



DEPARTMENT OF ENVIRONMENTAL SERVICES

Signal Systems and ITS
Traffic Engineering and Operations Bureau
2100 Clarendon Boulevard, Suite 900, Arlington, VA 22201
Phone: 703.228.3629 Fax: 703.228.3606 www.arlingtonva.us

Construction Drawings For:
S. Carlin Springs Road
Signal Upgrades
Intersection of:

- S. Carlin Springs Road & 6th Road South

THIS PROJECT CONSISTS OF TRAFFIC SIGNAL MODIFICATIONS AT THE INTERSECTION OF S. CARLIN SPRINGS ROAD WITH 6TH ROAD S. THE SIGNAL MODIFICATIONS INCLUDE REMOVING ALL EXISTING EQUIPMENT AND REPLACING WITH NEW EQUIPMENT, ACCESSIBLE PEDESTRIAN SIGNAL DEVICES, AND LIMITED SIDEWALK AND CURB AND GUTTER MODIFICATIONS.

SWM 20-0224

Signal Notes

A. POLES AND FOUNDATIONS

- 1. MAST ARM LENGTH IS TO BE AS SHOWN ON PLAN AND ALL MAST ARMS ARE TO BE FIELD DRILLED ONLY.
2. MAST ARM POLES SHALL BE DESIGNED TO THE PROPER HEIGHT TO ACCOMMODATE A STREET LIGHT LUMINAIRE AND INSTALLED IN ACCORDANCE WITH ARLINGTON COUNTY TRAFFIC SIGNAL & STREETLIGHT SPECIFICATIONS.
3. MAST ARM POLE FOUNDATIONS SHALL BE INSTALLED IN ACCORDANCE WITH ARLINGTON COUNTY STANDARDS AND SPECIFICATIONS. ALL POLES SHALL HAVE A 6-BOLT PATTERN.
4. AT THE COUNTY'S REQUEST, THE CONTRACTOR SHALL DIG TEST PITS TO VERIFY THAT SIGNAL POLE FOUNDATIONS WILL NOT CONFLICT WITH UNDERGROUND UTILITIES AND THAT FOUNDATIONS WILL FIT WITHIN THE EXISTING RIGHT-OF-WAY.
5. SIGNAL POLES AND MAST ARMS SHALL BE NON-ORNAMENTAL. COBRA LIGHTING SHALL BE LED.
6. SL1 COBRA LIGHTING SHALL BE LED TYPE RFL-145W64LED4K-T-R2M-UNIV-DMG-PH8-RCD7-[USA-003]-BK. SL2 DECORATIVE POST-TOP LIGHTING SHALL BE HADCO DECORATIVE POST-TOP LUMINAIRE WITH RELUME LED KIT (UAZ XRE LED 57.69W).

B. CONTROLLER AND FOUNDATION

- 1. NEW CONTROLLER CABINETS SHALL BE TS2, P TYPE WITH BATTERY BACKUP PER ARLINGTON COUNTY REQUIREMENTS.
2. CONTROLLER SHALL BE INTELIGHT X-3 AND SHALL BE INSTALLED AND SET AS FOLLOWS:
2.1 TO REST IN PHASE 2 & 6 GREEN INTERVAL
2.2 TO START/RESTART IN PHASE 2 & 6 YELLOW CHANGE INTERVAL
3. THE CONTROLLER CABINET AND FOUNDATION SHALL BE INSTALLED IN ACCORDANCE WITH ARLINGTON COUNTY TRAFFIC SIGNAL & STREETLIGHT SPECIFICATIONS 66-01, 66-02, AND 70-01.
4. THE COUNTY WILL PROVIDE SIGNAL TIMINGS TO THE CONTRACTOR FOR THE CONTROLLER WHEN THE INTERSECTION IS TOTALLY PREPARED FOR OPERATION. THE CONTRACTOR SHALL NOTIFY THE COUNTY IN WRITING 10 DAYS IN ADVANCE OF REQUIRING FINAL TIMINGS.

C. TRAFFIC SIGNAL HEADS

- 1. ALL NEW VEHICULAR SIGNAL SECTIONS SHALL BE 12 INCHES IN DIAMETER CAST ALUMINUM WITH LED DISPLAYS.
2. PEDESTRIAN SIGNAL HEAD SECTIONS SHALL BE CAST ALUMINUM WITH LED DISPLAYS (COUNTDOWN).
3. ALL SIGNAL HEADS SHALL BE YELLOW IN COLOR.

D. DETECTORS

- 1. ALL NEW PEDESTRIAN PUSH BUTTON STATIONS SHALL CONFORM TO ARLINGTON COUNTY'S SPECIFICATIONS FOR ACCESSIBLE SIGNAL DESIGN AND SHALL USE POLARA NAVIGATOR VIBRO-TACTILE/AUDIO PUSH BUTTON ASSEMBLIES UNLESS OTHERWISE SPECIFIED.
2. NEW OVERHEAD VIDEO DETECTION SHALL BE FLIR CAMERAS AND SHALL BE INSTALLED IN ACCORDANCE WITH COUNTY REQUIREMENTS.
3. EMERGENCY VEHICLE PRE-EMPTION (EVP) EQUIPMENT (GTT MODEL M711 OR M721), OR APPROVED SUBSTITUTE, SHALL BE INSTALLED COMPLETE WITH DISCRIMINATOR CARDS, WIRING, ETC. IN ACCORDANCE WITH ARLINGTON COUNTY STANDARDS.
4. EVP TO BE MOUNTED ON VEHICLE HEAD MOUNTING BRACKET OR AS APPROVED BY THE ENGINEER IN THE FIELD.

E. CONDUIT, CONDUCTORS, AND ELECTRICAL

- 1. ALL JUNCTION BOXES SHALL HAVE THE WORDS "ARLINGTON COUNTY TRANSPORTATION" CAST IN THE LID. ALL JUNCTION BOXES SHALL BE INSTALLED PER STANDARDS 61-01, 61-02, 61-03, AND 61-04.
2. METER PEDESTAL SHALL BE INSTALLED PER COUNTY STANDARDS. UNDERGROUND SERVICE SHALL BE OBTAINED FROM THE NEAREST UTILITY POLE OR SERVICE POINT. CONTRACTOR IS RESPONSIBLE FOR OBTAINING APPROVAL AND COORDINATING WITH POWER SERVICE COMPANY FOR CONNECTION.
3. CONDUIT SYSTEM SHALL BE ADDED TO CONNECT EXISTING COMMUNICATION CABLE PLANT TO THE NEW CONTROLLER CABINET LOCATION AS DIRECTED BY THE COUNTY ENGINEER.
4. ALL CONDUIT ENTERING INTO JUNCTION BOXES SHALL NOT EXTEND OVER 3" MAXIMUM NOR 2" MINIMUM INSIDE THE JUNCTION BOXES, AND SHALL BE FITTED WITH BELL ENDS OR BUSHING.
5. ALL JUNCTION BOXES SHALL HAVE A GROUND ROD INSTALLED. ALL JUNCTION BOXES SHALL BE PROPERLY CONNECTED TO THE INTERSECTION GROUNDING SYSTEM. METAL LIDS SHALL BE BONDED TO THE GROUNDING SYSTEM.
6. CONTRACTOR IS TO VERIFY DEPTHS OF UTILITIES AT PROPOSED CONDUIT CROSSINGS PRIOR TO EXCAVATING CONDUIT TRENCHES OR BORING.
7. ALL CONDUITS BENEATH ROADWAYS SHALL BE DIRECTIONAL DRILLED UNLESS DIRECTED OTHERWISE BY THE COUNTY CONSTRUCTION MANAGER. WHERE DIRECTED ON THE PLANS OR BY THE CONSTRUCTION MANAGER, THE CONTRACTOR SHALL INSTALL SPARE CONDUITS WITH PULL TAPE AND TRACER WIRE FOR ROAD CROSSINGS.
8. ALL EXISTING CONDUIT AND CABLES ARE BASED ON RECORD DRAWINGS OR WERE ESTIMATED. CONTRACTOR SHALL VERIFY CONDUIT FILL CAPACITY IN EXISTING CONDUITS PRIOR TO BEGINNING CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ARLINGTON COUNTY IF CONDUIT CAPACITY IS NOT AVAILABLE IN EXISTING CONDUIT FOR NEW CABLES.
9. NEW CCTV CAMERAS SHALL BE INSTALLED IN ACCORDANCE WITH ARLINGTON COUNTY REQUIREMENTS. CONTRACTOR SHALL CONFIRM MOUNTING LOCATION OF CCTV CAMERA WITH COUNTY PRIOR TO INSTALLATION.
10. CONTRACTOR TO VERIFY THE CONDUIT AND % FILL. IF THERE IS NOT ENOUGH CAPACITY IN CONDUIT, THEN THE CONTRACTOR SHALL INSTALL NEW CONDUIT.
11. ALL PROPOSED CONDUIT SHALL HAVE #6 AWG (EGC) & TRACER WIRE FOR GROUNDING SYSTEM.
12. REMOVE ALL EXISTING UNUSED RISERS, JUNCTION BOXES, AND CABLES.

F. SIGNS

- 1. ALL MAST ARM SIGNS SHALL BE MOUNTED IN ACCORDANCE WITH ARLINGTON COUNTY STANDARDS. SIGNS SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS DIRECTED OTHERWISE.
2. STREET NAME SIGNS SHALL HAVE A WHITE LEGEND ON GREEN BACKGROUND. CONTRACTOR SHALL SUBMIT SIGN DETAILS TO COUNTY TO REVIEW. THE DIMENSIONS PROVIDED ON PLANS ARE ESTIMATED.

G. DEMOLITION/SALVAGE

- 1. ALL EXISTING SIGNAL EQUIPMENT IS TO BE REMOVED & RETURNED TO ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES LOCATED AT 4300 29TH ST S., ARLINGTON, VA 22206.
2. ALL EXISTING SIGNAL POLE FOUNDATIONS SHALL BE DEMOLISHED IN ACCORDANCE WITH ARLINGTON COUNTY SPECIFICATIONS.

H. COMMUNICATIONS

- 1. EXISTING COUNTY FIBER JUNCTION BOXES AND CONDUITS CONTAIN LIVE FIBER OPTIC CABLES. THE CONTRACTOR SHALL NOT CUT OR DAMAGE THE COUNTY'S EXISTING FIBER CABLES.
2. ALL FIBER OPTIC CABLE INSTALLATION, REMOVAL, SPLICING, AND TESTING SHALL BE PERFORMED BY THE COUNTY AT THE CONTRACTOR'S EXPENSE. CONTRACTOR MAY CONTRACT DIRECTLY WITH THE COUNTY'S FIBER CONTRACTORS. UPON REQUEST 703-228-7726, THE COUNTY WILL PROVIDE THE CONTACT INFORMATION FOR CURRENT QUALIFIED COUNTY FIBER CONTRACTORS.
3. CONTACT ARLINGTON COUNTY DTS FOR FIBER OPTIC CABLE REMOVAL OR INSTALLATION AT LEAST 10 BUSINESS DAYS IN ADVANCE.
4. CONTRACTOR SHALL FURNISH FIBER PATCH PANEL FOR INSTALLATION BY THE COUNTY. FIBER PIGTAIL SHALL BE APPROPRIATE LENGTH TO ALLOW FOR 50 FEET OF SLACK IN EACH INTERMEDIATE JUNCTION BOX. CONTRACTOR SHALL SUBMIT A SHOP DRAWING OF THE PATCH PANEL (INDICATING THE TAIL LENGTH) FOR COUNTY REVIEW PRIOR TO ORDERING.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF PROPOSED JUNCTION BOXES AND CONDUITS INCLUDING ALL APPURTENANCES SUCH AS GROUND RODS, TRACER WIRE, PULL TAPE, ETC.
6. ALL NEW CONDUITS SHALL HAVE PULL TAPE INSTALLED BETWEEN JUNCTION BOXES AND TRACER WIRE INSTALLED WITHIN OR BESIDE AT LEAST ONE OF THE CONDUITS. TRACER WIRE SHALL BE CONNECTED TO THE GROUND RODS INSTALLED IN THE ADJACENT JUNCTION BOXES.
7. DO NOT SPLICE TRACER WIRE.

I. INSPECTIONS

- 1. THE CONTRACTOR SHALL CONTACT THE COUNTY CONSTRUCTION MANAGER FOR INSPECTIONS THROUGHOUT CONSTRUCTION AS REQUIRED BY THE CONSTRUCTION MANAGER.
2. THE COUNTY SHALL VERIFY POLE LOCATIONS PRIOR TO EXCAVATION. THE CONTRACTOR SHALL NOTIFY MR. SHAHID MOHIUDDIN, 703-228-7555 TO SCHEDULE INSPECTION PRIOR TO EXCAVATION, AND AGAIN PRIOR TO POURING CONCRETE. STAKEOUT IS THE RESPONSIBILITY OF THE CONTRACTOR UNLESS DIRECTED OTHERWISE.
3. THE CONTRACTOR SHALL CONTACT THE COUNTY CONSTRUCTION MANAGER WITHIN 7 BUSINESS DAYS OF SIGNAL ACTIVATION. ALL POWER AND COMMUNICATIONS SHALL BE IN OPERATION AT THE TIME OF ACTIVATION UNLESS APPROVED BY THE COUNTY CONSTRUCTION MANAGER.

Location Map

Scale: 1" = 500'

Vicinity

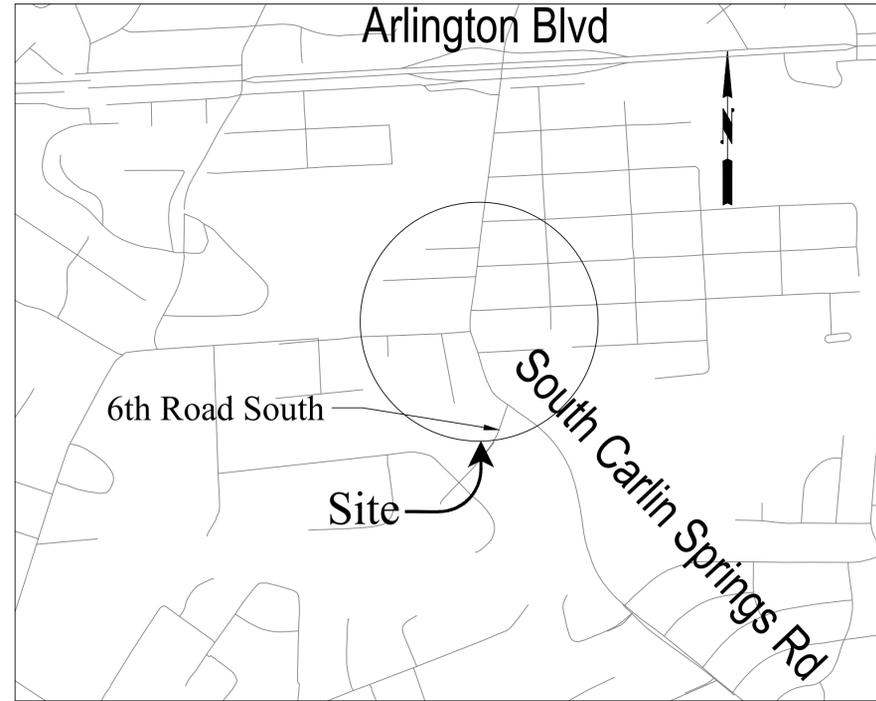


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DESIGN CHARACTERISTICS table with columns: ROAD CLASSIFICATION, ADT (2019), PROJECT COMPLETION, DESIGN YEAR. Values: ARTERIAL TYPE D SOUTH OF 5TH RD S, 31,000 VPD, N/A, N/A

DESIGN SPEED = 30 M.P.H.

ALL TRAFFIC SIGNALS ARE OWNED, MAINTAINED AND OPERATED BY ARLINGTON COUNTY. TRAFFIC SIGNAL DESIGN SHALL BE IN ACCORDANCE WITH LATEST ARLINGTON COUNTY TRAFFIC SIGNAL STANDARDS AND SPECIFICATIONS.

I CERTIFY THAT THIS PROJECT WAS BUILT IN SUBSTANTIAL CONFORMANCE WITH THIS PLAN, UNLESS DULY NOTED IN THE ABOVE REVISION BLOCK.

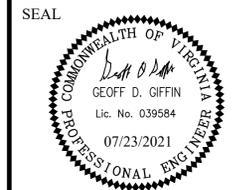
PROJECT MANAGER DATE
CONSTRUCTION MANAGER DATE

CALL 48 HOURS BEFORE YOU DIG
IT'S THE LAW! DIAL 811
811 logo and text: Know what's below. Call before you dig.



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division
Transportation Planning Bureau
2100 Clarendon Boulevard, Suite 900
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606



APPROVALS table with columns: APPROVALS, DATE. Signatures and dates for Traffic Signal Engineer, Traffic Engineering Manager, Water, Sewer, Streets Bureau Chief, and Transportation Director.

REVISIONS table with columns: REVISIONS, DATE.

Project Name and Location
S. Carlin Springs Road
Signal Upgrades

COVER SHEET
ID #234
TE02

Designed: AS
Drawn: AS
Checked: GG
Miss Utility Transmittal #:

Plotted: July 23, 2021
Plotted by: Max.Gawthrop

Scale:
HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191

Sheet C-0000

# LEGEND AND SURVEY DATA

## Existing Symbols Proposed

	Storm Str. #		ST1
	Catch Basin		
	Sanitary Manhole		
	Sanitary Str. #		SA1
	Fire Hydrant		
	Watermain Reducer		
	Water - Valve		
	Blowoff Valve		
	Water - Cross		
	Water - Tee		
	Water - Typical Bend		
	Water Meter		
	Water Cap		
	Water - Manhole Cover		
	Siamese Connection		
	CableTV Pedestal		
	Electrical Box		
	Telephone Pedestal		
	Cobrahead Light		
	Carlyle Light		
	Ground Light		
	Light Pole		
	Utility Pole		
	Guy Wire		
	Utility Cover		
	Gas Valve		
	Gas Line Marker		
	Test Hole		
	Bollard		
	Mailbox		
	Parking Meter		
	Sign		
	Traffic Mast Arm Pole		
	Traffic Pedestrian Pole		
	Traffic Control Box		
	Traffic Electrical Box		
	Traffic Junction Box		
	Traffic Service Meter		
	Coniferous Tree		
	Deciduous Tree		
	Bush/Hedge/Shrub		
	Construction Notes		
	Benchmark		
	Monument (GPS)		
	Monument		
	Iron Rod Found		
	Iron Pipe Found		
	Rebar Rod Found		
	P.K. Nail Found		
	Traverse		

### STORM SEWER TABULATION:

#15243 TOP = 260.75 15' RCP INV. OUT (15411) = 257.55 (per plan info)	#15411 TOP = 258.95 15' RCP INV. IN (15243) = 255.80 18' RCP INV. OUT (27544) = 255.62	#15415 TOP = 258.26 30' RCP INV. IN (15488) = 246.73	#15488 TOP = 259.12 24' RCP INV. IN (15495) = 250.66 30' RCP INV. OUT (15415) = 250.49	#15495 TOP = 258.67 18' RCP INV. IN (15636) = 253.88 24' RCP INV. OUT (15488) = 250.92	#15636 TOP = 260.09 18' RCP INV. IN (15676) = 256.30 18' RCP INV. OUT (15495) = 256.25	#15685 TOP = 260.85 15' RCP INV. IN (15911) = 257.33	#15911 TOP = 264.70 STRUCTURE NOT ACCESSIBLE 15' RCP INV. IN (15948) = 261.09 (PER PLAN INFO) 15' RCP INV. IN (15929) = 260.93 (PER PLAN INFO) 15' RCP INV. OUT (15685) = 260.86 (PER PLAN INFO)	#15948 TOP = 265.20 15' RCP INV. OUT (15911) = 261.48	#15929 TOP = 264.72 15' RCP INV. OUT (15911) = 260.90	#16337 TOP = 249.15 15' RCP INV. OUT (16357) = 245.94	#16357 TOP = 247.64 15' RCP INV. IN (16337) = 244.40 15' RCP INV. IN (16316) = 243.90 15' RCP INV. OUT (16431) = 243.14	#16316 TOP = 249.56 15' RCP INV. OUT (16357) = 245.01	#16431 TOP = 235.47 15' RCP INV. IN (16357) = 232.71 15' RCP INV. OUT (16560) = 231.57	#16560 TOP = 228.74 15' RCP INV. IN (16431) = 223.00	#16383 TOP = 249.55 15' RCP INV. OUT (16428) = 246.85	#16428 TOP = 246.65 15' RCP INV. IN (16383) = 242.45 15' RCP INV. IN (16445) = 238.17 27' RCP INV. = 238.88 27' RCP INV. OUT (16456) = 238.81	#16445 TOP = 245.60 15' RCP INV. OUT (16456) = 240.12	#16456 TOP = 238.51 27' RCP INV. IN (16428) = 234.97 27' RCP INV. OUT (16472) = 234.79	#16472 TOP = 235.90 27' RCP INV. IN (16456) = 231.26 27' RCP INV. OUT (16518) = 230.59	#16518 TOP = 231.61 27' RCP INV. IN (16472) = 224.96 27' RCP INV. OUT (16694) = 224.46	#27541 TOP = 259.37 15' RCP INV. OUT (2744) = 255.63 15' RCP INV. IN (27542) = 255.69	#27542 TOP = 259.61 15' RCP INV. OUT = 256.23	#27544 TOP = 258.96 18' RCP INV. IN (15411) = 255.05 15' RCP INV. IN (27541) = 255.09 18' RCP INV. OUT (15495) = 254.99
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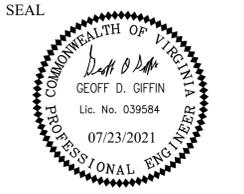
### SANITARY SEWER TABULATION:

#1635 TOP = 261.27 C/L INV. = 252.42	#1636 TOP = 259.38 C/L INV. = 253.52	#1637 TOP = 267.65 C/L INV. = 259.27	#6388 TOP = 259.29 C/L INV. = 254.04	#9335 TOP = 259.83 NOT ACCESSIBLE C/L INV. = 254.43 (PER PLAN INFO)	#3853 TOP = 261.20 NOT ACCESSIBLE C/L INV. = 255.26 (PER PLAN INFO)	#6744 TOP = 261.80 C/L INV. = 255.31	#3854 TOP = 265.18 NOT ACCESSIBLE C/L INV. = 256.71 (PER PLAN INFO)	#3855 TOP = 265.25 C/L INV. = 258.21	#6183 TOP = 265.66 NOT ACCESSIBLE C/L INV. = 256.60 (PER PLAN)	#10706 TOP = 262.36 C/L INV. = 258.07	#8106 TOP = 260.28 C/L INV. = 257.48	#7924 TOP = 262.69 C/L INV. = 256.71	#7293 TOP = 258.82 C/L INV. = 254.89	#12290 TOP = 251.77 C/L INV. = 239.64	#12289 TOP = 247.74 C/L INV. = 234.27	#12287 TOP = 245.55 C/L INV. = 232.68	#12288 TOP = 254.75 C/L INV. = 243.91	#12286 TOP = 234.97 C/L INV. = 223.85
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Transportation Division  
Transportation Planning Bureau  
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Phone: 703.228.3629  
Fax: 703.228.3606



APPROVALS	DATE
	06/21/21
	06/21/21
	07.16.2021
	06/22/2021
	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**  
LEGEND AND SURVEY DATA

ID #234  
TE02

Designed: AS  
Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.  
11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
**C-0001**

# General Signal Notes

- ALL WORK FOR TRAFFIC SIGNALS, TRAFFIC SIGNS, AND PAVEMENT MARKINGS SHALL BE IN ACCORDANCE WITH THE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), THE LATEST EDITION OF THE ARLINGTON COUNTY TRAFFIC SIGNAL & STREETLIGHT SPECIFICATIONS, 2016 VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, 2016 VDOT ROAD AND BRIDGE STANDARDS, 2011 VIRGINIA SUPPLEMENT TO THE MUTCD, 2011 VIRGINIA WORK AREA PRODUCTION MANUAL, AND SPECIAL PROVISIONS IN EFFECT AT THE TIME OF ADVERTISEMENT.
- FIVE WORKING DAYS PRIOR TO COMMENCING SIGNAL INSTALLATION/MODIFICATION WORK AT ANY LOCATION IN ARLINGTON COUNTY, VIRGINIA, SIGNAL CONTRACTORS MUST NOTIFY THE COUNTY ENGINEER IN WRITING WITH THE NAME, DAYTIME PHONE NUMBER, AND EMERGENCY PHONE NUMBERS OF THE CONTRACTOR. THIS NOTIFICATION IS TO INCLUDE LOCATION, ROUTE NUMBERS, TYPE, AND DETAILS OF CONSTRUCTION AND SCHEDULE OF WORK.
- THE TRAFFIC SIGNAL CONSTRUCTION SHALL NOT BEGIN WITHOUT PRIOR NOTIFICATION AND APPROVAL FROM ARLINGTON COUNTY.
- THE COUNTY ENGINEER, PRIOR TO CONSTRUCTION, SHALL VERIFY POLE(S) AND CONTROLLER CABINET LOCATIONS.
- ALL CATALOG CUTS, POLE CALCULATIONS, FOUNDATION DESIGNS, SHOP DRAWINGS, ETC., SHALL BE SUBMITTED TO, AND APPROVED BY, ARLINGTON COUNTY PRIOR TO CONSTRUCTION.
- OPERATION OF THE SIGNALIZED INTERSECTION IS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE TRAFFIC SIGNAL IS ACCEPTED BY ARLINGTON COUNTY.
- ANY NOTES NOT MENTIONED IN THE NOTES SECTION OF THIS SIGNAL PLAN WILL REVERT TO THE ARLINGTON COUNTY STANDARDS.
- CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING TRAFFIC SIGNAL COMMUNICATION THROUGHOUT THE PROJECT.
- ALL NEW CONTROLLER CABINETS MUST BE FURNISHED WITH A BACKUP POWER BATTERY.

- THE CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 811 FOR MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES (i.e. WATER, SEWER, GAS, TELEPHONE, ELECTRIC, AND CABLE TV) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION OR CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO IDENTIFY AND PROTECT ALL OTHER UTILITY LINES FOUND IN THE WORK SITE AREA BELONGING TO OTHER OWNERS THAT ARE NOT MEMBERS OF "MISS UTILITY." PRIVATE UTILITY LATERALS ARE NOT LOCATED. CONTRACTOR SHALL VERIFY THE LOCATION OF UTILITY LATERALS AND IS RESPONSIBLE FOR ANY DAMAGE TO PRIVATE UTILITY LATERALS. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE TRAFFIC SIGNAL WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE PROJECT ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY PAVEMENT, PAVEMENT MARKINGS, CURB AND GUTTER, SIDEWALK, ETC. THAT ARE DAMAGED DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK ZONE SIGNING, DELINEATION, PAVEMENT MARKINGS AND ANY OTHER TRAFFIC CONTROL DEVICES NECESSARY TO PERFORM THE WORK IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL. UPON COMPLETION OF THE WORK, THE CONTRACTOR SHALL IMMEDIATELY REMOVE ALL TEMPORARY DEVICES.
- THE CONTRACTOR SHALL SUBMIT "AS-BUILT" DRAWINGS TO ARLINGTON COUNTY UPON JOB COMPLETION AND FINAL INSPECTION.
- EXISTING CONTROLLER AND CABINETS SPECIFIED TO BE REMOVED SHALL BE RETURNED TO ARLINGTON COUNTY.
- CCTV LOCATIONS AND QUANTITIES ARE FOR PLANNING PURPOSES ONLY. THE FINAL LOCATIONS SHALL BE FIELD LOCATED.
- CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANIES ON ADJUSTMENT OF OVERHEAD CABLES TO INSTALL MAST ARM SIGNAL POLES.

### GENERAL CONSTRUCTION NOTES

- ALL ELEVATIONS ARE BASED ON THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88).
- ALL CONSTRUCTION WORK FOR THIS PROJECT SHALL CONFORM TO THE ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES, CONSTRUCTION STANDARDS AND SPECIFICATIONS, THE ARLINGTON COUNTY PARK DESIGN STANDARDS, THE ARLINGTON COUNTY TRAFFIC SIGNAL AND STREETLIGHT SPECIFICATIONS, AND WHERE APPLICABLE THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, AND ROAD AND BRIDGE STANDARDS. THE LATEST EDITIONS OF EACH RELEVANT MANUAL SHALL BE USED.
- ALL CONSTRUCTION AND WORK ACTIVITIES SHALL COMPLY WITH THE VIRGINIA WORK AREA PROTECTION MANUAL AND ALL OTHER RELEVANT WORK SAFETY REQUIREMENTS, LATEST EDITIONS.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT OFFICER OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE APPROVED PLANS.
- THE CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 811 FOR MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES (i.e. WATER, SEWER, GAS, TELEPHONE, ELECTRIC, AND CABLE TV) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION OR CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO IDENTIFY AND PROTECT ALL OTHER UTILITY LINES FOUND IN THE WORK SITE AREA BELONGING TO OTHER OWNERS THAT ARE NOT MEMBERS OF "MISS UTILITY." PRIVATE WATER, SEWER AND GAS LATERALS WILL NOT BE MARKED BY MISS UTILITY OR THE COUNTY. THE CONTRACTOR SHALL LOCATE AND PROTECT THESE SERVICES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT THE WORK AND SHALL RETAIN A PROFESSIONAL LAND SURVEYOR LICENSED IN THE COMMONWEALTH OF VIRGINIA TO PROVIDE ALL NECESSARY CONSTRUCTION LAYOUTS AND ESTABLISH ALL CONTROL LINES, GRADES, AND ELEVATION DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A COPY OF ALL CUT SHEETS FOR REVIEW, PER THE SPECIFICATIONS. THE COST OF ALL NECESSARY SURVEYING SERVICES SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND, UNLESS OTHERWISE SPECIFIED, THE COST SHALL BE INCORPORATED INTO THE COSTS FOR RELEVANT ITEMS.
- THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM BEST AVAILABLE RECORDS AND SHALL BE CONSIDERED TO BE APPROXIMATE. WHEN CONSTRUCTION ACTIVITY REACHES IN PROXIMITY TO EXISTING UTILITIES, THE TRENCHES SHALL BE OPENED A SUFFICIENT DISTANCE AHEAD OF THE WORK OR TEST PITS SHALL BE MADE TO VERIFY THE EXACT LOCATION AND INVERTS OF THE UTILITY TO ALLOW FOR POSSIBLE CHANGES IN THE LINE OR GRADE AS DIRECTED BY OFFICER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING UTILITIES AND THE RELATED STRUCTURES. ALL EXISTING UTILITY SYSTEMS SHALL BE PROTECTED TO PREVENT DAMAGE DURING THE CONTRACTOR'S OPERATIONS. ANY SYSTEM DAMAGED SHALL BE PROMPTLY REPAIRED AT NO COST TO THE OWNER.
- EXISTING MANHOLE FRAMES, COVERS, VALVE BOXES, AND OTHER APPURTENANCES SHALL BE ADJUSTED TO THE FINAL GRADE OR REPLACED, AS NECESSARY. UNLESS OTHERWISE SPECIFIED, THE COST FOR THIS SHALL BE CONSIDERED INCIDENTAL TO THE WORK, AND SHALL BE INCORPORATED INTO THE COSTS FOR RELEVANT ITEMS.
- THE CONTRACTOR SHALL PROVIDE ADA COMPLIANT ACCESS THROUGH OR AROUND THE SITE AT ALL TIMES AND SHALL ENSURE THE SAFETY OF ALL THOSE PASSING THROUGH OR ADJACENT TO THE SITE.

### STORMWATER AND ENVIRONMENTAL PROTECTION

- THE CONTRACTOR SHALL CONFINE ALL ACTIVITIES AT THE SITE ASSOCIATED WITH CONSTRUCTION ACTIVITIES, TO INCLUDE STORAGE OF EQUIPMENT AND OR MATERIALS, ACCESS TO THE WORK, FORMWORK, ETC. TO WITHIN THE DESIGNATED LIMITS OF DISTURBANCE (LOD).
- THE CONTRACTOR SHALL PROTECT EXISTING DRAINAGE FACILITIES (TO INCLUDE CURB AND GUTTER) AND WATERWAYS FROM ADVERSE IMPACTS PER SECTION 01500 OF THE ARLINGTON COUNTY STANDARDS & SPECIFICATIONS.
- 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).

### TREE PROTECTION

- TREES SHALL BE PROTECTED PER THE REQUIREMENTS OF ARLINGTON PARKS & RECREATION STANDARD. NO TREES SHALL BE REMOVED OR OTHERWISE AFFECTED UNLESS CLEARLY MARKED ON THE APPROVED PLAN.

### TRAFFIC CONTROL

- CONTRACTOR SHALL NOTIFY THE PROJECT OFFICER AT LEAST 3 WORKING DAYS PRIOR TO DISTURBING ANY EXISTING, OR INSTALLING ANY NEW, TRAFFIC SIGNS, SIGNALS, OR OTHER TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL PREMARK THE LAYOUT OF ANY PERMANENT TRAFFIC CONTROL STRIPING, INDICATING THE PROPOSED LOCATION AND TYPE OF MARKING TO BE INSTALLED. THE PREMARKING MAY CONSIST OF TYPE D TAPE, CHALK, OR LUMBER CRAYONS. THE CONTRACTOR SHALL ALLOW 3 WORKING DAYS FOR THE INSPECTION AND APPROVAL OF THE PREMARKINGS PRIOR TO PLACING THE PERMANENT MARKINGS.
- THE CONTRACTOR SHALL SUBMIT ANY REQUESTS FOR TEMPORARY "NO PARKING" RESTRICTIONS TO THE PROJECT OFFICER AT LEAST 3 WORKING DAYS PRIOR TO THE DESIRED ONSET OF RESTRICTIONS.
- THE CONTRACTOR SHALL PRESERVE ALL BUS STOPS, INCLUDING MAINTAINING ADEQUATE ACCESSIBILITY THROUGH AND ADJACENT TO THE CONSTRUCTION FOR BUSES AND THEIR PASSENGERS. THE CONTRACTOR SHALL NOT CLOSE, RELOCATE, OR OTHERWISE MODIFY A BUS STOP WITHOUT PRIOR REQUEST OF THE PROJECT OFFICER. TYPICALLY ANY RELOCATION OR CLOSURE OF A BUS STOP WILL REQUIRE AT LEAST FOUR WEEKS ADVANCE NOTICE FOR COORDINATION WITH THE COUNTY'S BUS STOP COORDINATOR - 703-228-3049
- WHEN CONDITIONS WARRANT DUE TO TRAFFIC VOLUMES, PATTERNS, OR SPECIAL EVENTS, THE COUNTY MAY SUSPEND OR OTHERWISE DIRECT THE CONTRACTOR'S ACTIVITIES TO PROTECT THE PUBLIC AND OR THE COUNTY'S TRANSPORTATION NETWORK.

### WATER DISTRIBUTION, STORM, AND SANITARY SEWER SYSTEMS

- UNLESS OTHERWISE DIRECTED, CONTRACTORS ARE EXPRESSLY PROHIBITED FROM OPERATING ANY WATER VALVES OR APPURTENANCES. CONTRACTORS SHALL SUBMIT ALL REQUESTS FOR VALVE OPERATIONS TO THE PROJECT OFFICER AT LEAST 3 WORKING DAYS IN ADVANCE OF THE REQUIRED OPERATION.
- IN THE EVENT OF A WATER OR SEWER EMERGENCY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY'S WATER CONTROL CENTER AT 703-228-5555 AND THE PROJECT OFFICER.



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606

SEAL



APPROVALS	DATE
<i>[Signature]</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>[Signature]</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>[Signature]</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>[Signature]</i> TE&O BUREAU CHIEF	06/22/2021
<i>[Signature]</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

GENERAL NOTES AND DETAILS

ID #234  
TE02

Designed: AS  
Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.  
11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
**C-0002**

# GENERAL NOTES

## MAPPING

1. EXISTING CONDITIONS MAPPING PROVIDED BY ARLINGTON COUNTY. BASIS FOR MAPPING IS FIELD SURVEY AND AS-BUILT INFORMATION.

## GENERAL REQUIREMENTS

1. THE CONTRACTOR SHALL OBTAIN ALL APPLICABLE PERMITS AND LICENSES AND KEEP COPIES OF THE SAME ON SITE DURING CONSTRUCTION, EXCEPT AS PROVIDED BY ARLINGTON COUNTY.
2. THE CONTRACTOR SHALL MAINTAIN A CLEAN WORK SITE, FREE FROM TRASH AND DEBRIS.
3. THE CONTRACTOR SHALL KEEP AND MAINTAIN A SET OF APPROVED PROJECT PLANS AND SPECIFICATIONS ON SITE AT ALL TIMES.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING WITH MATCHING MATERIALS ANY PAVEMENT, PAVEMENT MARKINGS, ETC. THAT MUST BE CUT OR REMOVED, OR THAT ARE DAMAGED DURING CONSTRUCTION.

## COORDINATION

1. CONSTRUCTION WILL TAKE PLACE ADJACENT TO ONGOING TRAFFIC OPERATIONS. THE CONTRACTOR SHALL COORDINATE CONSTRUCTION ACTIVITIES WITH ARLINGTON COUNTY (AC).
2. THE CONTRACTOR SHALL SUBMIT A SCHEDULE FOR CONSTRUCTION TO AC IN ACCORDANCE WITH ARLINGTON COUNTY D.E.S. REQUIREMENTS.
3. PER THE CONTRACT DOCUMENTS, PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL ARRANGE A MEETING WITH AC TO DISCUSS COORDINATION OF CONSTRUCTION ACTIVITIES AND RELATED PROJECTS. THE CONTRACTOR SHALL PARTICIPATE IN A CONTRACTOR LED BIWEEKLY PROGRESS MEETINGS WITH THE COUNTY AND SHALL SUBMIT SCHEDULE UPDATES AT THESE MEETINGS.
4. THE CONTRACTOR WILL ALSO BE REQUIRED TO CLOSELY COORDINATE WITH ADJACENT ONGOING AND PLANNED PROJECTS BEING CONSTRUCTED BY OTHERS, INCLUDING BUT NOT LIMITED TO THE COUNTY FIBER OPTIC INSTALLATION.

## CLEARING AND GRUBBING/DEMOLITION

1. THE CONTRACTOR SHALL PERFORM DEMOLITION ACTIVITIES AS NOTED AND SHOWN ON THESE PLANS AND AS DIRECTED BY ARLINGTON COUNTY (AC).
2. INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AND TREE PROTECTION PRIOR TO BEGINNING DEMOLITION WORK.
3. DEMOLITION DETAILS AND NOTES ARE INTENDED TO DEPICT GENERAL DEMOLITION AND UTILITY WORK AND ARE NOT INTENDED TO IDENTIFY EACH ELEMENT OF DEMOLITION OR RELOCATION. CONTRACTOR SHALL COORDINATE WITH AC AND APPROPRIATE UTILITY COMPANIES PRIOR TO WORK.
4. THE CONTRACTOR SHALL REMOVE OR ABANDON, AS SPECIFIED, EXISTING UTILITIES SUCH AS STORM DRAINAGE, SANITARY SEWER, WATER, GAS, ELECTRIC, AND TELEPHONE OR AS DIRECTED BY AC. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING EACH UTILITY COMPANY AND AC TO COORDINATE ABANDONMENT OR REMOVAL OF ALL UTILITIES AND FOR DETERMINING HORIZONTAL AND VERTICAL LOCATIONS OF UTILITIES PRIOR TO COMMENCING WORK.
5. THE CONTRACTOR IS RESPONSIBLE FOR THE PROTECTION OF ALL UTILITIES TO REMAIN IN PLACE.
6. ALL MATERIALS REMOVED UNDER CLEARING WORK, NOT TO BE RELOCATED OR TO BE TURNED OVER TO THE OWNER, SHALL BE LEGALLY DISPOSED OF BY THE CONTRACTOR.
7. THE CONTRACTOR SHALL TAKE ALL PRECAUTIONS TO AVOID UNNECESSARY DAMAGE TO EXISTING ROAD SURFACES.
8. ALL EXISTING ITEMS TO REMAIN WHICH ARE DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO ITS ORIGINAL CONDITION AT THE EXPENSE OF THE CONTRACTOR.

## UTILITIES

1. THIS PLAN DOES NOT GUARANTEE THE EXISTENCE, NONEXISTENCE, SIZE, TYPE, LOCATION, ALIGNMENT, OR DEPTH OF ANY UNDERGROUND UTILITIES OR OTHER FACILITIES. WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNER'S RECORDS AND/OR ELECTRONIC LINE TRACING. THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM TEST EXCAVATIONS OR OTHER REINVESTIGATIONS AS NECESSARY TO VERIFY LOCATION AND CLEARANCES.
2. UNLESS OTHERWISE NOTED, UTILITIES LIDS, INCLUDING WATER VALVE LIDS, ARE TO BE ADJUSTED BY THE CONTRACTOR TO MATCH FINAL GRADE AND SLOPE.
3. STATE LAW MANDATES THE NOTIFICATION OF UTILITY OWNERS 48 HOURS IN ADVANCE OF EXCAVATION. FOR LOCATION OF UTILITIES CALL:

UTILITY OWNERS	TELEPHONE
DOMINION VIRGINIA POWER (DVP)	888-667-3000
VERIZON COMMUNICATIONS	888-826-2355
COMCAST	888-683-1000
JONES FIBER	540-891-5545
WASHINGTON GAS	703-750-1000

4. CONTRACTOR SHALL CONFORM TO THE "OVERHEAD HIGH VOLTAGE ACT" (EFFECTIVE JULY 1, 2003) AND SHALL CONTACT THE NECESSARY AUTHORITIES PRIOR TO START OF CONSTRUCTION.
5. ARLINGTON COUNTY'S UTILITY DEPARTMENT INSPECTOR SHALL BE NOTIFIED WHEN ANY IMPROVEMENT PERTINENT TO HIS INSPECTION DUTIES ARE BEING INSTALLED. SPECIFIC REQUIREMENTS ARE:
  - A. SITE INSPECTOR OR AREA SUPERVISOR IS TO BE NOTIFIED AT LEAST 3 DAYS PRIOR TO START OF CONSTRUCTION.
  - B. A MINIMUM OF 24 HOURS NOTICE IS REQUIRED WHEN REQUESTING COMPACTION TESTS.
6. STABLE SUBGRADE SHALL COMPRISE SOLID, WELL DRAINED, UNDISTURBED EARTH CAPABLE OF SUPPORTING STREET LOADING WITHOUT RESULTING IN ANY DAMAGING SETTLEMENT AS DETERMINED BY THE ENGINEER.
7. WHERE UNSUITABLE SUBGRADE, AS DETERMINED BY THE ENGINEER, IS ENCOUNTERED, IT SHALL BE MADE STABLE BY DRAINING, COMPACTING, AND/OR REPLACING AS REQUIRED, TO THE SATISFACTION OF THE ENGINEER.
8. ALL CONCRETE SHALL BE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) CLASS "A4" FOR PRECAST STRUCTURES AND VDOT CLASS "A3" FOR ALL OTHERS USES, UNLESS OTHERWISE SPECIFIED.
9. ALL ASPHALT PAVEMENT COURSES SHALL BE IN CONFORMANCE WITH VDOT SPECIFICATIONS.
10. EXISTING FIRE HYDRANTS MUST REMAIN ACTIVE UNTIL NEW HYDRANTS ARE AVAILABLE FOR PUBLIC USE. CONTRACTOR TO COORDINATE WITH PROPERTY OWNERS AND FIRE DEPARTMENT WHEN SERVICES TO PROPERTIES ARE INTERRUPTED.

## WATER-SEWER CONSTRUCTION REQUIREMENTS

1. ALL MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES CONSTRUCTION STANDARDS & SPECIFICATIONS AND SHALL BE APPROVED BY THE DEPARTMENT OF ENVIRONMENTAL SERVICES. UPON PHYSICAL INSPECTION, THE COUNTY RESERVES THE RIGHT TO REJECT THE USE OF ANY MATERIAL FOUND TO BE DEFECTIVE OR NOT CONFORMING TO THE STANDARDS AND SPECIFICATIONS.
2. BEFORE START OF CONSTRUCTION, THE CONTRACTOR SHALL FURNISH THE FOLLOWING INFORMATION AND/OR EVIDENCE OF COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND LAWS, TO THE ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES:
  - THE NAME AND ADDRESS OF THE CONTRACTOR HIRED TO WORK ON THE PROJECT. THE CONTRACTOR SHALL BE REGISTERED IN THE COMMONWEALTH OF VIRGINIA. SATISFACTORY EVIDENCE SHALL BE FURNISHED OF THE CONTRACTOR'S PRIOR EXPERIENCE AS PRIME CONTRACTOR IN THE CONSTRUCTION OF WATER MAINS AND/OR SANITARY SEWER INSTALLATIONS. FURTHER, THE CONTRACTOR SHALL FURNISH A LETTER WITH A LIST OF MATERIALS AND SUPPLIERS FOR PROPOSED PROJECT.
  - A RIGHT-OF-WAY PERMIT IS REQUIRED TO WORK IN ARLINGTON COUNTY STREETS. IN INSTANCES OF EXCAVATIONS IN STATE RIGHT OF WAY, THE DATE AND NUMBER OF ALL PERMITS REQUIRED BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) SHALL BE FURNISHED.
  - IF ANY EASEMENTS ARE NEEDED, TWO (2) COPIES OF THE DESCRIPTION OF SUCH EASEMENT, AS ACTUALLY RECORDED, SHALL BE FURNISHED, INCLUDING THE PLACE, DATE AND REFERENCE OF SUCH RECORDATION PRIOR TO PLAN APPROVAL.
  - WRITTEN NOTICE OF TENTATIVE STARTING DATE OF CONSTRUCTION, WHICH SHALL BE A MINIMUM OF ONE (1) WEEK FOLLOWING THE DATE OF NOTICE. IN ADDITION, THE CONTRACTOR SHALL FURNISH THE NAMES AND TELEPHONE NUMBERS OF TWO (2) RESPONSIBLE PERSONS WHO CAN BE CONTACTED IN CASE OF EMERGENCY.
  - EXISTING WATER SERVICES MAY BE ALLOWED FOR CONSTRUCTION PURPOSES ONLY WITH PRIOR APPROVAL OF ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES. IN THESE CASES, INSTALLATION OF A WATER METER FOR "WATER ONLY" USE SHALL BE REQUESTED BY CALLING THE UTILITY SERVICES OFFICES AT (703) 228-6570. THE METER WILL NOT BE PROVIDED WITHOUT EVIDENCE THAT THE CONTRACTOR HAS INSTALLED AN ASSE-1013 APPROVED, REDUCED-PRESSURE, BACKFLOW PREVENTION (HIGH HAZARD) DEVICE PER THE ARLINGTON COUNTY PLUMBING CODE.
  - CONSTRUCTION SHALL NOT BEGIN UNTIL THE ABOVE ITEMS HAVE BEEN COMPLETED AND THE ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES HAS APPROVED THE STARTING DATE AND ARRANGEMENTS HAVE BEEN MADE FOR THE REQUIRED INSPECTION SERVICE.
3. ALL CONSTRUCTION SHALL BE ACCOMPLISHED FROM APPROVED PLANS, SPECIFICATIONS AND CUT SHEETS SUBMITTED BY A REGISTERED ENGINEER AND APPROVED BY THE COUNTY. TO AVOID CONSTRUCTION DELAYS ALL NECESSARY TEST HOLE INFORMATION SHALL BE OBTAINED PRIOR TO PLAN APPROVAL. WATER MAIN VALVES, METERS AND APPURTENANCES SHALL ONLY BE OPERATED BY ARLINGTON COUNTY WATER PERSONNEL.
4. NO EXISTING WATER MAINS, FIRE HYDRANTS, OR SANITARY SEWERS MAY BE TAKEN OUT OF SERVICE OR MADE INACCESSIBLE BY THE CONTRACTOR WITHOUT THE PRIOR APPROVAL FROM THE DEPARTMENT OF ENVIRONMENTAL SERVICES.
5. SANITARY SEWER LATERALS ARE PRIVATELY OWNED AND MAINTAINED. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING LATERALS WITHIN THE LIMITS OF CONSTRUCTION. APPROPRIATE PERMITS AND INSPECTIONS FOR WORK ON ANY LATERALS SHALL BE OBTAINED FROM THE INSPECTION SERVICES DIVISION. ANY LATERALS ABANDONED WITH THE PROJECT SHALL BE CAPPED AT THE SEWER MAIN.
6. IN CASES WHERE A PROPOSED SANITARY SEWER IS TO BE CONNECTED TO AN EXISTING SANITARY MANHOLE, THE EXISTING MANHOLE SHALL BE RECONSTRUCTED OR REPLACED BY THE CONTRACTOR AS DIRECTED BY THE COUNTY TO MEET THE CURRENT STANDARDS. ALL NEW CONNECTIONS TO THE EXISTING MANHOLES SHALL BE CORE DRILLED WITH BOOT JUST ABOVE THE EXISTING BENCH AND THE FLOW CHANNELS RESHAPED AS NEEDED.
7. UPON COMPLETION OF CONSTRUCTION, ALL FINAL TESTS, AS REQUIRED, SHALL BE PERFORMED IN THE PRESENCE OF THE COUNTY'S REPRESENTATIVE. WATER AND SEWER SERVICE CONNECTIONS SHALL NOT BE MADE UNTIL THE WATER AND/OR SEWER MAINS AND APPURTENANCES HAVE BEEN APPROVED AND ACCEPTED BY ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR DECHLORINATING ALL CHLORINATED WATER, REGARDLESS OF THE CONCENTRATION. ALL SUPER CHLORINATED WATER REQUIRES A DECHLORINATION PLAN THAT SHALL BE SUBMITTED TO AND APPROVED BY ARLINGTON COUNTY. THIS PLAN SHALL DESCRIBE HOW AND WHERE THE WATER IS TO BE DISCHARGED.
8. THE CONTRACTOR SHALL MAINTAIN BACKFILL FOR UTILITY EXCAVATIONS UNTIL ARLINGTON COUNTY HAS FINALLY ACCEPTED THE PROPOSED WATER AND/OR SEWER MAIN. ALSO, ALL SURFACES OVER THE UTILITY EXCAVATIONS SHALL EITHER BE RESTORED TO THE ORIGINAL CONDITION OR FINISHED AS PER THE PROPOSED DESIGN BEFORE THE ACCEPTANCE OF THE PROJECT. PAVEMENT PATCHING FOR UTILITY CUTS IN THE PUBLIC STREETS SHALL BE PERFORMED IN ACCORDANCE WITH ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES CONSTRUCTION STANDARDS AND SPECIFICATIONS OR AS PER VDOT ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS DEPENDING UPON THE STREET OWNERSHIP. PRIOR TO FINAL PAVING, THE CONTRACTOR SHALL ADJUST ALL EXISTING VALVE BOXES AND SANITARY SEWER MANHOLE FRAME AND COVERS AS PER COUNTY STANDARDS, REMOVE ALL ABANDONED SANITARY MANHOLES AND VALVE BOXES OVER THE ABANDONED WATER MAINS, ABANDON ALL PIPES IN ACCORDANCE WITH COUNTY STANDARDS AND COMPLETE ALL NECESSARY WATER MAIN "CUT AND CAPS."
9. UPON COMPLETION, APPROVAL, AND ACCEPTANCE OF WATER AND/OR SEWER MAINS AND APPURTENANCES, THE CONTRACTOR SHALL SUBMIT A TELEVISION INSPECTION AND REPORT ON A DVD IN A COUNTY APPROVED FORMAT. PRIOR TO ANY BOND REDUCTION/RELEASE OR APPROVAL/ACCEPTANCE OF WATER AND/OR SEWER MAINS AND APPURTENANCES, THE CONTRACTOR'S REGISTERED ENGINEER SHALL SUBMIT TO ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES, A SET OF MYLAR TRACINGS AND CD WITH PDF FILE FORMAT THAT SHOWS THE AS-BUILT CONDITIONS PER THE COUNTY STANDARDS AND A SIGNED STATEMENT CONFIRMING THAT THE WORK, AS INDICATED, IS ACCEPTABLE TO THE ENGINEER.
10. PRIOR TO THE FINAL ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL REQUEST TO THE UTILITY SERVICES IN WRITING FOR THE DISCONTINUATION OF ALL EXISTING WATER SERVICES (WHERE APPLICABLE) AT WHICH TIME THE COUNTY WILL REMOVE THE WATER METER AND ISSUE A FINAL BILL. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL EXISTING METER BOXES RELATED TO THE SERVICES BEING DISCONTINUED AND DISCONNECTING EXISTING WATER SERVICES AT THE MAIN BY EXCAVATING, TURNING OFF THE CORPORATION STOP AND DISCONNECTING THE SERVICE FROM THE CORPORATION STOP.

## DRAINAGE

1. THE LOCATIONS OF ALL DRAINAGE STRUCTURES SHOWN ON THESE PLANS ARE APPROXIMATE ONLY, WITH THE EXCEPTION OF STRUCTURES SHOWING SPECIFIC STATIONS. THE HEIGHT ("H") DIMENSIONS SHOWN ON THE PLANS FOR DROP INLETS AND JUNCTION BOXES AND THE LINEAR FOOT (LF) DIMENSIONS SHOWN FOR MANHOLES ARE APPROXIMATE.
2. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY DRAINAGE STRUCTURES AND CONVEYANCE MEASURES TO PREVENT DAMAGE TO PRIVATE PROPERTY AND PUBLIC STREETS, OR AS DIRECTED BY AC.
3. IF PRECAST DRAINAGE STRUCTURES ARE USED, SHOP DRAWINGS MUST BE SUBMITTED.
4. ALL PROPOSED STORM DRAINAGE STRUCTURES SHALL UTILIZE INLET SHAPING WITH PAVED INVERTS, UNLESS OTHERWISE NOTED ON THE PLANS, FOR EACH STRUCTURE.
5. ALL PIPE CULVERTS (WATER, SEWER, AND STORM SEWER), LOCATED WITHIN RIGHT-OF-WAY EXCAVATION AREAS THAT ARE SUBJECT TO TRAFFIC LOADS SHALL BE BACKFILLED WITH A SELECT OR GRANULAR MATERIAL AND PLACED IN SIX (6) INCH LAYERS AND COMPACTED TO 95 PERCENT THEORETICAL AASHTO DENSITY IN ACCORDANCE WITH SECTION 302.03 OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS (CURRENT EDITION).
6. RIPRAP MUST BE PROVIDED AT ALL ENDWALLS AND FLARED END SECTIONS AS REQUIRED BY AC INSPECTOR.
7. THE CONTRACTOR SHALL MAINTAIN ALL DRAINAGE, STORMWATER MANAGEMENT, AND BEST MANAGEMENT PRACTICES FACILITIES AND SYSTEMS TO ENSURE THAT THEY FUNCTION PROPERLY DURING CONSTRUCTION.
8. A WATERTIGHT CONNECTION SHALL BE MADE AT ALL PIPES ENTERING DRAINAGE STRUCTURES. IN ADDITION, WATERTIGHT CONNECTIONS SHALL BE MADE BETWEEN EACH SECTIONS OF PIPE.
9. LENGTHS OF PIPE SHOWN ON THE DRAWINGS ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
10. TOP OF STRUCTURES SHALL BE SET TO MATCH CURB AND GUTTER, SIDEWALK AND/OR DITCH CONSTRUCTION.

## CONSTRUCTION

1. SUBMITTALS ON MATERIALS FOR THIS PROJECT SHALL BE PROVIDED TO AC FOR APPROVAL PRIOR TO ORDERING MATERIALS AND BEGINNING CONSTRUCTION.
2. EXISTING VEGETATION SURROUNDING THE CONSTRUCTION AREA SHALL REMAIN IN A NATURAL STATE. TREES NEAR THE CONSTRUCTION AREA SHALL BE PROTECTED IN ACCORDANCE WITH TREE PROTECTION DETAILS, PLANS, AND NOTES AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLAN.
3. THE CONTRACTOR SHALL STRIP TOPSOIL AND ANY ORGANIC LADEN SOIL AND STORE FOR USE IN BACKFILLING AND LANDSCAPING FOR SITE RESTORATION. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ANY EXCESS SOIL AFTER RESTORATION OF THE SITE.
4. WHEN MATERIALS WHICH ARE UNSUITABLE FOR FOUNDATIONS, SUBGRADES, OR ROADWAY PURPOSES OCCUR WITHIN THE LIMITS OF CONSTRUCTION, THE CONTRACTOR SHALL BE REQUIRED TO EXCAVATE SUCH MATERIAL BELOW THE GRADE SHOWN ON THE PLANS. THE AREAS SO EXCAVATED SHALL BE BACKFILLED WITH APPROVED SUITABLE SELECT FILL MATERIAL.
5. ANY NECESSARY FILL UNDER PAVED AREAS SHALL BE PLACED IN 6-INCH LIFTS. ALL FILL SHALL BE COMPACTED 95% MDD STANDARD PROCTOR. SUBGRADE SHALL BE PROOF-ROLLED PER THE DIRECTION OF AC. AREAS THAT RUT SHALL BE UNDERCUT AND REPLACED WITH CONTROLLED FILL.
6. ALL UNPAVED SURFACES SHALL BE GRADED TO PROVIDE POSITIVE DRAINAGE AWAY FROM PAVED AREAS AND TOWARD DRAINAGE STRUCTURES.
7. FOLLOWING FINAL COMPLETION, ALL DISTURBED GRASS AREAS SHALL BE PREPARED AND SODDED.
8. DISTURBED GRASS AREAS WITHIN THE PROJECT LIMITS THAT WILL REMAIN INACTIVE FOR A PERIOD OF 7 CALENDAR DAYS OR LONGER SHALL BE TEMPORARILY STABILIZED WITH SEED AND STRAW, MULCH, OR OTHER ACCEPTABLE GROUND COVER.
9. THE CONTRACTOR IS REQUIRED TO NOTIFY AC THREE (3) DAYS PRIOR TO THE BEGINNING OF CONSTRUCTION AND SPECIFICALLY REQUEST INSPECTION BEFORE BEGINNING ANY OF THE FOLLOWING ACTIVITIES:
  - A. INSTALLATION OF SILTATION AND EROSION CONTROL MEASURES
  - B. CLEARING AND GRUBBING
  - C. EARTHWORK
  - D. BACKFILL OF ANY STORM DRAINAGE PIPE, CULVERTS, INLET, AND OTHER UTILITIES
  - E. INSTALLATION OF ANY UNDERGROUND UTILITY, INCLUDING STORM PIPES, CULVERT, INLETS, DUCT BANKS, MANHOLE, ETC.
  - F. PLACING SUBBASE, BASE OR PAVING SURFACE
  - G. INSTALLATION OF ANY FORMS
  - H. PLACING OF ANY CONCRETE
  - I. BACKFILL OF ANY FOUNDATIONS OR WALLS
  - J. INSTALLATION OF LANDSCAPING
  - K. INSTALLATION MARKINGS OF LIGHTING
  - L. STRIPING AND APPLICATION OF PAVEMENT MARKINGS
  - M. ALTERATIONS TO BUS STOPS' STRUCTURES AND SIGNAGE
10. CONTRACTOR TO MAINTAIN ALL PUBLIC AND PRIVATE ACCESS AT ALL TIMES.
11. CONTRACTOR TO MATCH ALL EXISTING STEPS, SIDEWALKS, RAMPS, ETC. IN ORDER TO MAINTAIN SAFE PEDESTRIAN AND ADA ACCESS.



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606



APPROVALS	DATE
<i>Geoff D. Giffin</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>John Nicks</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>Geoff D. Giffin</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>John Nicks</i> TE&O BUREAU CHIEF	06/22/2021
<i>Dennis M. Leach</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

GENERAL NOTES AND DETAILS

ID #234  
TE02

Designed: AS  
Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.  
11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

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**C-0003**

EROSION AND SEDIMENT CONTROL

- 1. TEMPORARY SILT FENCE SHALL BE CONSTRUCTED FOR SHEET RUN OFF AS SHOWN ON PLAN OR AS DIRECTED BY THE ENGINEER.
2. WHEN WIRE SUPPORT IS USED, STANDARD STRENGTH FILTER CLOTH MAY BE USED. POSTS FOR THIS TYPE OF INSTALLATION SHALL BE PLACED A MAXIMUM OF 10 FEET APART. THE WIRE MESH FENCE MUST BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING HEAVY DUTY WIRE STAPLES AT LEAST ONE INCH LONG. THE WIRES OR HOG RINGS OF THE WIRE SHALL EXTEND INTO THE TRENCH A MINIMUM OF TWO INCHES AND SHALL NOT EXTEND MORE THAN 34 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
3. WHEN WIRE SUPPORT IS NOT USED, EXTRA STRENGTH FILTER CLOTH SHALL BE USED. POSTS FOR THIS TYPE OF FABRIC SHALL BE PLACED A MAXIMUM OF 6 FEET APART. THE FILTER FABRIC SHALL BE FASTENED SECURELY TO THE UPSLOPE SIDE OF THE POSTS USING ONE INCH LONG (MINIMUM) HEAVY DUTY WIRE STAPLES OR THE WIRES AND EIGHT INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH.
4. WIRE FENCE REINFORCEMENT FOR SILT FENCES USING STANDARD STRENGTH FILTER CLOTH SHALL BE A MINIMUM OF 14 GAUGE AND SHALL HAVE A MAXIMUM MESH SPACING OF 6 INCHES. POSTS SHALL BE EITHER STEEL POSTS OR WOODEN STAKES AND HAVE A MINIMUM LENGTH OF 5 FEET.
5. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE YARN AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE REQUIREMENTS NOTED IN TABLE 3.05-B OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION. THE SYNTHETIC FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF SIX MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0° TO 120°F.
6. SILT FENCES SHALL BE INSPECTED AND CLEANED ON A WEEKLY BASIS AND ON A DAILY BASIS IMMEDIATELY FOLLOWING EACH RAIN STORM. ALL NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY.
14. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THIRD EDITION (1992) AND VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS.
15. THE TEMPORARY EROSION AND SILTATION (E&S) CONTROL ITEMS SHOWN ON THE E&S CONTROL PLAN ARE INTENDED TO PROVIDE A GENERAL PLAN FOR CONTROLLING EROSION AND SILTATION WITHIN THE PROJECT LIMITS. THE E&S CONTROL PLAN IS BASED ON FIELD CONDITIONS AT THE TIME OF PLAN DEVELOPMENT AND AN ASSUMED SEQUENCE OF CONSTRUCTION. THE CONTRACTOR, IN CONJUNCTION WITH THE AC PROJECT MANAGER AND/OR RLD, SHALL ADJUST THE LOCATION, QUANTITY AND TYPE OF EROSION AND SILTATION CONTROL ITEMS REQUIRED BASED ON THE ACTUAL FIELD CONDITIONS ENCOUNTERED AT THE TIME OF CONSTRUCTION AND THE SELECTED SEQUENCE OF CONSTRUCTION.
16. THE AREAS BEYOND THE PROJECT'S CONSTRUCTION AREA ARE TO BE PROTECTED FROM SILTATION. PERIMETER CONTROLS SUCH AS FILTER BARRIER, SILT FENCE, ETC. SHALL BE INSTALLED PRIOR TO ANY CONSTRUCTION OPERATIONS.
17. SILT REMOVAL AND SEDIMENT CLEAN-OUT FROM EROSION AND SILTATION CONTROL ITEMS SHALL BE PERFORMED IN ACCORDANCE WITH THE FOLLOWING:
A. TEMPORARY SEDIMENT BASINS AND SEDIMENT TRAPS - WHEN THE "WET" STORAGE VOLUME (PERMANENT POOL) HAS BEEN REDUCED BY 50%.
B. DEWATERING BASINS - WHEN THE EXCAVATED VOLUME HAS BEEN REDUCED BY 50%.
C. ALL OTHER EROSION AND SILTATION CONTROL ITEMS - WHEN THE CAPACITY, HEIGHT, OR DEPTH HAS BEEN REDUCED BY 50%.
18. EXCEPT WHERE NOTED HEREON, TO THE BEST OF THE DESIGNER'S KNOWLEDGE, THE PROPOSED DEVELOPMENT OF THE SUBJECT PROPERTY CONFORMS TO ALL CURRENT APPLICABLE LAND DEVELOPMENT ORDINANCES, REGULATIONS, AND ADOPTED STANDARDS.
19. LAND CONSERVATION NOTES - MEASURES TO CONTROL EROSION AND SILTATION SHALL BE PROVIDED PURSUANT TO AND IN COMPLIANCE WITH CURRENT STATE AND LOCAL REGULATIONS. HOWEVER, THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OR HIS AGENT OF ANY LEGAL RESPONSIBILITIES WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY ORDINANCE ENACTED BY AC.
20. ADDITIONAL SILTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS DIRECTED BY ARLINGTON COUNTY INSPECTOR DURING FIELD REVIEW; COSTS ASSOCIATED WITH ADDITIONAL MEASURES SHALL BE ASSUMED BY THE CONTRACTOR.
21. EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CONSTRUCTION.
22. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
23. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
24. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
25. THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES WEEKLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
26. EROSION CONTROL MEASURES ARE TO BE REMOVED BY CONTRACTOR AFTER PERMANENT VEGETATION HAS BEEN ESTABLISHED.
27. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS:
A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED (EXAMPLE WOULD BE A SILT BAG) OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE (EXAMPLE WOULD BE A SEDIMENT TRAP) OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH STANDARDS 3.31 AND 3.32.
F. ALL TRENCHING SHALL BE IN ACCORDANCE WITH APPLICABLE SAFETY STANDARDS.
28. THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING A CLEAR TRAVEL WAY AT ALL TIMES.

GENERAL LAND CONSERVATION NOTES

- 1. NO DISTURBED AREA WILL REMAIN DENUDED FOR MORE THAN 7 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OR HIS AGENT.
2. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING. FIRST AREAS TO BE CLEARED ARE TO BE THOSE REQUIRED FOR THE PERIMETER CONTROLS.
3. ALL STORM AND SANITARY SEWER LINES NOT IN STREETS ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL. NO MORE THAN 500 FEET ARE TO BE OPEN AT ANY ONE TIME.
4. ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, SEEDED AND MULCHED WITHIN 5 DAYS OF BACKFILL.
5. ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS ARE TO BE MULCHED AND SEEDED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES TO ALL SOIL STOCKPILES.
6. DURING CONSTRUCTION, ALL STORM SEWER INLETS WILL BE PROTECTED BY INLET PROTECTION DEVICES, MAINTAINED AND FORMED AS REQUIRED BY CONSTRUCTION PROGRESS.
7. ANY DISTURBED AREA NOT COVERED BY NOTE # 1 ABOVE AND NOT PAVED, SODDED OR BUILT UPON BY NOVEMBER 1ST, OR DISTURBED AFTER THAT DATE, SHALL BE MULCHED WITH HAY OR STRAW AT THE RATE OF 2 TONS PER ACRE AND OVER-SEEDED NO LATER THAN MAY 15TH.
8. AT THE COMPLETION OF THE CONSTRUCTION PROJECT AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROL SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED. ARLINGTON COUNTY INSPECTOR TO APPROVE REMOVAL OF ALL TEMPORARY SILTATION MEASURES.

MINIMUM STANDARDS REVIEW

- MS-1 TEMPORARY AND PERMANENT STABILIZATION HAS BEEN ADDRESSED.
MS-2 THERE ARE NO STOCKPILES PROPOSED WITH THIS PLAN.
MS-3 MAINTENANCE OF PERMANENT STABILIZATION HAS BEEN ADDRESSED, SEE PERMANENT STABILIZATION.
MS-4 SEDIMENT TRAPPING FACILITIES ARE TO BE INSTALLED AS THE FIRST STEP IN LAND DISTURBING ACTIVITIES. MAINTENANCE OF FACILITIES ARE DETAILED UNDER THE EROSION AND SEDIMENT CONTROL NOTES.
MS-5 THERE ARE NO EARTHEN STRUCTURE PROPOSED WITH THIS PROJECT.
MS-6 THERE ARE NO SEDIMENT BASINS PROPOSED WITH THIS PROJECT.
MS-7 THERE ARE NO CUT AND FILL SLOPES PROPOSED WITH THIS PROJECT.
MS-8 THERE ARE NO PAVED FLUMES, CHANNELS, OR SLOPE DRAINS PROPOSED WITH THIS PROJECT.
MS-9 THERE ARE NO WATER SEEPS ANTICIPATED WITH THIS PROJECT.
MS-10 INLET PROTECTION IS PROVIDED ON INLETS DOWN GRADIENT FROM DISTURBED AREAS.
MS-11 ADEQUATE OUTLET PROTECTION EXIST AT ALL EXISTING OUTLETS. THERE ARE NO NEW OUTLETS PROPOSED.
MS-12 THERE ARE NO IN-STREAM CONSTRUCTION MEASURES PROPOSED WITH THIS PROJECT.
MS-13 THERE ARE NO STREAM CROSSINGS PROPOSED WITH THIS PROJECT.
MS-14 THERE ARE NO WATERCOURSES BEING CROSSED WITH THIS PROJECT.
MS-15 THERE ARE NO IMPACTS TO IN-STREAM IMPROVEMENTS PROPOSED WITH THIS PROJECT.
MS-16 UTILITY TRENCHING HAS BEEN ADDRESSED IN THE EROSION AND SEDIMENT CONTROL NOTES.
MS-17 PREVENTING SOIL FROM BEING TRACKED ON THE STREETS IS ADDRESSED IN THE EROSION AND SEDIMENT CONTROL NOTES.
MS-18 THE REMOVAL OF TEMPORARY PRACTICES HAS BEEN ADDRESSED IN THE EROSION AND SEDIMENT CONTROL NOTES.
MS-19 THIS PROJECT REDUCES THE IMPERVIOUS AREA AND DECREASE THE RUNOFF FROM THE SITE AREA. DOWNSTREAM OUTFALL POINTS ARE ADEQUATELY PROTECTED AND ARE NOT ACTIVELY ERODING. OUTFALL POINTS HAVE BEEN ANALYZED AND FOUND TO BE ADEQUATE IN ACCORDANCE WITH THE STATE OUTFALL REQUIREMENTS.

MS4 NOTES

- 1. ONLY THE FOLLOWING NON-STORMWATER DISCHARGES ARE AUTHORIZED BY ARLINGTON COUNTY'S MS4 PERMIT, UNLESS THE STATE WATER CONTROL BOARD, THE VIRGINIA SOIL AND WATER CONSERVATION BOARD (BOARD), OR ARLINGTON COUNTY DETERMINES THE DISCHARGE TO BE A SIGNIFICANT SOURCE OF POLLUTANTS TO SURFACE WATERS: WATER LINE FLUSHING; LANDSCAPE IRRIGATION; DIVERTED STREAM FLOWS; RISING GROUND WATERS; UNCONTAMINATED GROUND WATER INFILTRATION (AS DEFINED AT 40 CFR 35.2005(20)); UNCONTAMINATED PUMPED GROUND WATER; DISCHARGES FROM POTABLE WATER SOURCES; AIR CONDITIONING CONDENSATION; IRRIGATION WATER; SPRINGS; WATER FROM CRAWL SPACE PUMPS; FOOTING DRAINS; LAWN WATERING; INDIVIDUAL RESIDENTIAL CAR WASHING; FLOWS FROM RIPARIAN HABITATS AND WETLANDS; DECHLORINATED SWIMMING POOL DISCHARGES; DISCHARGES OR FLOWS FROM FIRE FIGHTING; AND, OTHER ACTIVITIES GENERATING DISCHARGES IDENTIFIED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY AS NOT REQUIRING VPDES AUTHORIZATION.
2. APPROPRIATE CONTROLS MUST BE IMPLEMENTED TO PREVENT ANY NON-STORMWATER DISCHARGES NOT INCLUDED ON THE ABOVE LIST (E.G., CONCRETE WASH WATER, PAINT WASH WATER, VEHICLE WASH WATER, DETERGENT WASH WATER, ETC.) FROM BEING DISCHARGED INTO ARLINGTON COUNTY'S MS4 SYSTEM, WHICH INCLUDES THE CURB AND GUTTER SYSTEM, AS WELL AS CATCH BASINS AND OTHER STORM DRAIN INLETS, OR STREAM NETWORK.
3. PER CHAPTER 26 OF THE ARLINGTON COUNTY CODE, IT SHALL BE UNLAWFUL FOR ANY PERSON TO DISCHARGE DIRECTLY OR INDIRECTLY INTO THE STORM SEWER SYSTEM OR STATE WATER; ANY SUBSTANCE LIKELY, IN THE OPINION OF THE COUNTY MANAGER, TO HAVE AN ADVERSE EFFECT ON THE STORM SEWER SYSTEM OR STATE WATERS.

Pre-Storm Erosion and Sediment Control Checklist

Per Erosion and Sediment Control General Note 6, the Contractor is responsible for the installation and maintenance of any additional erosion and sediment control (ESC) measures necessary to prevent erosion and sedimentation as determined by the County. These supplementary practices are in addition to those shown in an ESC plan. ESC practices shall be modified as needed to ensure only clear water is discharged from the site.

The following actions shall be taken prior to storm events with predicted heavy and/or large volume rainfall to prevent sediment discharges from a construction site. A typical summer thunderstorm is an example of a storm event with predicted heavy and/or large volume rainfall.

Perimeter controls

- Silt fence shall be checked for undermining, holes, or deterioration of the fabric. Fencing shall be replaced immediately if the fabric is damaged or worn. Silt fence must be trenched into the ground per state specifications (Std & Spec 3.09).
Wooden stakes or steel posts shall be properly secured upright into the ground. Damaged posts or stakes must be replaced.
Sediment that has accumulated against the silt fence should be removed. Accumulated sediment must be removed when the level reaches one-half the height of the fencing.
Hay bales or a stone berm should be placed across the construction entrance to prevent sediment from leaving the construction site.

Exposed slopes and soil

- Exposed slopes not at the final stabilization phase shall be covered with tarps, plastic sheeting, or erosion control matting. Covering material shall be properly secured/anchored.
Controls shall be installed to prevent concentrated flow down an exposed slope. Berms or diversion dikes shall be installed at the top of cut / exposed slopes to direct storm flow around the disturbed area.
Exposed slopes at the final stabilization phase shall be stabilized using slope stabilization practices such as soil stabilization blankets or matting as specified in the Virginia Erosion and Sediment Control Handbook (VESCH) Std & Spec 3.36. Blankets or mats must be properly secured and anchored to the slope using staples, pins, or stakes.
Seeded areas shall be checked and reseeded as necessary to cover exposed soil. Recently seeded areas shall be protected by straw or soil stabilization blankets to prevent seeding from being washed away.

Stockpiles

- Stockpiled soil and other loose materials that can be washed away shall be covered with a tarp, plastic sheeting, or other stabilization matting. The cover must be properly secured / anchored down to prevent it from being blown off and exposing materials to rain. Controls such as hay bales or booms should be placed along the perimeter of the stock pile (downhill side).

Inlet protection

- Inlet protection controls shall be inspected to ensure they are functioning properly and flooding will not occur. Clogged or damaged controls must be replaced immediately. Ensure controls allow for overflow / bypass of stormwater runoff during significant storm events.

In addition to these pre-storm actions, all erosion and sediment control (ESC) measures must be checked daily and after each significant rainfall.

EROSION CONTROL NARRATIVE

PROJECT DESCRIPTION:
THIS PROJECT RECONSTRUCTS AN EXISTING INTERSECTION ALONG S CARLIN SPRINGS ROAD AT S CARLIN SPRINGS ROAD AT 6TH ROAD. ALL CONSTRUCTION WORK WILL BE FOR THE DURATION OF 80 TOTAL CALENDAR (60 WORK DAYS). WORK DAYS NOT TO INCLUDE ARLINGTON COUNTY PUBLIC HOLIDAYS.

TOTAL DISTURBED AREA (FOR ESC REQUIREMENTS): 9235.02 SF (0.21 AC)
PRE DEVELOPMENT IMPERVIOUS AREA (FOR SWM REQUIREMENTS): 2562.14 SF
POST DEVELOPMENT IMPERVIOUS AREA (FOR SWM REQUIREMENTS): 403.85 SF

POTOMAC RIVER-FOUR MILE RUN WATERSHED (HUC12: 020700100301, VAHU6: PL25) AND UPPER LONG BRANCH

EXISTING CONDITIONS:
S CARLIN SPRINGS ROAD IS A MULTI-LANE, CURB AND GUTTER ROAD WITH SIDEWALKS ON BOTH SIDES. OVERHEAD UTILITIES ARE LOCATED ALONG MOST OF THE ROAD. THE RIGHT OF WAY INCLUDES STREET TREES, STREET LIGHTING, STORM DRAINAGE STRUCTURES AND PIPES, SANITARY SEWER MAINS, WATER MAINS, NATURAL GAS, ELECTRIC LINES, COMMUNICATIONS LINES AND MASS TRANSIT STOP LOCATIONS. MINIMAL CHANGES TO THE EXISTING TOPOGRAPHY ARE PROPOSED WITH LIMITED AREAS OUTSIDE OF THE RIGHT-OF-WAY BEING IMPACTED. MOST OF THE EXISTING VEGETATION WITHIN THE PROJECT LIMITS SHALL BE REPLACED. THERE ARE MINOR NEW CUT AND FILL SLOPES PROPOSED.

ADJACENT AREAS:
S CARLIN SPRINGS ROAD IS BOUND ON BOTH SIDES WITH A MIXTURE OF RESIDENTIAL DEVELOPMENTS, MEDICAL FACILITIES, AND A SCHOOL. THE CONTRACTOR SHALL PROVIDE TO THE ARLINGTON COUNTY INSPECTOR PHOTOGRAPHS OF IMMEDIATE ADJACENT AREAS TO DOCUMENT ADJACENT OFFSITE CONDITIONS PRIOR TO INSTALLING PERIMETER EROSION CONTROLS.

OFF-SITE AREAS:
THERE ARE NO OFF-SITE AREAS OR STOCKPILES ASSOCIATED WITH THIS PROJECT. OFFSITE AREAS DAMAGED BY THE CONTRACTOR OR ITS LACK OF EROSION CONTROLS SHALL BE REPAIRED BY THE CONTRACTOR, AT ITS EXPENSE, IN A TIMELY MANNER.

SOILS:
THE SOILS IN THE PROJECT AREA HAVE BEEN PRIMARILY MAPPED AS URBAN LAND - UDORTHERTS COMPLEX WHICH ARE SOILS THAT HAVE BEEN PREVIOUSLY DISTURBED AND NOT CHARACTERIZED.

CRITICAL AREAS:
THERE ARE NO CRITICAL AREAS ASSOCIATED WITH THIS PROJECT. DISTURBANCE SHALL BE LIMITED TO SMALL AREAS AND THE CONTRACTOR SHALL PROTECT THOSE AREAS AS TO NOT CAUSE OR ALLOW FOR EROSION OF SOILS OUT OF THE PROJECT AREA.

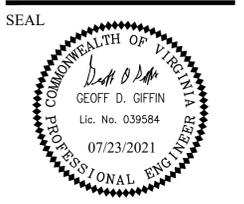
EROSION AND SEDIMENT CONTROL MEASURES:
THE FOLLOWING EROSION CONTROLS SHALL BE USED DURING THIS PROJECT.
1. STD. 3.05 SILT FENCE - SILT FENCE AND SUPER SILT FENCE SHALL BE USED IN ACCORDANCE WITH THIS STANDARD AND AS SPECIFIED BY ARLINGTON COUNTY. SEE DETAIL SHEET C-0005. SILT FENCE OR SUPER SILT FENCE SHALL BE USED DOWN GRADIENT FROM DISTURBED AREAS AS SHOWN ON THE PLANS AND AS NEEDED TO PREVENT THE TRANSPORTATION OF SEDIMENT BEYOND THE PROJECT LIMITS. IT SHALL BE INSTALLED PRIOR TO STARTING LAND DISTURBANCE AND SHALL BE REMOVED AFTER THE DISTURBED AREA HAS HAD TEMPORARY OR PERMANENT STABILIZATION ESTABLISHED. COORDINATE REMOVAL WITH THE ARLINGTON COUNTY INSPECTOR.
2. STD. 3.07 STORM DRAIN INLET PROTECTION - STORM DRAINAGE INLETS SHALL BE PROTECTED IN ACCORDANCE WITH THIS STANDARD. INLETS DOWN GRADIENT FROM LAND DISTURBING ACTIVITIES SHALL HAVE INLET PROTECTION INSTALLED PRIOR TO STARTING LAND DISTURBANCE. CARE SHALL BE TAKEN AS TO NOT INTERFERE WITH TRAFFIC ON S CARLIN SPRINGS ROAD WHEN SELECTING THE TYPE OF INLET PROTECTION TO BE USED. THE CONTRACTOR IS TO REMOVE SILT BUILDUP PROMPTLY SO THAT SILT IS NOT TRACKED ALONG THE ROAD. REMOVAL OF THE INLET PROTECTION SHALL OCCUR ONCE DISTURBED AREA UP GRADIENT OF THE INLET HAVE BEEN STABILIZED AND IN COORDINATION WITH THE ARLINGTON COUNTY INSPECTOR.
3. STD. 3.26 DEWATERING STRUCTURE - ALL DISCHARGES FROM DEWATERING OPERATIONS SHALL BE IN ACCORDANCE WITH THIS STANDARD. DEWATERING CONTROLS SHALL BE USED AT ALL DEWATERING DISCHARGES. THE CONTRACTOR IS TO NOTIFY THE ARLINGTON COUNTY INSPECTOR PRIOR TO DISCHARGING DEWATERING EFFLUENT OF THE LOCATION AND TYPE OF FILTER OR CONTROL THAT IS TO BE USED AND FOR HOW LONG IT WILL BE USED.
4. STD. 3.31 TEMPORARY SEEDING - TEMPORARY SEEDING SHALL BE APPLIED IN ACCORDANCE WITH THIS STANDARD. TEMPORARY STABILIZATION IS REQUIRED WHEN AN AREA IS NOT TO BE WORKED WITHIN A 7 DAY PERIOD. THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE IN ORDER TO ESTABLISH A SURFACE PROTECTION TO EROSION. TEMPORARY SEEDING SHALL BE CARED FOR AS NECESSARY IN ORDER TO GENERATE A DENSE, HEALTHY STAND OF VEGETATION THAT WILL RESIST EROSION.
5. THE CONTRACTOR SHALL USE APPROPRIATE METHODS TO ESTABLISH PERMANENT STABILIZATION THAT ARE SIMILAR TO THE CONDITION THAT WAS PRESENT PRIOR TO STARTING LAND DISTURBANCE ACTIVITIES.
6. STD. 3.33 SODDING - ALL SODDING SHALL BE IN ACCORDANCE WITH THIS STANDARD. SODDED AREAS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL THE SOD HAS BEEN ESTABLISHED AND HAD TWO MOWING CYCLES. THE CONTRACTOR SHALL COORDINATE THE RELEASE OF MAINTENANCE OF SODDED AREAS WITH THE ARLINGTON COUNTY INSPECTOR AND THE LAND OWNER.
7. STD. 3.38 TREE PRESERVATION AND PROTECTION - TREE PROTECTION FENCING SHALL BE IN ACCORDANCE WITH THIS STANDARD AND ARLINGTON COUNTY'S TREE PROTECTION FENCE, PLAN. SEE THIS SHEET FOR DETAIL. TREE PROTECTION SHALL BE USED ALONG THE LIMITS OF DISTURBANCE WHERE AN OFFSITE TREE OR LANDSCAPED AREA MAY HAVE A CRITICAL ROOT ZONE THAT EXTENDS INTO THE LIMITS OF THIS PROJECT. THE ARLINGTON COUNTY URBAN FORESTER MAY REQUIRE ADDITIONAL TREE PRESERVATION AND PROTECTION BE INSTALLED PRIOR TO STARTING LAND DISTURBING ACTIVITIES. TREE PRESERVATION AND PROTECTION SHALL ONLY BE REMOVED WITH THE APPROVAL OF THE ARLINGTON COUNTY URBAN FORESTER.

PERMANENT STABILIZATION:
ALL DISTURBED AREAS BY THIS PROJECT SHALL BE STABILIZED WITH PERMANENT GROUND COVER UTILIZING STD. 3.33. SODDING IS THE REQUIRED GROUND COVER FOR AREAS THAT ARE CURRENTLY GRASS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL DISTURBED AREAS UNTIL FINAL ACCEPTANCE BY ARLINGTON COUNTY AND/OR LAND OWNER. THIS SHALL INCLUDE CUTTING THE GRASS TO MAINTAIN THE SAME APPEARANCE AS THE ADJOINING PROPERTY.

STORMWATER RUNOFF CONSIDERATIONS:
THIS PROJECT REDUCES THE OVERALL IMPERVIOUSNESS OF THE SITE AREA AND DOES NOT INCREASE SURFACE RUNOFF PATTERNS OR VOLUMES. NO FLOODING OR CHANNEL DEGRADATION IS ANTICIPATED DOWNSTREAM OF THE PROJECT DUE TO THE PROPOSED REDUCTION IN RUNOFF.

CALCULATIONS:
DETAILED CALCULATIONS SHOWING PRE AND POST DEVELOPMENT DRAINAGE AREAS, INLET COMPUTATIONS, PIPE CAPACITIES AND FLOWS ARE INCLUDED IN THIS SET OF PLANS.

TABLE 3.32-D
SITE SPECIFIC SEEDING MIXTURES FOR PIEDMONT AREA
Table with columns: Seeding Mixture, Total Lbs. Per Acre. Rows include Minimum Care Lawn, Commercial or Residential, High-Maintenance Lawn, General Slope (3:1 or less), and Low-Maintenance Slope (Steeper than 3:1).



APPROVALS DATE
Traffic Signal Engineer: 06/21/21
Traffic Engineering Manager: 06/21/21
Water, Sewer, Streets Bureau Chief: 07.16.2021
TE&O Bureau Chief: 06/22/2021
Transportation Director: 06/23/21

REVISIONS DATE
Table with columns for revision number and date.

Project Name and Location: S. Carlin Springs Road Signal Upgrades
GENERAL NOTES AND DETAILS
ID #234 TE02

Designed: AS
Drawn: AS
Checked: GG
Miss Utility Transmittal #:

Plotted: July 23, 2021
Plotted by: Max.Gawthrop

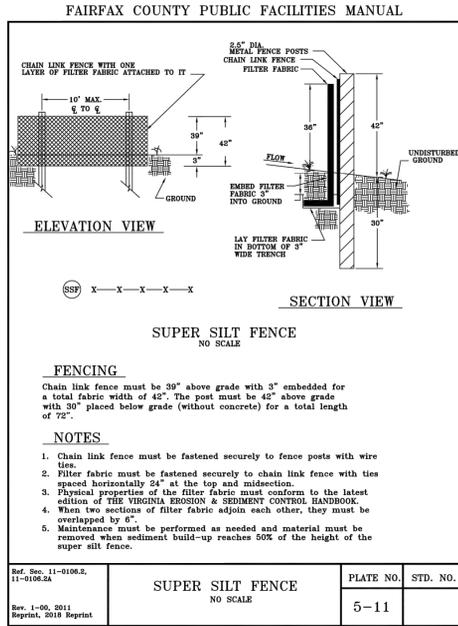
Scale:
HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191

Sheet C-0004

S. Carlin Springs Road Signal Upgrades

# GENERAL DETAILS



05/03/2021  
date

Qianqian Li, P.E.  
ESC Program Administrator  
Department of Environmental Services  
2100 Clarendon Boulevard, Suite 813  
Arlington, Virginia 22201

Re: Erosion and Sediment Control Permit Application for:  
**Carlin Springs Road and 3rd Street / Carlin Springs Road and 6th Road**  
street address

lot, block, section subdivision  
**LDA-20434**  
permit number

Dear Mrs. Li:

I hereby certify that I accept the responsibilities of Responsible Land Disturber for the above referenced project. I understand that these responsibilities include:

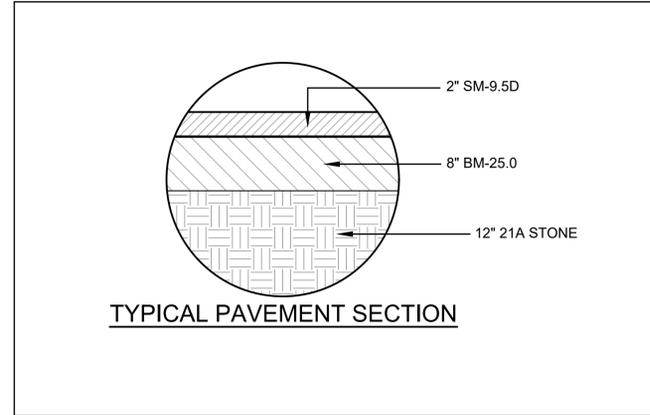
- Reviewing the erosion and sedimentation (E&S) plan for the project.
- Walking the site prior to construction to identify critical areas.
- Conducting a pre-construction briefing with earth moving and site contractors to present the E&S plan and highlight the presence of critical areas, the limits of clearing and the required E&S controls and tree protection measures to be installed. Call 703-228-0760 to schedule pre-construction meeting.
- Regularly inspecting the site during construction to ensure that all E&S controls are functioning and are adequate to address erosion and sedimentation. Inspect the site 48 hours after a runoff-generating storm, and provide a copy of the inspection findings to the county.
- Reporting to the owner the presence inadequate or non functioning E&S controls when they are observed.
- Ensuring that temporary soil stabilization is applied within 7 days to areas denuded that will remain undisturbed for longer than 14 days. Permanent stabilization shall be applied to areas that are to be left dormant for more than one year.
- Calling (703) 228-0760 at least 80 hours before demolishing any structure.

I may be reached at **703-228-7050** with questions about this plan or my execution of the duties of  
Responsible Land Disturber.

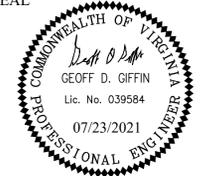
Sincerely,

*Anup Kalle*  
signed

**Anup Kalle**  
name printed  
**PE and 0402056432**  
professional registration (type and number)



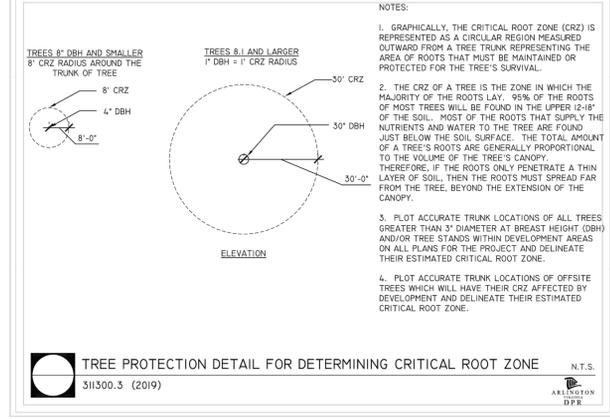
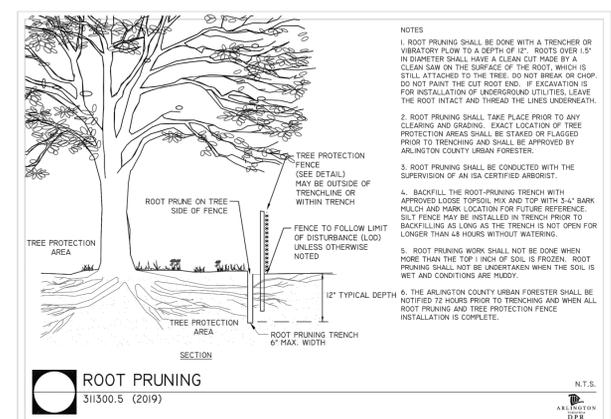
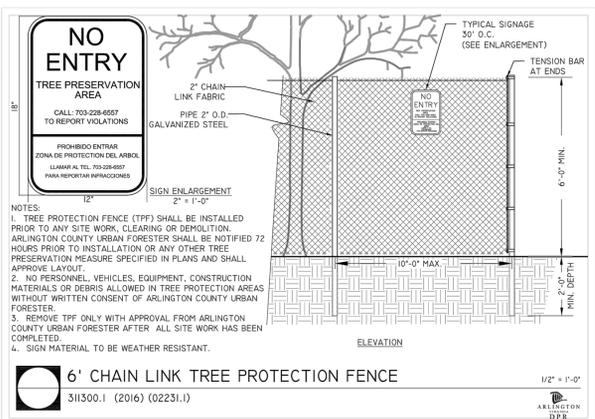
SEAL



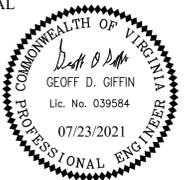
APPROVALS DATE

<i>Anup Kalle</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>Anup Kalle</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>Anup Kalle</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>Anup Kalle</i> TE&O BUREAU CHIEF	06/22/2021
<i>Dennis M. Leach</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS DATE

SEAL



APPROVALS DATE

<i>[Signature]</i>	06/21/21
TRAFFIC SIGNAL ENGINEER	
<i>[Signature]</i>	06/21/21
TRAFFIC ENGINEERING MANAGER	
<i>[Signature]</i>	07.16.2021
WATER, SEWER, STREETS BUREAU CHIEF	
<i>[Signature]</i>	06/22/2021
TE&O BUREAU CHIEF	
<i>[Signature]</i>	06/23/21
TRANSPORTATION DIRECTOR	

REVISIONS DATE

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road**  
**Signal Upgrades**

GENERAL NOTES AND DETAILS

ID #234  
TE02

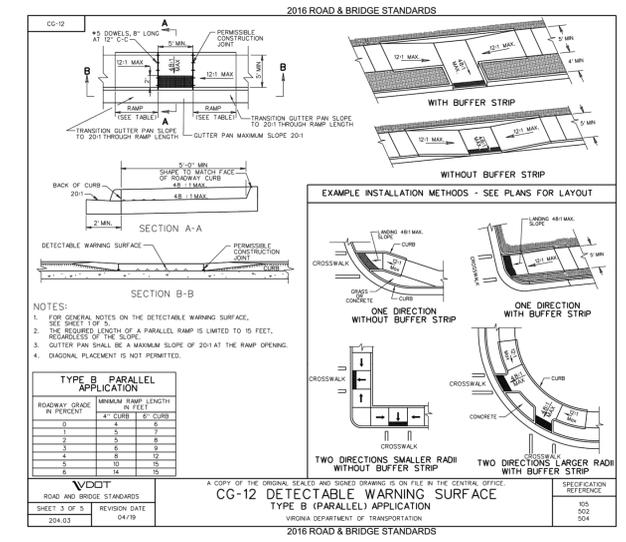
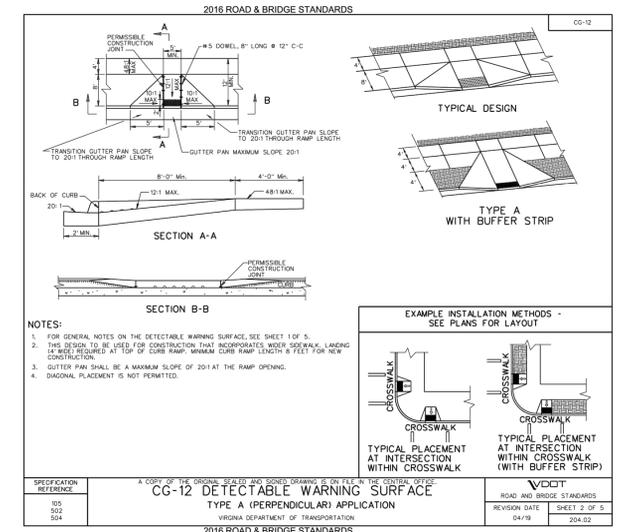
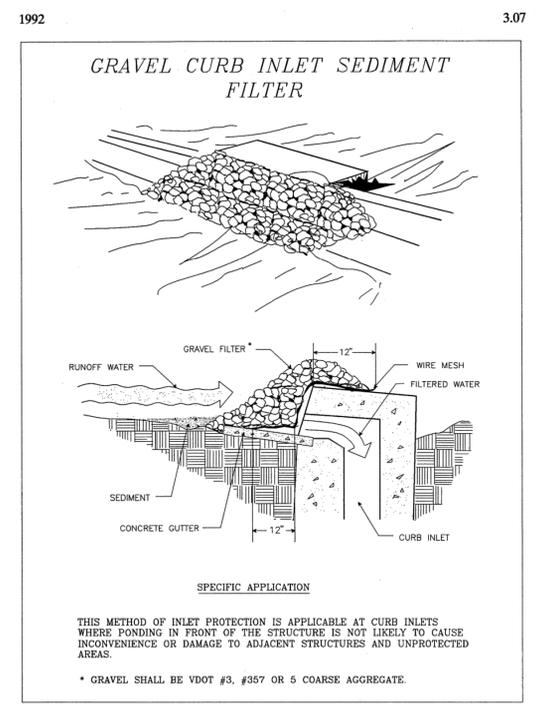
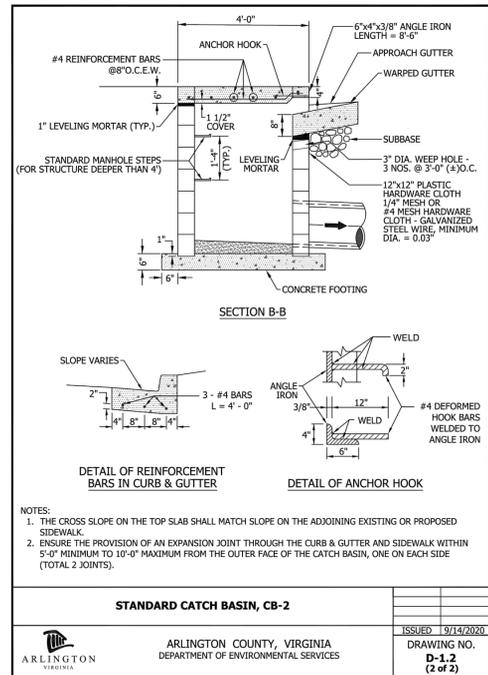
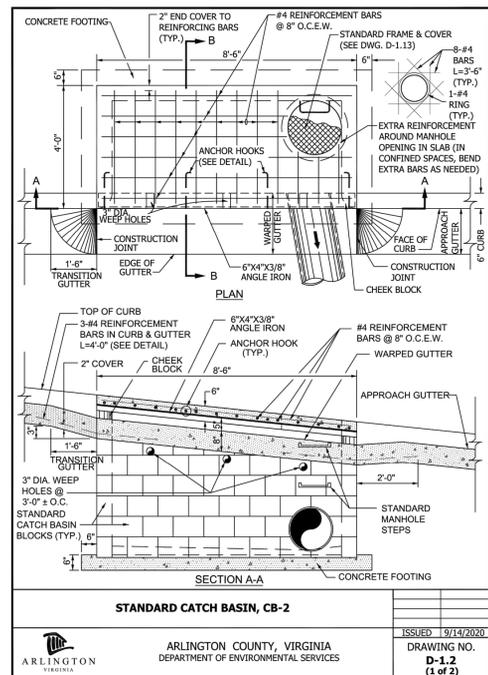
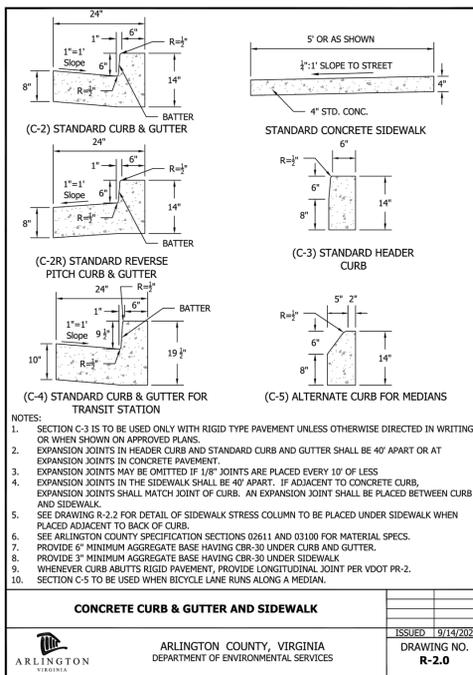
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Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

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11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
**C-0006**



Source: Va. DSWC

III - 41

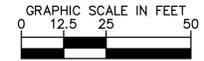


REVISED: MARCH 03, 2020

NOTE: EXISTING PAVEMENT WAS RESURFACED AND NEW MARKINGS WERE INSTALLED SINCE SURVEY WAS COMPLETED.

PARCEL A  
RPC 21030897  
VIRGINIA HOSPITAL CENTER  
ARLINGTON HEALTH

SUBDIVISION OF THE PROPERTY OF  
**NORTHERN VIRGINIA DOCTORS  
HOSPITAL CORPORATION &  
NVDH CORPORATION**  
D.B. 2022, Pg. 739



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606

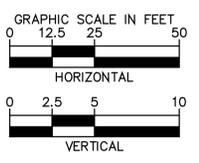
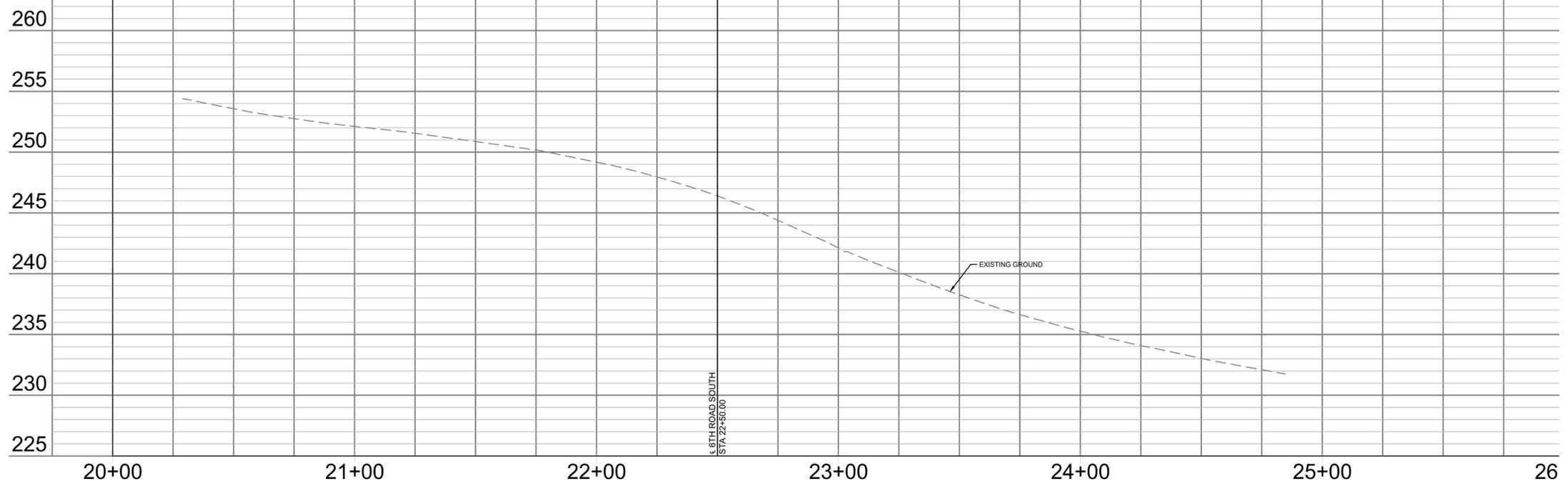
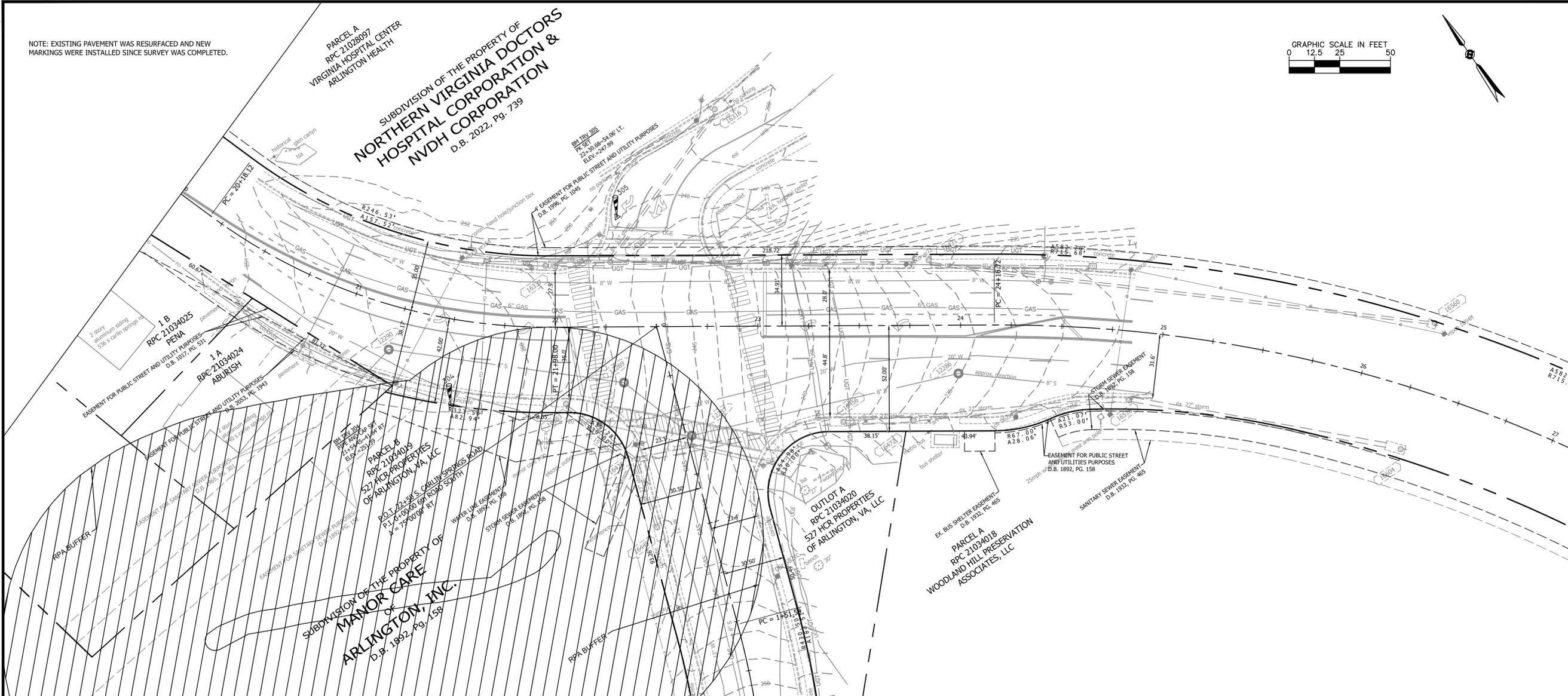
SEAL



APPROVALS DATE

<i>[Signature]</i>	06/21/21
TRAFFIC SIGNAL ENGINEER	
<i>[Signature]</i>	06/21/21
TRAFFIC ENGINEERING MANAGER	
<i>[Signature]</i>	07.16.2021
WATER, SEWER, STREETS BUREAU CHIEF	
<i>[Signature]</i>	06/22/2021
TE&O BUREAU CHIEF	
<i>[Signature]</i>	06/23/21
TRANSPORTATION DIRECTOR	

REVISIONS DATE

HORIZONTAL DATUM: VIRGINIA COORDINATE SYSTEM  
1983 NORTH ZONE

VERTICAL DATUM: NORTH AMERICAN VERTICAL  
DATUM 1988

THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF NATHAN A. ORR, L.S. FROM AN ACTUAL GROUND SURVEY MADE UNDER HIS SUPERVISION; THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED FROM 10/05/2015 TO 11/09/2015; AND THIS PLAN, MAP OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

EXISTING CONDITIONS PLAN AND  
PROFILE  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

Designed: JGJ  
Drawn: JGJ  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

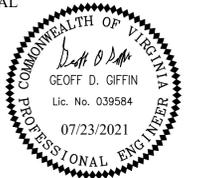
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HOR. 1" = 25' VERT. 1"=5'

KIMLEY-HORN AND ASSOCIATES, INC.  
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Reston, Virginia 20191

Sheet **C-0110**

Filename: C-0110 EXISTING CONDITIONS PLAN AND PROFILE.dwg  
Path: K:\NVA - IPT\110614003 - Carlin Springs\_2020\CAD\PlanSheets

SEAL



APPROVALS DATE

<i>[Signature]</i>	06/21/21
TRAFFIC SIGNAL ENGINEER	
<i>[Signature]</i>	06/21/21
TRAFFIC ENGINEERING MANAGER	
<i>[Signature]</i>	07.16.2021
WATER, SEWER, STREETS BUREAU CHIEF	
<i>[Signature]</i>	06/22/2021
TE&O BUREAU CHIEF	
<i>[Signature]</i>	06/23/21
TRANSPORTATION DIRECTOR	

REVISIONS DATE

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

PHASE I EROSION CONTROLS AND  
DEMOLITION PLAN

6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

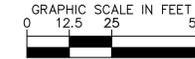
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Drawn: TEC  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

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11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
**C-0210**

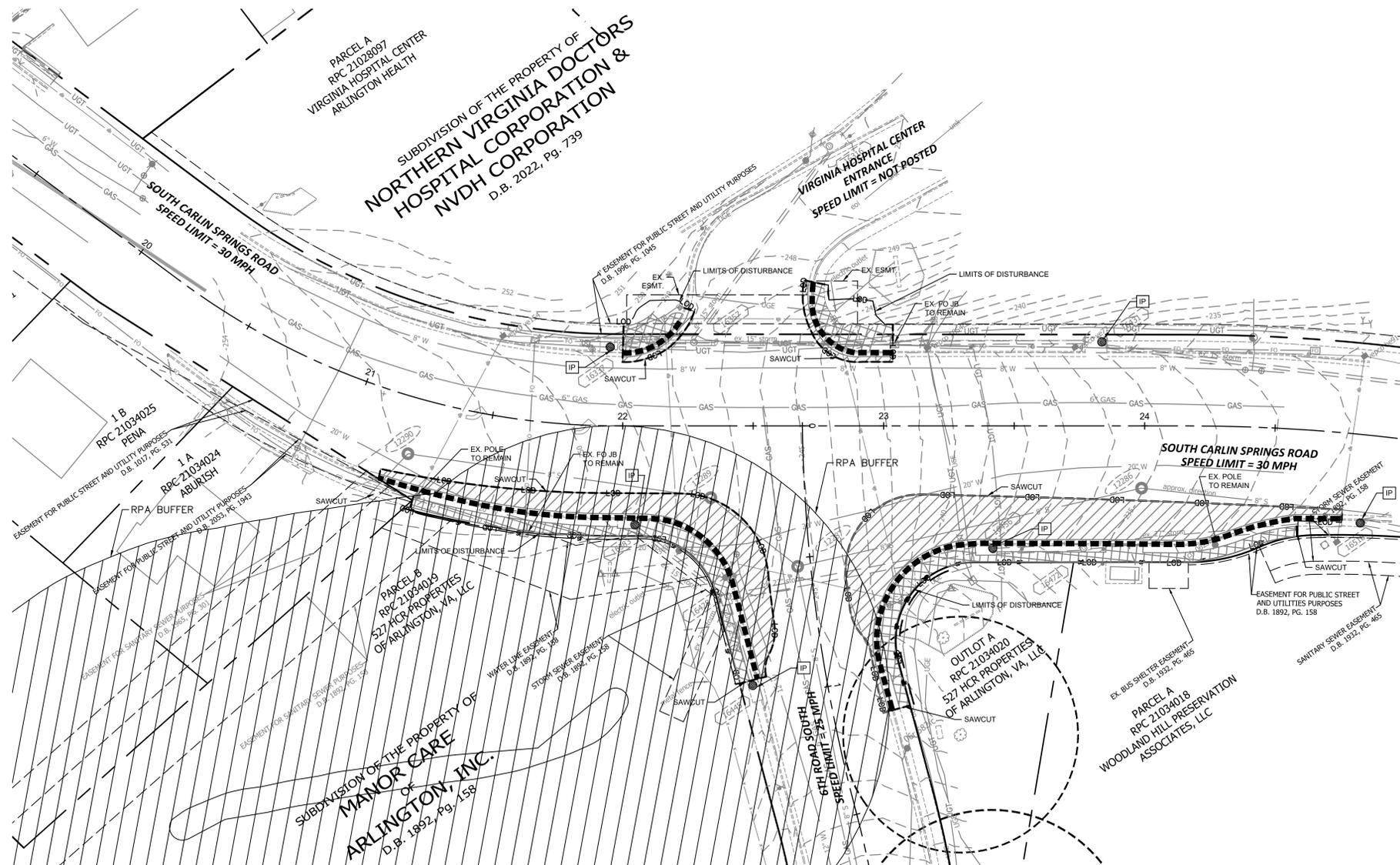


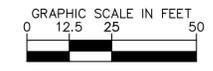
**LEGEND**

- REMOVE FULL DEPTH BITUMINOUS SURFACE
- REMOVE FULL DEPTH CONCRETE SURFACE
- REMOVE CONCRETE CURB AND GUTTER
- REMOVE FENCE OR WALL
- STORM SEWER STRUCTURE INLET PROTECTION (VESCH STD & SPEC 3.07)
- EROSION CONTROL FENCE (SILT FENCE) (VESCH STD & SPEC 3.05)
- LIMITS OF DISTURBANCE
- TREE PROTECTION
- ROOT PRUNING LINE
- CRITICAL ROOT ZONE

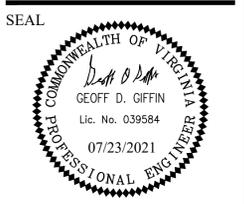
**NOTES:**

1. EROSION AND SEDIMENT PROTECTION MEASURES SHOULD BE INSTALLED ONLY WHEN NEEDED FOR THE CONSTRUCTION ZONE. IF A PROTECTION MEASURE IS NOT IMPACTED BY THE CONSTRUCTION THEN IT SHOULD BE REMOVED.
2. SEE TRAFFIC SIGNALS PLAN FOR DEMOLITION OF TRAFFIC SIGNALS
3. SEE SIGNING AND MARKING PLAN FOR LOCATIONS OF SIGNS TO BE REMOVED OR RELOCATED. COORDINATE RELOCATIONS WITH MOT AND ACTUAL CONSTRUCTION.
4. CONTRACTOR SHALL PROTECT AND RETAIN ALL EXISTING MANHOLE LIDS, VALVES, AND JUNCTION BOXES.
5. TREE PROTECTION FENCE SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING, OR DEMOLITION. CONTACT THE COUNTY URBAN FORESTER AT 703-228-1863, 72 HOURS BEFORE THE START OF CONSTRUCTION, TO COORDINATE AND INSPECT TREE PROTECTION. TREE PROTECTION IS TYPICALLY INSTALLED AT THE LIMIT OF DISTURBANCE LINES.
6. NO TREES ARE PROPOSED TO BE ADDED OR REMOVED AS PART OF THIS PLAN. TREE PROTECTION TABLE NOT INCLUDED.
7. REMOVE EXISTING FENCE AND REPLACE FENCE AS SHOWN WITH NEW MATERIAL MATCHING THE ORIGINAL FENCE.





DEPARTMENT OF ENVIRONMENTAL SERVICES  
 Transportation Division  
 Transportation Planning Bureau  
 2100 Clarendon Boulevard, Suite 900  
 Arlington, VA 22201  
 Phone: 703.228.3629  
 Fax: 703.228.3606



APPROVALS	DATE
<i>[Signature]</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>[Signature]</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>[Signature]</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>[Signature]</i> TE&O BUREAU CHIEF	06/22/2021
<i>[Signature]</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
 Signal Upgrades**  
 GEOMETRY PLAN  
 6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
 ID #234  
 TE02

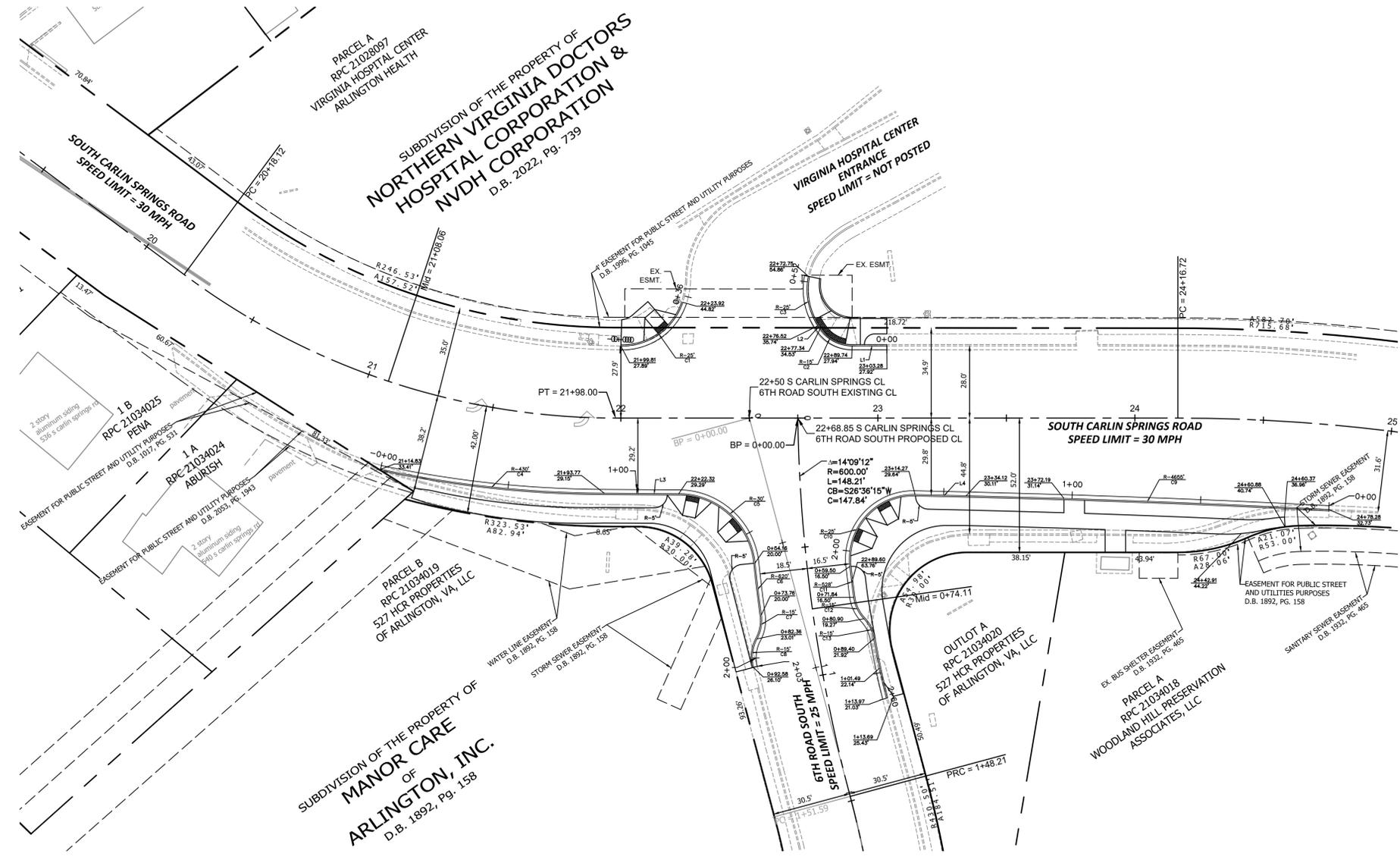
Designed: KF  
 Drawn: KF  
 Checked: GG  
 Miss Utility Transmittal #:

Plotted: July 23, 2021  
 Plotted by: Max.Gawthrop

Scale:  
 HOR. 1" = 25' VERT. N/A

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 11400 Commerce Park Drive, Suite 400  
 Reston, Virginia 20191

Sheet  
**C-0310**



6TH RD - NE - FOC					
NO.	DELTA OR BRG	RADIUS	LENGTH	NORTHING, EASTING (START)	NORTHING, EASTING (END)
C1	Δ=72° 41' 50"	24.8'	31.47'	6999389.8640, 11873459.4857	6999390.2055, 11873488.8806

6TH RD - SE - FOC					
NO.	DELTA OR BRG	RADIUS	LENGTH	NORTHING, EASTING (START)	NORTHING, EASTING (END)
C2	Δ=55° 51' 09"	15.0'	14.61'	6999338.9378, 11873533.5922	6999351.3930, 11873527.1109
C3	Δ=45° 22' 08"	25.0'	19.79'	6999352.8503, 11873527.1220	6999370.5773, 11873534.6903
L1	N 55° 25' 03" W		13.54'	6999331.2519, 11873544.7407	6999338.9378, 11873533.5922
L2	N 0° 26' 06" E		1.46'	6999351.3930, 11873527.1109	6999352.8503, 11873527.1220

6TH RD - NW - FOC					
NO.	DELTA OR BRG	RADIUS	LENGTH	NORTHING, EASTING (START)	NORTHING, EASTING (END)
C4	Δ=11° 41' 46"	429.5'	87.68'	6999403.5200, 11873355.3908	6999346.5442, 11873421.8337
C5	Δ=83° 39' 10"	30.0'	43.79'	6999329.9923, 11873445.5989	6999291.0688, 11873454.8125
C6	Δ=1° 52' 18"	620.0'	20.25'	6999291.0688, 11873454.8125	6999273.1160, 11873445.4377
C7	Δ=36° 32' 23"	15.0'	9.56'	6999273.1160, 11873445.4377	6999266.4595, 11873438.8027
C8	Δ=42° 39' 23"	15.2'	11.34'	6999266.4595, 11873438.8027	6999258.1647, 11873431.4569
L3	S 55° 08' 37" E		28.96'	6999346.5442, 11873421.8337	6999329.9923, 11873445.5989

6TH RD - SW - FOC					
NO.	DELTA OR BRG	RADIUS	LENGTH	NORTHING, EASTING (START)	NORTHING, EASTING (END)
C9	Δ=1° 44' 17"	4655.4'	141.22'	6999181.6068, 11873650.4978	6999265.9509, 11873537.2381
C10	Δ=97° 51' 54"	25.0'	42.68'	6999277.5812, 11873521.1501	6999269.0606, 11873484.4443
C11	Δ=1° 18' 11"	527.7'	12.00'	6999269.0606, 11873484.4443	6999258.4120, 11873478.9110
C12	Δ=35° 45' 58"	15.0'	9.36'	6999258.4120, 11873478.9110	6999249.3097, 11873477.4913
C13	Δ=33° 25' 46"	15.0'	8.75'	6999249.3097, 11873477.4913	6999240.7593, 11873476.3357
L4	N 54° 08' 10" W		19.85'	6999265.9509, 11873537.2381	6999277.5812, 11873521.1501

REVISED: MARCH 03, 2020

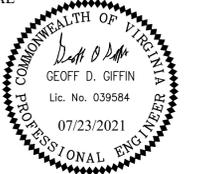
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DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606

SEAL



APPROVALS DATE

<i>[Signature]</i>	06/21/21
TRAFFIC SIGNAL ENGINEER	
<i>[Signature]</i>	06/21/21
TRAFFIC ENGINEERING MANAGER	
<i>[Signature]</i>	07.16.2021
WATER, SEWER, STREETS BUREAU CHIEF	
<i>[Signature]</i>	06/22/2021
TE&O BUREAU CHIEF	
<i>[Signature]</i>	06/23/21
TRANSPORTATION DIRECTOR	

REVISIONS DATE

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

PROPOSED PLAN AND PROFILE  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

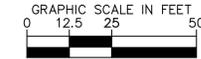
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Drawn: KF  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. 1" = 5'

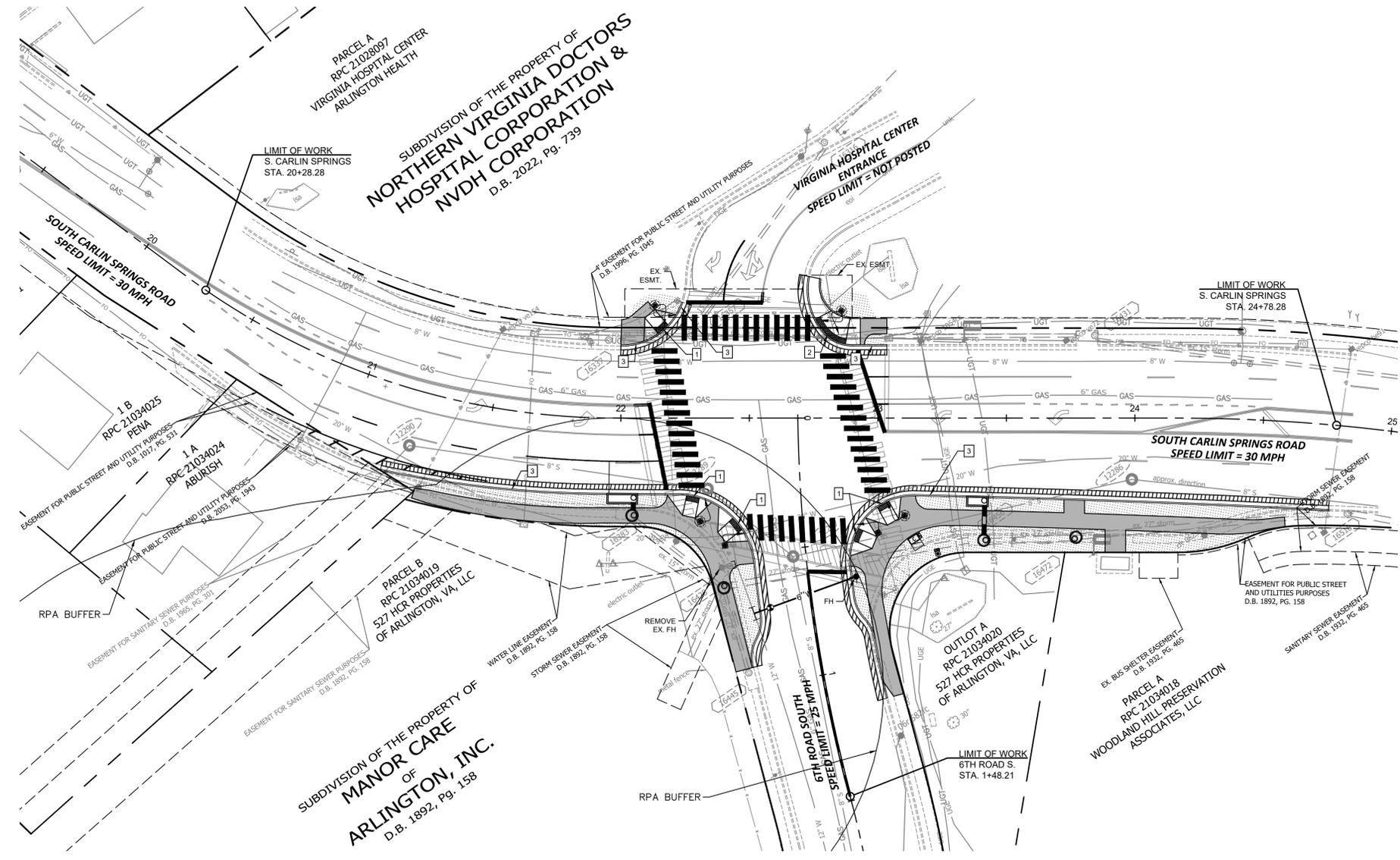
KIMLEY-HORN AND ASSOCIATES, INC.  
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Reston, Virginia 20191

Sheet  
**C-0410**

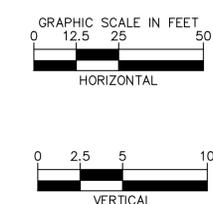
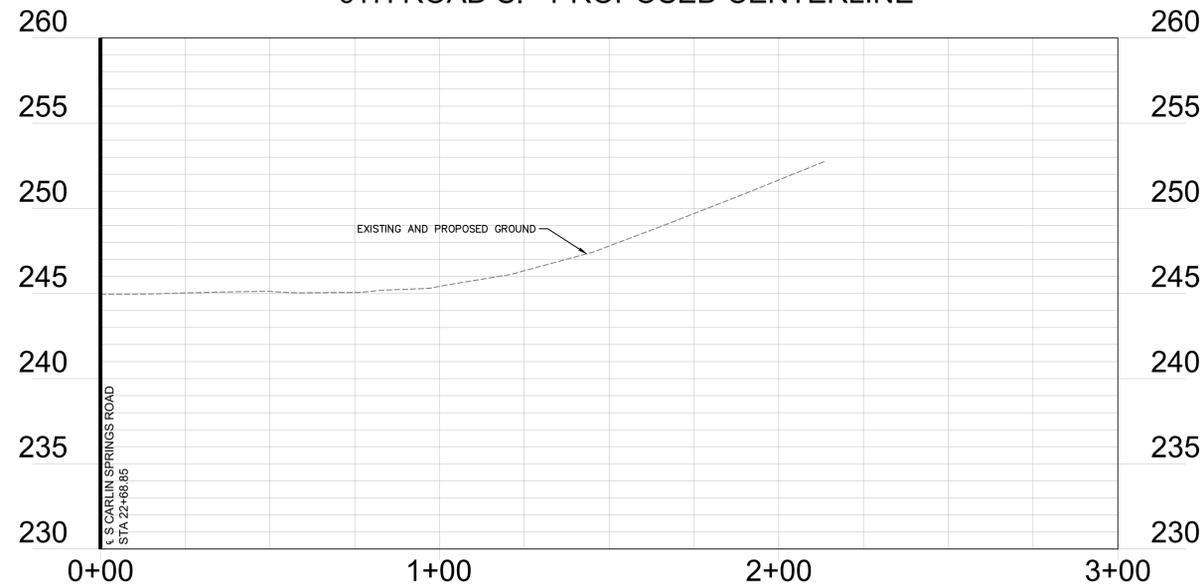


NOTE: TOPOGRAPHIC SURVEY WAS OBTAINED FROM 10/05/2015 TO 11/09/2015 BY ARLINGTON COUNTY. SEE SHEET C-0110 FOR EXISTING CONDITIONS.

- LEGEND**
- 1 TYPE A PEDESTRIAN CURB RAMP
  - 2 TYPE B PEDESTRIAN CURB RAMP
  - 3 ARL. CO. STD. C-2 CURB AND GUTTER
  - [Hatched Box] FULL DEPTH ASPHALT PAVEMENT
  - [Cross-hatched Box] FULL DEPTH CONCRETE PAVEMENT
  - [Solid Grey Box] ARL. CO. STD. CONCRETE SIDEWALK
  - [Dotted Box] LANDSCAPE AREA

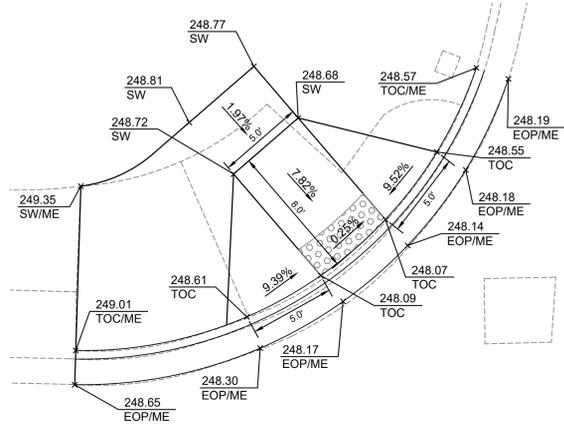


6TH ROAD S. - PROPOSED CENTERLINE

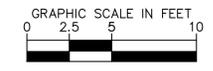
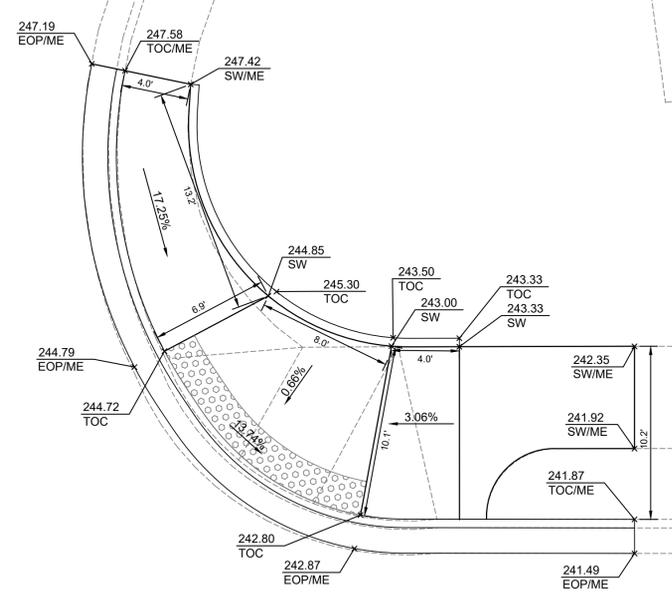


REVISED: MARCH 03, 2020

### 6TH ROAD S. - NE CORNER



### 6TH ROAD S. - SE CORNER

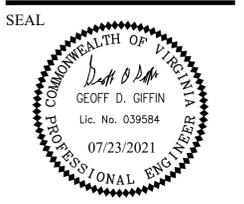


**LEGEND**

- ME = MATCH EXISTING
- TOC = TOP OF CURB
- EOP = EDGE OF PAVEMENT
- FL = FLOW LINE
- SW = SIDEWALK
- DW = DRIVEWAY



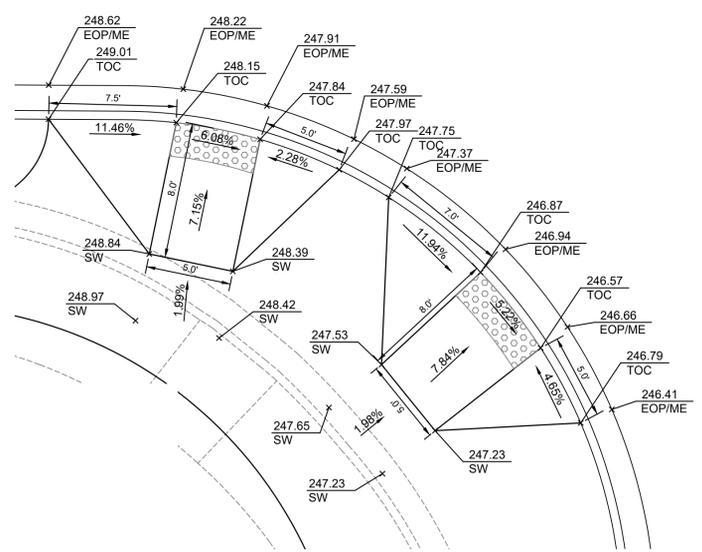
DEPARTMENT OF ENVIRONMENTAL SERVICES  
 Transportation Division  
 Transportation Planning Bureau  
 2100 Clarendon Boulevard, Suite 900  
 Arlington, VA 22201  
 Phone: 703.228.3629  
 Fax: 703.228.3606



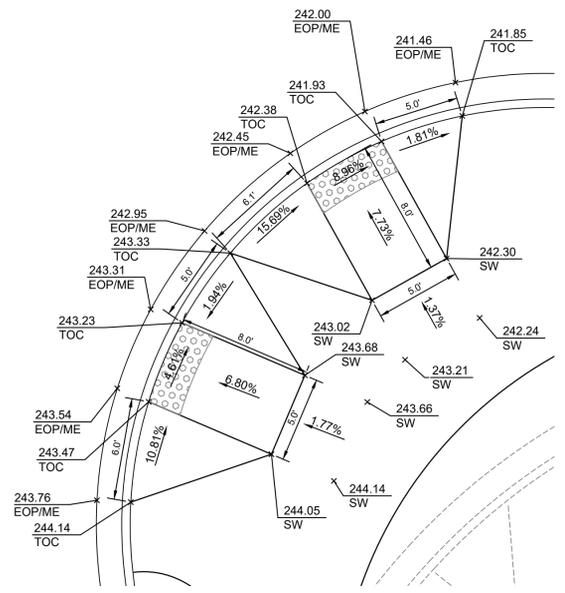
APPROVALS	DATE
<i>[Signature]</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>[Signature]</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>[Signature]</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>[Signature]</i> TE&O BUREAU CHIEF	06/22/2021
<i>[Signature]</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

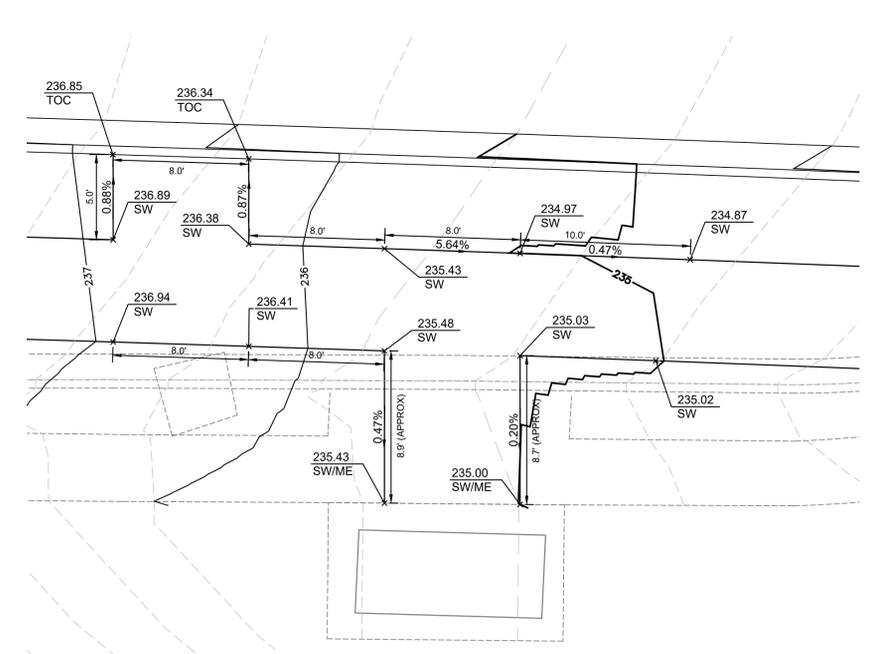
### 6TH ROAD S. - NW CORNER



### 6TH ROAD S. - SW CORNER



### 6TH ROAD S. - SW CORNER - BUS STOP GRADING PLAN



Project Name and Location  
**S. Carlin Springs Road Signal Upgrades**  
 RAMP DETAILS  
 6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
 ID #234  
 TE02

Designed: KF  
 Drawn: KF  
 Checked: GG  
 Miss Utility Transmittal #:

Plotted: July 23, 2021  
 Plotted by: Max.Gawthrop

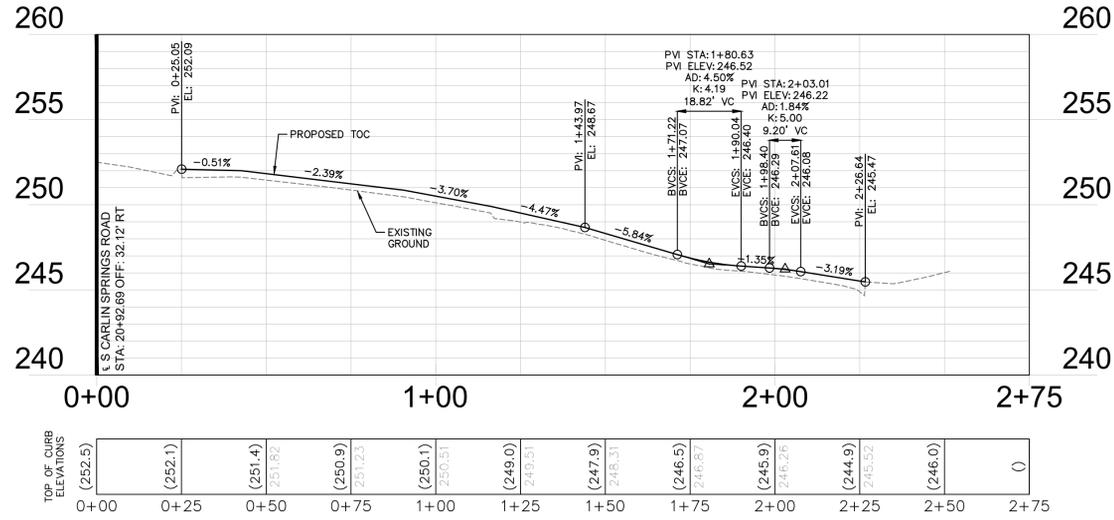
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 11400 Commerce Park Drive, Suite 400  
 Reston, Virginia 20191

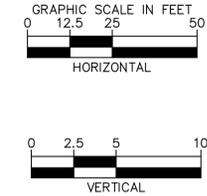
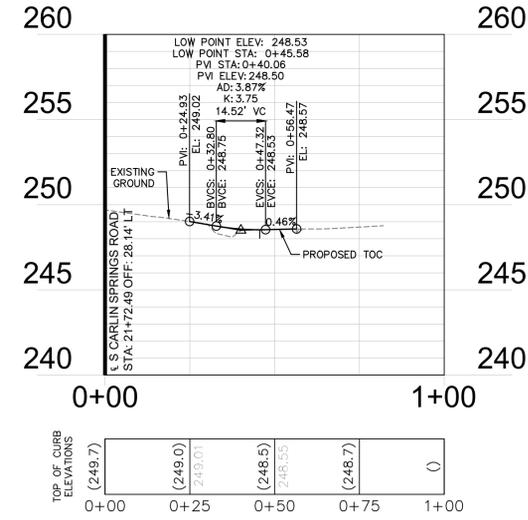
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**C-0510**

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### 6TH ROAD S. - NW CORNER

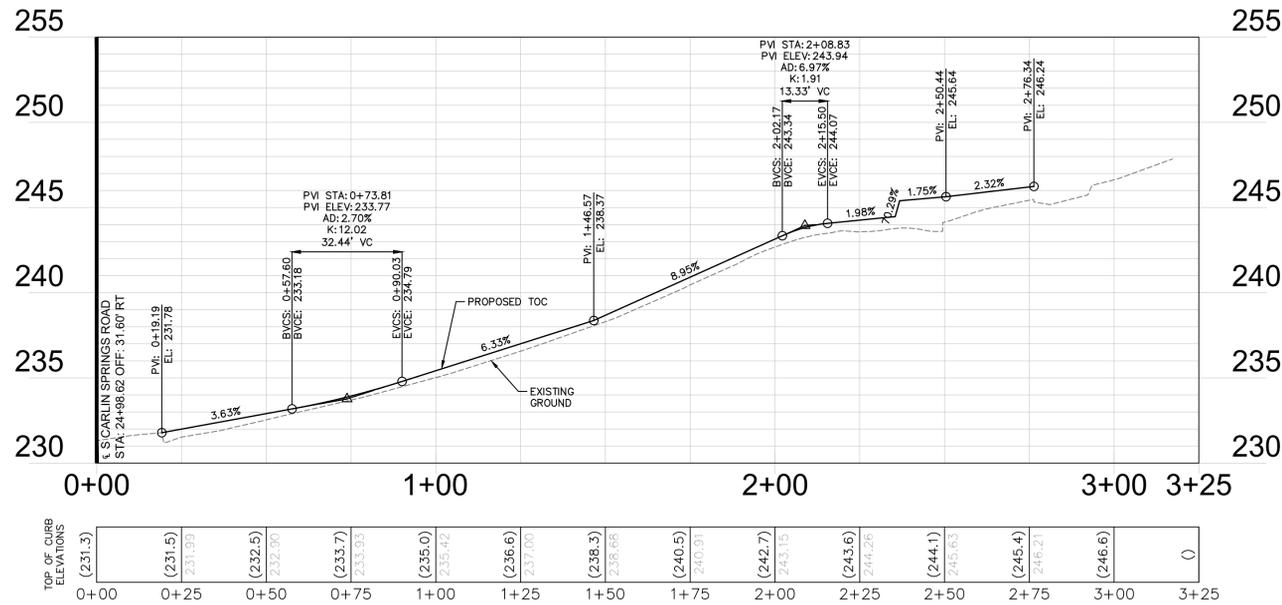


### 6TH ROAD S. - NE CORNER

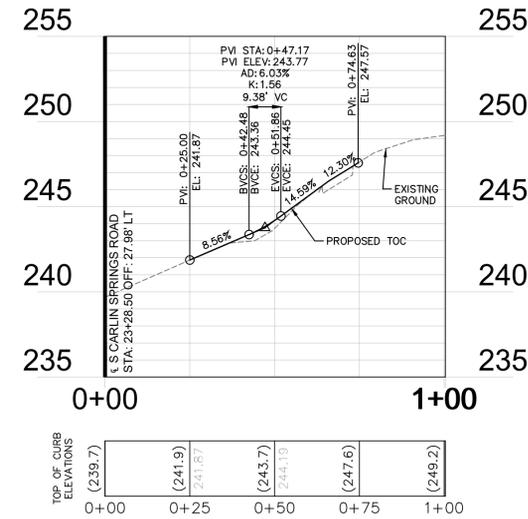


- NOTE
1. BASELINE (HORIZONTAL) STATIONING IS TAKEN AT THE PROPOSED FACE OF CURB.
  2. PROPOSED GRADES SHOW TOP OF CURB.
  3. EXISTING GRADES SHOW EXISTING GROUND ALONG THE PROPOSED FACE OF CURB.

### 6TH ROAD S. - SW CORNER

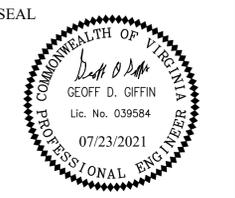


### 6TH ROAD S. - SE CORNER



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Transportation Division  
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<i>[Signature]</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

CURB RETURN PROFILES  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

Designed: KF  
Drawn: KF  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

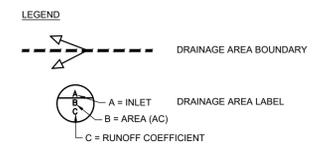
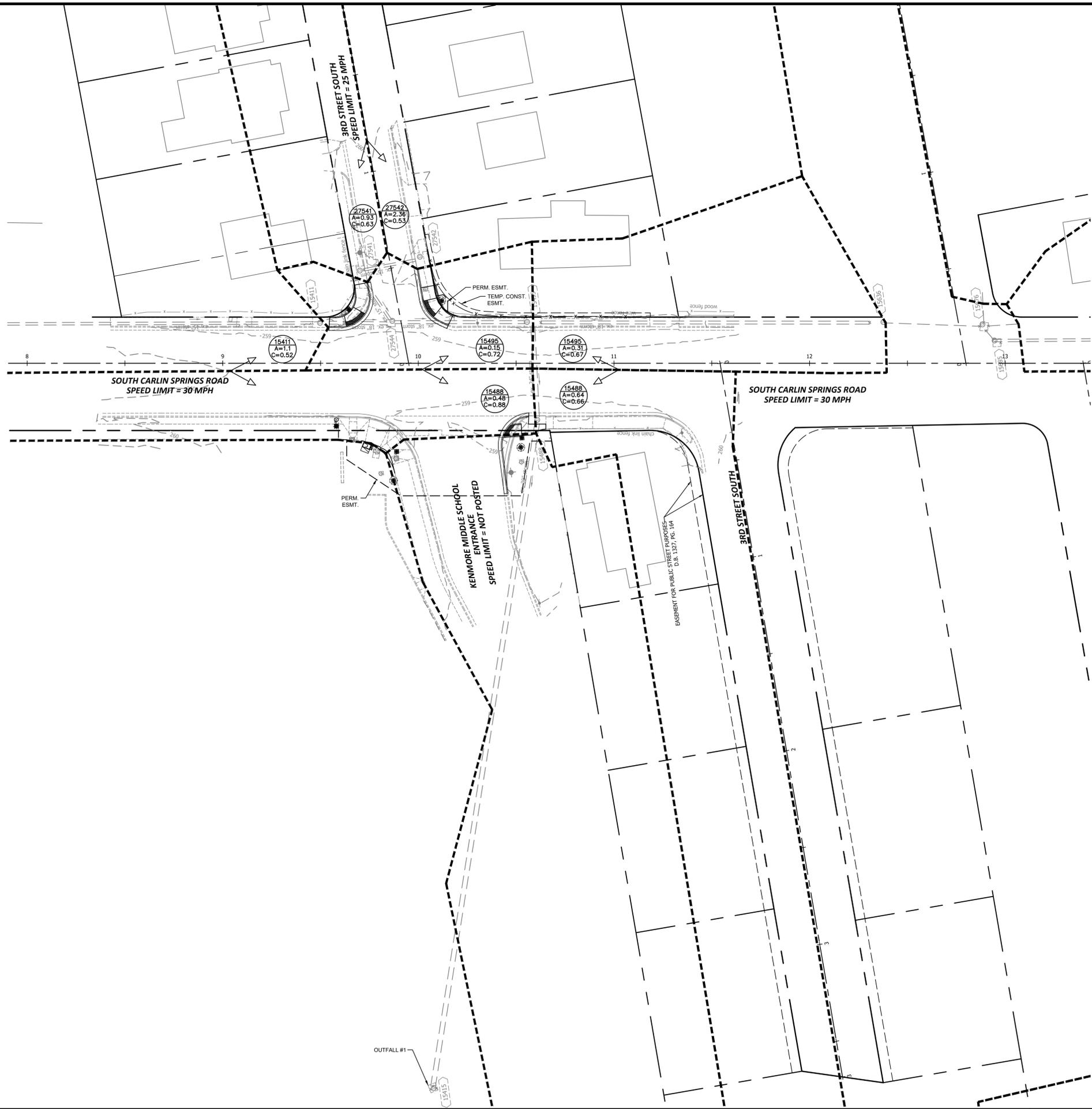
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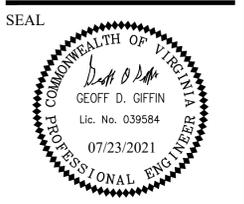
Sheet  
**C-0610**

REVISED: MARCH 03, 2020

Filename: C-0700 DRAINAGE AREA PLAN\_6th.dwg  
Path: K:\NSVA\_T\PTO\110614003 - Carlin Springs 2020\CAD\PlanSheets



DEPARTMENT OF ENVIRONMENTAL SERVICES  
 Transportation Division  
 Transportation Planning Bureau  
 2100 Clarendon Boulevard, Suite 900  
 Arlington, VA 22201  
 Phone: 703.228.3629  
 Fax: 703.228.3606



APPROVALS	DATE
<i>[Signature]</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>[Signature]</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>[Signature]</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>[Signature]</i> TE&O BUREAU CHIEF	06/22/2021
<i>[Signature]</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
 Signal Upgrades**  
 DRAINAGE AREA PLAN  
 6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
 ID #234  
 TE02

Designed: AS  
 Drawn: AS  
 Checked: GG  
 Miss Utility Transmittal #:

Plotted: July 23, 2021  
 Plotted by: Max.Gawthrop

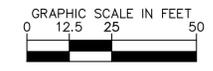
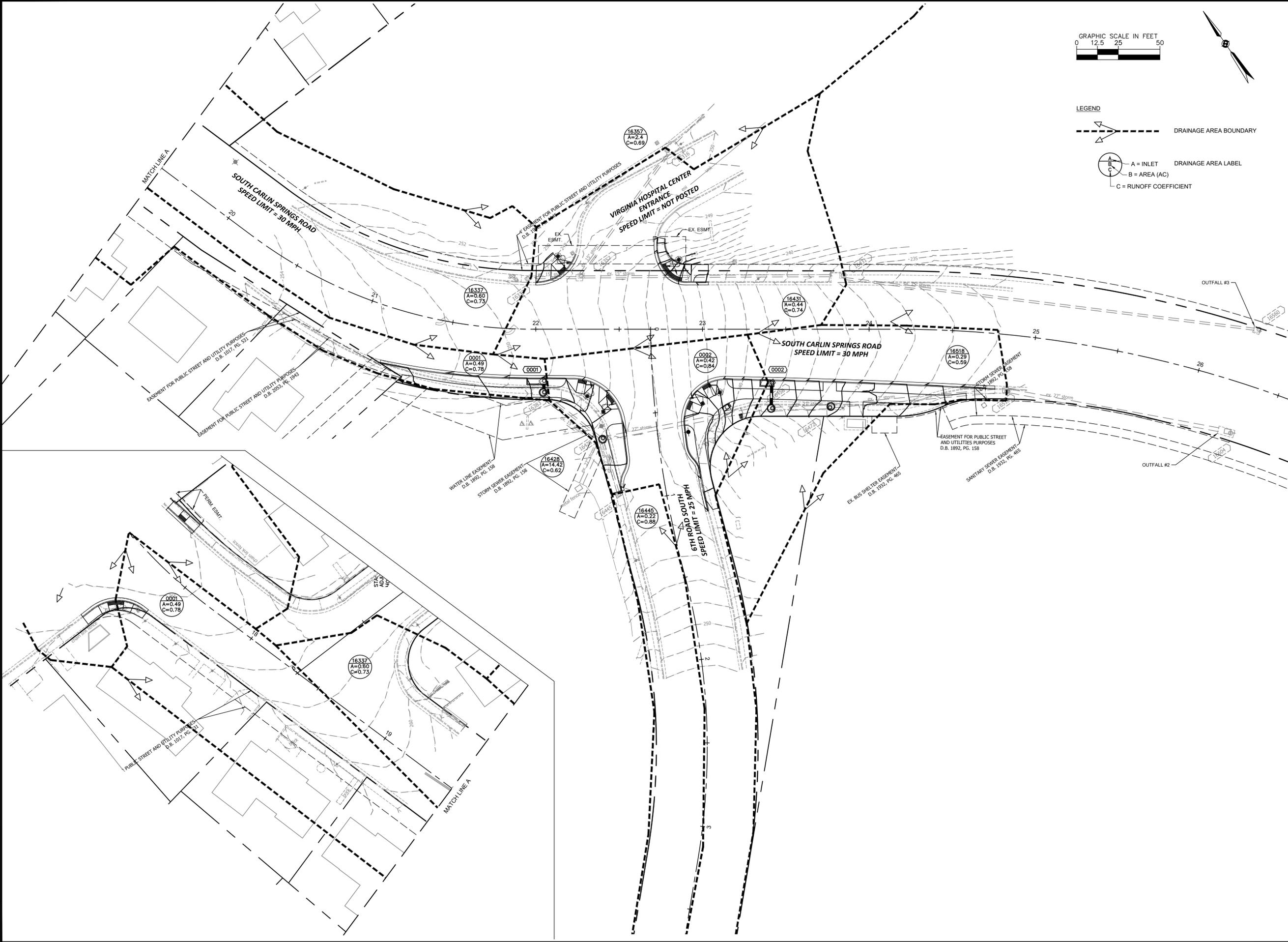
Scale:  
 HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.  
 11400 Commerce Park Drive, Suite 400  
 Reston, Virginia 20191

Sheet  
**C-0700**

REVISED: MARCH 03, 2020

Filename: C-0710 DRAINAGE AREA PLAN\_6th.dwg  
Path: K:\NSVA\_TPT\0110614003 - Carlin Springs\_2020\CAD\PlanSheets



**LEGEND**

--- DRAINAGE AREA BOUNDARY

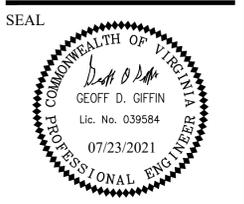
○ A = INLET  
○ B = AREA (AC)  
○ C = RUNOFF COEFFICIENT

○ DRAINAGE AREA LABEL



DEPARTMENT OF ENVIRONMENTAL SERVICES

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APPROVALS	DATE
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REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

DRAINAGE AREA PLAN  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

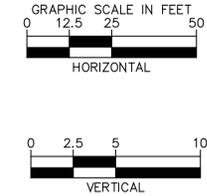
Designed: AS  
Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

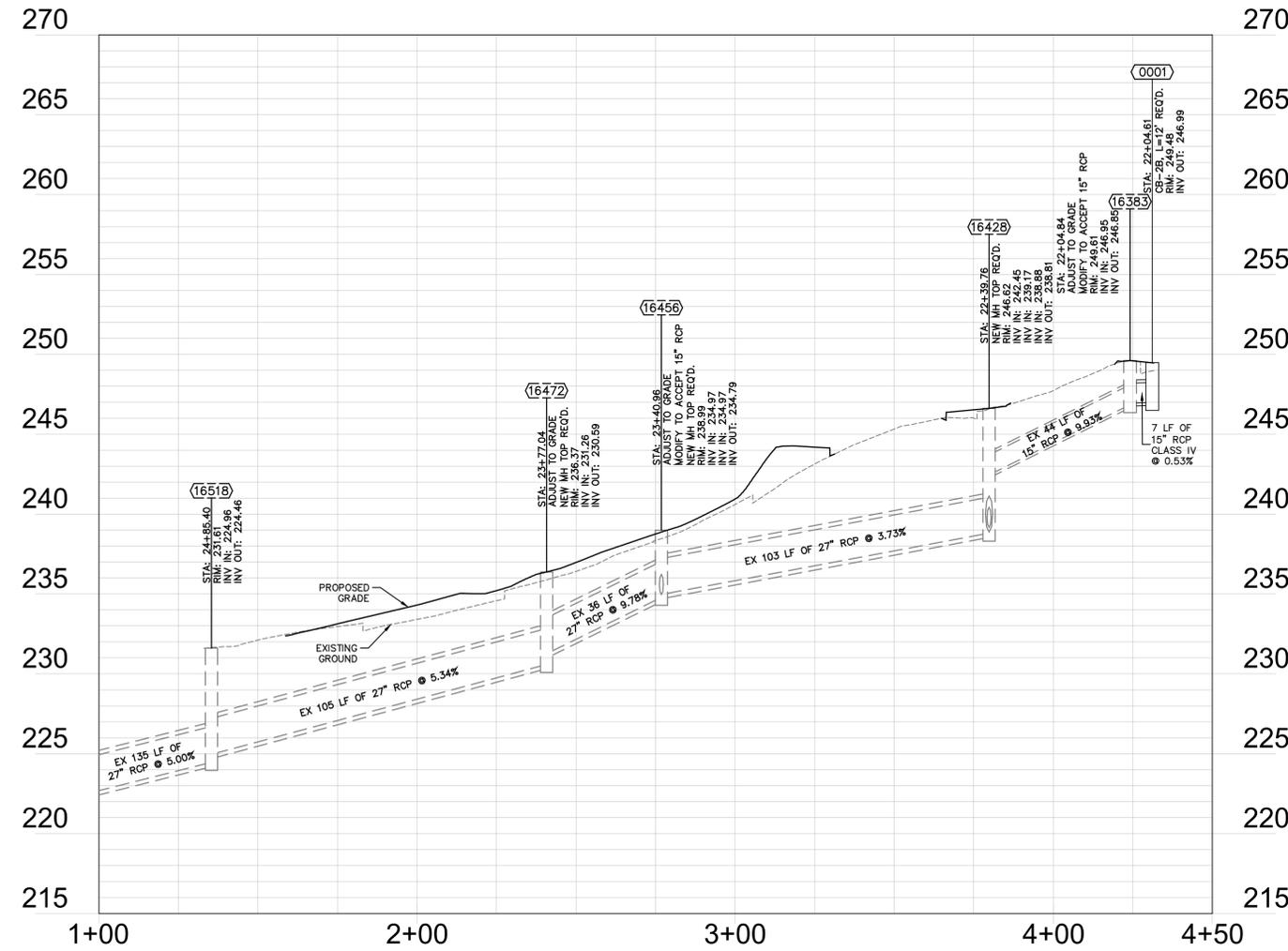
Scale:  
HOR. 1" = 25' VERT. N/A

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11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

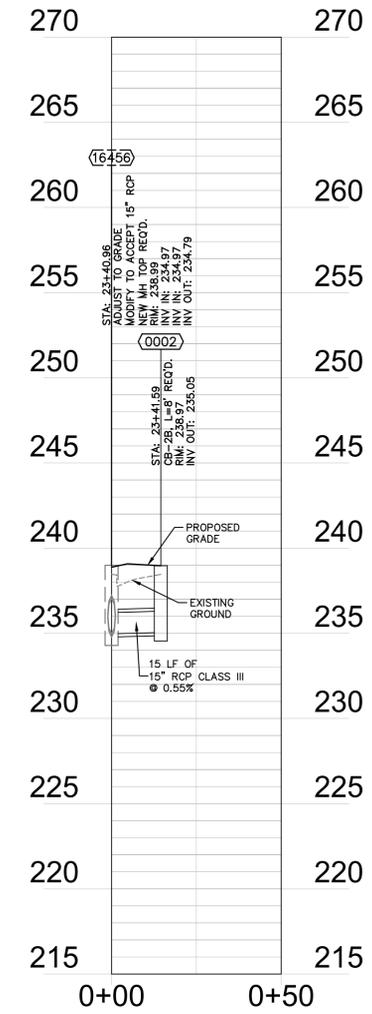
Sheet  
**C-0710**



### STORM SEWER SYSTEM 1 - PROFILE VIEW



### STORM SEWER SYSTEM 1.1 - PROFILE VIEW



DEPARTMENT OF ENVIRONMENTAL SERVICES

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<i>[Signature]</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

DRAINAGE PROFILES  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

Designed: AS  
Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

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Reston, Virginia 20191

Sheet  
**C-0711**

REVISION: MARCH 03, 2021  
 File name: C-0710 DRAINAGE AREA PLAN\_6th.dwg  
 Path: K:\NSVA\_TPT\110614003 - Carlin Springs 2020 CAD\PlanSheets

**Project:** South Carlin Springs Road  
**Locality:** Arlington County  
**Date:** 2/22/2021  
**Project No.:** 110614003  
**Designed By/Checked:** Nicole McVey, P.E. / Derik Doughty, P.E.

**Post-development Storm Drain Design Calculations**  
VDOT LD-229

FROM POINT	TO POINT	DRAINAGE AREA acres	RUNOFF COEFFICIENT C	CA		INLET TIME min	RAINFALL in/hr	RUNOFF cfs	INVERT ELEVATIONS		LENGTH ft	SLOPE %	SIZE in	PIPE CAPACITY cfs	Q / Q <sub>c</sub> %	VELOCITY fps	FLOW TIME	
				inlet	accum				upper end ft	lower end ft							incr	accum
S. Carlin Springs Road and 6th Road South (Outfall #3)																		
16337	16357	0.60	0.73	0.44	0.44	5.00	6.79	3.00	245.94	243.14	32	8.80%	15	19.11	16%	11.34	0.05	5.00
16357	16431	2.40	0.69	1.66	2.09	14.00	4.77	10.07	243.14	231.57	157	7.40%	15	17.54	57%	14.78	0.18	14.00
16431	16560	0.44	0.74	0.33	2.42	5.00	4.75	11.58	231.57	223.00	251	3.40%	15	11.94	97%	11.08	0.38	14.18
S. Carlin Springs Road and 3rd Street South (Outfall #1)																		
15411	27544	1.10	0.52	0.57	0.57	5.00	6.79	3.91	255.62	255.05	37	1.50%	18	13.03	30%	6.45	0.10	5.00
27542	27541	2.36	0.53	1.25	1.25	15.00	4.63	5.84	256.23	255.69	31	1.70%	15	8.51	69%	4.76	0.08	15.00
27541	27544	0.93	0.63	0.59	1.84	5.00	4.62	8.54	255.63	255.09	31	1.80%	15	8.60	99%	6.96	0.07	15.11
27544	15495	(N/A)	(N/A)	0.00	2.41	0.00	4.61	11.18	254.99	253.88	72	1.50%	18	13.07	86%	8.31	0.14	15.18
15495	15488	0.46	(N/A)	0.00	2.72	5.00	4.59	12.59	250.92	250.66	50	0.50%	24	16.35	77%	5.74	0.14	15.33
15488	15415	1.12	(N/A)	0.00	3.57	5.00	4.57	16.43	250.49	246.73	343	1.10%	30	42.93	38%	8.16	0.70	15.47
S. Carlin Springs Road and 6th Road South (Outfall #2)																		
BMP	16428	14.62	0.62	9.06	9.06	20.00	4.05	36.96	239.53	238.88	33	2.00%	27	43.77	84%	9.30	0.05	20.00
16445	16428	0.22	0.88	0.19	0.19	5.00	6.79	1.32	240.12	239.17	35	2.80%	15	10.72	12%	1.08	0.07	5.00
0001	16383	0.49	0.78	0.38	0.38	5.00	6.79	2.62	246.99	246.95	8	0.50%	15	4.72	56%	3.95	0.03	5.00
16383	16428	(N/A)	(N/A)	0.00	0.38	0.00	6.78	2.61	246.85	242.45	45	9.90%	15	20.30	13%	11.38	0.07	5.03
16428	16456	(N/A)	(N/A)	0.00	9.64	0.00	4.04	39.25	238.81	234.97	103	3.70%	27	59.77	66%	16.04	0.11	20.06
0002	16456	0.42	0.84	0.35	0.35	5.00	6.79	2.41	235.05	234.97	15	0.60%	15	4.80	50%	1.97	0.06	5.00
16456	16472	(N/A)	(N/A)	0.00	9.99	0.00	4.03	40.58	234.79	231.26	36	9.70%	27	96.63	42%	23.24	0.03	20.17
16472	16518	(N/A)	(N/A)	0.00	9.99	0.00	4.03	40.56	230.59	224.96	106	5.30%	27	71.54	57%	18.56	0.10	20.19
16518	16604	0.29	0.59	0.17	10.16	5.00	4.02	41.16	224.46	217.69	136	5.00%	27	69.21	59%	18.16	0.12	20.29

**Project:** South Carlin Springs Road  
**Locality:** Arlington County  
**Date:** 2/22/2021  
**Project #:** 110614003  
**Designed By/Checked:** Nicole McVey, P.E. / Derik Doughty, P.E.

**Post-development Hydraulic Grade Line Calculations**  
VDOT LD-347

INLET	DESIGN OUTLET WSE	D <sub>o</sub>	Q <sub>c</sub>	L <sub>o</sub>	S <sub>ro</sub>	H <sub>r</sub>	JUNCTION LOSS											FINAL H	INLET WSE	RIM ELEV	AVAILABLE FREEBOARD	
							V <sub>o</sub>	H <sub>o</sub>	Q <sub>i</sub>	V <sub>i</sub>	Q <sub>v</sub>	V <sub>2</sub>	H <sub>1</sub>	Angle	H <sub>s</sub>	H <sub>t</sub>	1.3 H <sub>t</sub>					0.5 H <sub>t</sub>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	
S. Carlin Springs Road and 3rd Street South (Outfall #1)																						
15488	248.73	30	16.43	343	0.010	3.43	8.16	0.26	12.59	5.25	66.10	0.43	0.15	11.67	0.06	0.47	0.61	0.31	3.74	252.47	259.12	6.65
15495	252.47	24	12.59	50	0.005	0.25	5.74	0.13	11.18	6.33	70.77	0.62	0.22	86.73	0.43	0.77	1.01	0.50	0.75	253.22	258.67	5.45
27544	255.08	18	11.18	72	0.014	1.00	8.31	0.27	8.54	6.96	59.44	0.75	0.26	56.54	0.41	0.94	0.94	0.47	1.47	256.55	258.96	2.41
15411	256.55	18	3.91	37	0.001	0.04	6.45	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.19	0.25	0.13	0.16	256.72	258.95	2.23
27541	256.55	15	8.54	31	0.017	0.52	6.96	0.19	5.84	4.76	27.80	0.35	0.12	111.93	0.28	0.59	0.76	0.38	0.90	257.45	259.37	1.92
27542	257.45	15	5.84	31	0.008	0.25	4.76	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.11	0.14	0.07	0.32	257.77	259.61	1.84
S. Carlin Springs Road and 6th Road South (Outfall #2)																						
16518	219.49	27	41.16	136	0.034	4.61	18.16	1.28	40.56	10.20	413.71	1.62	0.57	15.79	0.32	2.17	2.17	1.08	5.69	225.18	231.61	6.43
16472	226.76	27	40.56	106	0.053	5.59	18.56	1.34	40.58	10.80	438.26	1.81	0.63	4.84	0.11	2.08	2.08	1.04	6.63	233.39	236.38	2.99
16456	233.39	27	40.58	36	0.033	1.20	23.24	2.10	39.25	9.87	387.40	1.51	0.53	10.27	0.20	2.82	2.82	1.41	2.61	236.00	238.88	2.88
16428	236.77	27	39.25	103	0.034	3.51	16.04	1.00	36.96	9.30	343.73	1.34	0.47	48.75	0.66	2.13	2.13	1.06	4.57	241.34	246.62	5.28
16383	243.45	15	2.61	45	0.067	2.98	11.38	0.50	2.62	3.85	10.09	0.23	0.08	50.03	0.12	0.70	0.70	0.35	3.33	246.78	249.61	2.83
0001	247.95	15	2.62	8	0.005	0.04	3.95	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.09	0.05	0.08	248.03	249.48	1.45	
0002	236.00	15	2.41	15	0.001	0.01	1.97	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.01	0.03	236.03	238.97	2.94	
16445	241.34	15	1.32	35	0.000	0.00	1.08	0.01	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.00	0.00	0.00	241.34	245.60	4.26	
BMP	241.34	27	36.96	33	0.014	0.46	9.30	0.40	0.00	0.00	0.00	0.00	0.00	0.40	0.52	0.26	0.72	0.26	0.72	242.06	245.20	3.14
S. Carlin Springs Road and 6th Road South (Outfall #3)																						
16431	224.00	15	11.58	251	0.033	8.28	11.08	0.48	10.07	8.21	82.67	1.05	0.37	9.62	0.13	0.97	1.26	0.63	8.91	232.91	235.47	2.56
16357	232.91	15	10.07	157	0.070	10.99	14.78	0.85	3.00	2.44	7.32	0.09	0.03	4.38	0.01	0.89	1.15	0.58	11.57	244.48	247.64	3.16
16337	244.48	15	3.00	32	0.072	2.30	11.34	0.60	0.00	0.00	0.00	0.00	0.00	0	0.00	0.60	0.78	0.39	2.69	247.17	249.15	1.98

**Appendix 9B-1 LD-204 Stormwater Inlet Computations**

INLET		LENGTH (FT)	STATION	DRAINAGE AREA (AC)	C	CA	sum CA	I (IN/HR)	Q INCR (CFS)	Q <sub>c</sub> CARRYOVER (CFS)	Q <sub>t</sub> GUTTER FLOW (CFS)	S <sub>c</sub> GUTTER SLOPE (FT/FT)	S <sub>x</sub> CROSS SLOPE (FT/FT)	T <sub>c</sub> SPREAD (FT)	W (FT)	W/T	S <sub>w</sub> (FT/FT)	S <sub>w</sub> /S <sub>x</sub>	E <sub>o</sub>	a = 12W(S <sub>w</sub> - S <sub>w</sub> ) <sup>0.5</sup> Local Depression	S <sub>w</sub> /a = a/(12W)	S <sub>w</sub> = S <sub>x</sub> + S <sub>w</sub> (E <sub>o</sub> ) (FT/FT)	COMPUTED LENGTH, L <sub>c</sub> (FT)	L <sub>c</sub> SPECIFIED LENGTH (FT)	L/L <sub>c</sub>	E	Q <sub>i</sub> INTERCEPTED (CFS)	Q <sub>c</sub> CARRYOVER (CFS)	d (FT)	h (FT)	d/h	T <sub>c</sub> SPREAD @ SAG (FT)	
NUMBER	TYPE																																
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)	(30)	(31)	(32)	(33)	
<b>EXISTING - ON GRADE</b>																																	
16383	EXIST.	8	22+05	0.49	0.79	0.387	0.387	4.0	1.548	0.000	1.548	0.0640	0.0270	3.94	1.5	0.38	0.0833	3.09	0.84	3.01	0.167	0.167	12	8	0.67	0.86	1.33	0.214					
16337	EXIST.	8	21+95	0.60	0.73	0.438	0.438	4.0	1.752	0.000	1.752	0.0480	0.0620	2.99	1.5	0.50	0.0833	1.34	0.87	2.38	0.132	0.177	11	8	0.73	0.90	1.58	0.169					
16456	EXIST.	8	23+41	0.42	0.88	0.370	0.370	4.0	1.478	0.000	1.478	0.1050	0.0550	2.45	1.5	0.61	0.0833	1.52	0.94	2.51	0.139	0.186	13	8	0.62	0.82	1.21	0.265					
16431	EXIST.	8	23+84	0.44	0.74	0.326	0.326	4.0	1.302	0.338	1.640	0.0790	0.0710	2.49	1.5	0.60	0.0833	1.17	0.92	2.22	0.123	0.185	12	8	0.67	0.86	1.41	0.227					
16518	EXIST.	8	24+85	0.29	0.63	0.183	0.183	4.0	0.731	0.517	1.248	0.0450	0.0300	3.65	1.5	0.41	0.0833	2.78	0.86	2.96	0.164	0.171	10	8	0.80	0.94	1.18	0.069					
<b>PROPOSED - ON GRADE</b>																																	
0001	NEW	12	22+05	0.49	0.78	0.382	0.382																										



2.4 POLLUTION PREVENTION PLAN:

- ONLY THE FOLLOWING NON-STORMWATER DISCHARGES ARE AUTHORIZED BY ARLINGTON COUNTY'S MS4 PERMIT, UNLESS THE STATE WATER CONTROL BOARD, THE VIRGINIA SOIL AND WATER CONSERVATION BOARD (BOARD), OR ARLINGTON COUNTY DETERMINES THE DISCHARGE TO BE A SIGNIFICANT SOURCE OF POLLUTANTS TO SURFACE WATERS: WATER LINE FLUSHING; LANDSCAPE IRRIGATION; DIVERTED STREAM FLOWS; RISING GROUND WATERS; UNCONTAMINATED GROUND WATER INFILTRATION (AS DEFINED AT 40 CFR 35.2005(20)); UNCONTAMINATED PUMPED GROUND WATER; DISCHARGES FROM POTABLE WATER SOURCES; FOUNDATION DRAINS; AIR CONDITIONING CONDENSATION; IRRIGATION WATER; SPRINGS; WATER FROM CRAWL SPACE PUMPS; FOOTING DRAINS; LAWN WATERING; INDIVIDUAL RESIDENTIAL CAR WASHING; FLOWS FROM RIPARIAN HABITATS AND WETLANDS; DECHLORINATED SWIMMING POOL DISCHARGES; DISCHARGES OR FLOWS FROM FIRE FIGHTING; AND, OTHER ACTIVITIES GENERATING DISCHARGES IDENTIFIED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY AS NOT REQUIRING VPDES AUTHORIZATION.
APPROPRIATE CONTROLS MUST BE IMPLEMENTED TO PREVENT ANY NON-STORMWATER DISCHARGES NOT INCLUDED ON THE ABOVE LIST (E.G., CONCRETE WASH WATER, PAINT WASH WATER, VEHICLE WASH WATER, DETERGENT WASH WATER, ETC.) FROM BEING DISCHARGED INTO ARLINGTON COUNTY'S MS4 SYSTEM, WHICH INCLUDES THE CURB AND GUTTER SYSTEM, AS WELL AS CATCH BASINS AND OTHER STORM DRAIN INLETS, OR STREAM NETWORK.
PER CHAPTER 26 OF THE ARLINGTON COUNTY CODE, IT SHALL BE UNLAWFUL FOR ANY PERSON TO DISCHARGE DIRECTLY OR INDIRECTLY INTO THE STORM SEWER SYSTEM OR STATE WATERS, ANY SUBSTANCE LIKELY, IN THE OPINION OF THE COUNTY MANAGER, TO HAVE AN ADVERSE EFFECT ON THE STORM SEWER SYSTEM OR STATE WATERS.

2.0 Authorized Non-Stormwater Discharges

Table with 2 columns: Type of Authorized Non-Stormwater Discharge, Likely Present at Your Project Site? (Yes/No checkboxes).

STORMWATER POLLUTION PREVENTION PLAN
S. CARLIN SPRINGS ROAD SIGNAL UPGRADES

5.0 Potential Sources of Pollution & Pollution Prevention Practices

Table with columns: Pollutant-Generating Activity, Likely Present at your Project Site?, and various Pollutants (Sediment, Nutrients, Heavy Metals, etc.).

Arlington County - SWPPP 9/2016

POLLUTION PREVENTION PRACTICES:

- 1) CLEARING, GRADING, EXCAVATING AND UN-STABILIZED AREAS - UTILIZE EROSION AND SEDIMENT CONTROLS TO PREVENT SEDIMENT LADEN OR TURBID RUNOFF FROM LEAVING THE CONSTRUCTION SITE.
2) PAVING OPERATIONS - COVER STORM DRAIN INLETS DURING PAVING OPERATIONS AND UTILIZE POLLUTION PREVENTION MATERIALS SUCH AS DRIP PANS AND ABSORBENT/OIL DRY FOR ALL PAVING MACHINES TO LIMIT LEAKS AND SPILLS OF PAVING MATERIALS AND FLUIDS.
3) CONCRETE WASHOUT AND CEMENT WASTE - DIRECT CONCRETE WASH WATER INTO A LEAK-PROOF CONTAINER OR LEAK-PROOF SETTLING BASIN THAT IS DESIGNED SO THAT NO OVERFLOWS CAN OCCUR DUE TO INADEQUATE SIZING OR PRECIPITATION.
4) STRUCTURE CONSTRUCTION, STUCCO, PAINTING AND CLEANING - ENCLOSE, COVER OR BERM BUILDING MATERIAL STORAGE AREAS IF SUSCEPTIBLE TO CONTAMINATED STORMWATER RUNOFF.
5) DEWATERING OPERATIONS - CONSTRUCTION SITE DEWATERING FROM BUILDING FOOTINGS OR OTHER SOURCES MAY NOT BE DISCHARGED WITHOUT TREATMENT.
6) MATERIAL DELIVERY AND STORAGE - DESIGNATE AREAS OF THE CONSTRUCTION SITE FOR MATERIAL DELIVERY AND STORAGE.
7) MATERIAL USE DURING BUILDING PROCESS - USE MATERIALS ONLY WHERE AND WHEN NEEDED TO COMPLETE THE CONSTRUCTION ACTIVITY.
8) SOLID WASTE DISPOSAL - DESIGNATE A WASTE COLLECTION AREA ON THE CONSTRUCTION SITE THAT DOES NOT RECEIVE A SUBSTANTIAL AMOUNT OF RUNOFF FROM UPLAND AREAS AND DOES NOT DRAIN DIRECTLY TO A WATERWAY.
9) SANITARY WASTE - PREVENT THE DISCHARGE OF SANITARY WASTE BY PROVIDING CONVENIENT AND WELL-MAINTAINED PORTABLE SANITARY FACILITIES.
10) LANDSCAPING OPERATIONS - MAINTAIN AS MUCH EXISTING VEGETATION AS PRACTICABLE.

7.0 Spill Prevention & Response

Most spills can be cleaned up following manufacturer specifications. Absorbent/oil dry, sealable containers, plastic bags, and shovels/brooms are suggested minimum spill response items that should be available at this location.

- 1st Priority: Protect all people
2nd Priority: Protect equipment and property
3rd Priority: Protect the environment

- 1. Check for hazards (flammable material, noxious fumes, cause of spill) - if flammable liquid, turn off engines and nearby electrical equipment.
2. Make Sure the spill area is safe to enter and that it does not pose an immediate threat to health or safety of any person.
3. Stop the spill source.
4. Call co-workers and supervisor for assistance and to make them aware of the spill and potential dangers.
5. If possible, stop spill from entering drains (use absorbent or other material as necessary).
6. Stop spill from spreading (use absorbent or other material).
7. If spilled material has entered a storm sewer, contact locality's storm water department.
8. Clean up spilled material according to manufacturer specifications, for liquid spills use absorbent materials and do not flush area with water.
9. Properly dispose of cleaning materials and used absorbent material according to manufacturer specifications.

Emergency Contacts:

Normal Working Hours
DEQ Northern Regional Office 703-583-3800

Nights, Holidays & Weekends

VA Dept. of Emergency Management 804-674-2400
24 Hour Reporting Service

Local Contacts

Arlington County Fire & Police 703-558-2222
DES Water, Sewer, Streets 24-Hour Emergency 703-228-6565
Washington Gas Emergency 703-750-1400



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division
Transportation Planning Bureau
2100 Clarendon Boulevard, Suite 900
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606

SEAL



APPROVALS DATE

TRAFFIC SIGNAL ENGINEER 06/21/21
TRAFFIC ENGINEERING MANAGER 06/21/21
WATER, SEWER, STREETS BUREAU CHIEF 07.16.2021
TRANSPORTATION DIRECTOR 06/23/21

REVISIONS DATE

Table with 2 columns: REVISIONS, DATE

Project Name and Location
S. Carlin Springs Road
Signal Upgrades
SWPPP
6TH ROAD S. AND S. CARLIN SPRINGS ROAD
ID #234
TE02

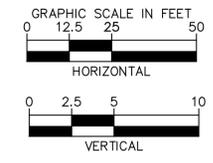
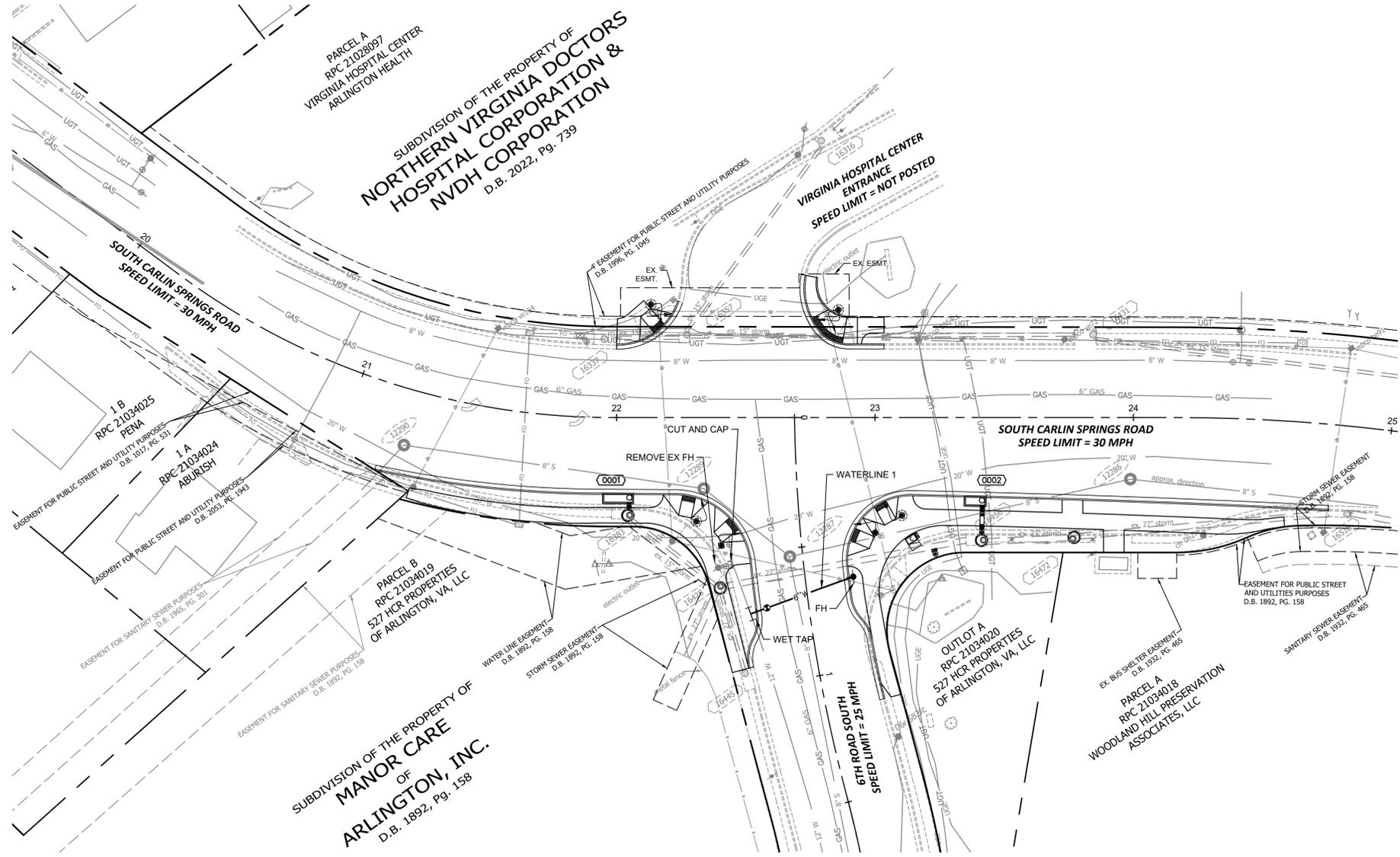
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Drawn: AS
Checked: GG
Miss Utility Transmittal #:

Plotted: July 23, 2021
Plotted by: Max.Gawthrop

Scale:
HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.
11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191

Sheet C-0714



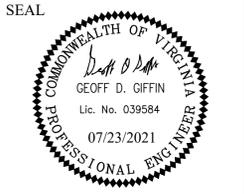
**NOTE**

- EXISTING FIRE HYDRANT TO REMAIN IN SERVICE UNTIL NEW HYDRANT IN SERVICE
- PROFILE VIEW STATIONING ALONG CENTERLINE OF PIPE.
- PROFILE VIEW STATION AND OFFSET IN REFERENCE TO S. CARLIN SPRINGS ROAD ALIGNMENT.



DEPARTMENT OF ENVIRONMENTAL SERVICES

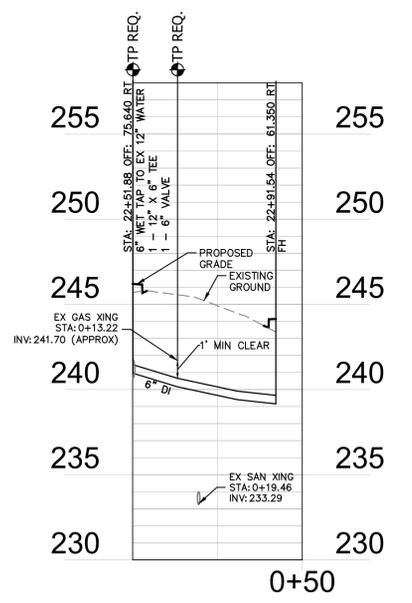
Transportation Division  
 Transportation Planning Bureau  
 2100 Clarendon Boulevard, Suite 900  
 Arlington, VA 22201  
 Phone: 703.228.3629  
 Fax: 703.228.3606



APPROVALS	DATE
<i>[Signature]</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>[Signature]</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>[Signature]</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>[Signature]</i> TE&O BUREAU CHIEF	06/22/2021
<i>[Signature]</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

**WATERLINE 1 - PROFILE VIEW**



Project Name and Location  
**S. Carlin Springs Road**  
**Signal Upgrades**

WATERLINE PLAN AND PROFILE  
 6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
 ID #234  
 TE02

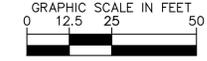
Designed: KF  
 Drawn: KF  
 Checked: GG  
 Miss Utility Transmittal #:

Plotted: July 23, 2021  
 Plotted by: Max.Gawthrop

Scale:

KIMLEY-HORN AND ASSOCIATES, INC.  
 11400 Commerce Park Drive, Suite 400  
 Reston, Virginia 20191

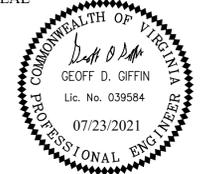
Sheet **C-0810**



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606

SEAL



LEGEND

- SF ——— EROSION CONTROL FENCE (SILT FENCE) (VESCH STD & SPEC 3.05)
- LOD ——— LIMITS OF DISTURBANCE
- [Hatched Box] SODDING
- [Circle with IP] IP STORM SEWER STRUCTURE INLET PROTECTION (VESCH STD & SPEC 3.07)

APPROVALS DATE

<i>[Signature]</i>	06/21/21
TRAFFIC SIGNAL ENGINEER	
<i>[Signature]</i>	06/21/21
TRAFFIC ENGINEERING MANAGER	
<i>[Signature]</i>	07.16.2021
WATER, SEWER, STREETS BUREAU CHIEF	
<i>[Signature]</i>	06/22/2021
TE&O BUREAU CHIEF	
<i>[Signature]</i>	06/23/21
TRANSPORTATION DIRECTOR	

REVISIONS DATE

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

PHASE 2 EROSION CONTROLS  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

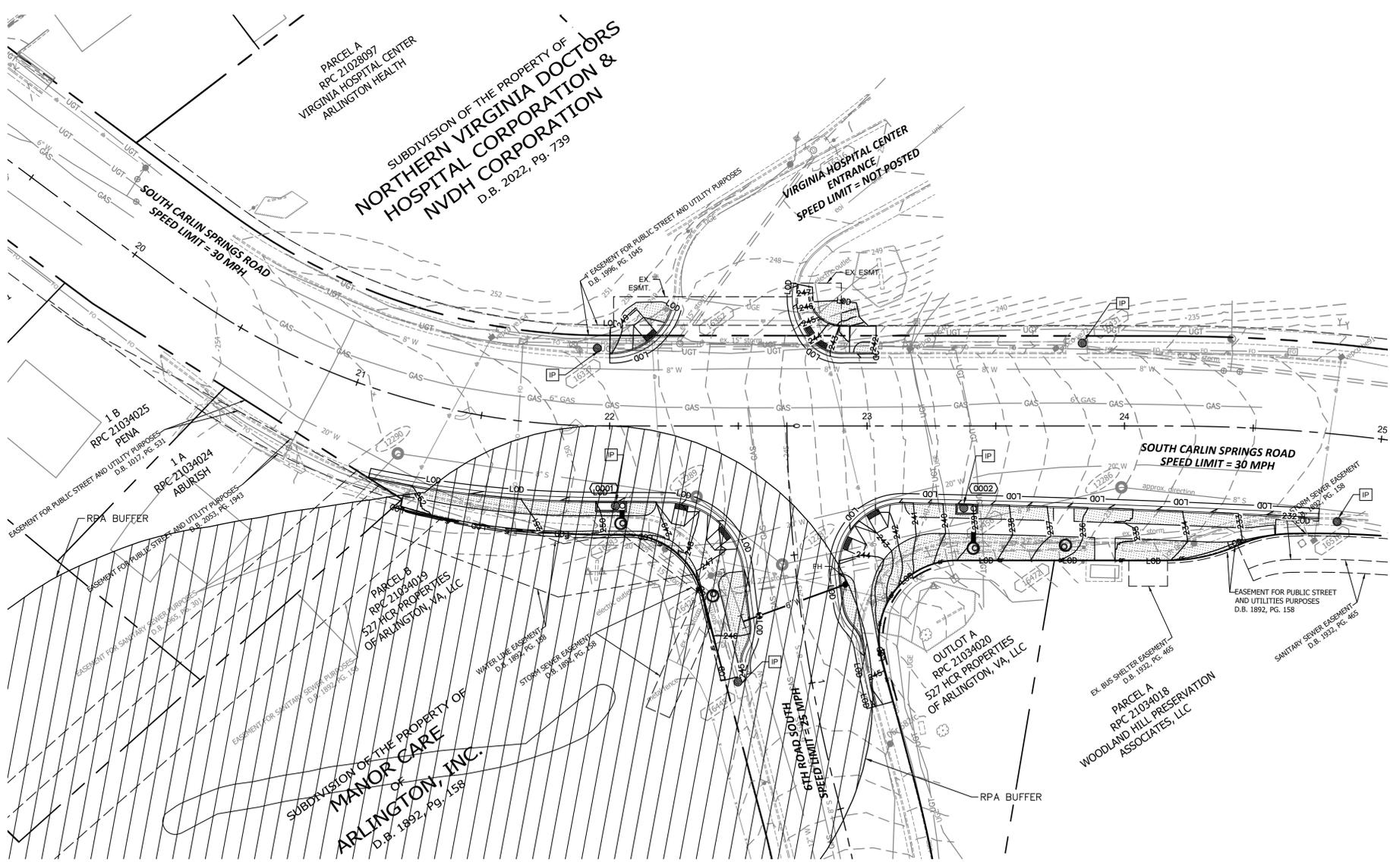
Designed: AS  
Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

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11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
**C-0910**



PARCEL A  
RPC 21028097  
VIRGINIA HOSPITAL CENTER  
ARLINGTON HEALTH

SUBDIVISION OF THE PROPERTY OF  
**NORTHERN VIRGINIA DOCTORS  
HOSPITAL CORPORATION &  
NVDH CORPORATION**  
D.B. 2022, Pg. 739

1 B  
RPC 21034025  
PENA  
D.B. 1017, Pg. 331

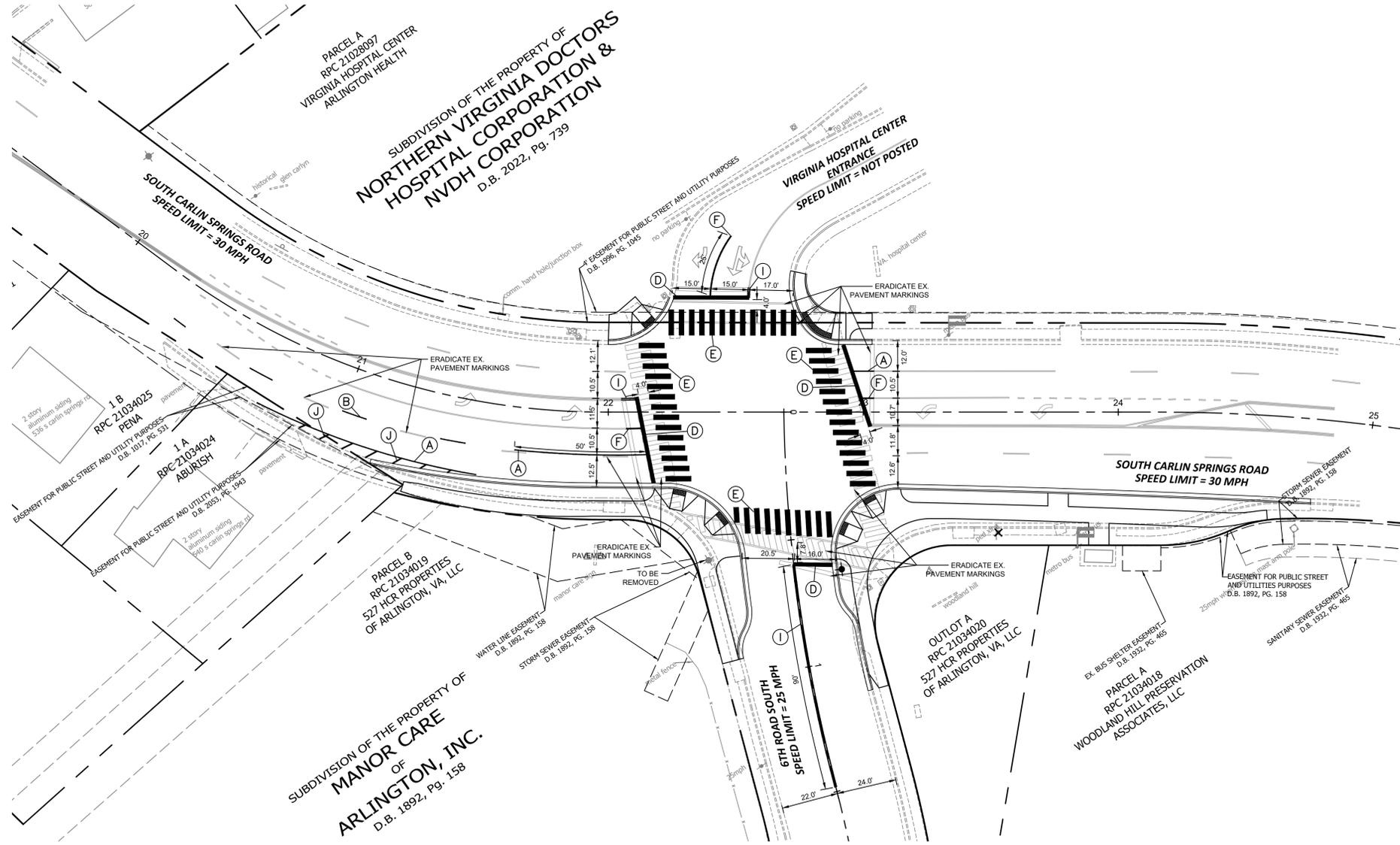
1 A  
RPC 21034024  
ABURISH  
D.B. 2053, Pg. 1943

PARCEL B  
RPC 21034026  
527 HCR PROPERTIES  
OF ARLINGTON, VA, LLC

SUBDIVISION OF THE PROPERTY OF  
**MANOR CARE  
OF ARLINGTON, INC.**  
D.B. 1992, Pg. 158

OUTLOT A  
RPC 21034020  
527 HCR PROPERTIES  
OF ARLINGTON, VA, LLC

PARCEL A  
RPC 21034018  
WOODLAND HILL PRESERVATION  
ASSOCIATES, LLC



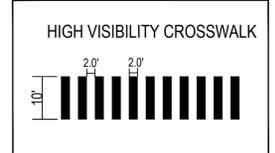
- SIGN AND PAVEMENT MARKING NOTES:**
- STREET WIDTH MEASUREMENTS ARE FROM FACE OF CURB TO FACE OF CURB. LANES ARE MEASURED FROM CENTER OF MARKING TO CENTER OF MARKING.
  - CONTACT DENNIS HOWELL OR HIS DESIGNEE AT 703-228-6598 OR (571) 437-1077 TO APPROVE MARKING LAYOUT 48 HRS. PRIOR TO INSTALLATION OF MARKINGS.
  - PAVEMENT MARKINGS TO BE IN ACCORDANCE WITH THE FOLLOWING AND ANY REVISIONS HERE TO:
    - A.) THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
    - B.) ARLINGTON COUNTY MARKING STANDARDS.
  - ALL MARKINGS SHALL BE THERMOPLASTIC PER ARLINGTON COUNTY MARKING STANDARDS.
  - STOP BARS SHALL BE A MINIMUM OF 4' IN ADVANCE OF A MARKED CROSSWALK. IF THERE IS NO MARKED CROSSWALK, STOP BAR SHALL BE NO MORE THAN 30' FROM THE NEAREST EDGE OF THE INTERSECTED TRAVELED WAY.
  - CROSSWALKS SHALL BE 10' WIDE UNLESS OTHERWISE NOTED.
  - LEFT TURN ARROWS SHALL BE LOCATED 25' BACK FROM STOP BAR. FOR ADDITIONAL ARROWS FOLLOW COUNTY MARKING STANDARDS.
  - ON-STREET PARKING LANE IS 7' WIDE (UNLESS OTHERWISE NOTED) AND MARKED WITH 4" WIDE WHITE LINES. BEGINNING AND END OF PARKING SHALL BE MARKED WITH AN END LINE PERPENDICULAR TO CURB EXCEPT AT NUBS OR WHERE OTHERWISE INDICATED.

**STANDARD PAVEMENT MARKING LEGEND:**

(A) TYPE B CLASS 1.....WHITE 4" WIDTH	PARKING LANES, EDGE LINES, LANE LINES
(B) TYPE B CLASS 1.....WHITE 4" WIDTH, 10' LONG, 30' SPACING	DASHED LANE LINES
(C) TYPE B CLASS 1.....WHITE 4" WIDTH, 2' LONG, 10' SPACING	LANE TRANSITIONS, TURN LANE SKIPS
(D) TYPE B CLASS 1.....WHITE 18" WIDTH	STOP BARS
(E) TYPE B CLASS 1.....WHITE 24" WIDTH	CONTINENTAL CROSS WALKS
(F) TYPE B CLASS 1.....WHITE 6" WIDTH	TURN LANES, TRANSVERSE CROSSWALKS, BIKE LANES
(G) TYPE B CLASS 1.....YELLOW 4" WIDTH, 10' LONG, 30' SPACING	DIVIDED TRAFFIC, TWO WAY TURN LANES
(H) TYPE B CLASS 1.....YELLOW 4" WIDTH	EDGE LINES
(I) TYPE B CLASS 1.....YELLOW 4" WIDTH, DOUBLE LINE, 4" SPACING	CENTERLINES
(J) TYPE B CLASS 1.....WHITE 6" WIDTH, 10' SPACING @45 DEGREE	HATCH LINES, SAFETY ZONES
(K) TYPE B CLASS 1.....WHITE SINGLE ARROW	TURN LANES
(L) TYPE B CLASS 1.....WHITE COMBINATION ARROW	TURN LANES
(M) TYPE B CLASS 1.....WHITE 8" LETTERS	PAVEMENT LETTERS (STOP, YIELD, BUS, ONLY etc.)
(N) TYPE B CLASS 1.....WHITE 6" WIDTH, 2' LONG, 10' SPACING	LANE TRANSITIONS, TURN LANE SKIPS
(O) TYPE B CLASS 1.....WHITE 12" WIDTH, 20' SPACING @45 DEGREE	GORE MARKINGS
(P) TYPE B CLASS 1.....YELLOW 12" WIDTH, 20' SPACING @45 DEGREE	GORE MARKINGS

**SIGNING AND MARKING LEGEND**

EXISTING		PROPOSED
	BUS STOP	
	FIRE HYDRANT	
	SIGN	
	MARKING	



**NOTE:**  
PAVEMENT WAS RESURFACED SINCE SURVEY WAS PERFORMED. CONTRACTOR TO VERIFY EXISTING MARKINGS PRIOR TO INSTALLING NEW MARKINGS.

- SIGN REMOVAL AND RELOCATION LEGEND**
- EXISTING SIGN TO REMAIN OR TO BE RELOCATED
  - EXISTING SIGN TO BE REMOVED

- SIGN LABELS**
- PROPOSED SIGN  
NEW LOCATION
  - EXISTING SIGN TO BE RELOCATED  
NEW LOCATION
  - EXISTING SIGN TO BE RELOCATED  
EXISTING LOCATION

NO SIGN RELOCATION REQUIRED AT THIS INTERSECTION



DEPARTMENT OF ENVIRONMENTAL SERVICES  
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Transportation Planning Bureau  
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**APPROVALS**

APPROVALS	DATE
	06/21/21
	06/21/21
	07.16.2021
	06/22/2021
	06/23/21

**REVISIONS**

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road**  
**Signal Upgrades**  
PAVEMENT MARKING AND SIGNING PLAN  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

Designed: KF  
Drawn: KF  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

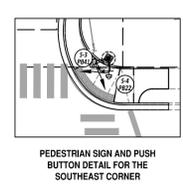
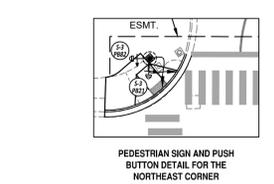
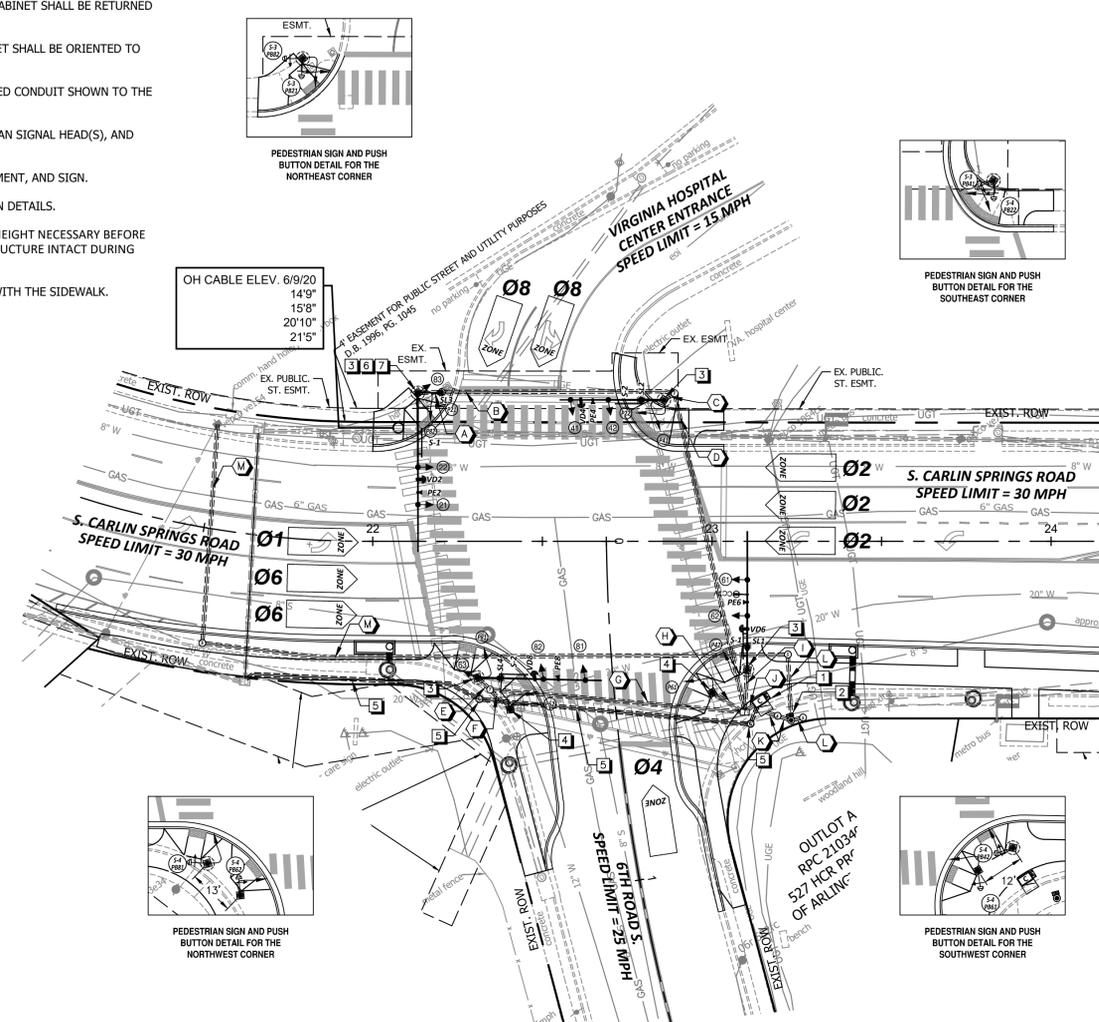
KIMLEY-HORN AND ASSOCIATES, INC.  
11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
**C-1010**

REVISED: MARCH 03, 2020  
 File name: C-1110 TRAFFIC SIGNAL DESIGN PLAN.dwg  
 Path: K:\NVA\_TPT\110614003 - Carlin Springs 2020 CAD\Plan Sheets

**CONSTRUCTION NOTES**

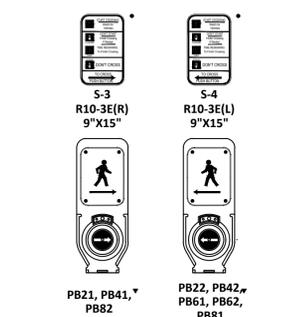
- EXISTING CONTROLLER AND CABINET TO BE REPLACED WITH NEW CONTROLLER AND CABINET ON A NEW FOUNDATION. ALL OTHER EXISTING EQUIPMENT TO BE REMOVED INCLUDING UNUSED WIRING, CONDUIT, AND JUNCTION BOXES, UNLESS OTHERWISE SPECIFIED. EXISTING CONTROLLER AND CABINET SHALL BE RETURNED TO ARLINGTON COUNTY.
- INSTALL SIGNAL CONTROLLER CABINET WITH UPS AND CONCRETE STOOP. CABINET SHALL BE ORIENTED TO PROVIDE TECHNICIAN VIEW OF SIGNAL DISPLAYS.
- INSTALL UNDERGROUND ELECTRIC SERVICE WITH PEDESTAL METERPAN. PROPOSED CONDUIT SHOWN TO THE APPROXIMATE LOCATION OF POWER SOURCE.
- INSTALL NON-ORNAMENTAL MAST ARM SIGNAL POLE WITH LUMINAIRE, PEDESTRIAN SIGNAL HEAD(S), AND POLARA PEDESTRIAN EQUIPMENT.
- INSTALL PEDESTAL POLE WITH PEDESTRIAN SIGNAL, POLARA PEDESTRIAN EQUIPMENT, AND SIGN.
- SEE COMMUNICATION PLAN ON SHEET C-1111 FOR COMMUNICATION CONNECTION DETAILS.
- MAST ARM HEIGHT SHOULD BE AT 18'. CONTRACTOR SHALL VERIFY MAST ARM HEIGHT NECESSARY BEFORE ORDERING POLE AND SHALL PROTECT AND MAINTAIN EXISTING SPAN WIRES STRUCTURE INTACT DURING CONSTRUCTION.
- INSTALL SIGNAL POLE FOUNDATION SUCH THAT TOP OF FOUNDATION IS FLUSH WITH THE SIDEWALK.



**CONDUIT & CABLE**

- 1-3" CONDUIT PVC**  
2-14/7C FOR SIGNAL HEADS 21, 22, AND 83  
2-14/7C FOR PED HEADS P21 AND P82  
2-14/3C FOR PED PUSH BUTTONS P21 AND P82  
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION VD2
- 1-12/2C FOR LUMINAIRE SL3**  
1-#6 AWG (EGC)
- 1-3" CONDUIT PVC**  
1-PREEMPTION CABLE FOR PE2  
1-#6 AWG (EGC)
- 1-4" CONDUIT (BORED) HDPE**  
2-14/7C FOR SIGNAL HEADS 21, 22, AND 83  
2-14/7C FOR PED HEADS P21 AND P82  
2-14/3C FOR PED PUSH BUTTONS P21 AND P82  
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION VD2
- 1-12/2C FOR LUMINAIRE SL3**  
1-#6 AWG (EGC)
- 1-3" CONDUIT (BORED) HDPE**  
1-PREEMPTION CABLE FOR PE2  
1-#6 AWG (EGC)
- 1-3" CONDUIT PVC**  
1-14/7C FOR SIGNAL HEADS 41 AND 42  
2-14/7C FOR PED HEADS P22 AND P41  
2-14/3C FOR PED PUSH BUTTONS P22 AND P41  
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION VD4
- 1-12/2C FOR LUMINAIRE SL2**  
1-#6 AWG (EGC)
- 1-3" CONDUIT PVC**  
1-PREEMPTION CABLE FOR PE4  
1-#6 AWG (EGC)
- 1-4" CONDUIT (BORED) HDPE**  
3-14/7C FOR SIGNAL HEADS 21, 22, 41, 42, AND 83  
4-14/7C FOR PED HEADS P21, P22, P41, AND P82  
4-14/3C FOR PED PUSH BUTTONS P21, P22, P41, AND P82  
2-LEAD IN CABLES FOR THERMAL VEHICLE DETECTION VD2 AND VD4
- 2-12/2C FOR LUMINAIRE SL2 AND SL3**  
1-#6 AWG (EGC)
- 1-3" CONDUIT (BORED) HDPE**  
2-PREEMPTION CABLES FOR PE2 AND PE4  
1-#6 AWG (EGC)
- 1-3" CONDUIT PVC**  
2-14/7C FOR SIGNAL HEADS 63, 81, AND 82  
1-14/7C FOR PED HEAD P81  
1-14/3C FOR PED PUSH BUTTON P81  
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION VD8
- 1-12/2C FOR LUMINAIRE SL4**  
1-#6 AWG (EGC)
- 1-3" CONDUIT PVC**  
1-PREEMPTION CABLE FOR PE8  
1-#6 AWG (EGC)
- 1-3" CONDUIT PVC**  
1-14/7C FOR PED HEAD P62  
1-14/3C FOR PED PUSH BUTTON P62  
1-#6 AWG (EGC)
- 1-4" CONDUIT (BORED) HDPE**  
2-14/7C FOR SIGNAL HEADS 63, 81, AND 82  
2-14/7C FOR PED HEADS P62 AND P81  
2-14/3C FOR PED PUSH BUTTONS P62 AND P81  
1-LEAD IN CABLE FOR THERMAL VEHICLE DETECTION VD8
- 1-12/2C FOR LUMINAIRE SL4**  
1-#6 AWG (EGC)
- 1-3" CONDUIT (BORED) HDPE**  
1-PREEMPTION CABLE FOR PE6  
1-#6 AWG (EGC)
- 1-2" CONDUIT METAL**  
2-12/2C FOR ELECTRICAL SERVICE  
1-#6/4C AWG FOR ELECTRICAL SERVICE
- 1-2" CONDUIT METAL**  
1-#6/4C AWG FOR ELECTRICAL SERVICE
- 1-2" (BORED) CONDUIT METAL**  
1-#6/4C AWG FOR ELECTRICAL SERVICE

**PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTONS**



PUSHBUTTON	WALK MESSAGE
PB41, PB42, PB81, PB82	"SOUTH CARLIN SPRINGS ROAD, WALK SIGN IS ON TO CROSS SOUTH CARLIN SPRINGS ROAD."
PB21, PB22, PB61, PB62	"6TH ROAD SOUTH, WALK SIGN IS ON TO CROSS 6TH ROAD SOUTH."

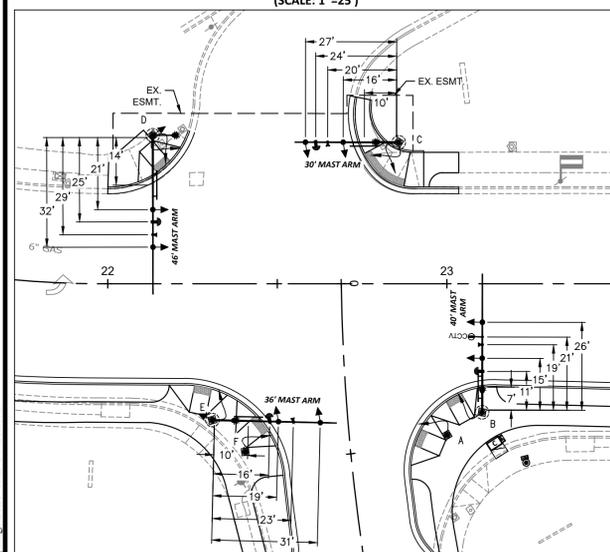
\* PEDESTRIAN PUSHBUTTON SIGN SHALL BE MOUNTED ABOVE PEDESTRIAN PUSHBUTTON.  
\* ACCESSIBLE PUSHBUTTON SYSTEM SHALL BE POLARA SYSTEM CONFORMING TO ARLINGTON COUNTY SPECIFICATION AND SHALL INCLUDE A POLARA CENTRAL CONTROL UNIT.

**PROPOSED SIGNS**

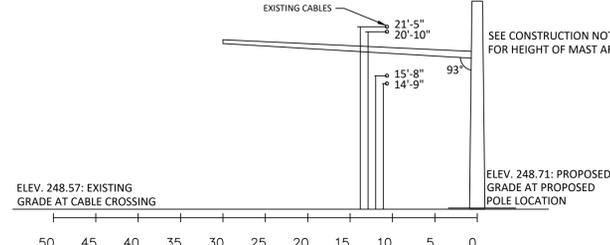


\*NOTE: SEE SHEET C-0007 FOR DETAILED STREET NAME SIGN LAYOUT

**POLE LOCATION DETAIL**  
(SCALE: 1"=25')



**POLE D MAST ARM DETAIL**



**COLOR SEQUENCE CHART**

PHASE	2	4	6	8	2+6	4+8	FLASH
21,22	R/W	R/W	R/W	R/W	R/W	R/W	Y
41,42		G			G		R
61,62,63			G		G		Y
81,82,83				G	G	R	
P21,P22	W*				W*		DARK
P41,P42		W*			W*		DARK
P61,P62			W*		W*		DARK
P81,P82				W*	W*		DARK

NOTE: BLANK SPACES IN THIS CHART REPRESENT A "RED" SIGNAL INDICATION.  
\*WALK INDICATION IS DISPLAYED WHEN PEDESTRIAN CALL IS SERVICED; WALK INDICATION IS DISPLAYED UNTIL IT IS TIMED OUT. OTHERWISE "DON'T WALK" INDICATION IS DISPLAYED.

**INITIAL TIMING CHART\***

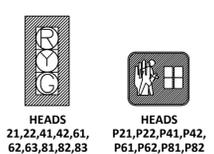
PHASE	1	2	3	4	5	6	7	8
MOVEMENT		NB S CARLIN SPRINGS RD THRU		SB 6TH RD S		SB S CARLIN SPRINGS RD		NB VIRGINIA HOSPITAL CENTER
PHASE ON		X		X		X		X
PHASE OFF	X		X		X		X	
INTERVAL	PHASE TIMINGS							
MIN GR	-	5.0	-	5.0	-	5.0	-	5.0
PASSAGE	-	0.0	-	2.0	-	0.0	-	2.0
YELLOW	-	4.1	-	3.8	-	4.1	-	3.8
RED	-	1.8	-	2.9	-	1.8	-	2.9
MAX 1	-	45.0	-	35.0	-	45.0	-	35.0
MAX 2	-	-	-	-	-	-	-	-
MIN GAP	-	-	-	-	-	-	-	-
TIME BEFORE REDUCTION	-	-	-	-	-	-	-	-
TIME TO REDUCE	-	-	-	-	-	-	-	-
PED WALK	-	7.0	-	7.0	-	7.0	-	7.0
PED FLASH	-	14.0	-	17.0	-	14.0	-	17.0
DONT WALK	-	-	-	-	-	-	-	-
MODE	-	MAX	-	NON-LOCK	-	MAX	-	NON-LOCK

\*SIGNAL TIMING INFORMATION PROVIDED BY ARLINGTON COUNTY. UPDATED TIMING INFORMATION TO BE DEVELOPED AND IMPLEMENTED BY ARLINGTON COUNTY ACCOUNTING FOR MODIFIED INTERSECTION GEOMETRY.

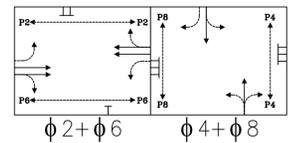
**POLE LOCATION SCHEDULE**

POLE ID	STATION	OFFSET	UMC DESIGN NUMBER	MAST ARM LENGTH	POLE TYPE
-	23+00.08	44.41' RT	-	-	67-01 (12')
234-MA-01-S	23+10.40	37.72' RT	50700-B1991-Y1	40'	-
234-MA-02-E	22+85.82	41.50' LT	50700-B1991-Y1	30'	-
234-MA-03-N	22+13.28	43.56' LT	50700-B1991-Y3	46'	-
234-MA-04-W	22+30.85	40.00' RT	50700-B1991-Y1	36'	-
-	22+40.54	49.34' RT	-	-	67-01 (12')

**PROPOSED SIGNALS**



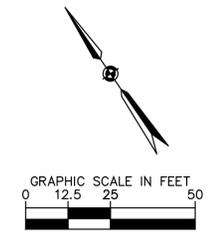
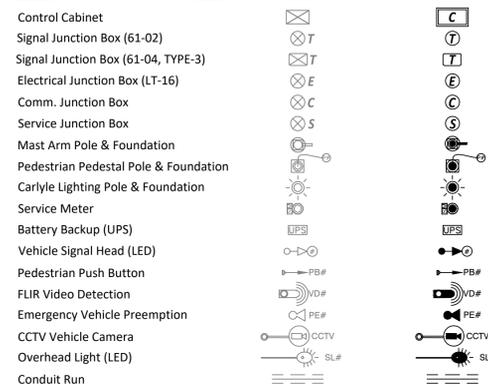
**EXISTING/PROPOSED PHASING DIAGRAM**



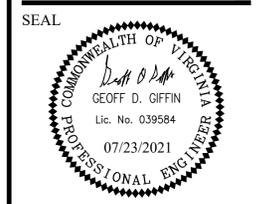
**POLE SIGNAL MOUNTING**

No.	STANDARD			POLE SIGNAL MOUNTING				STREET NAME SIGN
	TYPE	SIG. M.A.	LUM. M.A.	VEHICLE & PED. HEADS	PED. PUSH BUTTONS	SIGNS	VIDEO DETECTOR PREEMPTION & CCTV	
1	PEDESTAL POLE 12'			P61	S-4			
2	MAST ARM POLE 30'	40'	6'	145W	61,62,P42	S-4	VD6,PE6,CCTV	S-1
3	MAST ARM POLE 30'	30'	6'	145W	41,42,P22,P41	S-3,S-4	VD4,PE4	S-2
4	MAST ARM POLE 30'	46'	6'	145W	21,22,83,P21,P82	S-3,S-5	VD2,PE2	S-1
5	MAST ARM POLE 30'	36'	6'	145W	63,81,82,P81	S-4	VD8,PE8	S-2
6	PEDESTAL POLE 12'				P62	S-4		

**LEGEND**



DEPARTMENT OF ENVIRONMENTAL SERVICES  
 Transportation Division  
 Transportation Planning Bureau  
 2100 Clarendon Boulevard, Suite 900  
 Arlington, VA 22201  
 Phone: 703.228.3629  
 Fax: 703.228.3606



**APPROVALS**

APPROVALS	DATE
<i>Geoff D. Giffin</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>John N. Nicks</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>John N. Nicks</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>John N. Nicks</i> TE&O BUREAU CHIEF	06/22/2021
<i>Dennis M. Leach</i> TRANSPORTATION DIRECTOR	06/23/21

**REVISIONS**

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road**  
**Signal Upgrades**  
 TRAFFIC SIGNAL DESIGN PLAN  
 6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
 ID #234  
 TE02

Designed: AS  
 Drawn: AS  
 Checked: GG  
 Miss Utility Transmittal #:

Plotted: July 23, 2021  
 Plotted by: Max.Gawthrop

Scale:  
 HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.  
 11400 Commerce Park Drive, Suite 400  
 Reston, Virginia 20191

Sheet **C-1110**

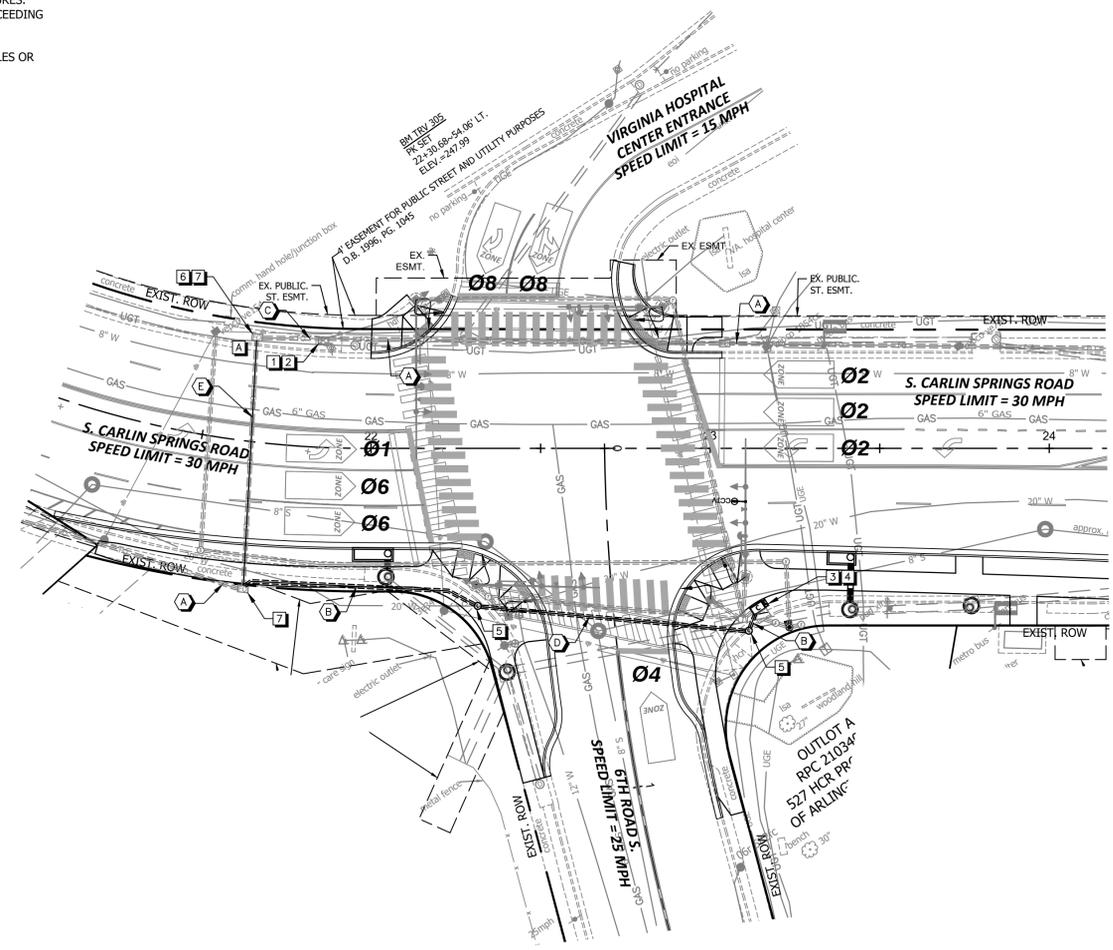
REVISED: MARCH 03, 2020

GENERAL NOTES

- 1. CONTRACTOR SHALL SUBMIT SPLICE ENCLOSURES FOR ENGINEER APPROVAL.
2. CONTRACTOR SHALL NOTIFY ENGINEER PRIOR TO CUTTING OR DISCONNECTING ANY FIBER CABLE.
3. CONTRACTOR SHALL RE-SPLICE ALL FIBERS TO LIKE COLORED FIBERS AND SHALL MATCH LIKE COLORED BUFFER TUBES WITH LIKE COLORED BUFFER TUBES.
4. CONTRACTOR SHALL PERFORM BI-DIRECTIONAL OTDR TESTING ON ALL OF THE 144 FIBER OPTIC CABLES AND THE 12 FIBER CABLE FROM THEIR TERMINATION POINTS.
5. THE CONTRACTOR SHALL PROVIDE THE ENGINEER WITH BI-DIRECTIONAL OTDR TEST RESULTS IN PDF FORMAT FOR APPROVAL.
6. THE CONTRACTOR SHALL NOT CUT OR DAMAGE EXISTING FIBER OPTIC CABLES OR FIBER OPTIC SPLICE ENCLOSURES.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL REPAIR AND COSTS ASSOCIATED WITH DAMAGED FIBER OPTIC CABLES OR SPLICE ENCLOSURES DUE TO CONSTRUCTION ACTIVITIES.
8. ALL CABLING AND SPLICE ENCLOSURES IN JUNCTION BOXES SHALL BE NEATLY ARRANGED.

CONSTRUCTION NOTES

- 1. CONTRACTOR SHALL REMOVE ALL COMMUNICATION EQUIPMENT TO INCLUDE: 12 FIBER PATCH PANEL AND FIBER CABLE, ETHERNET SWITCH AND JUMPER CABLES FROM EXISTING CONTROLLER CABINET.
2. EXISTING CONTROLLER LOCATION
3. PROPOSED CONTROLLER LOCATION
4. CONTRACTOR SHALL INSTALL RELOCATED ETHERNET SWITCH AND JUMPER CABLES IN PROPOSED CONTROLLER CABINET.
5. INSTALL JUNCTION BOX (61-02) WITH COUNTY APPROVED LABELING ON JUNCTION BOX LID.
6. WITHIN EXISTING FIBER SPLICE ENCLOSURE, DISCONNECT EXISTING SPUR FIBER CABLE.
7. RE-ENTER EXISTING JUNCTION BOX WITH NEW CONDUIT.
A. LOCATION A



CONDUIT & CABLE

- A. 4-2" CONDUIT (EXISTING) 2-144 FIBER CABLES (EXISTING)
B. 1-2" CONDUIT PVC (NEW) 1-12 FIBER CABLE (NEW)
C. 1-2" CONDUIT (EXISTING) 1-12 FIBER CABLE (TO BE REMOVED)
D. 1-2" CONDUIT (BORED) HDPE (NEW) 1-12 FIBER CABLE (NEW)
E. 4-2" CONDUIT (EXISTING) 2-144 FIBER CABLES (EXISTING) 1-12 FIBER CABLE (NEW)



DEPARTMENT OF ENVIRONMENTAL SERVICES
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Transportation Planning Bureau
2100 Clarendon Boulevard, Suite 900
Arlington, VA 22201
Phone: 703.228.3629
Fax: 703.228.3606

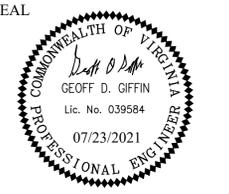


Table with columns: APPROVALS, DATE. Includes signatures and dates for Traffic Signal Engineer, Traffic Engineering Manager, Water, Sewer, Streets Bureau Chief, and Transportation Director.

Table with columns: REVISIONS, DATE. Includes empty rows for tracking changes.

Project Name and Location: S. Carlin Springs Road Signal Upgrades
COMMUNICATION DESIGN PLAN
6TH ROAD S. AND S. CARLIN SPRINGS ROAD
ID #234 TE02

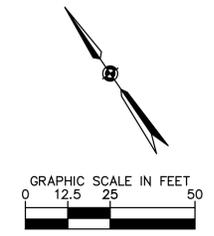
Designed: AS
Drawn: AS
Checked: GG
Miss Utility Transmittal #:

Plotted: July 23, 2021
Plotted by: Max.Gawthrop

Scale:
HOR. 1" = 25' VERT. N/A

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11400 Commerce Park Drive, Suite 400
Reston, Virginia 20191

Sheet C-1111



LEGEND

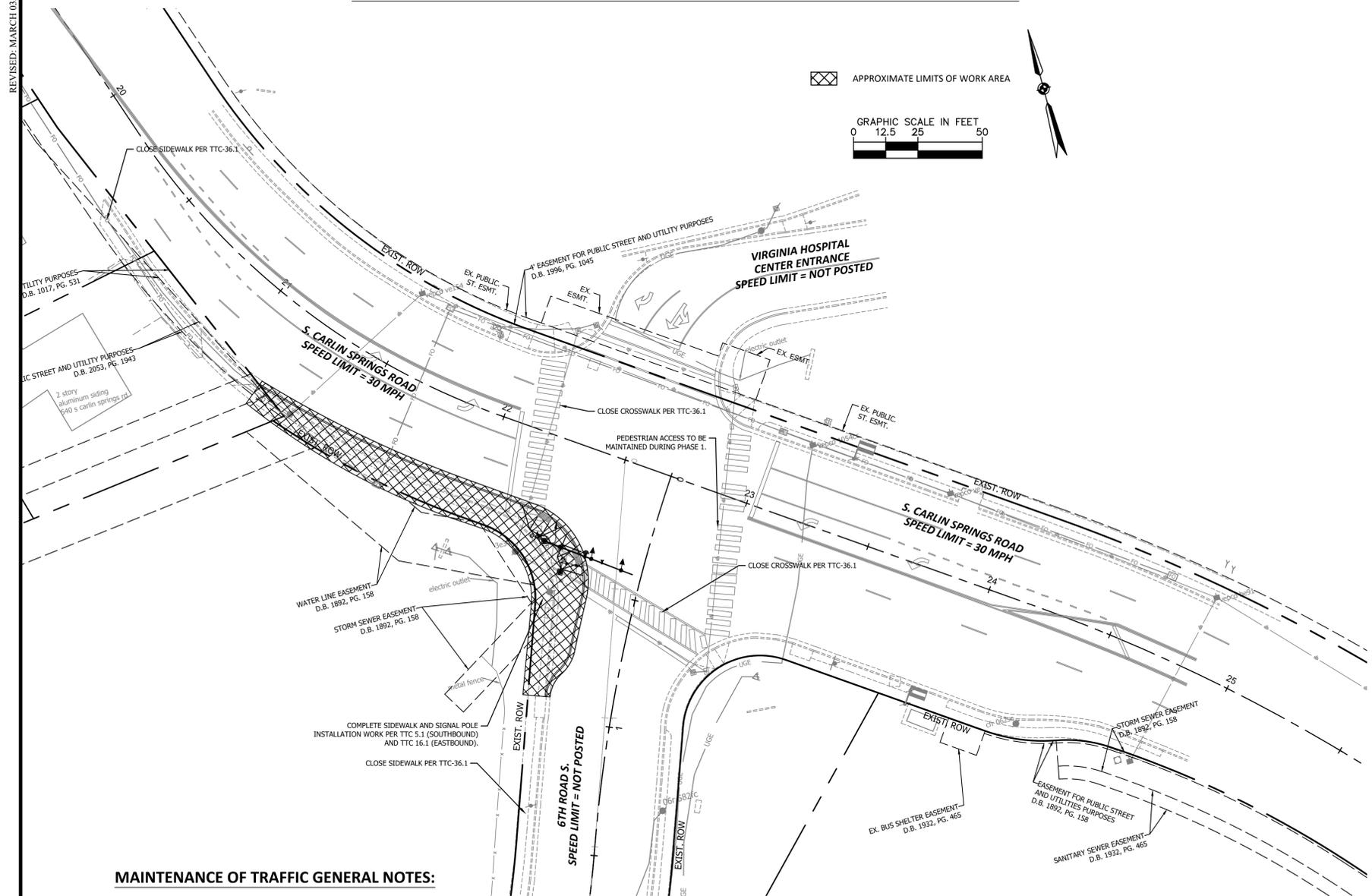
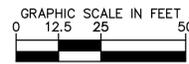
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REVISION: MARCH 03, 2020  
File name: C-1210 MAINTENANCE OF TRAFFIC PLAN.dwg  
Path: K:\NVA\_TPT\110614003 - Carlin Springs 2020 CAD\Plan Sheets

# MAINTENANCE OF TRAFFIC PHASE 1 - NORTHWEST CORNER - ESTIMATED DURATION 15 DAYS

APPROXIMATE LIMITS OF WORK AREA



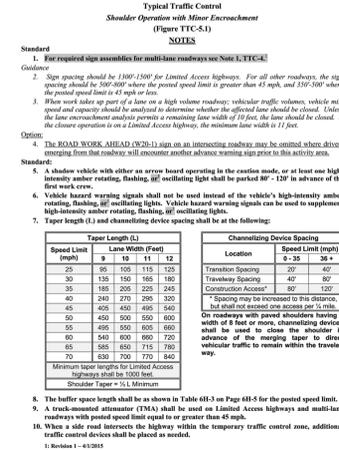
## MAINTENANCE OF TRAFFIC GENERAL NOTES:

- TRAFFIC CONTROL SHALL COMPLY WITH THE LATEST VERSION OF THE VIRGINIA WORK AREA PROTECTION MANUAL, VDOT'S GUIDELINES FOR TEMPORARY TRAFFIC CONTROL, ARLINGTON COUNTY STANDARDS, THE TRAFFIC CONTROL PLANS INCLUDED IN THE CONSTRUCTION DRAWINGS, THIS MAINTENANCE OF TRAFFIC PLAN, AND/OR AS DIRECTED BY THE ARLINGTON COUNTY TRAFFIC ENGINEER.
- 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.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL EITHER MAINTAIN APPROPRIATE SIGHT DISTANCE TO ALL TRAFFIC SIGNS OR PROVIDE FOR TEMPORARY SIGNAGE OR FLAGGERS TO GUIDE TRAFFIC THROUGH WORK ZONES. THE MINIMUM LANE WIDTH SHOULD BE 10 FEET.
- THE CONTRACTOR SHALL MINIMIZE THE DURATION OF AN OBSTRUCTION TO PRIVATE ENTRANCES AND DRIVEWAYS. THE AFFECTED PROPERTY OWNER SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE OF SUCH ACTIVITIES, AND THE CONTRACTOR SHALL MAKE ALL PRIVATE ENTRANCES AND DRIVEWAYS ACCESSIBLE AT THE CONCLUSION OF EACH WORKDAY.
- ANY EXCAVATIONS WHICH ARE SPECIFICALLY APPROVED BY THE ENGINEER TO REMAIN OPEN PAST 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 ENGINEER.
- ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE RETROREFLECTIVE OR ILLUMINATED DURING NIGHT TIME HOURS.
- PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, INCLUDING ACCESS TO BUS STOP SHELTERS.
- PEDESTRIAN TRAFFIC SHALL BE SEPARATED FROM WORK ZONES WITH APPROPRIATE MEASURES IN ACCORDANCE WITH THE 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 MIDBLOCK 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 508.5.4 AND 508.5.5 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
- ACCESS TO BUILDINGS FOR FIREFIGHTING 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.
- 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 OFFICE AT 703-228-4644 TO COORDINATE REVIEW AND APPROVAL OF TEMPORARY FIRE DEPARTMENT CONNECTIONS AND/OR FIRE APPARATUS ACCESS ROADS PRIOR TO CREATING THE OBSTRUCTION.
- NORMAL WORKING HOURS SHALL BE 9:00 AM TO 4:00 PM MONDAY THROUGH FRIDAY WITHIN ARLINGTON COUNTY RIGHT-OF-WAY AND 9:30 AM TO 3:00 PM MONDAY THROUGH THURSDAY AND 9:30 AM TO 2:00 PM ON FRIDAY WITHIN VDOT RIGHT-OF-WAY.
- COUNTY WILL COORDINATE WITH TRANSIT BUREAU FOR WORK THAT WILL EFFECT TRANSIT STOPS.
- PARKING SHALL BE RESTRICTED BY THE COUNTY AS PART OF THE RIGHT-OF-WAY PERMIT. CONTRACT DES-PERMITTING SECTION, 703-228-4798 AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK.

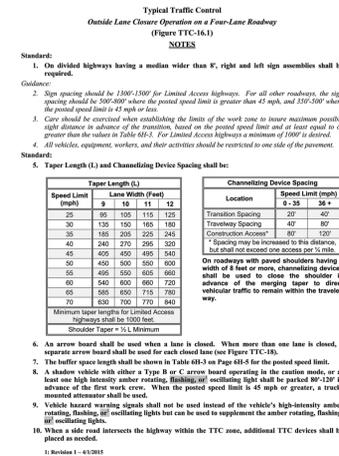
## CONSTRUCTION PHASE SPECIFIC NOTES:

- CONTRACTOR SHALL MINIMIZE THE NUMBER OF PARKING SPACES IMPACTED BY CONSTRUCTION ALONG THE NORTH SIDE OF 6TH ROAD SOUTH.

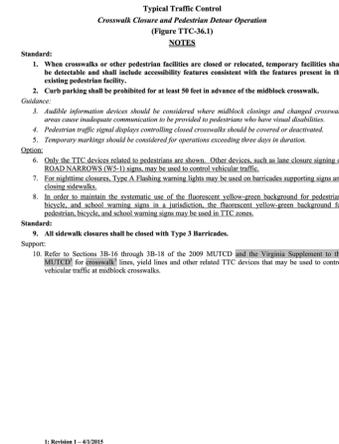
Page 68-16



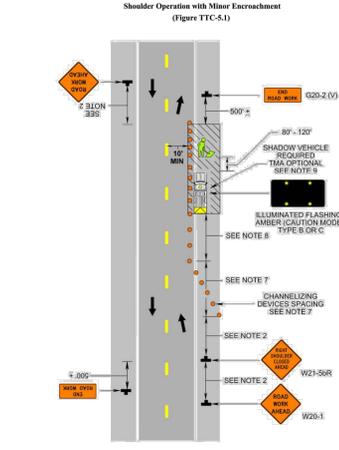
Page 68-18



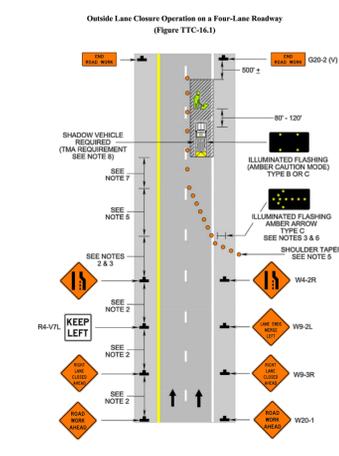
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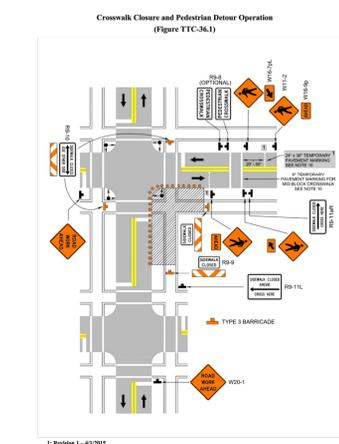
Page 68-17



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DEPARTMENT OF ENVIRONMENTAL SERVICES  
Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606



APPROVALS	DATE
	06/21/21
	06/21/21
	07.16.2021
	06/22/2021
	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road Signal Upgrades**  
MAINTENANCE OF TRAFFIC PLAN  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

Designed: DM  
Drawn: DM  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

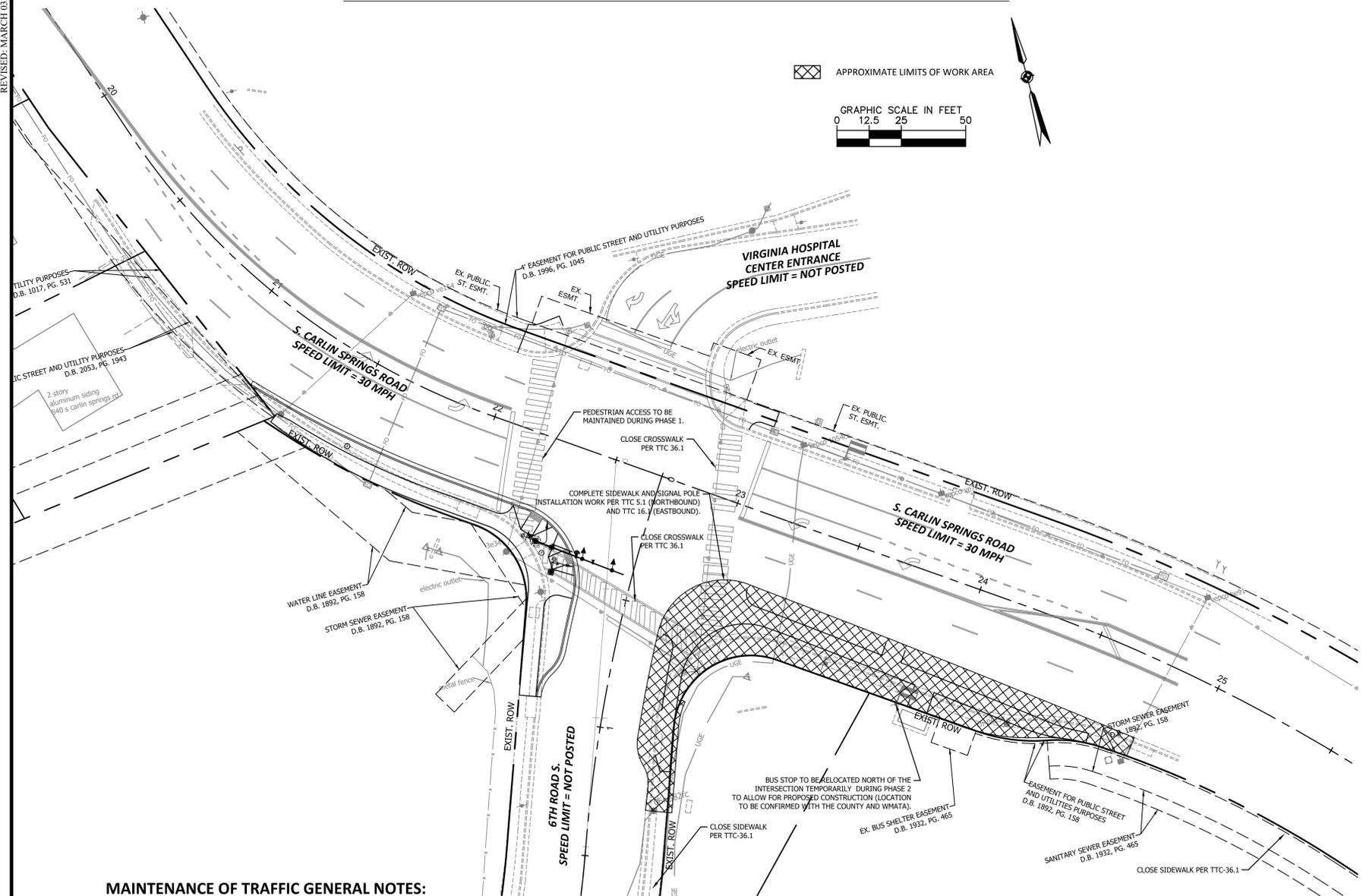
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11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
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S. Carlin Springs Road Signal Upgrades

REVISED: MARCH 03, 2020  
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### MAINTENANCE OF TRAFFIC PHASE 2 - SOUTHWEST CORNER - ESTIMATED DURATION 25 DAYS



#### MAINTENANCE OF TRAFFIC GENERAL NOTES:

- TRAFFIC CONTROL SHALL COMPLY WITH THE LATEST VERSION OF THE VIRGINIA WORK AREA PROTECTION MANUAL, VDOT'S GUIDELINES FOR TEMPORARY TRAFFIC CONTROL, ARLINGTON COUNTY STANDARDS, THE TRAFFIC CONTROL PLANS INCLUDED IN THE CONSTRUCTION DRAWINGS, THIS MAINTENANCE OF TRAFFIC PLAN, AND/OR AS DIRECTED BY THE ARLINGTON COUNTY TRAFFIC ENGINEER.
- 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.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL EITHER MAINTAIN APPROPRIATE SIGHT DISTANCE TO ALL TRAFFIC SIGNS OR PROVIDE FOR TEMPORARY SIGNAGE OR FLAGGERS TO GUIDE TRAFFIC THROUGH WORK ZONES. THE MINIMUM LANE WIDTH SHOULD BE 10 FEET.
- THE CONTRACTOR SHALL MINIMIZE THE DURATION OF AN OBSTRUCTION TO PRIVATE ENTRANCES AND DRIVEWAYS. THE AFFECTED PROPERTY OWNER SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE OF SUCH ACTIVITIES, AND THE CONTRACTOR SHALL MAKE ALL PRIVATE ENTRANCES AND DRIVEWAYS ACCESSIBLE AT THE CONCLUSION OF EACH WORKDAY.
- ANY EXCAVATIONS WHICH ARE SPECIFICALLY APPROVED BY THE ENGINEER TO REMAIN OPEN PAST 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 ENGINEER.
- ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE RETROREFLECTIVE OR ILLUMINATED DURING NIGHT TIME HOURS.
- PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, INCLUDING ACCESS TO BUS STOP SHELTERS.
- PEDESTRIAN TRAFFIC SHALL BE SEPARATED FROM WORK ZONES WITH APPROPRIATE MEASURES IN ACCORDANCE WITH THE 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 MIDLICK 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 508.5.4 AND 508.5.5 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
- ACCESS TO BUILDINGS FOR FIREFIGHTING 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.
- 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 OFFICE AT 703-228-4644 TO COORDINATE REVIEW AND APPROVAL OF TEMPORARY FIRE DEPARTMENT CONNECTIONS AND/OR FIRE APPARATUS ACCESS ROADS PRIOR TO CREATING THE OBSTRUCTION.
- NORMAL WORKING HOURS SHALL BE 9:00 AM TO 4:00 PM MONDAY THROUGH FRIDAY WITHIN ARLINGTON COUNTY RIGHT-OF-WAY AND 9:30 AM TO 3:00 PM MONDAY THROUGH THURSDAY AND 9:30 AM TO 2:00 PM ON FRIDAY WITHIN VDOT RIGHT-OF-WAY.
- COUNTY WILL COORDINATE WITH TRANSIT BUREAU FOR WORK THAT WILL EFFECT TRANSIT STOPS.
- PARKING SHALL BE RESTRICTED BY THE COUNTY AS PART OF THE RIGHT-OF-WAY PERMIT. CONTRACT DES-PERMITTING SECTION, 703-228-4798 AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK.

#### CONSTRUCTION PHASE SPECIFIC NOTES:

- CONTRACTOR SHALL MINIMIZE THE NUMBER OF PARKING SPACES IMPACTED BY CONSTRUCTION ALONG THE NORTH SIDE OF 6TH ROAD SOUTH.

Page 68-16

#### Typical Traffic Control Shoulder Operation with Minor Encroachment (Figure TTC-5.1)

- NOTES**
- Use required sign assemblies for multi-lane roadways see Note 1, TTC-4.
  - Sign spacing should be 1200'-1500' for Limited Access Highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.
  - When work takes up part of a lane on a high volume roadway, vehicular traffic volumes, vehicle mix, speed and capacity should be considered and the posted speed limit should be reduced. Obtain the lane encroachment analysis for a minimum lane width of 10 feet, the lane should be closed. If the closure operation is on a Limited Access Highway, the minimum lane width is 11 feet.
  - The ROAD WORK AHEAD (W20-1) sign on an intersecting roadway may be control where drivers originate from the roadway will encounter another advance warning sign prior to the activity area.
- Standard:**
- A shadow vehicle with either an arrow board operating in the caution mode, or at least one high intensity amber rotating, flashing, [W] oscillating light shall be posted 80' - 120' in advance of the first work zone.
  - Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, [W] oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, [W] oscillating lights.
  - Taper length (L) and channelizing device spacing shall be as follows:

Speed Limit (mph)	Taper Length (L)				Channelizing Device Spacing		
	9	10	11	12	Location	Speed Limit (mph)	
25	105	105	115	125	Transition Spacing	20'	40'
30	135	150	165	180	Travelway Spacing	40'	80'
35	185	205	225	245	Construction Access*	80'	120'
40	240	270	295	320	*Spacing may be increased to this distance, but shall not exceed one access per 1/2 mile.		
45	405	450	495	540	On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.		
50	450	500	550	600			
55	495	550	605	660			
60	540	600	660	720			
65	585	660	735	780			
70	630	705	780	840			

Minimum taper lengths for Limited Access Highways shall be 1000 feet.  
Shoulder Taper = 1/2 L Minimum

Page 68-16

#### Typical Traffic Control Outside Lane Closure Operation on a Four-Lane Roadway (Figure TTC-16.1)

- NOTES**
- On divided highways having a median wider than 8', right and left sign assemblies shall be required.
  - Sign spacing should be 1200'-1500' for Limited Access Highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.
  - Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or greater than the values in Table 68-1. For Limited Access Highways a minimum of 1000' is desired.
  - All vehicles, equipment, workers, and their activities should be restricted to one side of the pavement.
- Standard:**
- Taper Length (L) and Channelizing Device Spacing shall be:

Speed Limit (mph)	Taper Length (L)				Channelizing Device Spacing		
	9	10	11	12	Location	Speed Limit (mph)	
25	105	105	115	125	Transition Spacing	20'	40'
30	135	150	165	180	Travelway Spacing	40'	80'
35	185	205	225	245	Construction Access*	80'	120'
40	240	270	295	320	*Spacing may be increased to this distance, but shall not exceed one access per 1/2 mile.		
45	405	450	495	540	On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.		
50	450	500	550	600			
55	495	550	605	660			
60	540	600	660	720			
65	585	660	735	780			
70	630	705	780	840			

Minimum taper lengths for Limited Access Highways shall be 1000 feet.  
Shoulder Taper = 1/2 L Minimum

Page 68-16

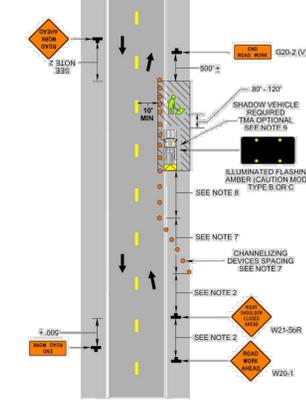
#### Typical Traffic Control Crosswalk Closure and Pedestrian Detour Operation (Figure TTC-36.1)

- NOTES**
- When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be deterrable and shall include accessibility features consistent with the features present in the existing pedestrian facility.
  - Curbside parking shall be prohibited for at least 50 feet in advance of the midblock crosswalk.
- Standard:**
- Advance information devices should be considered where midblock crossings and changed crosswalk areas cause management communication to be provided to pedestrians who have visual disabilities.
  - Pedestrian traffic signal displays controlling closed crosswalks should be covered or deactivated.
  - Temporary markings should be considered for operations exceeding three days in duration.
- Option:**
- Only the TTC devices related to pedestrian are shown. Other devices, such as lane closure signing or ROAD NARROWS (W2-1) signs, may be used to control vehicular traffic.
  - For nighttime closures, Type A flashing warning lights may be used on barricades supporting signs and closing vehicles.
  - In order to maintain the systematic use of the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs, in a jurisdiction, the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs may be used in TTC zones.
- Standard:**
- All sidewalk closures shall be closed with Type 3 Barricades.
- Support:**
- Refer to Sections 18-16 through 18-18 of the 2009 MUTCD and the Virginia Supplement to the MUTCD for minimum lane, yield lines and other related TTC devices that may be used to control vehicular traffic at midblock crosswalks.

1: Revision 1 - 4/12/15

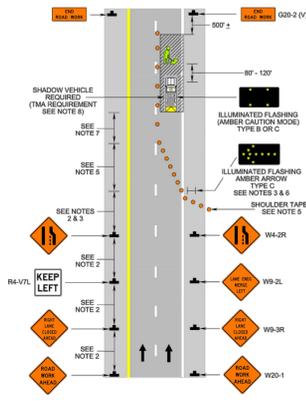
Page 68-17

#### Shoulder Operation with Minor Encroachment (Figure TTC-5.1)



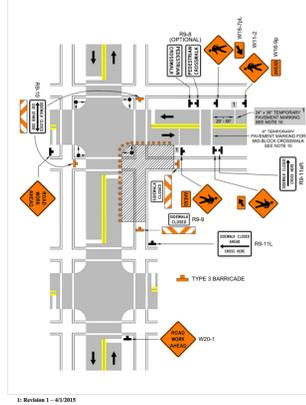
Page 68-17

#### Outside Lane Closure Operation on a Four-Lane Roadway (Figure TTC-16.1)



Page 68-17

#### Crosswalk Closure and Pedestrian Detour Operation (Figure TTC-36.1)



1: Revision 1 - 4/12/15



DEPARTMENT OF ENVIRONMENTAL SERVICES  
Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606



APPROVALS DATE  
Traffic Signal Engineer: [Signature] 06/21/21  
Traffic Engineering Manager: [Signature] 06/21/21  
Water, Sewer, Streets Bureau Chief: [Signature] 07.16.2021  
TE & Bureau Chief: [Signature] 06/22/2021  
Transportation Director: Dennis M. Leach 06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**  
MAINTENANCE OF TRAFFIC PLAN  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

Designed: DM  
Drawn: DM  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.  
11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

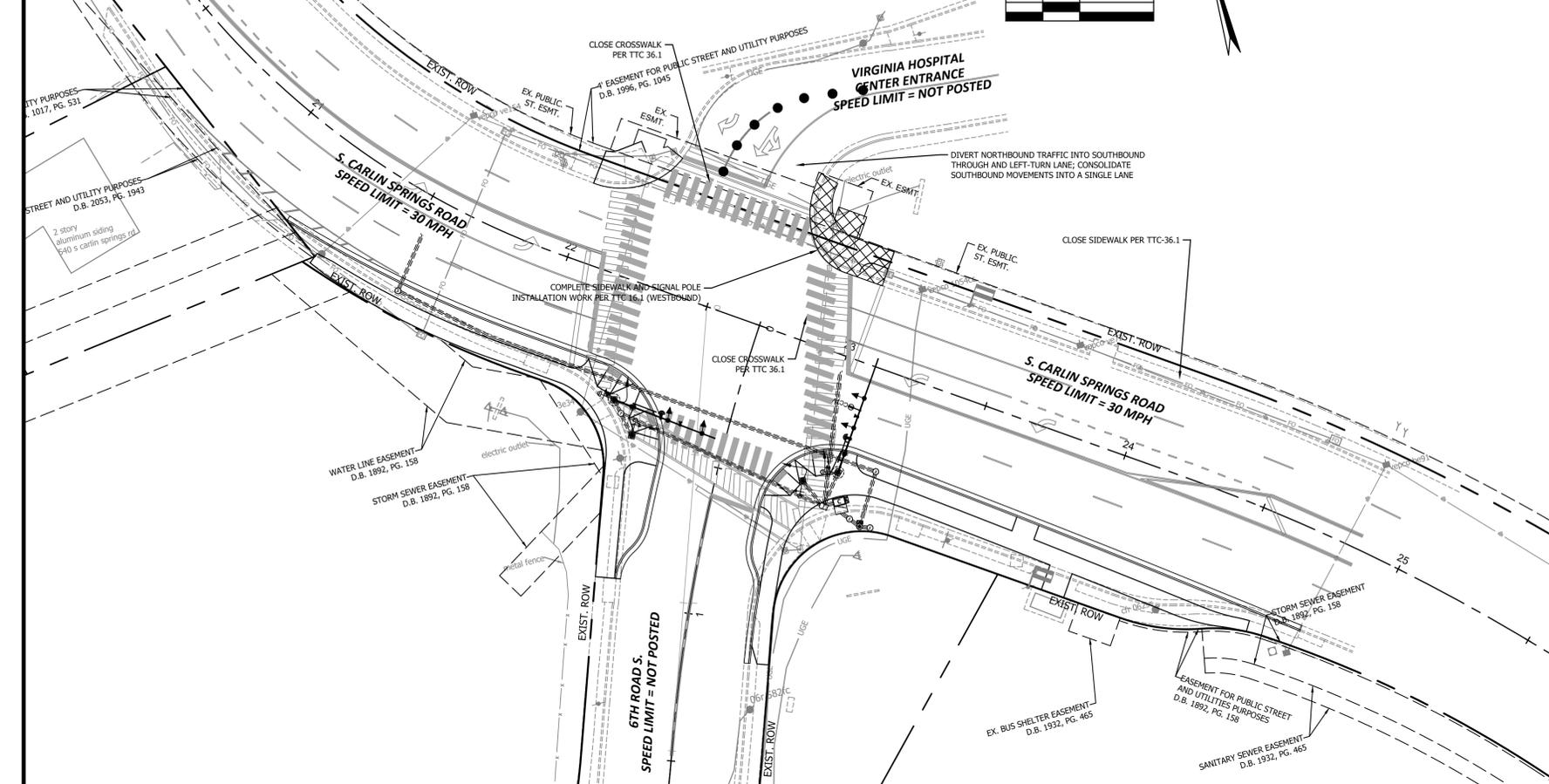
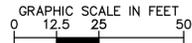
Sheet  
**C-1211**

S. Carlin Springs Road Signal Upgrades

REVISED: MARCH 03, 2020

### MAINTENANCE OF TRAFFIC PHASE 3 - SOUTHEAST CORNER - ESTIMATED DURATION 4 DAYS

APPROXIMATE LIMITS OF WORK AREA



Page 68-16

#### Typical Traffic Control Shoulder Operation with Minor Encroachment (Figure TTC-6.1)

- NOTES**
- For required sign assemblies for multi-lane roadways see Note 1, TTC-6.1.
  - Sign spacing should be 100'-150' for Limited Access highways. For all other roadways, the sign spacing should be 500' where the posted speed limit is greater than 45 mph, and 500'-500' where the posted speed limit is 45 mph or less.
  - When work takes place in a lane on a high volume roadway, vehicular traffic volume, which may affect and capacity should be analyzed to determine whether the affected lane should be closed. Unless lane construction is limited to a maximum lane width of 15 feet, the affected lane should be closed. If the closure operation is on a Limited Access highway, the minimum lane width is 11 feet.
  - The ROAD WORK AHEAD (W20-1) sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.
  - A shadow vehicle with either an arrow board operating in the caution mode, or at least one high intensity amber rotating, flashing, or oscillating light shall be parked 80'-120' in advance of the first work crew.
  - Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating light. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or oscillating light.
  - Taper length (L) and channelizing device spacing shall be at the following:

Taper Length (L)			Channelizing Device Spacing		
Speed Limit (mph)	Lane Width (Feet)	Location	Location	Speed Limit (mph)	Location
25	95	105	115	125	Transition Spacing
30	115	150	160	180	Transition Spacing
35	135	205	225	245	Transition Spacing
40	240	270	295	320	Transition Spacing
45	405	465	495	540	Transition Spacing
50	450	500	550	600	Transition Spacing
55	495	550	600	660	Transition Spacing
60	540	600	660	720	Transition Spacing
65	585	650	715	780	Transition Spacing
70	630	700	770	840	Transition Spacing

- On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the taper to direct vehicular traffic to remain within the traveled way.
- The buffer space length shall be as shown in Table 683-3 on Page 68-5 for the posted speed limit.
- A truck-mounted attenuator (TMA) shall be used on Limited Access highways and multi-lane roadways with posted speed limit equal to or greater than 45 mph.
- When a side road intersects the highway within the temporary traffic control zone, additional traffic control devices shall be placed as needed.

Page 68-18

#### Typical Traffic Control Outside Lane Closure Operation on a Four-Lane Roadway (Figure TTC-16.1)

- NOTES**
- On divided highways having a median wider than 4', right and left sign assemblies shall be required.
  - Sign spacing should be 100'-150' for Limited Access highways. For all other roadways, the sign spacing should be 500' where the posted speed limit is greater than 45 mph, and 500'-500' where the posted speed limit is 45 mph or less.
  - Crews should be exercised when establishing the lines of the work zone to insure maximum possible sight distance in advance of the location, based on the posted speed limit and at least equal to or greater than the values in Table 683-1. For Limited Access highways a minimum of 1000' is desired.
  - All vehicles, equipment, workers, and their activities should be restricted to one side of the pavement.
  - Taper Length (L) and Channelizing Device Spacing shall be:

Taper Length (L)			Channelizing Device Spacing		
Speed Limit (mph)	Lane Width (Feet)	Location	Location	Speed Limit (mph)	Location
25	95	105	115	125	Transition Spacing
30	115	150	160	180	Transition Spacing
35	135	205	225	245	Transition Spacing
40	240	270	295	320	Transition Spacing
45	405	465	495	540	Transition Spacing
50	450	500	550	600	Transition Spacing
55	495	550	600	660	Transition Spacing
60	540	600	660	720	Transition Spacing
65	585	650	715	780	Transition Spacing
70	630	700	770	840	Transition Spacing

- An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane (see Figure TTC-16.1).
- The buffer space length shall be as shown in Table 683-3 on Page 68-5 for the posted speed limit.
- A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or at least one high intensity amber rotating, flashing, or oscillating light shall be parked 80'-120' in advance of the first work crew. When the posted speed limit is 45 mph or greater, a truck-mounted attenuator shall be used.
- Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating light, but can be used to supplement the amber rotating, flashing, or oscillating light.
- When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.

Page 68-78

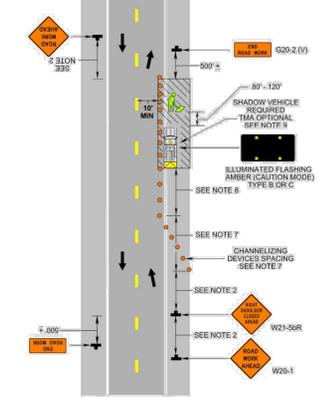
#### Typical Traffic Control Crosswalk Closure and Pedestrian Detour Operation (Figure TTC-36.1)

- NOTES**
- When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.
  - Early parking shall be prohibited for at least 50 feet in advance of the midblock crosswalk.
  - Available information devices should be considered where midblock crossings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.
  - Pedestrian traffic signal displays controlling closed crosswalks should be covered or deactivated.
  - Temporary markings should be considered for operations involving three-way intersections.
  - Only the TTC devices related to pedestrian are shown. Other devices, such as lane closure signing or ROAD NARROWS (W2-1) signs, may be used to control vehicle traffic.
  - For nighttime closures, Type A flashing warning lights may be used on barricades supporting signs and closing sidewalks.
  - In order to maintain the systematic use of the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs, in a jurisdiction, the fluorescent yellow-green background for pedestrian, bicycle, and school warning signs may be used in TTC zones.

1: Revision 1 - 4/12/15

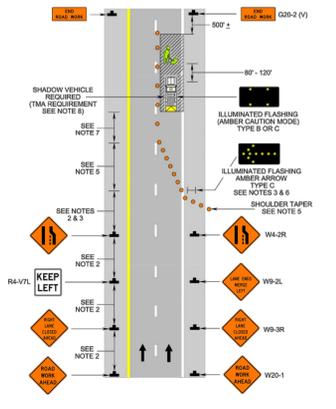
Page 68-17

#### Shoulder Operation with Minor Encroachment (Figure TTC-6.1)



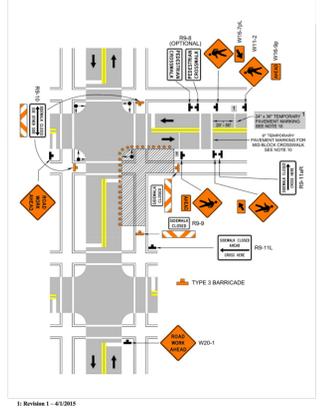
Page 68-39

#### Outside Lane Closure Operation on a Four-Lane Roadway (Figure TTC-16.1)



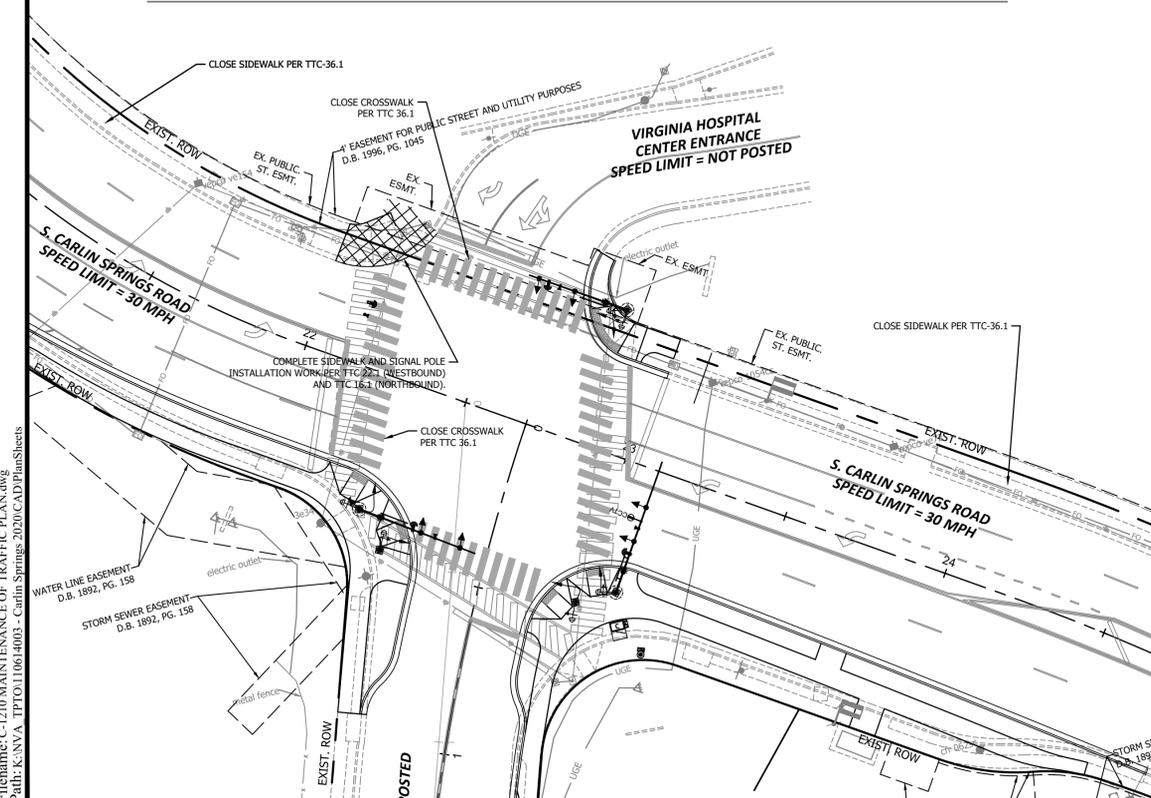
Page 68-79

#### Crosswalk Closure and Pedestrian Detour Operation (Figure TTC-36.1)



1: Revision 1 - 4/12/15

### MAINTENANCE OF TRAFFIC PHASE 4 - NORTHEAST CORNER - ESTIMATED DURATION 4 DAYS

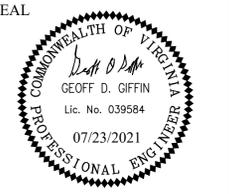


### MAINTENANCE OF TRAFFIC GENERAL NOTES:

- TRAFFIC CONTROL SHALL COMPLY WITH THE LATEST VERSION OF THE VIRGINIA WORK AREA PROTECTION MANUAL, VDOT'S GUIDELINES FOR TEMPORARY TRAFFIC CONTROL, ARLINGTON COUNTY STANDARDS, THE TRAFFIC CONTROL PLANS INCLUDED IN THE CONSTRUCTION DRAWINGS, THIS MAINTENANCE OF TRAFFIC PLAN, AND/OR AS DIRECTED BY THE ARLINGTON COUNTY TRAFFIC ENGINEER.
- 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.
- DURING CONSTRUCTION, THE CONTRACTOR SHALL EITHER MAINTAIN APPROPRIATE SIGHT DISTANCE TO ALL TRAFFIC SIGNS OR PROVIDE FOR TEMPORARY SIGNAGE OR FLAGGERS TO GUIDE TRAFFIC THROUGH WORK ZONES. THE MINIMUM LANE WIDTH SHOULD BE 10 FEET.
- THE CONTRACTOR SHALL MINIMIZE THE DURATION OF AN OBSTRUCTION TO PRIVATE ENTRANCES AND DRIVEWAYS, THE AFFECTED PROPERTY OWNER SHALL BE NOTIFIED A MINIMUM OF 24 HOURS IN ADVANCE OF SUCH ACTIVITIES, AND THE CONTRACTOR SHALL MAKE ALL PRIVATE ENTRANCES AND DRIVEWAYS ACCESSIBLE AT THE CONCLUSION OF EACH WORKDAY.
- ANY EXCAVATIONS WHICH ARE SPECIFICALLY APPROVED BY THE ENGINEER TO REMAIN OPEN PAST 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 ENGINEER.
- ALL TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE RETROREFLECTIVE OR ILLUMINATED DURING NIGHT TIME HOURS.
- PEDESTRIAN TRAFFIC SHALL BE MAINTAINED AT ALL TIMES, INCLUDING ACCESS TO BUS STOP SHELTERS.
- PEDESTRIAN TRAFFIC SHALL BE SEPARATED FROM WORK ZONES WITH APPROPRIATE MEASURES IN ACCORDANCE WITH THE 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 MIDBLOCK 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 508.5.4 AND 508.5.5 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.
- 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 OFFICE AT 703-228-4644 TO COORDINATE REVIEW AND APPROVAL OF TEMPORARY FIRE DEPARTMENT CONNECTIONS AND/OR FIRE APPARATUS ACCESS ROADS PRIOR TO CREATING THE OBSTRUCTION.
- NORMAL WORKING HOURS SHALL BE 9:00 AM TO 4:00 PM MONDAY THROUGH FRIDAY WITHIN ARLINGTON COUNTY RIGHT-OF-WAY AND 9:30 AM TO 3:00 PM MONDAY THROUGH THURSDAY AND 9:30 AM TO 2:00 PM ON FRIDAY WITHIN VDOT RIGHT-OF-WAY.
- COUNTY WILL COORDINATE WITH TRANSIT BUREAU FOR WORK THAT WILL EFFECT TRANSIT STOPS.
- PARKING SHALL BE RESTRICTED BY THE COUNTY AS PART OF THE RIGHT-OF-WAY PERMIT. CONTACT DES-PERMITTING SECTION, 703-228-4798 AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF WORK.



DEPARTMENT OF ENVIRONMENTAL SERVICES  
 Transportation Division  
 Transportation Planning Bureau  
 2100 Clarendon Boulevard, Suite 900  
 Arlington, VA 22201  
 Phone: 703.228.3629  
 Fax: 703.228.3606



APPROVALS DATE  
 [Signature] 06/21/21  
 TRAFFIC SIGNAL ENGINEER  
 [Signature] 06/21/21  
 TRAFFIC ENGINEERING MANAGER  
 [Signature] 07.16.2021  
 WATER, SEWER, STREETS BUREAU CHIEF  
 [Signature] 06/22/2021  
 TE&O BUREAU CHIEF  
 [Signature] 06/23/21  
 TRANSPORTATION DIRECTOR

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
 Signal Upgrades**  
 MAINTENANCE OF TRAFFIC PLAN  
 6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
 ID #234  
 TE02

Designed: DM  
 Drawn: DM  
 Checked: GG  
 Miss Utility Transmittal #:

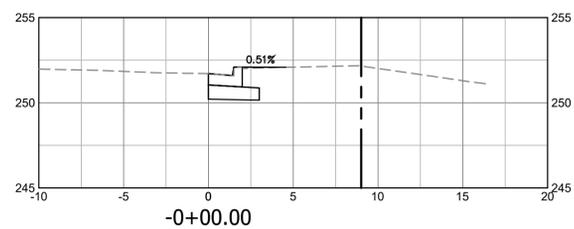
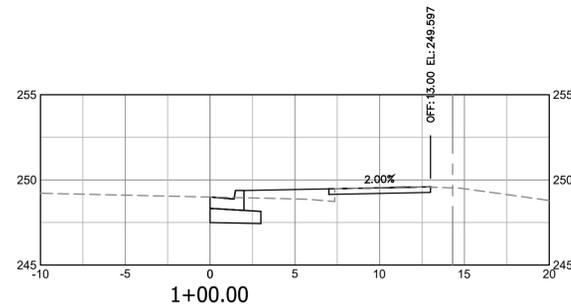
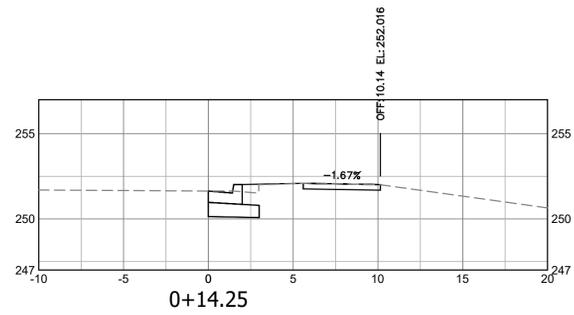
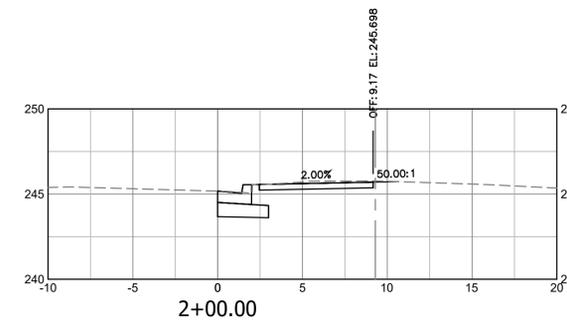
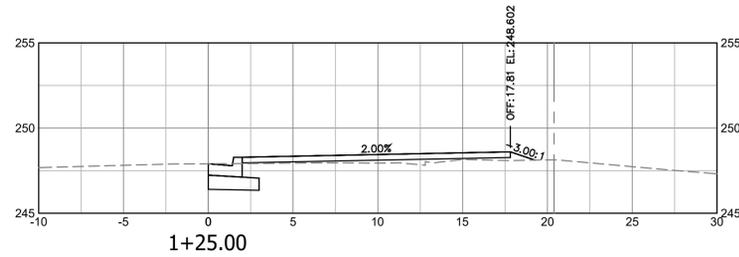
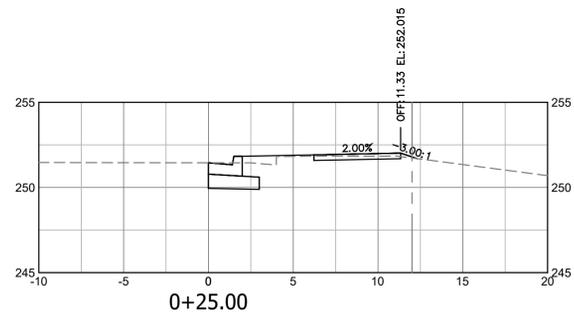
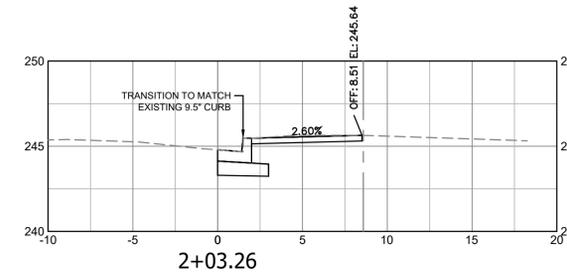
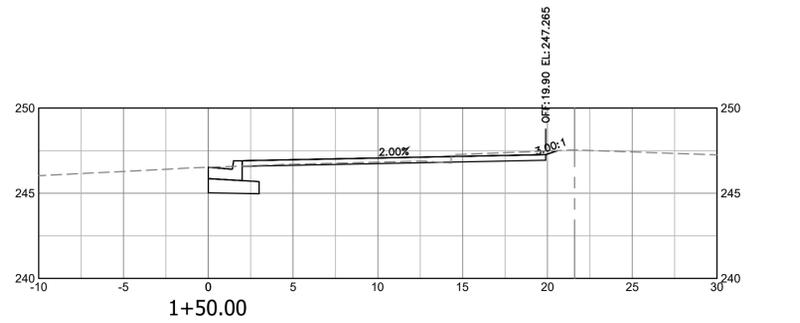
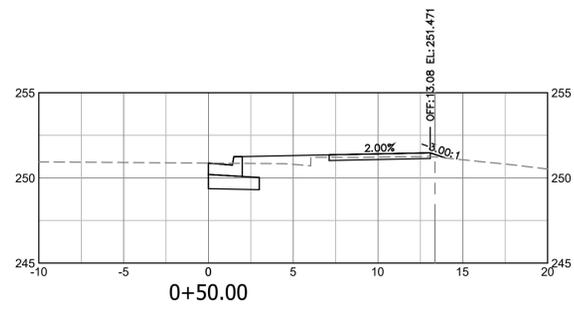
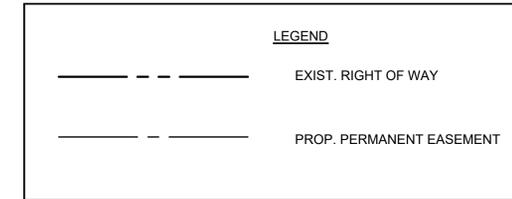
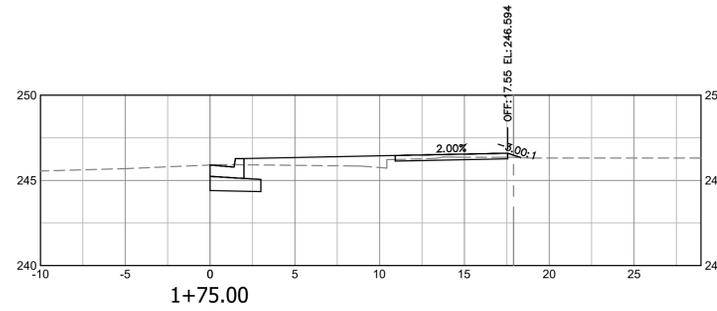
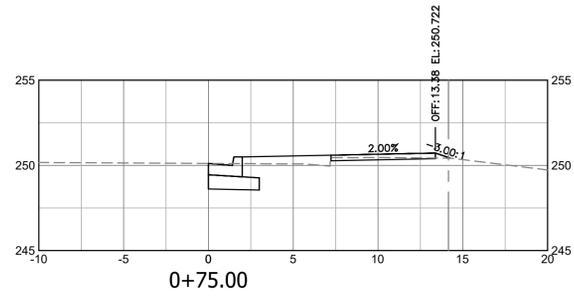
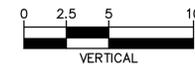
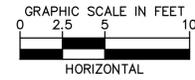
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 Plotted by: Max.Gawthrop

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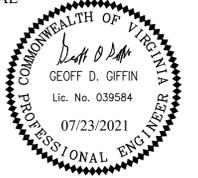
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 11400 Commerce Park Drive, Suite 400  
 Reston, Virginia 20191

Sheet  
**C-1212**

### 6TH ROAD S. - NW CORNER



SEAL



APPROVALS	DATE
<i>[Signature]</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>[Signature]</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>[Signature]</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>[Signature]</i> TE&O BUREAU CHIEF	06/22/2021
<i>[Signature]</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

CROSS SECTIONS

ID #234  
TE02

Designed: KF  
Drawn: KF  
Checked: GG  
Miss Utility Transmittal #:

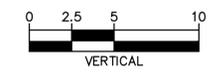
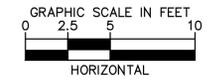
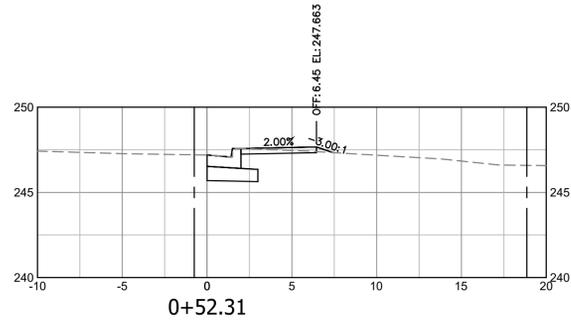
Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 5' VERT. 1" = 5'

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Reston, Virginia 20191

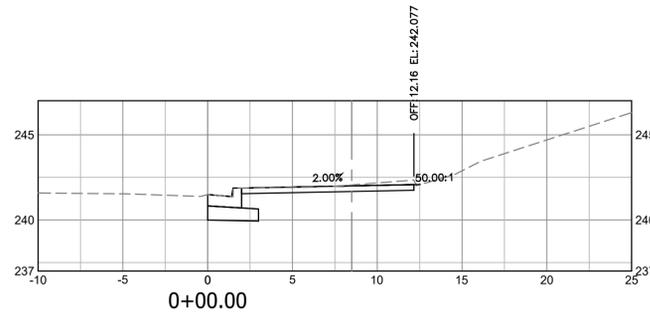
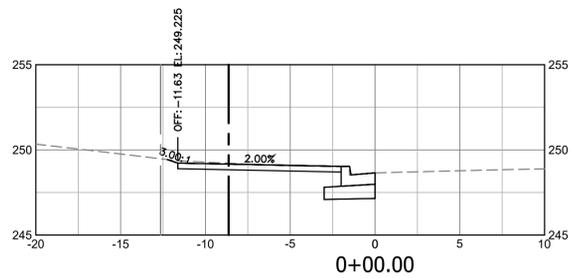
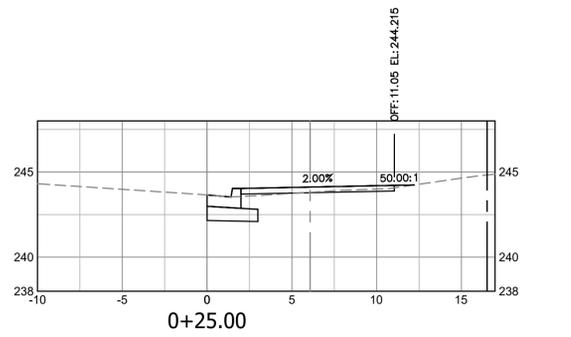
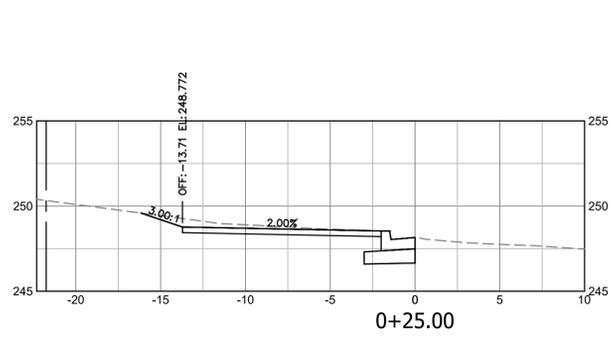
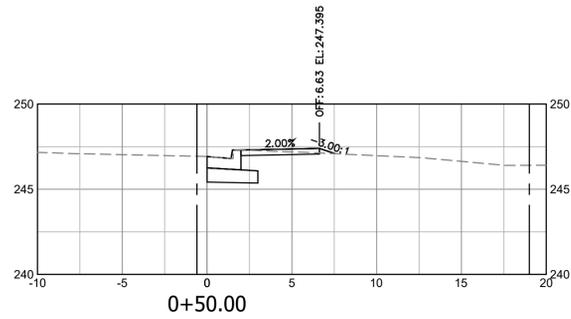
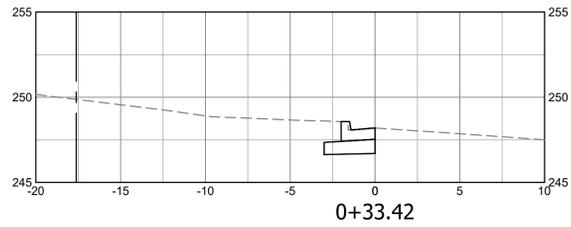
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### 6TH ROAD S. - SE CORNER



LEGEND	
	EXIST. RIGHT OF WAY
	PROP. PERMANENT EASEMENT
	EXIST. PERMANENT EASEMENT

### 6TH ROAD S. - NE CORNER



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606



APPROVALS	DATE
	06/21/21
	06/21/21
	07.16.2021
	06/22/2021
	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**  
CROSS SECTIONS  
ID #234  
TE02

Designed: KF  
Drawn: KF  
Checked: GG  
Miss Utility Transmittal #:

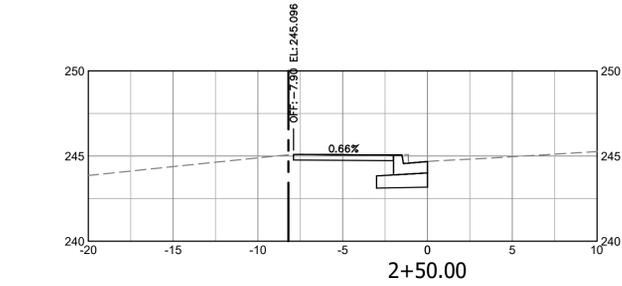
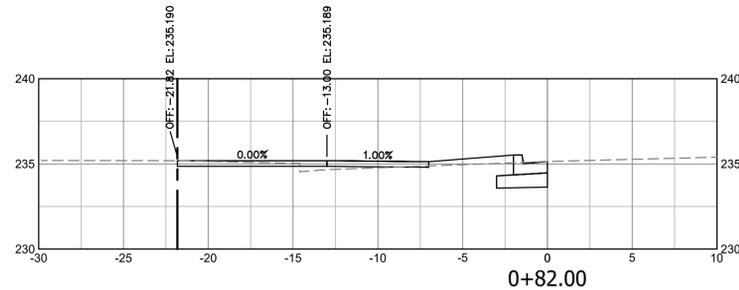
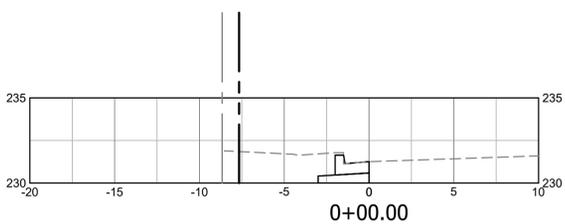
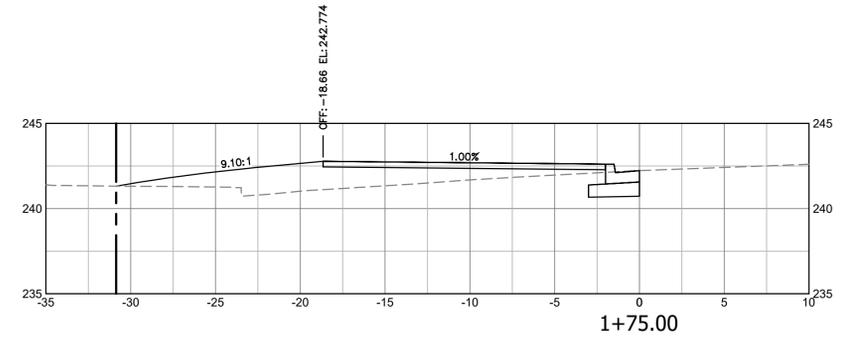
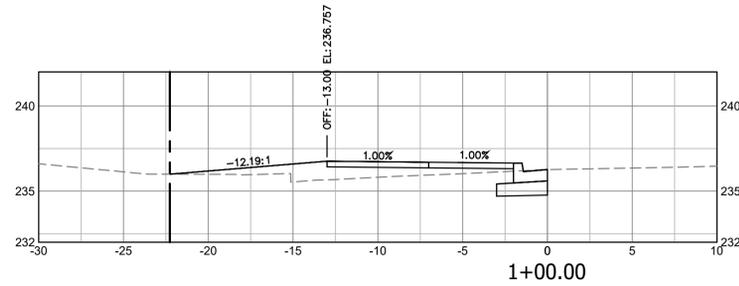
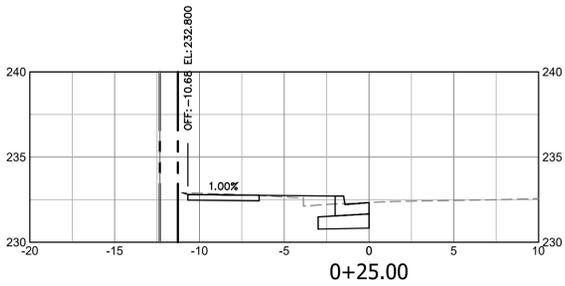
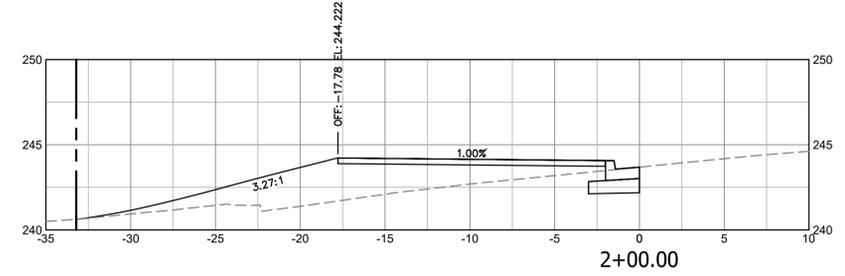
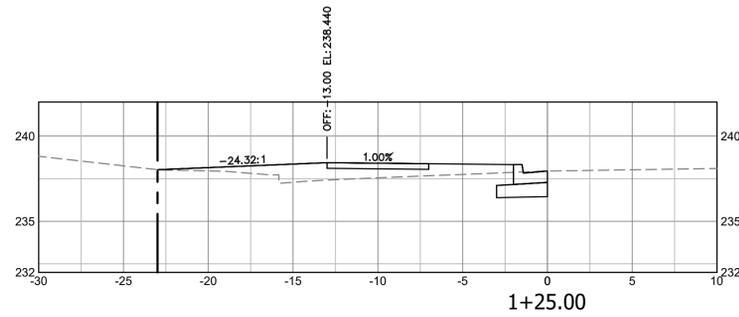
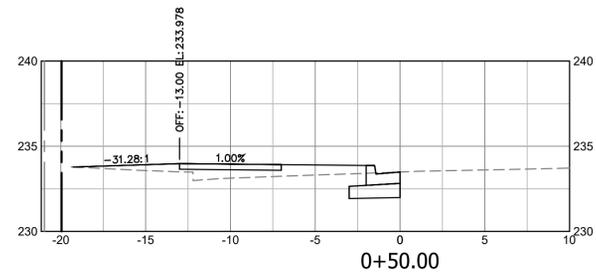
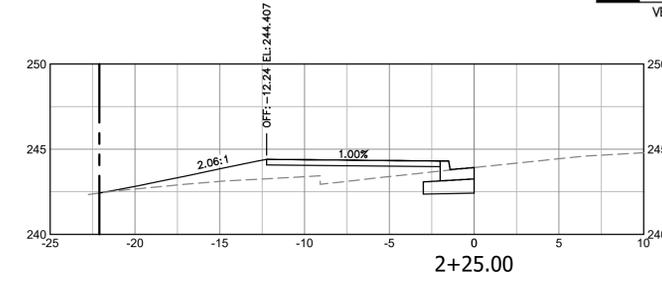
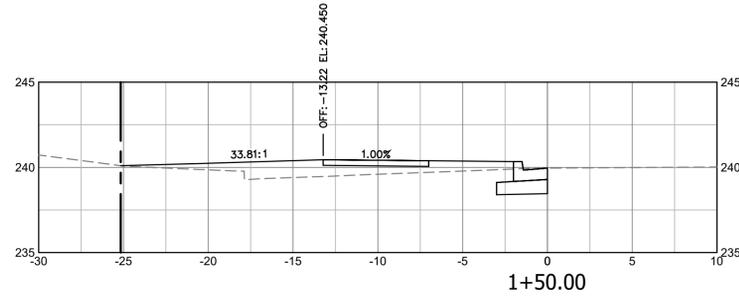
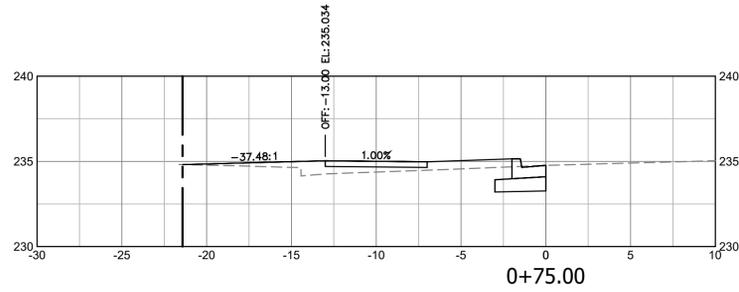
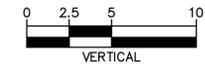
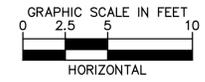
Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 5' VERT. 1" = 5'

KIMLEY-HORN AND ASSOCIATES, INC.  
11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
**C-1311**

### 6TH ROAD S. - SW CORNER



LEGEND	
	EXIST. RIGHT OF WAY
	PROP. PERMANENT EASEMENT
	EXIST. PERMANENT EASEMENT



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606



APPROVALS	DATE
	06/21/21
	06/21/21
	07.16.2021
	06/22/2021
	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road Signal Upgrades**

CROSS SECTIONS

ID #234  
TE02

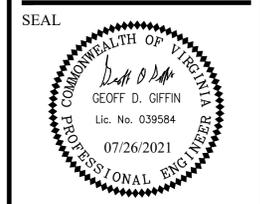
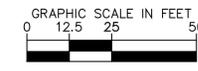
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Drawn: KF  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 23, 2021  
Plotted by: Max.Gawthrop

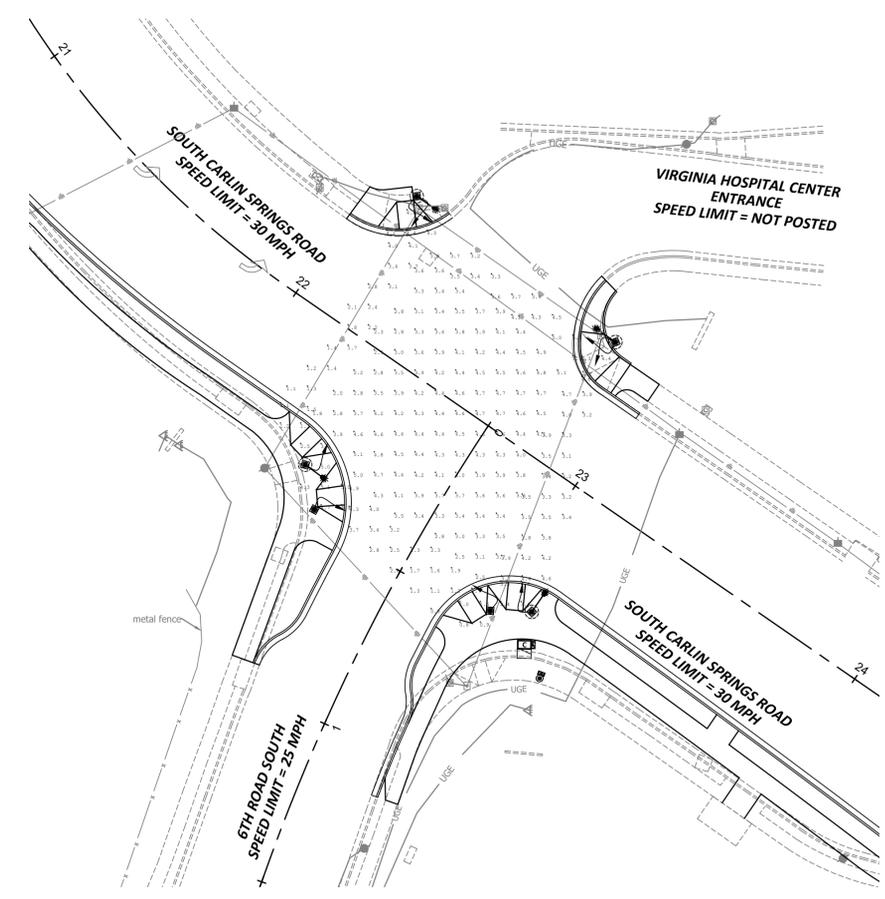
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HOR. 1" = 5' VERT. 1"=5'

KIMLEY-HORN AND ASSOCIATES, INC.  
11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
**C-1312**



APPROVALS	DATE
<i>[Signature]</i>	06/21/21
TRAFFIC SIGNAL ENGINEER	
<i>[Signature]</i>	06/21/21
TRAFFIC ENGINEERING MANAGER	
<i>[Signature]</i>	07.16.2021
WATER, SEWER, STREETS BUREAU CHIEF	
<i>[Signature]</i>	06/22/2021
TE&O BUREAU CHIEF	
<i>[Signature]</i>	06/23/21
TRANSPORTATION DIRECTOR	



Facility	Carlin Springs Intersections						Requirements Met?
	Target			Proposed			
	Avg	Avg/Min	Max/Min	Avg	Avg/Min	Max/Min	
6th Crosswalk_E	2.2	4	20	4.1	1.3	1.7	Yes
6th Crosswalk_N	2.2	4	20	2.3	2.1	3.7	Yes
6th Crosswalk_S	2.2	4	20	3.8	1.2	1.5	Yes
6th Crosswalk_W	2.2	4	20	2.5	2.8	5.4	Yes
6th Intersection	1.7	4	20	3.9	2.2	2.8	Yes
6thRampsSidewalk_NE	1.3	4	20	4.8	1.1	1.2	Yes
6thRampsSidewalk_NW	1.3	4	20	4.4	1.0	1.1	Yes
6thRampsSidewalk_SE	1.3	4	20	2.3	2.9	5.5	Yes
6thRampsSidewalk_SW	1.3	4	20	3.6	3.3	4.6	Yes

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road**  
**Signal Upgrades**

**STREETLIGHT PHOTOMETRICS EXHIBIT**  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

Designed: AS  
Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 26, 2021  
Plotted by: Max.Gawthrop

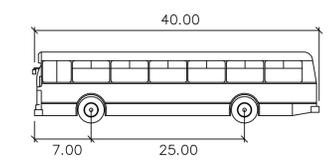
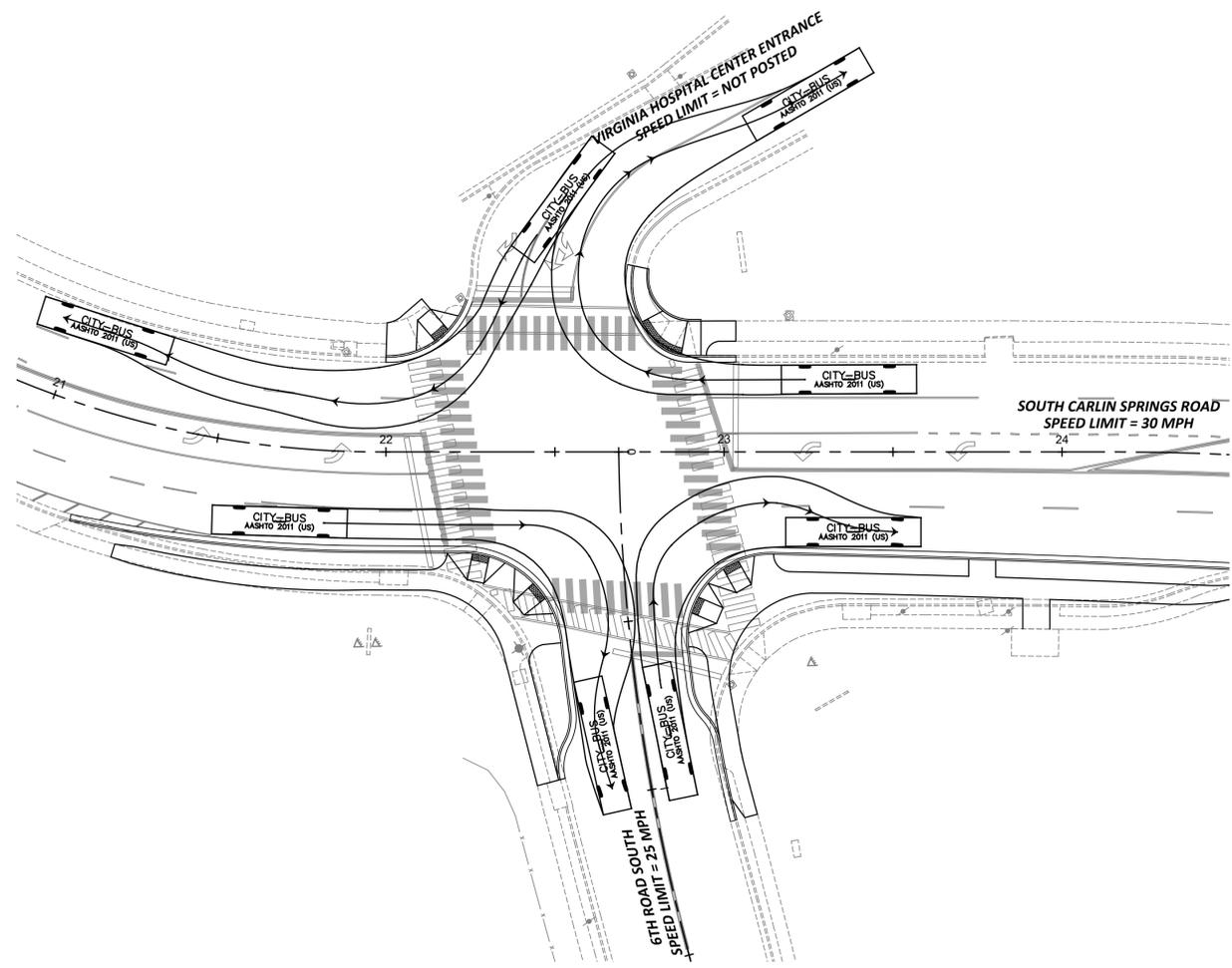
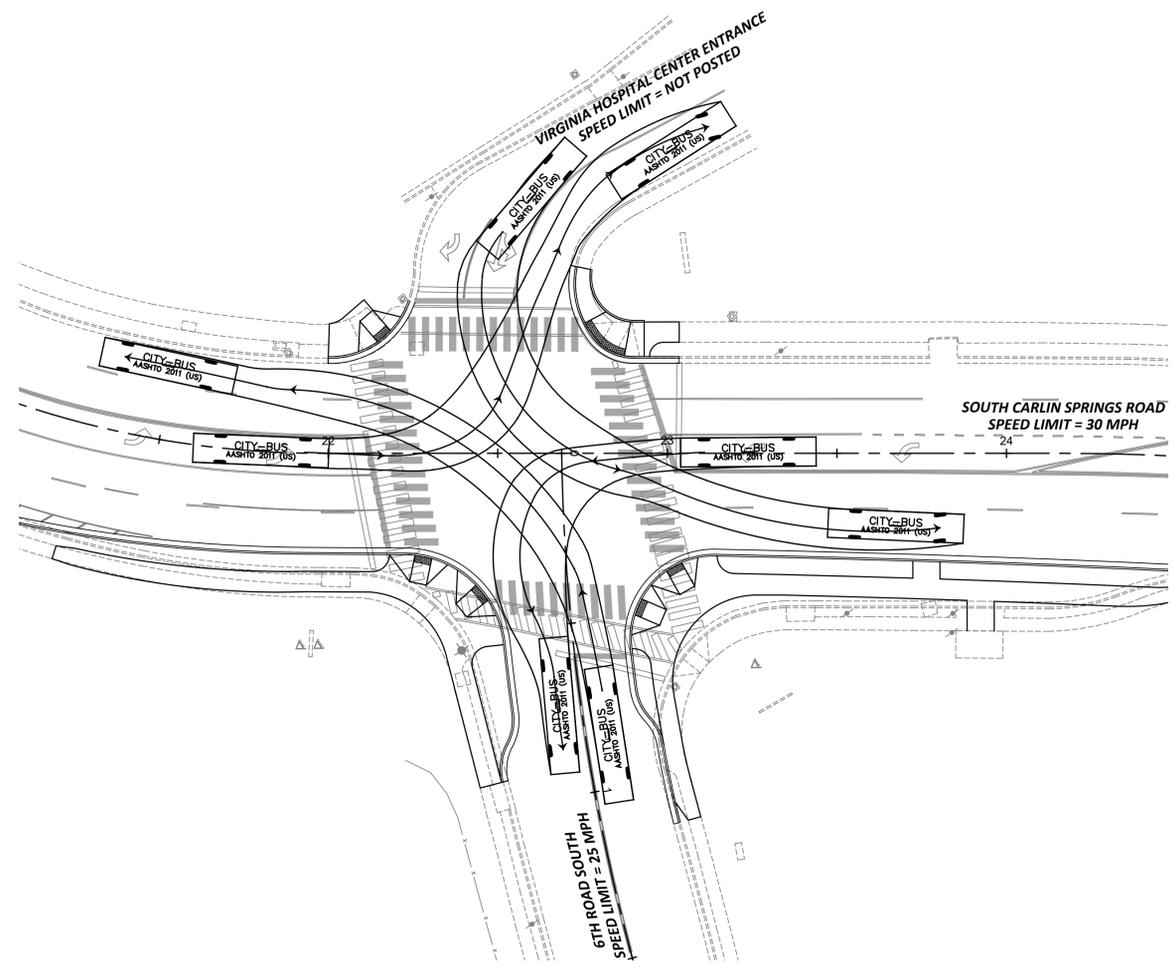
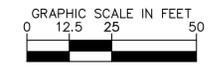
Scale:  
HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.  
11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
**EXHIBIT A**

REVISED: MARCH 03, 2020

Filename: AUTOTURN EXHIBITS-11601-4003\_6TH.dwg  
Path: K:\NSVA\_TPTO\110614003 - Carlin Springs\_2020\CAD\PlanSheets\Exhibits

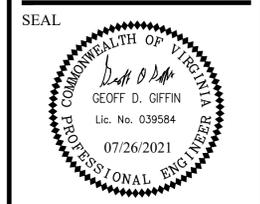


CITY-BUS  
feet  
Width : 8.50  
Track : 8.50  
Lock to Lock Time : 6.0  
Steering Angle : 41.4



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606



APPROVALS	DATE
<i>[Signature]</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>[Signature]</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>[Signature]</i> WATER, SEWER, STREETS BUREAU CHIEF	07/16/2021
<i>[Signature]</i> TE&O BUREAU CHIEF	06/22/2021
<i>[Signature]</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**

AUTOTURN EXHIBIT  
6TH ROAD S. AND S. CARLIN SPRINGS ROAD  
ID #234  
TE02

Designed: AS  
Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

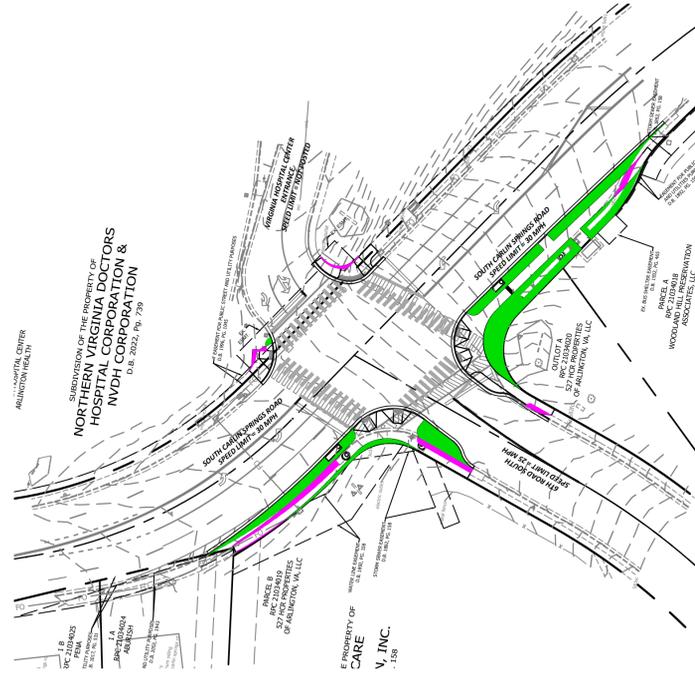
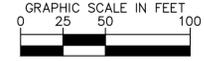
Plotted: July 26, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.  
11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

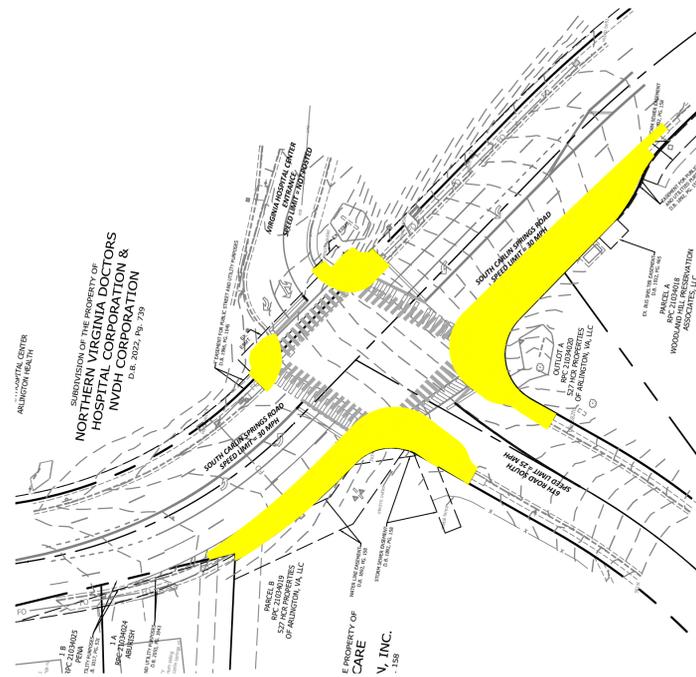
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**EXHIBIT B**

### DISTURBED AREA FOR STORMWATER MANAGEMENT



DISTURBED AREA FOR STORMWATER MANAGEMENT					
INTERSECTION	TOTAL	EXISTING IMPERVIOUS	EXISTING PERVIOUS	PROPOSED IMPERVIOUS	PROPOSED PERVIOUS
6TH ROAD S AND S CARLIN SPRINGS ROAD	2965.99 SF	2562.14 SF	403.85 SF	403.85 SF	2562.14 SF

### DISTURBED AREA FOR EROSION AND SEDIMENT CONTROL



DISTURBED AREA FOR EROSION AND SEDIMENT CONTROL	
INTERSECTION	TOTAL
6TH ROAD S AND S CARLIN SPRINGS ROAD	9235.02 SF

- LEGEND**
- PERVIOUS TO IMPERVIOUS AREA
  - IMPERVIOUS TO PERVIOUS AREA
  - LIMITS OF DISTURBANCE



DEPARTMENT OF ENVIRONMENTAL SERVICES

Transportation Division  
Transportation Planning Bureau  
2100 Clarendon Boulevard, Suite 900  
Arlington, VA 22201  
Phone: 703.228.3629  
Fax: 703.228.3606

SEAL



APPROVALS	DATE
<i>[Signature]</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>[Signature]</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>[Signature]</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>[Signature]</i> TE&O BUREAU CHIEF	06/22/2021
<i>[Signature]</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**  
IMPERVIOUS AREA  
ID #234  
TE02

Designed: AS  
Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

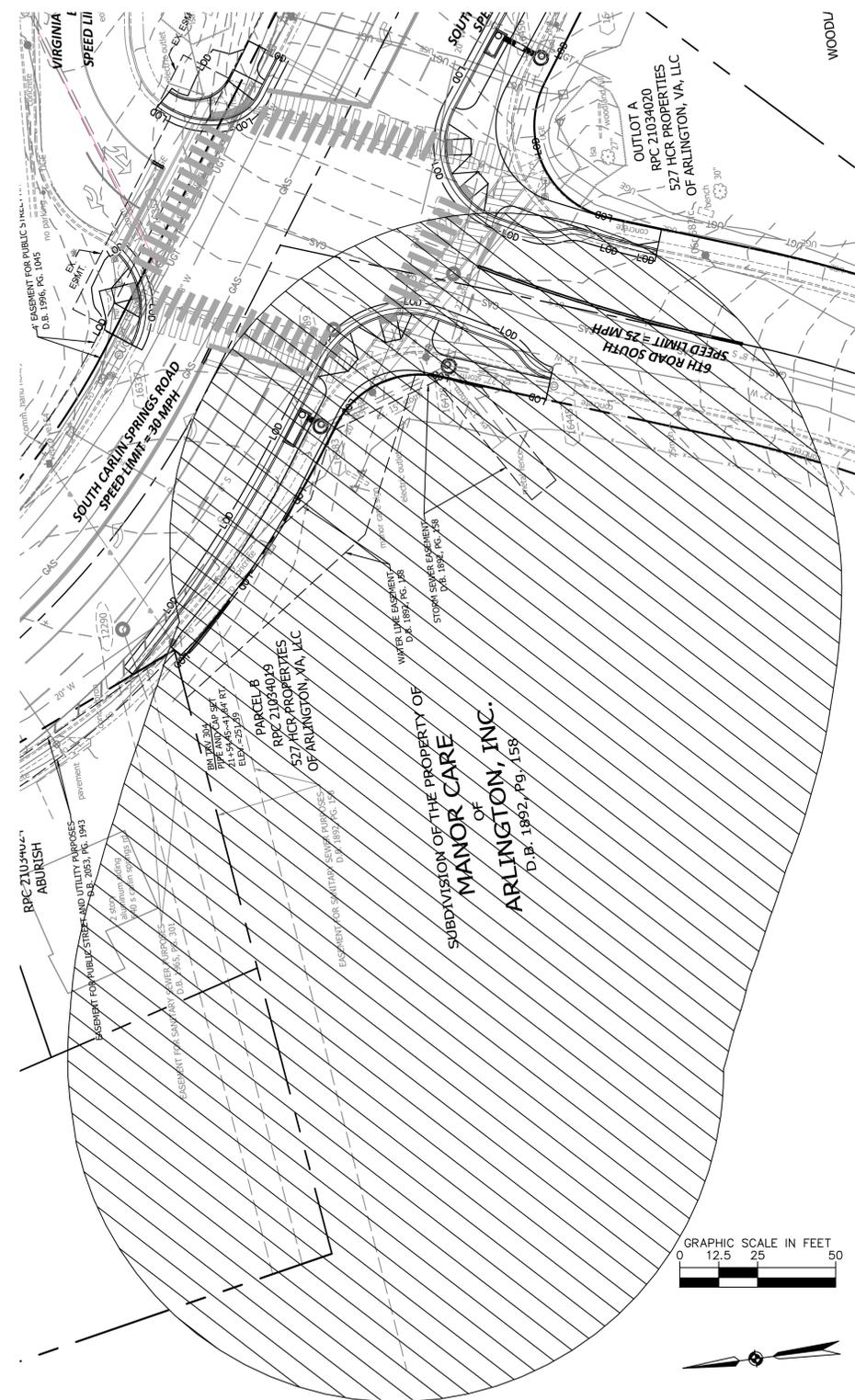
Plotted: July 26, 2021  
Plotted by: Max.Gawthrop

Scale:  
HOR. 1" = 25' VERT. N/A

KIMLEY-HORN AND ASSOCIATES, INC.  
11400 Commerce Park Drive, Suite 400  
Reston, Virginia 20191

Sheet  
**EXHIBIT C**

# WATER QUALITY IMPACT ASSESSMENT (WQIA) NARRATIVE



THIS PROJECT IS AN INTERSECTION IMPROVEMENT FOR THE INTERSECTIONS OF SOUTH CARLIN SPRINGS ROAD AND 3RD STREET SOUTH AS WELL AS SOUTH CARLIN SPRINGS ROAD AND 6TH ROAD SOUTH. THE SITE AREA IS DEFINED BY THE LIMITS OF DISTURBANCE. A RPA WAS DETERMINED USING GIS SURVEY DATA. THAT DELINEATION IS USED FOR IMPACTS HEREIN.

**EXISTING CONDITIONS**  
THE PROJECT SITE IS LOCATED ADJACENT TO A RPA THAT DRAINS TO THE UPPER LONG BRANCH AND FOUR MILE RUN WATERSHED. THE SITE TOPOGRAPHY IS RELATIVELY FLAT AND IS WITHIN THE RIGHT OF WAY OF A DENSELY DEVELOPED URBAN AREA. THE MAJORITY OF SITE COVER IS IMPERVIOUS. WITHIN SITE AREA, THE ROAD HAS CURB AND GUTTER AND ROADWAY RUNOFF DRAINS TO STORM SEWER.

THE SITE AREA IS LOCATED IN A HEAVILY DEVELOPED AREA. NORTH AND SOUTH OF THE PROJECT AREA, LAND IS ZONED AS RESIDENTIAL.

**PROPOSED IMPROVEMENTS**  
THIS PROJECT CONSISTS OF TRAFFIC SIGNAL MODIFICATIONS AT THE INTERSECTIONS OF S. CARLIN SPRINGS ROAD WITH 3RD STREET S AND S. CARLIN SPRINGS ROAD WITH 6TH ROAD S. THE SIGNAL MODIFICATIONS INCLUDE REMOVING ALL EXISTING EQUIPMENT AND REPLACING WITH NEW EQUIPMENT, ACCESSIBLE PEDESTRIAN SIGNAL DEVICES, AND LIMITED SIDEWALK AND CURB AND GUTTER MODIFICATIONS. PERMANENT AND TEMPORARY EASEMENTS ARE PROPOSED TO ENCOMPASS THE PROPOSED SIGNAL EQUIPMENT AND PEDESTRIAN IMPROVEMENTS. THE CONTRACTOR SHALL CONFIRM THE EXECUTION OF THE PROPOSED EASEMENTS PRIOR TO BEGINNING WORK.

**TREE/VEGETATION IMPACTS**  
THE CONTRACTOR WILL RESTORE DISTURBED AREAS TO THEIR ORIGINAL CONDITION. NO TREES ARE PROPOSED TO BE IMPACTED.

**PERMANENT STABILIZATION**  
ALL DISTURBED AREAS BY THIS PROJECT SHALL BE STABILIZED WITH PERMANENT GROUND COVER UTILIZING STD. 3.33. SODDING IS THE REQUIRED GROUND COVER FOR AREAS THAT ARE CURRENTLY GRASS. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF ALL DISTURBED AREAS UNTIL FINAL ACCEPTANCE BY ARLINGTON COUNTY AND/OR LAND OWNER. THIS SHALL INCLUDE CUTTING THE GRASS TO MAINTAIN THE SAME APPEARANCE AS THE ADJOINING PROPERTY.

**SOILS**  
THE SOILS IN THE PROJECT AREA HAVE BEEN PRIMARILY MAPPED AS URBAN LAND - UDORTHERTS COMPLEX WHICH ARE SOILS THAT HAVE BEEN PREVIOUSLY DISTURBED AND NOT CHARACTERIZED.

- EROSION AND SEDIMENT CONTROL MEASURES**  
THE FOLLOWING EROSION CONTROLS SHALL BE USED DURING THIS PROJECT.
- STD. 3.05 SILT FENCE - SILT FENCE AND SUPER SILT FENCE SHALL BE USED IN ACCORDANCE WITH THIS STANDARD AND AS SPECIFIED BY ARLINGTON COUNTY. SEE DETAIL SHEET C-0005. SILT FENCE OR SUPER SILT FENCE SHALL BE USED DOWN GRADIENT FROM DISTURBED AREAS AS SHOWN ON THE PLANS AND AS NEEDED TO PREVENT THE TRANSPORTATION OF SEDIMENT BEYOND THE PROJECT LIMITS. IT SHALL BE INSTALLED PRIOR TO STARTING LAND DISTURBANCE AND SHALL BE REMOVED AFTER THE DISTURBED AREA HAS HAD TEMPORARY OR PERMANENT STABILIZATION ESTABLISHED. COORDINATE REMOVAL WITH THE ARLINGTON COUNTY INSPECTOR.
  - STD. 3.07 STORM DRAIN INLET PROTECTION - STORM DRAINAGE INLETS SHALL BE PROTECTED IN ACCORDANCE WITH THIS STANDARD. INLETS DOWN GRADIENT FROM LAND DISTURBING ACTIVITIES SHALL HAVE INLET PROTECTION INSTALLED PRIOR TO STARTING LAND DISTURBANCE. CARE SHALL BE TAKEN AS TO NOT INTERFERE WITH TRAFFIC ON S CARLIN SPRINGS ROAD WHEN SELECTING THE TYPE OF INLET PROTECTION TO BE USED. THE CONTRACTOR IS TO REMOVE SILT BUILDUP PROMPTLY SO THAT SILT IS NOT TRACKED ALONG THE ROAD. REMOVAL OF THE INLET PROTECTION SHALL OCCUR ONCE DISTURBED AREA UP GRADIENT OF THE INLET HAVE BEEN STABILIZED AND IN COORDINATION WITH THE ARLINGTON COUNTY INSPECTOR.
  - STD. 3.26 DEWATERING STRUCTURE - ALL DISCHARGES FROM DEWATERING OPERATIONS SHALL BE IN ACCORDANCE WITH THIS STANDARD. DEWATERING CONTROLS SHALL BE USED AT ALL DEWATERING DISCHARGES. THE CONTRACTOR IS TO NOTIFY THE ARLINGTON COUNTY INSPECTOR PRIOR TO DISCHARGING DEWATERING EFFLUENT OF THE LOCATION AND TYPE OF FILTER OR CONTROL THAT IS TO BE USED AND FOR HOW LONG IT WILL BE USED.
  - STD. 3.31 TEMPORARY SEEDING - TEMPORARY SEEDING SHALL BE APPLIED IN ACCORDANCE WITH THIS STANDARD. TEMPORARY STABILIZATION IS REQUIRED WHEN AN AREA IS NOT TO BE WORKED WITHIN A 7 DAY PERIOD. THE CONTRACTOR SHALL STABILIZE DISTURBED AREAS AS SOON AS POSSIBLE IN ORDER TO ESTABLISH A SURFACE PROTECTION TO EROSION. TEMPORARY SEEDING SHALL BE CARED FOR AS NECESSARY IN ORDER TO GENERATE A DENSE, HEALTHY STAND OF VEGETATION THAT WILL RESIST EROSION.
  - THE CONTRACTOR SHALL USE APPROPRIATE METHODS TO ESTABLISH PERMANENT STABILIZATION THAT ARE SIMILAR TO THE CONDITION THAT WAS PRESENT PRIOR TO STARTING LAND DISTURBANCE ACTIVITIES.
  - STD. 3.33 SODDING - ALL SODDING SHALL BE IN ACCORDANCE WITH THIS STANDARD. SODDED AREAS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL THE SOD HAS BEEN ESTABLISHED AND HAD TWO MOWING CYCLES. THE CONTRACTOR SHALL COORDINATE THE RELEASE OF MAINTENANCE OF SODDED AREAS WITH THE ARLINGTON COUNTY INSPECTOR AND THE LAND OWNER.
  - STD. 3.38 TREE PRESERVATION AND PROTECTION - TREE PROTECTION FENCING SHALL BE IN ACCORDANCE WITH THIS STANDARD AND ARLINGTON COUNTY'S TREE PROTECTION FENCE, PLAN. SEE THIS SHEET FOR DETAIL. TREE PROTECTION SHALL BE USED ALONG THE LIMITS OF DISTURBANCE WHERE AN OFFSITE TREE OR LANDSCAPED AREA MAY HAVE A CRITICAL ROOT ZONE THAT EXTENDS INTO THE LIMITS OF THIS PROJECT. THE ARLINGTON COUNTY URBAN FORESTER MAY REQUIRE ADDITIONAL TREE PRESERVATION AND PROTECTION BE INSTALLED PRIOR TO STARTING LAND DISTURBING ACTIVITIES. TREE PRESERVATION AND PROTECTION SHALL ONLY BE REMOVED WITH THE APPROVAL OF THE ARLINGTON COUNTY URBAN FORESTER.

ADDITIONAL EROSION AND SEDIMENT MEASURES WILL BE PLACED BY THE CONTRACTOR AS NECESSARY AND IN ACCORDANCE WITH DEQ EROSION AND SEDIMENT CONTROL REQUIREMENTS.

**STORMWATER RUNOFF CONSIDERATIONS**  
THIS PROJECT REDUCES THE OVERALL IMPERVIOUSNESS OF THE SITE AREA AND DOES NOT INCREASE SURFACE RUNOFF PATTERNS OR VOLUMES. NO FLOODING OR CHANNEL DEGRADATION IS ANTICIPATED DOWNSTREAM OF THE PROJECT DUE TO THE PROPOSED REDUCTION IN RUNOFF.

**REQUIRED PERMITS**  
LAND DISTURBING ACTIVITY PERMIT - ARLINGTON COUNTY DES  
TRANSPORTATION RIGHT-OF-WAY PERMIT - ARLINGTON COUNTY DES  
PUBLIC RIGHT-OF-WAY PERMIT - ARLINGTON COUNTY DES

## Appendix C. Water Quality Impact Assessment Data Sheet

Project Address 3RD STREET S. AT CARLIN SPRINGS ROAD S.		Date: JUNE 1ST, 2021	
Applicant Name/Affiliation: ANUP KALFE		Applicant Contact Information (phone and email): 703-228-7050	
Owner/Client Name: ARLINGTON COUNTY DES		Owner/Client Contact Information (phone and email): 703-228-7050	
<b>Section 1: Type of activity proposed</b>			
Activity type (check all that apply):			
<input type="checkbox"/> New construction (residential, commercial, public, etc.)	<input type="checkbox"/> Deck, patio, or retaining wall		
<input type="checkbox"/> Alteration of non-residential structure	<input type="checkbox"/> Landscaping (includes tree removal)		
<input type="checkbox"/> Residential addition	<input type="checkbox"/> Utility work		
<input type="checkbox"/> Detached residential structure	<input checked="" type="checkbox"/> Fence		
Other (please describe): INTERSECTION IMPROVEMENTS			
<b>Section 2: Key details of the proposed activity</b>			
Complete all that apply		Explanation	
Total area of disturbance on parcel (sf)	6,078.54	Includes building footprint plus a 10 foot buffer. Also includes all soil disturbance, ingress/egress areas, stockpiling areas, etc.	
Area of disturbance within RPA (sf)	3,403.87	Includes removal of trees > 3" in diameter	
Area of disturbance on slopes greater than or equal to 15 percent located adjacent to landward RPA boundary (sf)	0	Does not apply to RPA parcels along Chain Bridge Road (15 percent and greater slopes are included as part of RPA)	
Complete all fields		Explanation	
RPA encroachment (ft)	Existing condition	Proposed condition	
	Left third of parcel or site	95	95
	Middle third of parcel or site	58	61
Right third of parcel or site	43	43	
Total development footprint in RPA (sf)	11,802.17	11,034.01	
Impervious footprint in RPA (sf)	11,258.52	9,934.27	
		(OVER)	
<b>STAFF USE ONLY</b>			
Building/demolition/LDA/Fence permit number(s):			
Major WQIA required? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Date WQIA/Exception request information complete:			
Date Chesapeake Bay Preservation Ordinance and E/S ordinance (if applicable) approvals issued in Permits Plus:			
<b>Section 3: Plan and Narrative</b>			
Provide a plan showing the location of the proposed activity, along with the RPA boundary. Briefly describe the proposed project, including any potential water quality impacts and mitigation measures proposed. The narrative must address three impact categories: 1. Tree/vegetation impacts, 2. Stormwater and runoff 3. Erosion and sediment control. Please refer to the WQIA plan/narrative checklist for additional information.			
NARRATIVE: SEE WATER QUALITY IMPACT ASSESSMENT NARRATIVE ON THIS SHEET.			
PLAN: LOCATION OF REQUIRED PLAN ELEMENTS PER WATER QUALITY IMPACT ASSESSMENT DATA SHEET AND NARRATIVE CHECKLIST ARE LISTED IN THE TABLE BELOW.			
WQIA ELEMENT	SHEET NO.		
RPA BOUNDARY	C-0200, C-0210, C-0900, C-0910		
LIMITS OF DISTURBANCE	C-0100, C-0110, C-0410		
EXISTING CONDITIONS	C-0200, C-0210, C-0900, C-0910		
IMPERVIOUS COVER	C-0100, C-0110		
UTILITY PLAN	EXHIBIT E AND F		
SIGNAL PLAN	C-1101, C-1111		
DOWNSPOUT LOCATIONS	C-1100, C-1110		
EROSION AND SEDIMENT CONTROLS	N/A		
TREE PROTECTION	C-0200, C-0210, C-0900, C-0910		
LANDSCAPE PLAN	N/A		
PLANT LIST	N/A		
<b>Additional Water Quality Impact Assessment Information</b>			
The information supplied on this form satisfies the minimum requirements for a Minor Water Quality Impact Assessment. For projects that disturb over 2500 square feet, elements of a Major Water Quality Impact Assessment may also be required, depending on the nature and extent of the proposed RPA encroachment, as outlined in Section 61-12 of the ordinance.			



DEPARTMENT OF ENVIRONMENTAL SERVICES  
Transportation Division  
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Fax: 703.228.3606



APPROVALS	DATE
<i>Geoff D. Giffin</i> TRAFFIC SIGNAL ENGINEER	06/21/21
<i>John N. Nicks</i> TRAFFIC ENGINEERING MANAGER	06/21/21
<i>John N. Nicks</i> WATER, SEWER, STREETS BUREAU CHIEF	07.16.2021
<i>John N. Nicks</i> TE&O BUREAU CHIEF	06/22/2021
<i>Dennis M. Leach</i> TRANSPORTATION DIRECTOR	06/23/21

REVISIONS	DATE

Project Name and Location  
**S. Carlin Springs Road  
Signal Upgrades**  
WQIA PLAN AND NARRATIVE

ID #234  
TE02

Designed: AS  
Drawn: AS  
Checked: GG  
Miss Utility Transmittal #:

Plotted: July 26, 2021  
Plotted by: Max.Gawthrop

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Sheet  
**EXHIBIT D**