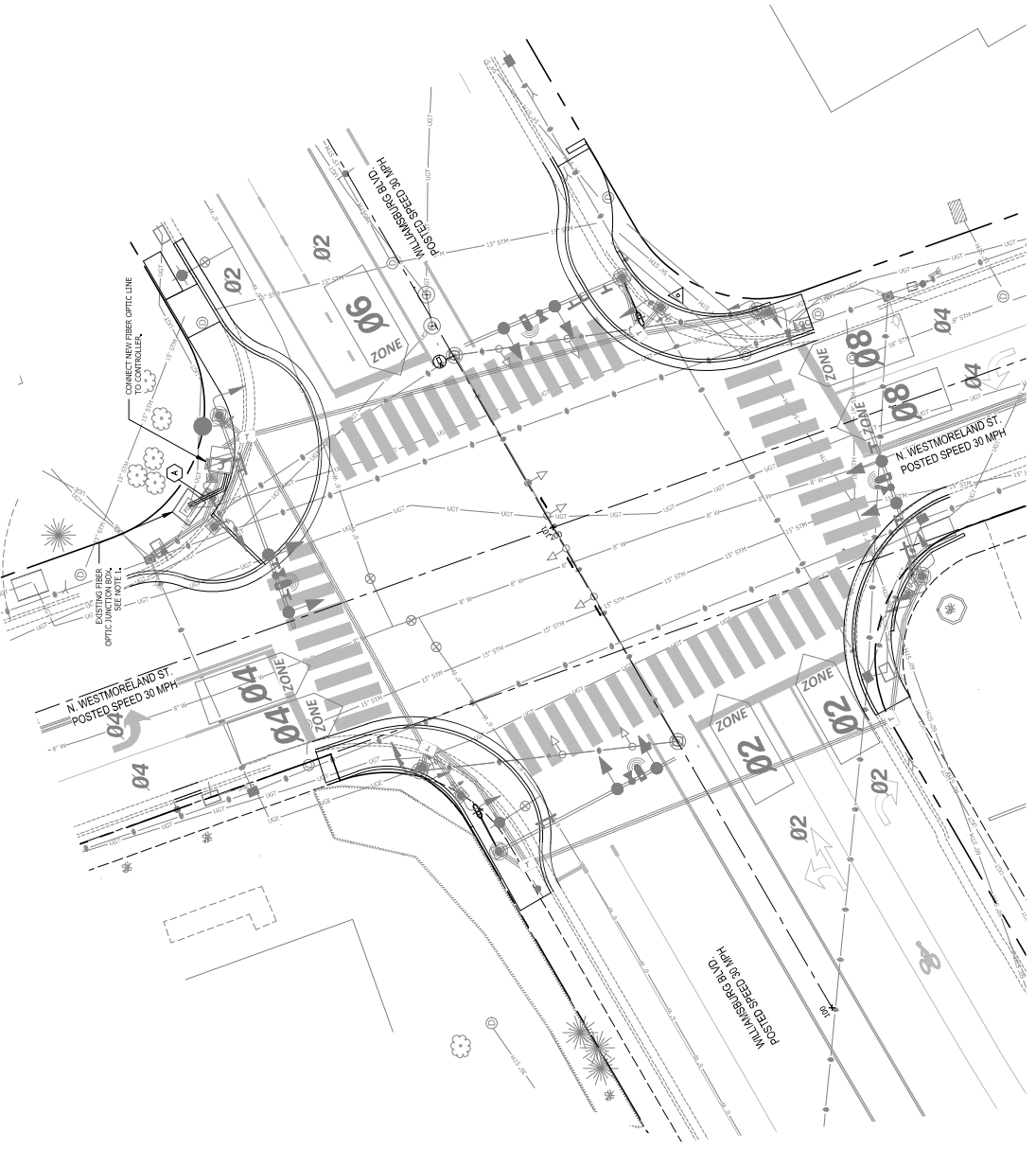
STREET NAME SIGNS  
S-5 (10'-0" x 1'-6")  
**Williamsburg Blvd**  
S-6 (9'-6" x 1'-6")  
**Westmoreland St**

NOTES:  
1. SIGNS ARE TO HAVE GREEN BACKGROUND WITH WHITE LETTERS AND BORDER IN ACCORDANCE WITH VDOT STANDARDS.  
2. SEE SHEET 20A FOR SIGN DETAILS.

CABLE & CONDUIT RUNS  
CONNECTIONS TO EXISTING JUNCTION BOXES, CONTROL CABINET, AND  
DEPARTMENT OF TECHNOLOGY SERVICES (DTS) TO COORDINATE CONNECTION  
TO PROPOSED SIGNAL CABINET.

CONSTRUCTION NOTES

1. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE ARIZONA COUNTY DEPARTMENT OF TECHNOLOGY SERVICES (DTS) TO COORDINATE CONNECTION TO PROPOSED SIGNAL CABINET.
2. ALL PROPOSED CONDUITS SHOULD BE FIPRE SCHEDULE 40.
3. ALL PROPOSED CONDUIT SHALL HAVE #6 AWG (ECC) FOR GROUNDING SYSTEM AND SHALL HAVE TRACER WIRE.
4. PROPOSED COMMUNICATION CONDUITS SHALL HAVE A PULL WIRE FOR FUTURE FIBER OPTIC CABLE.
5. CONDUIT SYSTEM SHALL BE ADDED TO CONNECT EXISTING COMMUNICATIONS TO THE PROPOSED SIGNAL CABINET. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING SIGNAL COMMUNICATIONS THROUGHOUT THE PROJECT. THE CONTRACTOR SHALL COORDINATE WITH ARIZONA COUNTY DTS FOR FIBER-RELATED WORK.



**ARLINGTON**  
VIRGINIA

DEPARTMENT OF  
ENVIRONMENTAL SERVICES

Transportation Engineering and  
Operations Bureau  
2100 Cleveland Boulevard, Suite 800  
Arlington, VA 22204  
Phone: 703.228.3344  
Fax: 703.228.3719



APPROVALS	DATE
STUART N. SANDERS Professional Engineer License No. 54707 State of Virginia	7/18/2021
DAVID J. HARRIS Professional Engineer License No. 54707 State of Virginia	07/16/2021
DAVID J. HARRIS Professional Engineer License No. 54707 State of Virginia	07/16/2021
DAVID J. HARRIS Professional Engineer License No. 54707 State of Virginia	07/16/2021

REVISIONS	DATE

**TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS**

Williamsburg Blvd. at N.  
Westmoreland St.

Communications Plan

DESIGNED: JOW  
DRAWN: JOW  
CHECKED: JMK  
MISS UTILITY TRANSMITTAL #: xxx  
FILENAME: 1085032-Communications\_Plan.dwg  
PATH: c:\projects\1085032-Communications\_Plan.dwg  
PLOTTED: March 10, 2021  
PLOTTER: JMK

SCALE: 1"=25'  
0' 25' 50'  
GRAPHIC SCALE

SHEET 20B of 31

TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS



DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Operations Bureau  
2100 Cleveland Boulevard, Suite 800  
Arlington, VA 22202-4344  
Phone: 703.223.3344  
Fax: 703.223.3719



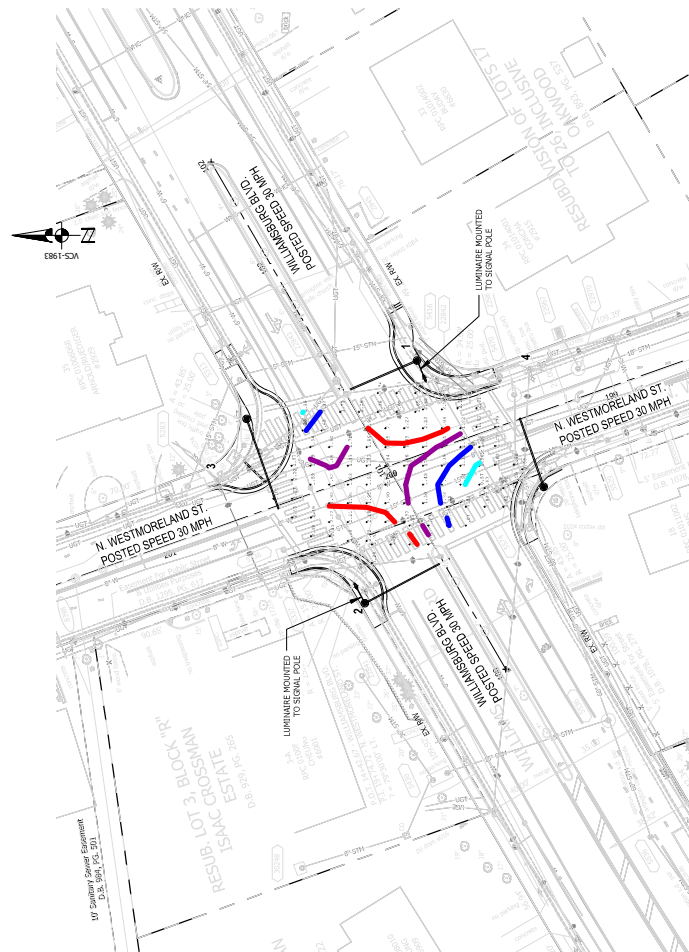
APPROVALS	DATE
STUART M. SAMRA Professional Engineer	7/18/2021
DAVID J. LEE Professional Engineer	07/20/2021
DAVID J. LEE Professional Engineer	07/16/2021
DAVID J. LEE Professional Engineer	07/12/2021
DAVID J. LEE Professional Engineer	07/12/2021

REVISIONS	DATE

Photometric Plan  
Williamsburg Blvd. at N.  
Westmoreland St.  
TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS

DESIGNED: ZDH  
DRAWN: ZDH  
CHECKED: ASM  
MISS UTILITY TRANSMITTAL #: xxx  
FILENAME: 108523 Photometric Plan-10/24/21  
PATH: c:\projects\108523\108523-10/24/21\108523-10/24/21.dwg  
PLOTTED: March 10, 2021  
PLOTTER: Juser  
SCALE: 1"=25'  
GRAPHIC SCALE  
0' 25' 50'

SHEET 21 of 31

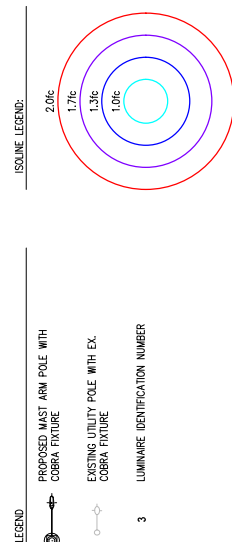


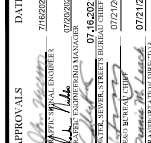
Luminaire ID Number	Pole Type	Luminaire Waiver/Type	Light Loss Factor (LLF)	Mounting Height	Color Temperature	Distribution	Initial Lumens	Finish	Baseline, Station, Offset
1	Mast Arm Pole	145W Colorhead LED	0.95	32.25'	4000K	Type III	16,046	Per Signal Plans	Per Signal Plans
2	Mast Arm Pole	145W Colorhead LED	0.95	32.25'	4000K	Type III	16,046	Per Signal Plans	Per Signal Plans
3	Ex. Dominion Energy Pole (to remain)	Colorhead 250WPS Enclosed Drop Lens	0.64	30'	Not Spec'd	Type III	18,805	N/A	N/A
4	Ex. Dominion Energy Pole (luminaires to be removed)	Colorhead 250WPS Enclosed Drop Lens	0.64	30'	Not Spec'd	Type III	18,805	N/A	N/A

Williamsburg Boulevard at Westmoreland Street: Photometric Analysis Results						
	Avg.		Max.		Avg/Min <sup>3</sup>	Max/Min <sup>3</sup>
	1.40	2.68	0.87	4.00	-	-
Intersection Criteria <sup>1</sup>	1.81	2.68	0.87	2.08	3.08	-
Intersection	1.40	-	-	4.00	-	-
Crosswalk Criteria <sup>2</sup>	2.14	3.29	0.99	2.16	3.32	1.51
East Leg Crosswalk	2.40	3.05	2.02	1.19	1.51	3.95
North Leg Crosswalk	1.32	2.33	0.59	2.24	3.95	5.66
South Leg Crosswalk	1.50	3.28	0.58	2.59	5.66	-
West Leg Crosswalk						

NOTES:

1. Horizontal criteria for roadway intersection lighting based on design requirements of Arlington County Lighting Specification Section 14454.2, Table 6, for two intersecting arterials with residential land use.
2. Horizontal crosswalk lighting designed to provide uniform lighting throughout intersection. Horizontal criteria for crosswalk lighting based on design requirements of Arlington County Lighting Specification Section 14462 for arterial street lighting with commercial land use.
3. Uniformities (Avg/Min<sup>3</sup> and Max/Min<sup>3</sup>) are "not-to-exceed" criteria.





DESIGNED: KM  
DRAWN: KM  
CHECKED: MJA  
SSS UTILITY TRANSMITTAL #: xxx

FILENAME: T10S-22-NOT-NW.dwg  
\\sd\as\proj\NW\proj\T10S-22-NW.dwg  
PATH: C:\Users\TTO\_101\_Internetwork\...\\sd\as\proj\T10S-22-NW.dwg

LOTTED: February 18, 2021  
LOTTED BY: kmka

CAI.F • N.T.S.

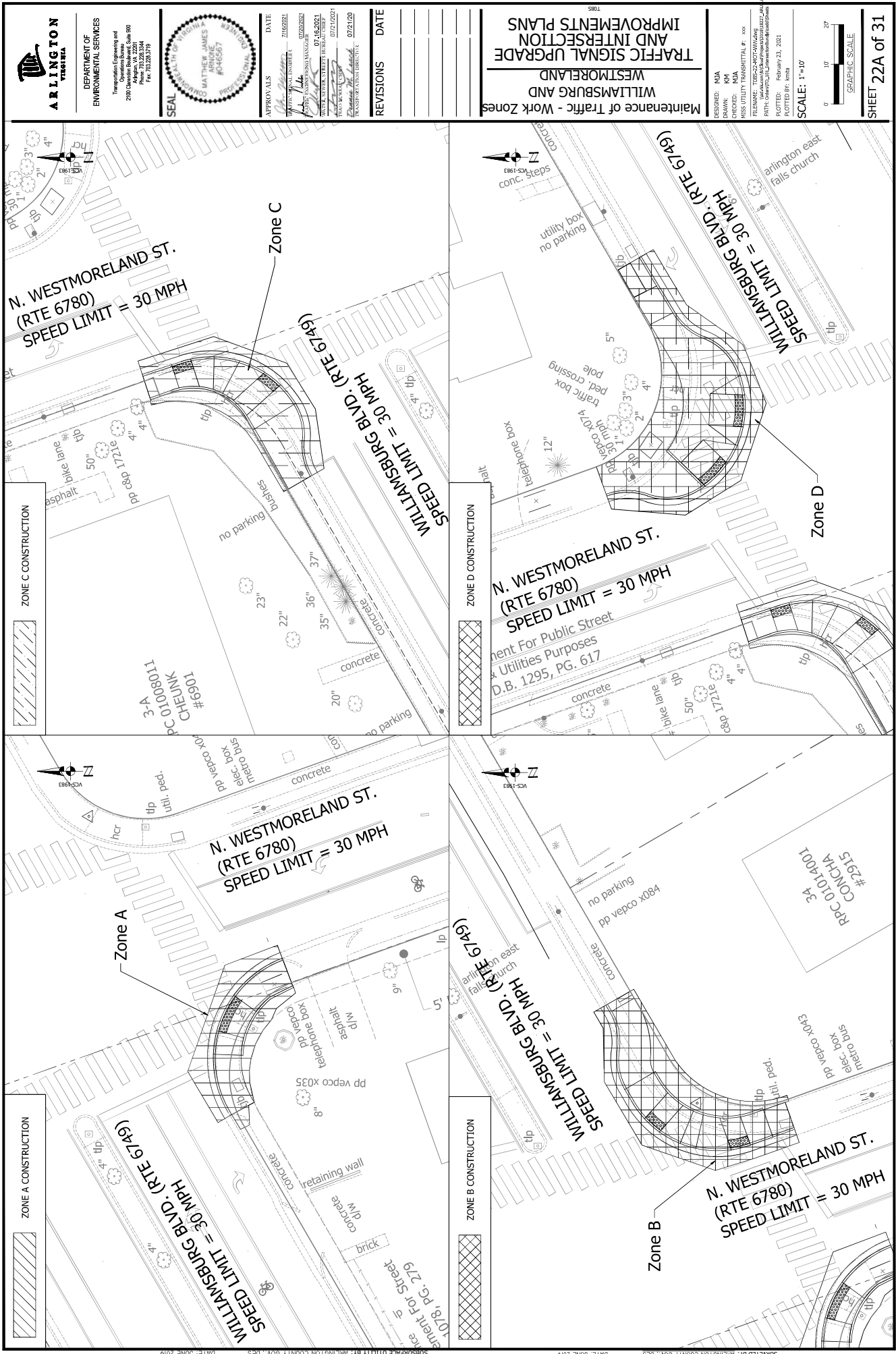
Zone	TTC #	Work Zone Table	Duration
Zone A	TTC # 5.2	Utilize TTC-5.2 on Williamsburg Blvd.	Two weeks
	TTC # 4.2	Utilize TTC-4.2 on Williamsburg Blvd.	
	TTC # 2.2	Utilize TTC-2.2 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
	TTC # 3.2	Utilize TTC-3.2 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
	TTC # 5.0	Utilize TTC-5.0 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
Zone B	TTC # 5.2	Utilize TTC-5.2 on N. Westmoreland St.	Two weeks
	TTC # 4.2	Utilize TTC-4.2 on N. Westmoreland St.	
	TTC # 2.2	Utilize TTC-2.2 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
	TTC # 3.2	Utilize TTC-3.2 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
	TTC # 5.0	Utilize TTC-5.0 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
Zone C	TTC # 5.2	Utilize TTC-5.2 on N. Westmoreland St.	Two weeks
	TTC # 4.2	Utilize TTC-4.2 on N. Westmoreland St.	
	TTC # 2.2	Utilize TTC-2.2 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
	TTC # 3.2	Utilize TTC-3.2 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
	TTC # 5.0	Utilize TTC-5.0 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
Zone D	TTC # 5.2	Utilize TTC-5.2 on Williamsburg Blvd.	Two weeks
	TTC # 4.2	Utilize TTC-4.2 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
	TTC # 2.2	Utilize TTC-2.2 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
	TTC # 3.2	Utilize TTC-3.2 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	
	TTC # 5.0	Utilize TTC-5.0 at the intersection of Williamsburg Blvd. and N. Westmoreland St.	

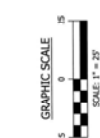
1. SEE SHEETS 2E & 2F FOR TTC TYPICAL APPLICATIONS PER THE VIRGINIA WORK AREA PROTECTION MANUAL
2. THE DURATIONS SHOWN WERE DEVELOPED FOR PLANNING AND ESTIMATION PURPOSES ONLY. THE DURATIONS IN NO WAY ALTER THE CONTRACT TIME FOR COMPLETION, OR INFERENCE ON THE CONTRACTOR'S MEANS AND METHODS. THE CONTRACTOR'S SUBMITTED SCHEDULE SUPERSEDES THE ESTIMATED DURATIONS SHOWN.
3. TEMPORARY SIGNS AND BARRIERS SHOULD NOT OBSTRUCT PEDESTRIAN PASSAGE ON SIDEWALKS UNLESS SUCH SIGNS OR BARRIERS ARE SPECIFICALLY INTENDED TO CLOSE SUCH SIDEWALK
4. CONTRACTOR SHALL CONSTRUCT ONLY ONE CORNER PER PHASE TO MINIMIZE PEDESTRIAN MOVEMENT DISRUPTION
5. CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A TEMPORARY WALKING PATH OR COORDINATE CONSTRUCTION TO PROVIDE A PORTION OF SIDEWALK TO MAINTAIN PEDESTRIAN CONNECTIVITY



1. THE USE OF TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE CONSIDERED THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL MAINTAIN THE WORK AREA IN ACCORDANCE WITH THE VARIOUS TEMPORARY TRAFFIC CONTROL PLAN.
2. TEMPORARY TRAFFIC CONTROL DEVICES AND SAFETY MEASURES SHALL COMPLY WITH THE VIRGINIA WORK AREA PROTECTION MANUAL, VDOT'S GUIDELINES FOR TEMPORARY TRAFFIC CONTROL, THE FEDERAL HIGHWAY ADMINISTRATION MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, AND THE VIRGINIA TRAFFIC CONTROL PLAN, ALL OF WHICH ARE INCLUDED IN THE CONSTRUCTION DRAWINGS, AND/OR AS DIRECTED BY THE PROJECT OFFICER.
3. THE CONTRACTOR SHALL SUBMIT A DETAILED SCHEDULE WHICH INDICATES START AND FINISH DATES FOR EACH SEGMENT OF THE WORK. THE SCHEDULE SHALL INDICATE THE DURATION OF ALL LANE OR SHOULDER CLOSURES. THE CONTRACTOR SHALL NOTIFY THE PROJECT OFFICER OF A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF PROCEEDINGS TO THE NEXT WORK SEGMENT. THE CONTRACTOR SHALL NOTIFY THE COUNTY PROJECT OFFICER OF PARKING RESTRICTION NEEDS A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF PROCEEDINGS TO THE NEXT WORK SEGMENT. THE CONTRACTOR SHALL SUBMIT TRAFFIC PLANNING BY-PRODUCTS - PERMITTING SECTION, 703-228-4798.
4. THE CONTRACTOR SHALL MAINTAIN ADEQUATE ACCESS TO ALL EXISTING TRAVEL LANE(S) AND TO ALL EXISTING SIDEWALKS OR BIWAYS DURING CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN APPROPRIATE SIGHT DISTANCE TO ALL TRAFFIC SIGNS OR PROVIDE FOR TEMPORARY SIGNAGE OR FLAGGERS TO GUIDE TRAFFIC THROUGH WORK ZONES.
5. THE CONTRACTOR SHALL MINIMIZE THE DURATION OF ANY BLOCKAGE TO PRIVATE ENTRANCES AND DRIVEWAYS. THE PROJECT OFFICER SHALL BE NOTIFIED A MINIMUM OF 3 BUSINESS DAYS IN ADVANCE OF SUCH ACTIVITIES. THE CONTRACTOR SHALL NOTIFY THE PROPERTY OWNER AT LEAST 24 HOURS IN ADVANCE OF THE START OF ANY WORK THAT WILL REQUIRE THE TEMPORARY CLOSURE OF ANY DRIVEWAY OR SIDEWALK. THE CONTRACTOR SHALL MAINTAIN ALL PRIVATE ENHANCED AND DRIVEWAYS ACCESSIBLE AT THE CONCLUSION OF EACH WORKDAY.
6. ANY EXCAVATIONS WHICH ARE SPECIFICALLY APPROVED BY THE PROJECT OFFICER TO REMAIN OPEN AT NORMAL WORKING HOURS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE PROTECTED IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL, AND AS APPROVED BY THE PROJECT OFFICER.
7. PRESTRESSING WORK SHALL BE MAINTAINED AT ALL TIMES, INCLUDING ACCESS TO BUS STOP SHELTERS, UNLESS OTHERWISE APPROVED BY THE PROJECT OFFICER.
8. PEDESTRIAN TRAFFIC SHALL BE SEPARATED FROM WORK ZONES WITH APPROPRIATE MEASURES IN ACCORDANCE WITH MUTCD.
9. ADEQUATE PROVISIONS FOR PERSONS WITH DISABILITIES SHALL BE PROVIDED AT ALL TIMES PER ADA REQUIREMENTS.
10. WHEN NECESSARY, PEDESTRIANS SHALL BE APPROPRIATELY DIRECTED WITH ADVANCED WARNING SIGNS PLACED AT THE NEARBY INTERSECTION, TO CROSS TO THE OPPOSITE SIDE OF THE ROADWAY IN ORDER TO PREVENT COLLISION WITH MISLEADING WORK SITES.
11. PEDESTRIANS SHALL NOT BE LED INTO CONFLICT WITH WORK SITE EQUIPMENT, OPERATIONS, AND/OR VEHICLES MOVING THROUGH OR AROUND THE WORK SITE.
12. ALL EXISTING FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MAINTAINED UNOBSTRUCTED AND ACCESSIBLE AT ALL TIMES IN ACCORDANCE WITH SECTIONS 508.5.4 AND 508.5.5 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
13. ACCESS TO BUILDINGS FOR PREFRIGTERING SHALL BE MAINTAINED AT ALL TIMES. EXISTING FIRE APPARATUS ACCESS ROADS (FIRE LANE) SHALL BE KEPT CLEAR OF OBSTRUCTIONS IN ACCORDANCE WITH SECTION 503.3 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE. ALL EXISTING FIRE APPARATUS ACCESS ROADS SHALL BE PROVIDED AND MAINTAINED IN ACCORDANCE WITH SECTION 141.0 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
14. IN THE EVENT THAT EXISTING FIRE DEPARTMENT CONNECTIONS OR FIRE APPARATUS ACCESS ROADS (FIRE LANES) MUST BE OBSTRUCTED TO FACILITATE CONSTRUCTION ACTIVITIES, CONTACT THE ARLINGTON COUNTY FIRE DEPARTMENT FIRE PREVENTION DIVISION AT LEAST 72 HOURS PRIOR TO THE START OF THE OBSTRUCTION. THE TEMPORARY FIRE DEPARTMENT CONNECTIONS AND/OR FIRE APPARATUS ACCESS ROADS SHALL BE RESTORED TO ORIGINAL CONDITION PRIOR TO RESUMING THE OBSTRUCTION.
15. THE CONTRACTOR SHALL COORDINATE WITH THE TRANSIT BUREAU AT 703-270-2646 AT LEAST 4 WEEKS PRIOR TO COMMENCEMENT OF WORK WHEN TRANSIT IS AFFECTED OR IF THERE ARE ANY IMPACTS TO TRANSIT STOPS OR ROUTES. NOTE: ALL TEMPORARY AND PERMITS BUS TRAVEL LANE(S) MUST BE MINIMUM OF 11' WIDE IN EACH DIRECTION. COORDINATE ALL CONCERN WITH THE BUS STOPPING AND TRAVEL LANE(S) DIVISION AT 703-270-2646.
16. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING VEHICLE DETECTION AT ALL TIMES DURING THE PROJECT. PROJECT DETECTOR SHALL BE RESTORED TO THEIR PRE-CONSTRUCTION STATE PRIOR TO THE COMPLETION OF THIS PROJECT.
17. WORK HOURS ARE RESTRICTED TO 9:00 AM TO 4:30 PM, MONDAY-FRIDAY, UNLESS APPROVED BY THE COUNTY PROJECT OFFICER IN WRITING.
18. CONTRACTOR SHALL COVER ANY EXISTING SIGNS WHICH ARE NOT APPLICABLE OR ARE IN CONFLICT WITH THE MOT PLAN.
19. CONTRACTOR SHALL EDUCATE AND RE-STORE AS NECESSARY ANY EXISTING PAVEMENT MARKINGS THAT ARE IN CONFLICT WITH OR DO NOT ALIGN WITH THE TEMPORARY PAVEMENT MARKINGS OR NEW TRAFFIC PATTERNS.
20. CONTRACTOR SHALL EDUCATE ALL TEMPORARY PAVEMENT MARKINGS, INCLUDING TEMPORARY MARKED CROSSWALKS ONCE THE WORK AREA(S) ASSOCIATED WITH THE MARKINGS HAS BEEN COMPLETED.
21. CONTRACTOR SHALL CONTACT ARLINGTON COUNTY DOT 3 BUSINESS DAYS PRIOR TO INSTALLATION OF PERMANENT PAVEMENT MARKINGS.
22. CONTRACTOR SHALL NOT DISTURB OR OBSCURE ANY TRAFFIC CONTROL DEVICES, PAVEMENT MARKINGS OR SIGNS OR ANY OTHER TRAFFIC CONTROL DEVICES UNLESS SPECIFIED ON THE PLANS OR APPROVED BY THE COUNTY PROJECT OFFICER IN WRITING.







- LEGEND**
- |   |                |   |                               |
|---|----------------|---|-------------------------------|
| ◆ | FIRE HYDRANT   | ① | STORMDRAIN MANHOLE            |
| ● | WATER VALVE    | ② | STORMY SEWER STRUCTURE NUMBER |
| ● | WATER METER    | ③ | STORM DRAIN STRUCTURE NUMBER  |
| ● | WATER MANHOLE  | ④ | SR/SLUB                       |
| + | SEIN           | ⑤ | DECIDUOUS TREE                |
| ● | POWER POLE     | ⑥ | CONFIDENTIAL TREE             |
| ● | GUY WIRE       | ⑦ | TRAVESSE/TVLY STATION         |
| ● | STORMY MANHOLE | ⑧ |                               |

**NOTES:**  
 RTX GPS COORDINATES ESTABLISHED ON POINTS 71, AND 72, 7/26/2018  
 THIS PROJECT IS ESTABLISHED BY CONVENTIONAL SURVEY METHODS  
 COORDINATES ARE NOT SCALED.  
 RTX GPS ELEVATION FOR POINT NUMBER 71, (D55.52) WAS HELD.  
 UNDESIGNED UTILITIES WERE MARKED BY MID-ATLANTIC UTILITY LOCATING (MULU) ON  
 08/01/2019 AND LOCATED BY ARLINGTON COUNTY SURVEY PERSONNEL ON 08/13/2019  
 SANITARY SEWER AND WATERLINE SIZES ARE SHOWN FROM AVAILABLE ARLINGTON  
 COUNTY GIS INFORMATION.  
 BUILDINGS ARE SHOWN FROM ARLINGTON COUNTY GIS INFORMATION.

SURVEY CONTROL			
PTS	NORTHING	EASTING	ELEV.
71	7003911.5460	1186942.4944	355.52
72	7004069.0786	1186911.1112	331.88
71	7004068.7143	1186958.0166	340.18
82	7004045.1600	11869167.4322	320.39

I HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY WAS COMPILED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF JOSHUA M. BROOK, L.S. FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE ORIGINAL DATA WAS OBTAINED IN JUNE AND JULY 2018; AND THAT THIS PLAT, MAP OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED

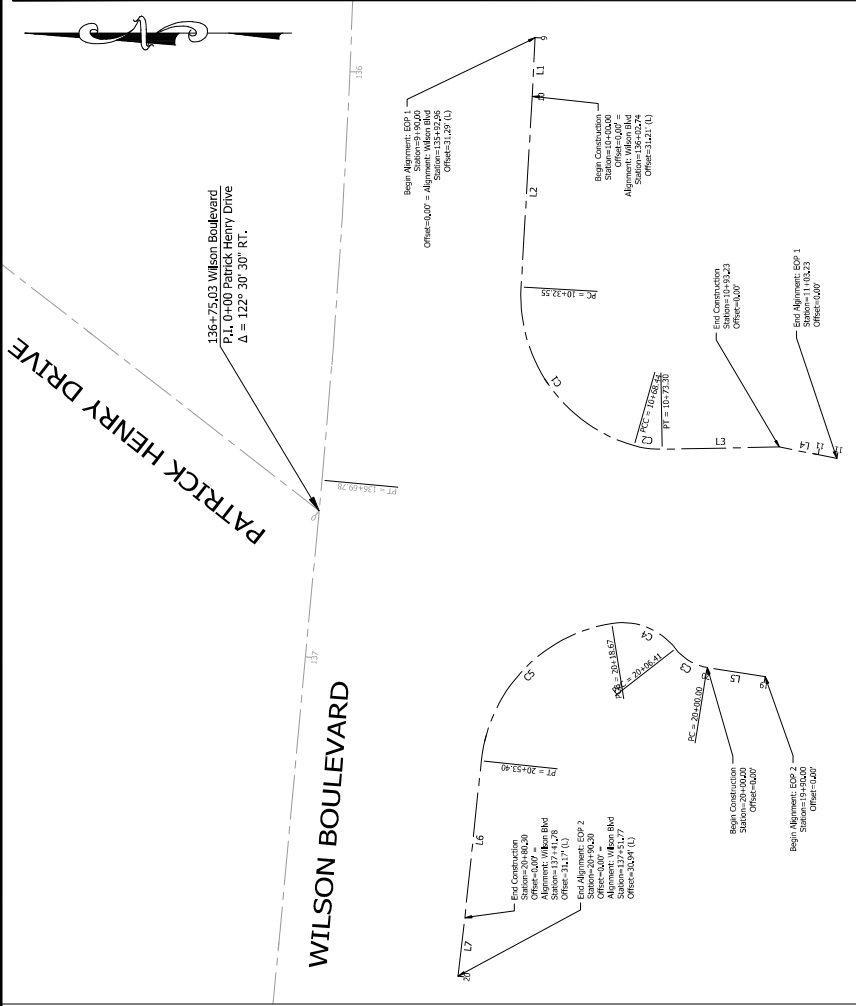


DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Engineering Bureau - Survey Section  
1100 Clarendon Boulevard, Suite #13  
Arlington, VA 22201

PROJECT: 6878/P16D

TOPOGRAPHIC SURVEY  
WILSON BOULEVARD  
AT INTERSECTION OF  
PATRICK HENRY DRIVE  
ARLINGTON COUNTY, VIRGINIA





Alignment: EOP 1						
Number	Length	Radius	Line/Chord Direction	Beta (°)	STA (Start)	STA (End)
C1	35.893	26,500	S58° 32' 26.97"W	77° 36' 15"	10+16.25	10+46.44
C2	4.689	16,500	S7° 18' 02.09"W	86° 52' 18"	10+46.44	10+76.30
L1	13.000		N87° 07' 50.65"W		8+90.00	10+00.00
L2	33.547		N86° 39' 26.20"W		10+00.00	10+33.55
L3	14.933		S7° 18' 01.20"E		10+76.30	10+91.23
L4	10.001		S11° 15' 16.31"W		10+91.23	11+01.23

Alignment: EOP 2						
Number	Length	Radius	Line/Chord Direction	Beta (°)	STA (Start)	STA (End)
C3	6.406	8,500	N30° 37' 26.59"E	43° 12' 49"	20+10.00	20+16.67
C4	12.498	11,500	N21° 39' 03.01"E	61° 07' 24"	20+16.67	20+46.41
C5	34.276	26,500	N46° 27' 55.19"W	79° 04' 53"	30+16.67	30+53.40
L5	13.000		N46° 01' 36.48"E		19+50.00	20+46.40
L6	26.899		N83° 59' 31.46"W		20+53.40	20+80.30
L7	13.000		N83° 22' 56.46"W		20+80.30	20+93.30

GEOMETRIC PLAN

TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS

DESIGNED: [Signature]  
CHECKED: [Signature]  
MESS UTILITY TRANSMITTAL #: 300  
FILENAME: TDS - Gas & Curb Extension Job.dwg  
PATH: C:\Users\jka\OneDrive\Documents\Projects\Wilson Blvd\TDS - Gas & Curb Extension Job.dwg  
PLOTTED BY: jka  
PLOT DATE: June 17, 2020  
SCALE: 1" = 10'



DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Planning  
2100 Clarendon Boulevard, Suite 800  
Arlington, Virginia 22202  
Phone: (703) 228-3344  
Fax: (703) 228-3719

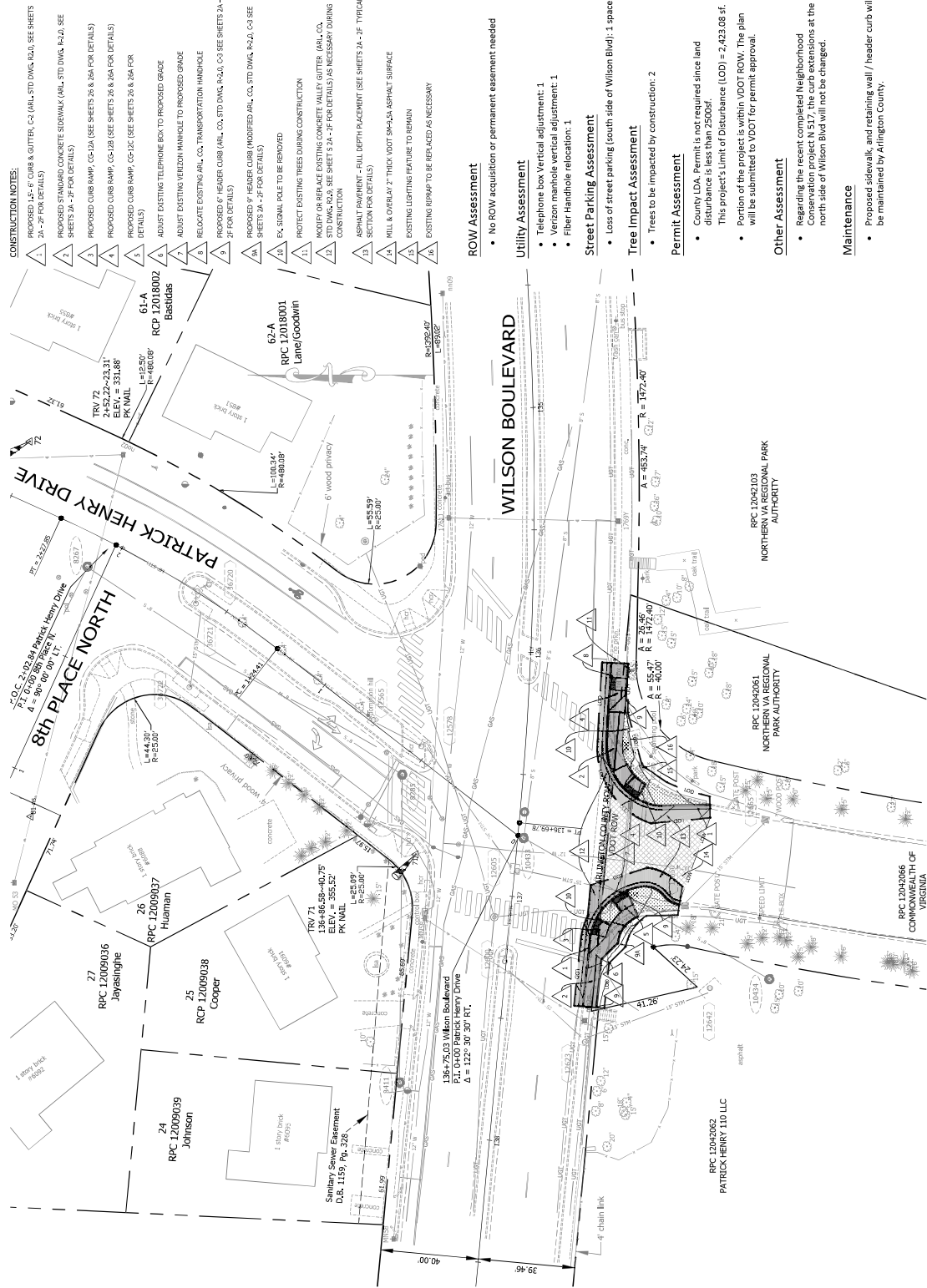
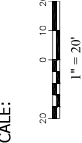


APPROVALS	DATE
Justin McCarthy, P.E.	7/18/2021
David B. Kahl, P.E.	7/26/2021
David B. Kahl, P.E.	07/15/2021
David B. Kahl, P.E.	07/15/2021
David B. Kahl, P.E.	07/15/2021
David B. Kahl, P.E.	07/15/2021

REVISIONS	DATE
1. Addendum 1	07/15/2021
2. Addendum 2	07/15/2021
3. Addendum 3	07/15/2021
4. Addendum 4	07/15/2021
5. Addendum 5	07/15/2021
6. Addendum 6	07/15/2021
7. Addendum 7	07/15/2021
8. Addendum 8	07/15/2021
9. Addendum 9	07/15/2021
10. Addendum 10	07/15/2021
11. Addendum 11	07/15/2021
12. Addendum 12	07/15/2021
13. Addendum 13	07/15/2021
14. Addendum 14	07/15/2021
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16. Addendum 16	07/15/2021
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98. Addendum 98	07/15/2021
99. Addendum 99	07/15/2021
100. Addendum 100	07/15/2021

# TRAFFIC SIGNAL SIGNAL AND INTERSECTION IMPROVEMENTS PLANS

DESIGNED: JUSTIN MCCARTHY, P.E.  
DRAWN: DAVID B. KAHL, P.E.  
CHECKED: DAVID B. KAHL, P.E.  
FILENAME: TSS - Prop Conditions.dwg  
PROJECT: Wilson Blvd Signal Intersection  
PATH: C:\Users\Justin.McCarthy\Documents  
PLOT: May 24, 2021  
PLOT BY: bwn



### CONSTRUCTION NOTES:

- PROPOSED 14'-0" CURB & GUTTER, C&G (ARL STD DWG R-2A). SEE SHEETS 2A-2F FOR DETAILS.
- PROPOSED STANDARD CONCRETE SIDEWALK (ARL STD DWG R-2A). SEE SHEETS 2A-2F FOR DETAILS.
- PROPOSED CURB RAMP C&G-1A (SEE SHEETS 26 & 5A FOR DETAILS).
- PROPOSED CURB RAMP C&G-1B (SEE SHEETS 26 & 5A FOR DETAILS).
- PROPOSED CURB RAMP C&G-1C (SEE SHEETS 26 & 5A FOR DETAILS).
- PROPOSED CURB RAMP C&G-1D (SEE SHEETS 26 & 5A FOR DETAILS).
- ADJUST EXISTING TELEPHONE BOX TO PROPOSED GRADE.
- ADJUST EXISTING VERIZON MANHOLE TO PROPOSED GRADE.
- RELOCATE EXISTING ARL CO. TRANSPORTATION HANDBOLE.
- PROPOSED 8' HEADWALL (ARL CO. STD DWG R-2A). C&G SEE SHEETS 2A-2F FOR DETAILS.
- PROPOSED 8' HEADWALL (ARL CO. STD DWG R-2A). C&G SEE SHEETS 2A-2F FOR DETAILS.
- EXISTING SIGNAL POLE TO BE REMOVED.
- PROTECT EXISTING TREES DURING CONSTRUCTION.
- MODIFY OR REPLACE EXISTING CONCRETE VALLEY GUTTER (ARL CO. STD DWG R-2A). SEE SHEET 2A-2F FOR DETAILS AS NECESSARY DURING CONSTRUCTION.
- ASPHALT PAVEMENT - FULL DEPTH PLACEMENT (SEE SHEETS 2A-2F TYPICAL SECTION FOR DETAILS).
- ASPHALT PAVEMENT - FULL DEPTH PLACEMENT (SEE SHEETS 2A-2F TYPICAL SECTION FOR DETAILS).
- EXISTING LIGHTING FEATURE TO REMAIN.
- EXISTING RAMP TO BE REPLACED AS NECESSARY.

### ROW Assessment

- No ROW acquisition or permanent easement needed

### Utility Assessment

- Telephone box vertical adjustment: 1
- Verizon manhole vertical adjustment: 1
- Fiber Handhole relocation: 1

### Street Parking Assessment

- Loss of street parking (south side of Wilson Blvd): 1 space

### Tree Impact Assessment

- Trees to be impacted by construction: 2

### Permit Assessment

- County LDA. Permit is not required since land disturbance is less than 2500sf.
- This project's Limit of Disturbance (LOD) = 2,423.08 sf.
- Portion of the project is within VDOT ROW. The plan will be submitted to VDOT for permit approval.

### Other Assessment

- Regarding the recent completed Neighborhood Conservation Project N 517, the curb extensions at the north side of Wilson Blvd will not be changed.

### Maintenance

- Proposed sidewalk, and retaining wall / header curb will be maintained by Arlington County.







DEPARTMENT OF  
ENVIRONMENTAL SERVICES

Transportation Engineering and  
Operations Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3344  
Fax: 703.228.3719



APPROVALS	DATE
-----------	------

<i>John H. Hadden</i>	7/16/2021
AFFIC SURVIVAL ENGINEER	
<i>John H. Hadden</i>	07/20/2021
AFFIC ENGINEERING MANAGER	
<i>John H. Hadden</i>	07/16/2021
SEWER, STREET, BUREAU CHIEF	
<i>John H. Hadden</i>	07/21/2021
SEWER, STREET, BUREAU CHIEF	
<i>John H. Hadden</i>	07/21/2021
SEWER, STREET, BUREAU CHIEF	

EVISIONS	DATE
----------	------

|||

Signing & Marking Plan  
Wilson Blvd. at Patrick Henry Dr.

IGNED: ZDH  
 MWN: ZDH  
 CKED: ASM  
 S IS UTILITY TRANSMITTAL #: XXXX  
 ENAME: T065-28-Signing and Marking  
 (vtd.kks.com/VtdKaul/Project/2021/18/18227  
 TH: Order\TO\_101\_IntersectionUnderPass\506  
 OTTED: February 25, 2021

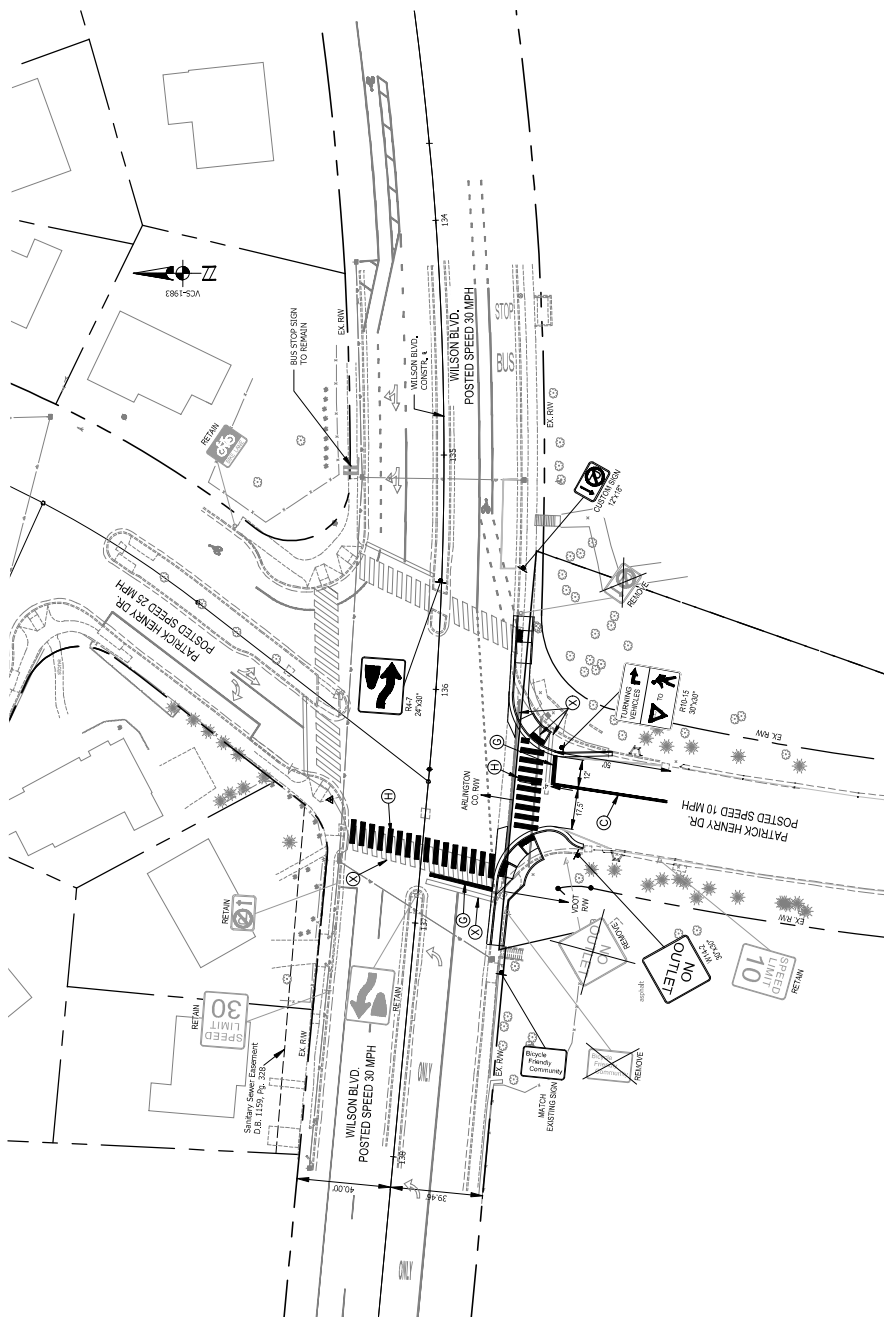
SCALE: 1"=25'

GRAPHIC SCALE

0' 25' 50'

HEET 28 of 31

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS



## NOTES:

1. ALL PROPOSED SIGNING AND PAVERS MARKINGS SHALL BE IN ACCORDANCE WITH THE MOST CURRENT EDITION OF EACH OF THE FOLLOWING MANUALS, OR THE MOST RECENT AASHTO PUBLISHED VERSION:
  - A. THE NATIONAL HIGHWAY TRAFFIC CONTROL DESIGN STANDARDS
  - B. THE ILLINOIS SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES
  - C. THE ILLINOIS SUPPLEMENT TO THE MANUAL ON STANDARD SIGNIFICATION
  - D. THE ILLINOIS DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS
  - E. THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
2. UNLESS OTHERWISE APPROVED BY THE ENGINEER OR INDICATED IN THE MAINTENANCE OF TRAFFIC AND SEQUENCING OF CONSTRUCTION PLANS, EXISTING TRAFFIC SIGNS WHICH ARE TO BE REMOVED SHALL BECAIN PLACE UNTIL THE NEW SIGN STRUCTURE IS IN PLACE.
3. THE GENERAL MODIFICATION OF EXISTING SIGN PANELS, STRUCTURES OR LOCATIONS SHALL BE LIMITED TO SECTION 907 OF THE ROAD AND BRIDGE SPECIFICATIONS.
4. NEW MATERIALS AND ITEMS REQUIRED TO COMPLETE THE RENOVAL OR MODIFICATION OF EXISTING ITEMS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL IN ACCORDANCE WITH SECTION 905 OF THE ROAD AND BRIDGE SPECIFICATIONS.
5. ALL EXISTING AND PROPOSED SIGN LOCATIONS ARE THE PROPERTY ENGINEER AND SHALL BE FIELDED FOR REVIEW AND APPROVAL IN THE TRAFFIC ENGINEERING PRIOR TO ANY INSTALLATION OR RELOCATION. LOCATIONS SHALL BE MODIFIED IN THE FIELD TO AVOID CONFLICT WITH UNDERGROUND UTILITIES OR OTHER CONSTRUCTION.
6. NEW SIGN PANELS SHALL BE MEASURED AND PAID FOR IN UNITS OF CENTS. THE PRICE SHALL BE BASED ON THE WEIGHT OF THE SIGN PANELS AND SHALL INCLUDE THE COST OF THE ENGINTEERS' TIME TO INSURE THAT THE SIGN MATCHES TO EXISTING. SHALL BE DONE IN MANNNERS APPROVED BY THE ENGINEER.
7. LIMITS OF PROPOSED PAVERS MARKINGS ARE APPROPRIATE AND SHALL BE MODIFIED IN ORDER TO MATCH EXISTING MARKINGS. THE LIMITS OF THE MARKINGS SHALL BE DETERMINED BY THE ENGINEER.
8. EXISTING PAVERS MARKINGS THAT CONFLICT WITH THE PROPOSED MARKINGS SHOWN HEREIN SHALL BE ERADICATED.
9. ALL PAVERS MARKINGS SHALL BE TYPE B, CLASS I THERMOPLASTIC, PER ARLINGTON COUNTY STANDARDS, UNLESS OTHERWISE NOTED.
10. SPACING BETWEEN DOUBLE SOLID YELLOW LINES IS 4 FEET.
11. STOP MARKS SHALL BE 4 FEET IN WIDTH AND MUST BE A MINIMUM OF 4 FEET IN ADVANCE OF A MARKED CROSSWALK.
12. CROSSWALKS ARE 10 FEET WIDE UNLESS NOTED.
13. CROSSWALK STRIPS SHALL BE SITUATED OUTSIDE OF THE EXPECTED VEHICULAR WHEEL TRACKS.
14. CONTRACTORS ARE RESPONSIBLE FOR REPLACING ANY EXISTING PAVERS MARKINGS THAT ARE DAMAGED OR DESTROYED WHILE IN THE COURSE OF CONSTRUCTION.

## HIGH DENSITY CROSSWALK



## SIGNING LEGEND

- |   |                                    |
|---|------------------------------------|
|  | PROPOSED GROUND MOUNT SIGN SUPPORT |
|  | EXISTING GROUND MOUNT SIGN SUPPORT |
|  | EXISTING BUS STOP                  |
|  | EXISTING SIGN TO REMAIN            |
|  | EXISTING SIGN TO BE REMOVED        |
|  | PROPOSED SIGN                      |

## STANDARD PAVEMENT MARKING LEGEND:

- |                     |  |
|---------------------|--|
| TYPE B CLASS 1..... | WHITE 4" WIDTH                           |
| TYPE B CLASS 1..... | YELLOW 4" WIDTH                          |
| TYPE B CLASS 1..... | YELLOW 4" WIDTH, DOUBLE LINE, 4" SPACING |
| TYPE B CLASS 1..... | YELLOW 4" WIDTH, DOUBLE LINE, 8" SPACING |
| TYPE B CLASS 1..... | WHITE 6" WIDTH                           |
| TYPE B CLASS 1..... | WHITE 6" WIDTH, 2" LONG, 4" SKIP         |
| TYPE B CLASS 1..... | YELLOW 12" WIDTH                         |
| TYPE B CLASS 1..... | WHITE 18" WIDTH                          |
| TYPE B CLASS 1..... | WHITE 24" WIDTH                          |
| TYPE B CLASS 1..... | YELLOW 24" WIDTH                         |
| TYPE B CLASS 1..... | WHITE SINGLE ARROW                       |
| TYPE B CLASS 1..... | WHITE SHARED LANE ARROW                  |
| TYPE B CLASS 1..... | WHITE SEPARATE LANE BIVE SYMBOL          |
| TYPE B CLASS 1..... | FRADICATION OF LINEAR MARKING            |
| TYPE B CLASS 1..... | FRADICATION OF NON-LINEAR MARKING        |









DEPARTMENT OF  
ENVIRONMENTAL SERVICES  
Transportation Engineering and  
Construction Services  
2100 Clarendon Boulevard, Suite 600  
Arlington, VA 22201  
Phone: 703.228.5344  
Fax: 703.228.3719



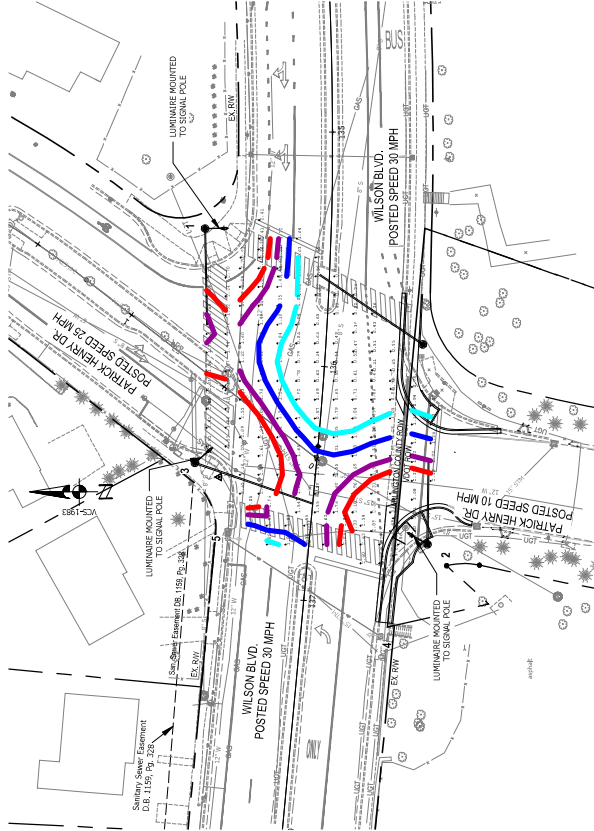
APPROVALS	DATE
DESIGNED: ZDH	7/26/2021
DRAWN: ZDH	07/15/2021
CHECKED: ASM	07/15/2021
IN CHARGE: Patrick M. Samaras	07/21/2021

REVISIONS	DATE

Photometric Plan  
Wilson Blvd. at Patrick Henry Dr.  
TRAFFIC SIGNAL UPGRADE  
AND INTERSECTION  
IMPROVEMENTS PLANS

DESIGNED: ZDH  
DRAWN: ZDH  
CHECKED: ASM  
FILENAME: T05S-Photometric-Plan-17-2021.dwg  
PATH: I:\Projects\2021\Wilson Blvd. at Patrick Henry Dr.\T05S-Photometric-Plan-17-2021.dwg  
PLOTTER: HP DesignJet T1100e  
PLOT DATE: February 23, 2021  
PLOT BY: Jhuar

SCALE: 1"=25'  
GRAPHIC SCALE  
0 25 50  
SHEET 30 of 31



Luminaire ID Number	Pole Type	Luminaires Wattage/Type	Light Loss Factor (LLF)	Mounting Height	Color Temperature	Distribution	Initial Lumens	Finish	Baseline, Station, Offset
1	Arl. Co. Mast Arm Pole	145W Cobalthead LED	0.95	32.25'	4000K	Type III	16,046	Per Signal Plans	Per Signal Plans
2	Arl. Co. Mast Arm Pole	145W Cobalthead LED	0.95	32.25'	4000K	Type III	16,046	Per Signal Plans	Per Signal Plans
3	Arl. Co. Mast Arm Pole	145W Cobalthead LED	0.95	32.25'	4000K	Type III	16,046	Per Signal Plans	Per Signal Plans
4	Ex. Dominion Energy Pole (luminaire to be removed)	Cobalthead 250WPS Enclosed Drop Lens	0.64	30'	Not Spec'd	Type III	16,805	N/A	N/A
5	Ex. Dominion Energy Pole (luminaire to be removed)	Cobalthead 250WPS Enclosed Drop Lens	0.64	30'	Not Spec'd	Type III	16,805	N/A	N/A

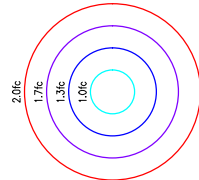
Wilson Boulevard at Patrick Henry Drive: Photometric Analysis Results					
Intersection Criteria <sup>1</sup>	Avg.	Max.	Min.	Avg/Min <sup>3</sup>	
				Avg/Min <sup>3</sup>	Max/Min <sup>3</sup>
Intersection	1.40	-	-	4.00	-
Crosswalk Criteria <sup>2</sup>	1.56	3.49	0.49	3.18	7.12
East Leg Crosswalk	1.40	-	-	4.00	-
North Leg Crosswalk	0.97	2.93	0.26	3.73	11.20
South Leg Crosswalk	2.36	3.91	1.66	1.42	2.36
West Leg Crosswalk	2.23	4.10	0.78	2.86	5.26
Notes	2.01	3.86	0.89	2.26	4.34

NOTES:

1. All calculations for roadway intersection lighting based on design requirements of Arlington County Lighting Specification Section 14.04.2, Table 14.04.2, for two intersecting streets with residential land use.
2. Horizontal crosswalk lighting designed to provide uniform lighting throughout intersection. Horizontal criteria for crosswalk lighting based on design requirements of Arlington County Lighting Specification Section 14.04.2 for arterial street lighting with commercial land use.
3. Uniformities (Avg./Min. and Max./Min.) are "node-to-node" criteria.

- LEGEND
- PROPOSED MAST ARM POLE WITH COBRA FIXTURE
  - EXISTING UTILITY POLE WITH EX. COBRA FIXTURE
  - LUMINAIRE IDENTIFICATION NUMBER

ISOLINE LEGEND:





**DEPARTMENT OF  
ENVIRONMENTAL SERVICES**

Transportation Engineering and  
Operations Bureau  
100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703 228 3344  
Fax: 703 228 3719



DATE	APPROVALS
07/16/2021	<i>[Signature]</i> TRAFFIC SIGNAL ENGINEER
07/20/2021	<i>[Signature]</i> PROJECT ENGINEERING MANAGER
07/16/2021	<i>[Signature]</i> 07/16/2021 WATER POWER STAFFS BUREAU CHIEF
07/21/2021	<i>[Signature]</i> WAGO BUREAU CHIEF
07/21/20	<i>[Signature]</i> Dennis M. Leach

REVISIONS	DATE

Communications Plan  
Wilson Blvd. at Patrick Henry Dr.

ASSIGNED: ZDH  
DRAWN: JCW  
CHECKED: ASM  
SS UTILITY TRANSMITTAL #: xxx

FILENAME: T085-298-Communications\_Ha  
[http://url.com/fits/CloudProjects/20181027\\_1827\\_](http://url.com/fits/CloudProjects/20181027_1827_)  
 PATH: Coder170\_101\_IntersectionBundle/aid/101e

LOTTED: February 26, 2021  
 LOTTED BY: jkuu

CALE: 11-101

HEET 29B of 31

## TRAFFIC SIGNAL UPGRADE AND INTERSECTION IMPROVEMENTS PLANS

## CONSTRUCTION NOTES

3. CONTRACT ADMINISTRATION COUNTY DEPARTMENT OF TECHNOLOGY SERVICES (DTS) SHALL BE RESPONSIBLE FOR THE COORDINATION OF THE FIBER OPTIC NETWORK, AND TO COORDINATE RELOCATION OF FIBER OPTIC NETWORK BOX.
4. INSTALL NEW FIBER OPTIC NETWORK BOX AND CONDUIT TO CONTROL BOX. INTERCEPT EXISTING FIBER OPTIC LINE AT PROPOSED JUNCTION BOX LOCATION.
5. ALL PROPOSED CONDUITS SHOULD BE POLE SCHEDULE 40.
6. ALL PROPOSED CONDUIT SHALL HAVE #6 AWG (EOL) FOR GROUNDING SYSTEM AND SHALL HAVE TIE-BACK WIRE.
7. PROPOSED COMMUNICATIONS CONDUITS SHALL HAVE A PULL WIRE FOR FUTURE FIBER OPTIC CABLE.
8. CONDUIT SYSTEM SHALL BE ADDED TO CONNECT EXISTING COMMUNICATIONS NETWORK WITH THE PROPOSED NETWORK. THE NETWORK SHALL BE DESIGNED BY THE PLANS OR AS DIRECTED BY THE COUNTY ENGINEER. THE CONTRACTORS ARE RESPONSIBLE FOR MAINTAINING SIGNAL COMMUNICATIONS THROUGHOUT THE PROJECT. COORDINATING WITH CALISTOGA COUNTY DUTS FOR FIBER-RELATED WORK.

WILSON BLVD.  
POSTED SPEED 30 MPH

WILSON BLVD.  
POSTED SPEED 30 MPH

PATRICK HENRY DRIVE  
POSTED SPEED 30 MPH

LEGEND

EXISTING

PROPOSED

CONTROL CABINET

UNINTERRUPTIBLE POWER SUPPLY (UPS)

FIBER OPTIC JUNCTION BOX

CONDUIT RUN

SCALE: 1"=10'

HEET 29B of 31

**ARLINGTON COUNTY, VIRGINIA  
OFFICE OF THE PURCHASING AGENT  
INVITATION TO BID NO. 22-DES-ITB-474  
CONSTRUCTION SERVICES FOR NORTHWEST ARLINGTON SIGNAL UPGRADES**

Bid Item Number	Description	Qty	Unit	Unit Price	Total Price
<b>EXCAVATION &amp; SITE WORK</b>					
02200-C1-00010	General Excavation, only when not included in other pay items	426	CY	\$ 10.00	\$ 4,260.00
02200-C1-00020	Aggregate, VDOT #21-B (Compacted in Place per VDOT standards & Specs)	133	CY	\$ 52.00	\$ 6,916.00
<b>CONCRETE WORK</b>					
02750-C2-00030	Concrete Curb, Standard Header Curb C-3 (Arlington County Detail R-2.0), includes curb for aprons, ramps, etc.	230	LF	\$ 35.00	\$ 8,050.00
02750-C2-00040	Concrete Curb & Gutter, Standard C-2 and C-2R (Arlington County Detail R-2.0), includes curb & gutter for aprons, ramps, etc.	480	LF	\$ 35.00	\$ 16,800.00
02750-C2-00050	Valley Gutter (Arlington County Detail R-2.9, including all materials as shown in detail)	10	SY	\$ 100.00	\$ 1,000.00
02750-C2-00060	Concrete Curb & Gutter, Combination 6" (VDOT CG-6), includes curb & gutter for aprons, ramps, etc.	180	LF	\$ 35.00	\$ 6,300.00
02750-C2-00070	Concrete Curb & Gutter, Transition From VDOT St'd. CG-6 to ARL. CO. St'd. C-2	25	LF	\$ 35.00	\$ 875.00
02611-C2-00080	Concrete Sidewalk, 4" Thickness (Arlington County Detail R-2.0)	464	SY	\$ 70.00	\$ 32,480.00
02611-C2-00090	CG-12 Detectable Warning Surface	28	SY	\$ 200.00	\$ 5,600.00
<b>ASPHALT PAVEMENT WORK</b>					
02600-C3-00100	Asphalt Concrete, Planing or Milling (2" Depth)	2356	SY	\$ 6.00	\$ 14,136.00
02600-C3-00110	Asphalt Concrete, Base Course (VDOT BM-25.0A)(6" Depth Assumed)	98	TON	\$ 120.00	\$ 11,760.00
02600-C3-00120	Asphalt Concrete, Surface Course (VDOT SM-9.5D)(2" Depth Assumed)	310	TON	\$ 120.00	\$ 37,200.00
<b>NS ASPHALT PAVEMENT WORK</b>					
<b>STORM SEWER WORK</b>					
02550-C4-00130	Catch Basin Structure Top, Remove & Replace	1	EA	\$ 3,511.80	\$ 3,511.80
02550-C4-00140	Adjust Storm Manhole to New Grade (Arlington County Detail S-2.5), Type A	2	EA	\$ 250.00	\$ 500.00
02550-C4-00150	Adjust Storm Manhole to New Grade (Arlington County Detail S-2.5), Type B	1	EA	\$ 250.00	\$ 250.00
02550-C4-	NS Trench Drain and Cover	7	LF	\$ 360.00	\$ 2,520.00
02550-C4-	8" Pipe, PVC ( Schedule 40 or SDR 35), In Place Upto 6' Deep	8	LF	\$ 250.00	\$ 2,000.00
02550-C4-00180	Adjust Verizon Manhole to New Grade (Arlington County Detail S-2.5), Type A	1	EA	\$ 250.00	\$ 250.00
02550-C4-00190	Convert Catch Basin to Manhole	1	EA	\$ 4,200.00	\$ 4,200.00
02550-C4-00200	Core Drill and Connect New Concrete Pipe to Existing Storm Manhole, Catch Basin, Drop Inlet, Yard Inlet, or Grate Inlet	1	EA	\$ 1,500.00	\$ 1,500.00
<b>WATERMAIN &amp; UTILITY WORK</b>					
02550-C6-00210	Reset Existing Fire Hydrant	1	EA	\$ 1,500.00	\$ 1,500.00
02550-C6-00220	Install New Fire Hydrant	1	EA	\$ 5,600.00	\$ 5,600.00
02550-C6-00230	Water Valve Box vertical Adjustment to New Grade	11	EA	\$ 200.00	\$ 2,200.00
02550-C6-00240	Gas Valve Box vertical Adjustment to New Grade	2	EA	\$ 200.00	\$ 400.00
02550-C6-00250	6-Inch Water Main, DIP CL-53, Up to 6' Deep	17	LF	\$ 250.00	\$ 4,250.00
02550-C6-00260	6-Inch Gate Valve & Valve Box	1	EA	\$ 4,000.00	\$ 4,000.00
02550-C6-00270	Connect To Existing 8-Inch Water Main	1	EA	\$ 2,500.00	\$ 2,500.00
02550-C6-00280	Abandon/Remove Existing Fire Hydrant	1	EA	\$ 1,000.00	\$ 1,000.00
02550-C6-00290	Telecommunication Handhole Box Vertical Adjustment to New Grade	1	EA	\$ 200.00	\$ 200.00
<b>SANITARY SEWER WORK</b>					
02510-C7-00300	Adjust Sanitary Manhole to New Grade (Arlington County Detail S-2.5), Type A	3	EA	\$ 250.00	\$ 750.00
<b>TRAFFIC SIGNAL WORK</b>					
13160-C8-00310	Traffic Signal Upgrade at N Glebe Rd & Chesterbrook Rd (As outlined in the plans)	1	LS	\$ 500,000.00	\$ 500,000.00
13160-C8-00320	Traffic Signal Upgrade at Williamsburg Blvd & N Westmoreland St (As outlined in the plans)	1	LS	\$ 485,000.00	\$ 485,000.00
13160-C8-00330	Traffic Signal Upgrade at Wilson Blvd & Patrick Henry Dr (As outlined in the plans)	1	LS	\$ 550,000.00	\$ 550,000.00



BIDDER NAME: Ardent Co

AUTH. SIGNATURE

*A. Hoshay*

Bid Item Number	Description	Qty	Unit	Unit Price	Total Price
<b>PAVEMENT MARKING &amp; SIGNAGE WORK</b>					
02900-C1-00340	Traffic Control Sign (Typical Stop, Yield, No Parking, Speed Limit, or Similar), Install per Detail SG-1.0	10	EA	\$ 300.00	\$ 3,000.00
02900-C1-00350	Traffic Control Sign (Typical Stop, Yield, No Parking, Speed Limit, or Similar), Remove and Dispose	9	EA	\$ 150.00	\$ 1,350.00
02900-C1-00360	Four (4) Inch White or Yellow Longitudinal Solid Line	585	LF	\$ 0.92	\$ 538.20
02900-C1-00370	Six (6) Inch White or Yellow Longitudinal Solid Line	460	LF	\$ 1.77	\$ 814.20
02900-C1-00380	Twenty Four (24) Inch White or Yellow Transverse or Diagonal Solid Lines	1350	LF	\$ 7.22	\$ 9,747.00
02900-C1-00390	Single Arrows	2	EA	\$ 106.00	\$ 212.00
02900-C1-00400	Combination Arrows	1	EA	\$ 195.00	\$ 195.00
02900-C1-00410	Standard Bicycle Symbols (MUTCD, Chapter 9C, Figure 9C-3), "Bike Symbol", "Helmeted Bicyclist Symbol"	3	EA	\$ 277.00	\$ 831.00
13160-C8-00420	Eighteen (18) Inch White or Yellow Transverse Solid Line (Note: used for stop bars)	135	LF	\$ 6.88	\$ 928.80
02900-C1-00410	Removal of Existing Longitudinal Lines (Four (4) Inch Width)	205	LF	\$ 1.00	\$ 205.00
13160-C8-00420	Removal of Existing Longitudinal Lines (Eighteen (18) Inch Width)	75	LF	\$ 3.00	\$ 225.00
13160-C8-00430	Removal of Existing Longitudinal Lines (Twenty Four (24) Inch Width)	250	LF	\$ 4.00	\$ 1,000.00
<b>GENERAL &amp; MISCELLANEOUS</b>					
01500-C1-00460	Silt Fence, without Wire Support (Virginia Erosion & Sediment Control Handbook Standard & Specification 3.05)	140	LF	\$ 2.00	\$ 280.00
02200-C1-00470	Topsoil	24	CY	\$ 35.00	\$ 840.00
02801-C1-00480	Sod, Zoysia	200	SY	\$ 3.50	\$ 700.00
01500-C1-00490	Storm Drain Inlet Protection, Block & Gravel Curb Inlet Application (per Virginia Erosion & Sediment Control Handbook Standard & Specification 3.07)	19	EA	\$ 250.00	\$ 4,750.00
01500-C1-00500	Tree Protection, Fencing and Amoring Applications (per Virginia Erosion & Sediment Control Handbook Standard & Specification 3.38)	45	LF	\$ 15.00	\$ 675.00
2800-C11-00510	Landscape/Retaining Wall, Excluding Foundation (Segmental Non-Reinforced Interlocking Concrete Wall), Height Less Than 3' Exposed Face (Versa-Lok, or County Approved Alternate System)	35	SF	\$ 100.00	\$ 3,500.00
01000-M2-00520	Maintenance of Traffic (MOT)	3	LS	\$ 70,000.00	\$ 210,000.00
	Mobilization	3	LS	\$ 25,000.00	\$ 75,000.00
<b>TOTAL</b>					<b>\$ 2,032,300.00</b>





# COMMONWEALTH of VIRGINIA

## DEPARTMENT OF TRANSPORTATION


4975 Alliance Drive  
Fairfax, VA 22030

**CHARLES A. KILPATRICK, P.E.**  
COMMISSIONER

September 29, 2016

### MEMORANDUM

**TO:** NOVA District Staff

**FROM:** Hari Sripathi, P.E.  
Regional Operations Director 

**SUBJECT:** Lane Closures in Nova District

As a follow up to the Lane Closures in Nova District memorandum dated April 27, 2012, enclosed are the updated guidelines for lane closures.

These updated guidelines will be effective immediately. All existing and previously approved projects are encouraged to review their respective contract documents and make adjustments if possible.

# Lane Closure Guidelines

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**-For Northern Virginia-**



**Virginia Department of Transportation  
Northern Region Operations**

**September 21, 2016**

## Instruction

The purpose of this memorandum is to present guidelines for lane closure hours for construction, maintenance, permits, and special events in Northern Virginia.

The first version of the lane closure guidelines was issued in April 2012. In the past four years, there have been completed and on-going roadway construction projects in the NoVA District, such as I-495 and I-95 express lanes and the I-66 spot improvements. As these guidelines are applied and implemented, modifications and updates to these guidelines have become necessary. Same as the previous version, the modifications were made based on traffic volume; roadway characteristics; comments from staff; and considering the public tolerance for the lane closure during certain time periods of the day.

It should be noted that these guidelines must be used as a starting point for discussion at the project level. On large scale projects with robust community outreach and a Traffic Management Plan, these hours could be extended. If project staff would like to modify these hours for interstate or major arterials, they must work with NRO Traffic Operations staff for recommendations and obtain final approval from their functional Assistant District Administrator (ADA).

Please review the existing contracts and discuss the deviations from these hours with your functional ADA.

## Restriction of Operations:

In addition to the allowable lane closure hours specified in the tables, the restrictions listed below shall be followed.

### 1. Peak Hours Lane Closures

Any lane reductions (temporary or permanent) during the peak periods (Monday to Friday, 6:00AM to 9:00AM and 3:30PM to 6:30PM) on roads with an AADT above or equal to 10,000 vehicles requires consultation with the Regional Operations Director (ROD) and Public Affairs Manager.

### 2. Complete Roadway Closures

If there are complete road closures on any road for construction or maintenance work, the ROD and Public Affairs Manager must be consulted.

Complete Roadway Closures shall be limited to 20 to 30 minutes intermittent stoppage for some specific work activities.

If the closure duration is above 30 minutes, it shall be approved separately with full Maintenance of Traffic and Traffic Management Plans.

### 3. Construction in Residential Subdivisions

Road work within residential subdivisions and/or cul-de-sac streets should be conducted during daytime hours to avoid night time noise issues.

#### 4. Express Lanes (I-95 & I-495)

All I-95 and I-495 Express Lane closures shall be coordinated with the Express Lanes Operations Center at least 5 business days in advance using their Authorization to Work form (available from the Express Lanes Operations Center at (571) 419-6046. Complete road closures on the I-95 Express Lanes and I-495 Express Lanes will be limited to 30 minutes or less

#### 5. Holiday

In addition to the Sunday or Holiday work limitations, mobile, short duration, short-term stationary or intermediate-term stationary temporary traffic control zone lane closures on mainline lanes, shoulders or ramps shall not be performed during the following Holiday time periods without the written permission of the Engineer. Additionally, long-term stationary temporary traffic control zones shall not be initially put in place, adjusted, or removed during the following Holiday time periods without the written permission of the Engineer (VDOT 2016 Standard Specifications, updated 7/2016):

- **January 1:** From Noon on the preceding day until Noon on the following day, except as indicated below.
- **Martin Luther King, Jr. Day and Lee Jackson Day\*:** From Noon on the preceding Thursday to Noon on the following Tuesday.
- **Presidents Day\*:** As indicated below.
- **Easter\*:** As indicated below.
- **Memorial Day:** As indicated below.
- **July 4:** From Noon on the preceding day until Noon on the following day, except as indicated below.
- **Labor Day:** As indicated below.
- **Columbus Day\*:** As indicated below.
- **Veterans Day\*:** From Noon on the preceding day until Noon on the following day, except as indicated below.
- **Thanksgiving Day:** From Noon on the Wednesday proceeding Thanksgiving Day until Noon on the Monday following Thanksgiving Day.
- **Christmas Day:** From Noon on the preceding day until Noon on the following day, except as indicated below.

**If the Holiday occurs on a Friday or Saturday:** From Noon on the preceding Thursday to Noon on the following Monday.

**If the Holiday occurs on a Sunday or Monday:** From Noon on the preceding Friday to Noon on the following Tuesday.

**\*Note:**

For low volume roadways (minor arterial), lane closures will not be allowed during the holidays; however, there will be no restriction to the preceding day and the following day.

INTERSTATE 395 & INTERSTATE 95					
WEEKDAY		Northbound			
		Single-Lane Closures or Shoulder	Two-Lane Closures	Multiple-Lane Closures	Complete Road Closure
Segment 1	14 <sup>th</sup> St. Bridge to Springfield Interchange	10:00AM to 3:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:00PM to 5:00AM			
Segment 2	Springfield Interchange to Rt.123	9:30AM to 3:30PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:00PM to 5:00AM			
Segment 3	Rt.123 to Prince William / Stafford County line	9:30AM to 3:30PM	10:00PM to 4:30AM	11:00PM to 4:00AM	12:00AM to 4:00AM
		9:00PM to 5:00AM			
Segment 4	Prince William / Stafford County line to Rt.3 Exit 130	9:30AM to 3:30PM	10:00PM to 4:30AM	n/a	12:00AM to 4:00AM
		9:00PM to 4:30AM			
Segment 5	Rt.3 Exit 130 to Caroline / Hanover County line	9:00AM to 3:30PM	10:00PM to 4:30AM	n/a	12:00AM to 4:00AM
		9:00PM to 5:30AM			
All lanes open at 12:00 noon on Friday					
WEEKDAY		Southbound			
		Single-Lane Closures or Shoulder	Two-Lane Closures	Multiple-Lane Closures	Complete Road Closure
Segment 1	14 <sup>th</sup> St. Bridge to Springfield Interchange	10:00AM to 2:30PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:30PM to 5:00AM			
Segment 2	Springfield Interchange to Rt.123	9:00AM to 2:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:30PM to 5:00AM			
Segment 3	Rt.123 to Prince William / Stafford County line	9:00AM to 2:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 4:00AM
		9:30PM to 6:00AM			
Segment 4	Prince William / Stafford County line to Rt.3 Exit 130	9:00AM to 2:00PM	10:00PM to 5:30AM	n/a	12:00AM to 4:00AM
		9:30PM to 6:00AM			
Segment 5	Rt.3 Exit 130 to Caroline / Hanover County line	9:00AM to 3:00PM	10:00PM to 5:30AM	n/a	12:00AM to 4:00AM
		9:30PM to 6:00AM			
All lanes open at 11:00am on Friday					



<b>INTERSTATE 395 &amp; INTERSTATE 95</b>			
<b>WEEKEND</b>	<b>Northbound/Southbound*</b>		
	<b>Single-Lane Closures or Shoulder</b>	<b>Multiple-Lane Closures</b>	<b>Complete Road Closure</b>
Friday to Saturday	10:00PM to 7:00AM	11:00PM to 6:00AM	12:00AM to 5:00AM
Saturday to Sunday	10:00PM to 7:00AM	11:00PM to 6:00AM	12:00AM to 5:00AM
Sunday to Monday	10:00PM to 5:00AM	11:00PM to 4:00AM	12:00AM to 4:00AM
* For special operations, depending on time of year, additional hours may be allowed with proper ADA/ROD approval.			

	<b>REVERSIBLE LANES (HOV &amp; EXPRESS LANES)*</b>	
	<b>Single-Lane Closures or Shoulder</b>	<b>Complete Road Closure**</b>
<b>WEEKDAY</b>	9:30PM (Sunday to Thursday) to 4:00AM (Monday to Friday)	11:00PM to 4:00AM
<b>WEEKEND</b>	11:00PM (Friday to Saturday) to 9:00AM (Saturday to Sunday)	11:00PM to 4:00AM
* Direction of traffic control for all lane closures in reversible lanes will need to be adjusted as necessary to face direction of traffic.		
** Complete Road Closure on Express Lanes limited to 30 minutes or less.		

INTERSTATE 495 (BELTWAY)					
WEEKDAY		Inner Loop			
		Single-Lane Closures or Shoulder	Two-Lane Closures	Multiple-Lane Closures	Complete Road Closure
Segment 1	A. L. Bridge to Springfield Interchange	10:00AM to 3:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 5:00AM
		9:30PM to 5:00AM			
Segment 2	Springfield Interchange to W.W. Bridge	10:00AM to 3:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 5:00AM
		9:30PM to 5:00AM			
All lanes open at 12:00 noon on Friday					
WEEKDAY		Outer Loop			
		Single-Lane Closures or Shoulder	Two-Lane Closures	Multiple-Lane Closures	Complete Road Closure
Segment 1	A. L. Bridge to Springfield Interchange	9:30AM to 2:30PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 5:00AM
		9:30PM to 5:00AM			
Segment 2	Springfield Interchange to W.W. Bridge	10:00AM to 3:00PM	10:00PM to 5:00AM	11:00PM to 5:00AM	12:00AM to 5:00AM
		9:30PM to 5:00AM			
All lanes open at 12:00 noon on Friday					
WEEKEND		Inner/Outer Loop			
		Single-Lane Closures or Shoulder	Multiple-Lane Closures		Complete Road Closure
Friday to Saturday		10:00PM to 8:00AM	11:00PM to 7:00AM		12:00AM to 5:00AM
Saturday to Sunday		10:00PM to 9:00AM	11:00PM to 8:00AM		12:00AM to 5:00AM
Sunday to Monday		9:30PM to 5:00AM	11:00PM to 5:00AM		12:00AM to 5:00AM

EXPRESS LANES		
	Single-Lane Closures or Shoulder	Complete Road Closure**
WEEKDAY	9:30PM (Sunday to Thursday) to 4:00AM (Monday to Friday)	11:00PM to 4:00AM
WEEKEND	11:00PM (Friday to Saturday) to 9:00AM (Saturday to Sunday)	11:00PM to 4:00AM
** Complete Road Closure on Express Lanes limited to 30 minutes or less.		

INTERSTATE 66					
WEEKDAY		Eastbound			
		Single-Lane Closures or Shoulder	Two-Lane Closures	Multiple-Lane Closures	Complete Road Closure
Segment 1	Prince William County line to Route 286	10:00AM to 3:30PM	9:00PM to 5:00AM	10:00PM to 5:00AM	12:00AM to 4:00AM
		8:00PM to 5:00AM			
Segment 2	Route 286 to Beltway	11:00AM to 3:30PM	10:00PM to 5:00AM**	11:00PM to 5:00AM**	12:00AM to 4:00AM
		9:00PM to 5:00AM			
Segment 3	Beltway to TR Bridge (Inside Beltway)	9:30PM to 5:00AM	n/a	n/a	12:00AM to 4:00AM
All lanes open at 12:00 noon on Friday					
WEEKDAY		Westbound			
		Single-Lane Closures or Shoulder	Two-Lane Closures	Multiple-Lane Closures	Complete Road Closure
Segment 1	Prince William County line to Route 286	9:00AM to 2:30PM	9:30PM to 6:00AM	10:30PM to 5:00AM	12:00AM to 4:00AM
		9:00PM to 6:00AM			
Segment 2	Route 286 to Beltway	9:00AM to 2:00PM*	10:00PM to 5:00AM**	11:00PM to 5:00AM**	12:00AM to 4:00AM
		9:30PM to 5:00AM			
Segment 3	Beltway to TR Bridge (Inside Beltway)	9:30AM to 2:00PM*	10:00PM to 5:00AM**	n/a	12:00AM to 4:00AM
		10:00PM to 5:00AM			
All lanes open at 12:00 noon on Friday					
* Only be considered for three lane segment.					
** Consider opening shoulder lane, where Applicable.					

WEEKEND		Eastbound/Westbound		
Outside Beltway		Single-Lane Closures or Shoulder	Multiple-Lane Closures	Complete Road Closure
Friday to Saturday		9:00PM to 9:00AM	10:00PM to 6:00AM	12:00AM to 5:00AM
Saturday to Sunday		9:00PM to 9:00AM	10:00PM to 6:00AM	12:00AM to 5:00AM
Sunday to Monday		8:00PM to 5:00AM	9:00PM to 5:00AM	12:00AM to 4:00AM
Inside Beltway		Single-Lane Closures or Shoulder	Multiple-Lane Closures	Complete Road Closure
Friday to Saturday		10:00PM to 6:00AM	n/a	12:00AM to 5:00AM
Saturday to Sunday		10:00PM to 6:00AM	n/a	12:00AM to 5:00AM
Sunday to Monday		9:30PM to 5:00AM	n/a	12:00AM to 4:00AM

Lane Closure Guidelines – 9/21/2016

VDOT - NOVA

ROUTE 267 CONNECTOR				
WEEKDAY	Eastbound		Westbound	
	Single-Lane Closures or Shoulder	Complete Road Closure	Single-Lane Closures or Shoulder	Complete Road Closure
Monday to Friday	11:00AM to 3:00PM	12:00AM to 4:00AM	9:30AM to 3:00PM	12:00AM to 4:00AM
	9:30PM to 5:00AM		9:00PM to 5:00AM	
All lanes open at 12:00 noon on Friday				

WEEKEND	Eastbound/Westbound	
	Single-Lane Closures or Shoulder	Complete Road Closure
Friday to Saturday	10:00PM to 8:00AM	12:00AM to 5:00AM
Saturday to Sunday	11:00PM to 8:00AM	12:00AM to 5:00AM
Sunday to Monday	9:00PM to 5:00AM	12:00AM to 4:00AM

Single-Lane Closures* or Shoulder					
ARTERIAL	WEEKDAY		WEEKEND		
	Monday to Thursday	Friday	Friday to Saturday	Saturday to Sunday	Sunday to Monday
Major Arterials**	9:30AM to 3:00PM	9:30AM to 2:00 PM	10:00PM to 9:00AM	10:00PM to 8:00AM	10:00PM to 5:00AM
	10:00PM to 5:00AM				
All Other Roadways	9:00AM to 3:30PM	9:00AM to 2:00 PM	10:00PM to 9:00AM	9:00PM to 9:00AM	10:00PM to 5:00AM
	9:00PM to 5:00AM				

Multiple-Lane Closures					
ARTERIAL	WEEKDAY		WEEKEND		
	Monday to Thursday	Friday	Friday to Saturday	Saturday to Sunday	Sunday to Monday
Major Arterials**	10:00PM to 5:00AM	Not allowed until 11:00PM	11:00PM to 5:00AM	11:00PM to 6:00AM	11:00PM to 5:00AM
All Other Roadways	9:00PM to 5:00AM	Not allowed until 10:00PM	10:00PM to 6:00AM	10:00PM to 6:00AM	10:00PM to 5:00AM

\*Single-lane closures only permitted for multiple-lane roadways.

\*\*Major Arterials defined as Primary Roads, high volume Secondary Roads, and all other routes that connect directly to Interstates.



**ATTACHMENT – E****ARLINGTON COUNTY, VA  
REQUEST FOR INFORMATION FORM****PROJECT:** \_\_\_\_\_**RFI NUMBER:** \_\_\_\_\_  
**PROJECT NO.:** \_\_\_\_\_**FOR CONTRACTOR ROUTING:**Contractor: \_\_\_\_\_  
Work Category: \_\_\_\_\_Transmittal No.: \_\_\_\_\_  
Date: \_\_\_\_\_**TO** ☐ **(County Project Officer)**  
☐ **(Consultant)**  
☐ **(Other)**☐ Action ☐ Faxed to \_\_\_\_\_ ☐ Emailed ☐ Mailed Pages \_\_\_\_  
☐ Action ☐ Faxed to \_\_\_\_\_ ☐ Emailed ☐ Mailed Pages \_\_\_\_  
☐ Action ☐ Faxed to \_\_\_\_\_ ☐ Emailed ☐ Mailed Pages \_\_\_\_**REGARDING:** \_\_\_\_\_**SPEC. SECTION:** \_\_\_\_\_ **DWG. NO.:** \_\_\_\_\_**EXPLANATION OF ISSUE:** Provide complete description of request with sketches or photos if necessary, and present status of work)**RECOMMENDATION / SUGGESTED SOLUTION:****RESPONSE PRIORITY:** ☐ EARLIEST CONVENIENCE ☐ RUSH (WORK IN PROGRESS)**REASON FOR REQUEST:** ☐ Existing Condition ☐ Non-conformance ☐ Clarification / Interpretation ☐ Agency Generated ☐ Other**CONTRACTOR:** \_\_\_\_\_**BY:** \_\_\_\_\_ **DATE:** \_\_\_\_\_ **Dist:** \_\_\_\_\_**ARCHITECT'S/ENGINEER'S ROUTING:** (for A/E use only)

To: \_\_\_\_\_ Date: \_\_\_\_\_ Return to: \_\_\_\_\_ Date: \_\_\_\_\_

**TO:** **(contractor)** ☐ Faxed to \_\_\_\_\_ ☐ Emailed ☐ Mailed ☐ Hand delivered**RESPONSE:**

A

- ☐ The above is considered a change. The following document will be used for processing: \_\_\_\_\_
- ☐ The above is consistent with the intent of and reasonably inferable from Contract Documents, or makes minor changes in the Work without change in Contract Sum or Contract Time. If Contractor does not agree, submit written notice within twenty (20) days substantiating claim in accordance with Contract Documents for approval.
- ☐ This RFI is returned without response for the following reason: ☐ Incomplete or lack of detailed information. ☐ Related to "means & methods".  
☐ Lack of adequate Coordination Drawings. ☐ Is a "Substitution Request".  
☐ Response required by others.

**FROM:** \_\_\_\_\_**BY:** \_\_\_\_\_ **DATE:** \_\_\_\_\_**Dist:** ☐ \_\_\_\_\_ ☐ File



## **State & Federal Roads in Arlington County, VA**

### **State Routes**

- Interstate 66: Custis Memorial Parkway
- Interstate 395: Henry G. Shirley Memorial Highway
- U.S. Route 1: Jefferson Davis Highway
- State Route 27: Washington Boulevard (Memorial Bridge to U.S. Route 50)
- U.S. Route 29: Lee Highway
- U.S. Route 50: Arlington Boulevard
- State Route 110: Jefferson Davis Highway (Rosslyn to Crystal City)
- State Route 120: Glebe Road
- State Route 123: Chain Bridge Road
- State Route 124: Spout Run Parkway (Lee Highway to Lorcom Lane)
- State Route 233: Airport Viaduct
- State Route 237: Washington Boulevard (North Glebe Road to Lee Highway)
- State Route 237: Fairfax Drive (Kirkwood Road to North Glebe Road)
- State Route 237: 10th Street North (U.S. Route 50 to Kirkwood Road)
- State Route 309: Old Dominion Drive

### **Federal Routes**

- Arlington Hall Street
- Boundary Channel Drive
- George Washington Memorial Parkway
- Fort Myer streets, including Arlington National Cemetery
- Marshall Drive (North Meade Street to U.S. Route 110)
- Memorial Avenue
- Pentagon Street
- Spout Run Parkway (Lorcom Lane to George Washington Memorial Parkway)

**INSURANCE CHECKLIST****CERTIFICATE OF INSURANCE MUST SHOW ALL COVERAGE AND ENDORSEMENTS MARKED "X".****COVERAGES REQUIRED****LIMITS (FIGURES DENOTE MINIMUMS)**

- X 1. Workers' Compensation ..... Statutory limits of Virginia
- X 2. Employer's Liability ..... \$500,000/accident, \$500,000/disease, \$500,000/disease policy limit
- X 3. Commercial General Liability ..... \$2,000,000 CSL BI/PD each occurrence, \$4 Million annual aggregate
- X 4. Premises/Operations ..... \$500,000 CSL BI/PD each occurrence, \$1 Million annual aggregate
- X 5. Automobile Liability ..... \$1 Million BI/PD each accident, Uninsured Motorist
- X 6. Owned/Hired/Non-Owned Vehicles ..... \$1 Million BI/PD each accident, Uninsured Motorist
- X 7. Independent Contractors ..... \$1 Million CSL BI/PD each occurrence, \$1 Million annual aggregate
- X 8. Products Liability ..... \$1 Million CSL BI/PD each occurrence, \$1 Million annual aggregate
- X 9. Completed Operations ..... \$1 Million CSL BI/PD each occurrence, \$1 Million annual aggregate
- X 10. Contractual Liability (Must be shown on Certificate) ..... \$1 Million CSL BI/PD each occurrence, \$1 Million annual aggregate
- X 11. Personal and Advertising Injury Liability ..... \$1 Million each offense, \$1 Million annual aggregate
- X 12. Umbrella/Excess Liability ..... \$1 Million Bodily Injury, Property Damage and Personal Injury
13. Per Project Aggregate
14. Professional Liability
- a. Architects and Engineers ..... \$1 Million per occurrence/claim
- b. Asbestos Removal Liability ..... \$2 Million per occurrence/claim
- c. Medical Malpractice ..... \$1 Million per occurrence/claim
- d. Medical Professional Liability ..... \$1 Million per occurrence/claim
- X 15. Miscellaneous E&O/ Professional Liability ..... \$1 Million per occurrence/claim
16. Motor Carrier Act End. (MCS-90) ..... \$1 Million BI/PD each accident, Uninsured Motorist
17. Motor Cargo Insurance
18. Garage Liability ..... \$1 Million Bodily Injury, Property Damage per occurrence
19. Garagekeepers Liability ..... \$500,000 Comprehensive, \$500,000 Collision
20. Inland Marine-Bailee's Insurance ..... \$ \_\_\_\_\_
- X 21. Moving and Rigging Floater ..... Endorsement to CGL
22. Dishonesty Bond ..... \$ \_\_\_\_\_
- X 23. Builder's Risk ..... Provide Coverage in the full amount of contract
- X 24. XCU Coverage ..... Endorsement to CGL
25. USL&H ..... Federal Statutory Limits
- X 26. Carrier Rating shall be Best's Rating of A-VII or better or its equivalent
- X 27. Notice of Cancellation, nonrenewal or material change in coverage shall be provided to County at least thirty (30) days prior to action.
- X 28. The County shall be named Additional Insured on all policies except Workers Compensation, Errors and Omissions/Professional Liability and Auto.
- X 29. Certificate of Insurance shall show Bid Number and Bid Title.
30. Environmental Impairment Liability, including coverage of on-site clean up ..... BI/PD \$3 Million per occurrence/\$6 Million Aggregate
- a In addition to environmental impairment liability, if work requires clean up, remediation, and/or removal of bio-solids, bio-hazardous waste, and any hazardous or toxic material via transportation request:
- X Business Auto Liability ..... \$2 Million per occurrence with MCS-90 and CA9948 (or equivalent endorsements specifically referenced in the certificate of insurance)
31. Cyber insurance ..... \$2 Million per occurrence/Aggregate
32. OTHER INSURANCE REQUIRED: \_\_\_\_\_

**INSURANCE AGENT'S STATEMENT:**

I have reviewed the above requirements with the bidder named below and have advised the bidder of required coverages not provided through this agency.

AGENCY NAME: \_\_\_\_\_ AUTH. SIGNATURE: \_\_\_\_\_

**BIDDER'S STATEMENT:**

If awarded the contract, I will comply with contract insurance requirements.

BIDDER NAME: \_\_\_\_\_ AUTH. SIGNATURE: \_\_\_\_\_