REVISED ON 05/23/2018

ARLINGTON
VIRGINIA

ENGINEER
DEPARTMENT OF
ENVIRONMENTAL SERVICES

FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
2100 CLARENDON BOULEVARD, SUITE 813
ARLINGTON, VA 22201
PHONE: 703.228.3629 FAX: 703.228.3606
WWW.ARLINGTONVA.US

OWNER
DES/DTD/PLAN

CONTRACTOR
TO BE DETERMINED

LOCATION MAP

0 600' 1200'
GRAPHIC SCALE

CONSTRUCTION DRAWINGS FOR:

INTERSECTION IMPROVEMENT MILITARY ROAD

Intersections: Military Rd & N Marcey Rd / Military Rd & 36th Rd N

PROJECT NUMBER: DC17

GENERAL NOTES:

GENERAL CONSTRUCTION NOTES

1. ALL CONSTRUCTION WORK FOR THIS PROJECT SHALL CONFORM TO THE ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES, CONSTRUCTION STANDARDS AND 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.
2. ALL CONSTRUCTION AND WORK ACTIVITIES SHALL COMPLY WITH THE VIRGINIA WORK AREA PROTECTION MANUAL AND ALL OTHER RELEVANT WORK SAFETY REQUIREMENTS, LATEST EDITIONS.
3. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT OFFICER OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE APPROVED PLANS.
4. 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.
5. 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.
6. 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 TRENCH(ES) 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.
7. 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.
8. 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

9. 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).

TREE PROTECTION

10. TREES SHALL BE PROTECTED PER THE REQUIREMENTS OF ARLINGTON PARKS & RECREATION.

TRAFFIC CONTROL

11. 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.
12. 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.
13. 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.
14. 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. ANY RELOCATION OR CLOSURE OF A BUS STOP SHALL BE COORDINATED WITH THE COUNTY'S BUS STOP COORDINATOR (PHONE #703-228-3049) AT LEAST FOUR WEEKS IN ADVANCE OF CONSTRUCTION COMMENCEMENT. ALL TEMPORARY AND FINAL BUS TRAVEL LANES MUST BE MINIMUM 11' WIDE.
15. 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

16. 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.
17. 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.

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SWM# 19-0207

ADT

N MILITARY RD:
7,000 VPD AADT (VDOT 2017) From Quincy St to N Glebe Rd
11,000 VPD AADT (VDOT 2017) From Nellie Custis Dr to Beechwood Cir

N MARCEY RD:
N/A
36TH RD N:
N/A

STREET CLASSIFICATION

MINOR ARTERIAL - MILITARY ROAD
NEIGHBORHOOD PRINCIPAL - 36TH ROAD NORTH
NEIGHBORHOOD MINOR - NORTH MARCEY ROAD

POSTED SPEED

30 MPH - MILITARY ROAD
25 MPH - 36TH ROAD NORTH
25 MPH - NORTH MARCEY ROAD

DESIGN VEHICLE

AASHTO 2011 (US) CITY-BUS

ARLINGTON
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SEAL

COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019706
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/4/20
WATER, SEWER, STREETS BUREAU CHIEF	1/14/2020
TRANSPORTATION DIRECTOR	1/9/2020
PROJECT MANAGER	

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

COVER SHEET

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

AS NOTED

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6' BENCH DETAIL

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COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
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1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

DETAILS

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

AS SHOWN

SHEET 2 OF 37

REVISED ON 05/23/2018
FILENAME: DC17-204-DETAIL.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

LINETYPE LEGEND

FEATURE	EXISTING	PROPOSED
BUILDING		
CENTERLINE / BASELINE		
COMMUNICATIONS CABLE	COM COM	COM COM
CONTOURS MAJOR;MINOR?	250 250	250 250
CRITICAL ROOT ZONE	CRZ CRZ	CRZ CRZ
EASEMENT		
ELECTRIC (UNDERGROUND)	UGE UGE	
FENCE (MATERIAL NOTED)	x x x x x	x x x x x
FIBER OPTIC	FO FO	fo
GAS LINE	GAS GAS	GAS GAS
X" GAS LINE (SIZE INCLUDED IF AVAILABLE)	X" G X" G	X" G X" G
GUARDRAIL		
HARDSCAPE FEATURE (MATERIAL NOTED)		
LIMITS OF DISTURBANCE	LOD LOD	LOD LOD
LIMITS OF WORK	LOW LOW	LOW LOW
OVERHEAD WIRES		
PAVEMENT MINI SKIP LINE		
PAVEMENT SKIP LINE		
PROPERTY LINE		
RIGHT-OF-WAY LINE		
ROOT PRUNING	RP RP	RP RP
SANITARY SEWER		SAN SAN
X" SANITARY SEWER (SIZE INCLUDED IF AVAILABLE)	X" S X" S	
SILT FENCE	SF SF	SF SF
STORM (SIZE NOTED)	STM STM	
STREAM		
STREET LIGHT CONDUIT	SL SL	SL SL
TELEPHONE (UNDERGROUND)	UGT	UGT
TREE LINE		
TREE PROTECTION FENCE	TP TP	TP TP
WALL		
WATER		
X" WATER (SIZE INCLUDED IF AVAILABLE)	X" W X" W	X" W X" W

SYMBOL LEGEND

EXISTING FEATURE	PROPOSE FEATURE
EX CABLE PEDESTAL	
EX ELECTRIC BOX	
EX FIRE HYDRANT	PROP FIRE HYDRANT
EX GAS VALVE	PROP GAS VALVE
EX GROUND LIGHT	
EX GUY WIRES	
EX IRON PIPE OR PIN	
EX LIGHT POLE	PROP LIGHT POLE
EX MAILBOX	
EX MONUMENT	
EX PARKING METER	
EX PAY STATION	PROP PAY STATION
EX SANITARY MANHOLE	PROP SANITARY MANHOLE
EX STORM BASIN	PROP STORM CATCH BASIN (TO SCALE)
EX STORM MANHOLE	PROP STORM MANHOLE
EX TELEPHONE PEDESTAL	
EX TRAFFIC CONTROL BOX	
EX TRAFFIC SIGN	PROP TRAFFIC SIGN
EX TRASH CAN	PROP TRASH CAN
EX TRAVERSE	
EX TREES, WOODED AREA	PROPOSED TREE REMOVAL
EX UTILITY MANHOLE TYPE INDICATED ELECTRIC, TELE, ETC	
EX UTILITY POLE	PROP UTILITY POLE
EX WATER MANHOLE	PROP WATER MANHOLE
EX WATER METER	PROP WATER METER
EX WATER VALVE	PROP WATER VALVE
EX YARD INLET	PROP YARD INLET (TO SCALE)
EX BENCHMARK	CONSTRUCTION NOTES (LEADER TO AREA AFFECTED)
	CURVE NUMBER (SEE CURVE TABLE)
	LINE NUMBER (SEE LINE TABLE)
	TEST HOLE
	NORTH ARROW

LABEL LEGEND

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

HATCH LEGEND

PROP MILL & OVERLAY SEE TYPICAL SECTION FOR DETAILS	
PROP FULL DEPTH ASPHALT SEE TYPICAL SECTION FOR DETAILS	
PROP CONCRETE	
REPLACE & MATCH EXISTING DRIVEWAY OR LEADWALK. SEE CONSTRUCTION NOTES	
DEMOLITION AREA	
GRASS AREA	

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SEAL

COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019706
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

LEGEND SHEET

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE: AS NOTED

FILENAME: DC17-202-LEGEND_36TH.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

N MILITARY RD
BASELINE: SURVEY N MILITARY RD CENTERLINE
STA 75+12.40 TO STA 75+30.39

36TH RD N
BASELINE: SURVEY 36TH RD N CENTERLINE
STA 0+85.88 TO STA 1+11.80

LEGEND

- (A) PROP 4" CONC. SDWK. CLASS A3 PER ARL. CO. STD. R-2.0
- (B) PROP CURB AND GUTTER PER ARL. CO. STD. R-2.0 (C-2)
- (C) PROP. 4" TOPSOIL AND SOD PER ARL. CO. SPECS 329100 & 329200 AND SELECTED & APPROVED SOIL FOR BACKFILL IF NEEDED
- (D) PROP. 2" ASPHALT CONCRETE SURFACE COURSE TYPE SM-9.5D PER VDOT SPEC. 211
- (E) PROP. 6" ASPHALT CONCRETE BASE COURSE TYPE BM-25.0A PER VDOT SPEC. 211
- (F) PROP. 6" AGGREGATE BASE MATERIAL, MIN. CBR-30, TYPE 1, SIZE 21-A PER ARL. CO. STD. R-1.4
- (G) PROP. 3" AGGREGATE BASE MATERIAL, MIN. CBR-30, TYPE 1, SIZE 21-A PER ARL. CO. STD R-2.0
- (H) PROP. STD. SOLID CONCRETE RAISED MEDIAN MS-1 W/CUT-THROUGH TYPE M2 PER 2016 VDOT ROAD & BRIDGE STD. DWG. 202.02 & 203.09

TYPICAL UTILITY STRIP CROSS SECTION
(N.T.S)

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APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER (Gabriela Kock)	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

TYPICAL SECTIONS
Military Rd and 36th Rd N

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE: NTS

REVISED ON 05/23/2018
FILENAME: DC17-210-TYPICAL_SECTIONS-36TH.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

N MILITARY RD
BASELINE: SURVEY N MILITARY RD CENTERLINE
STA 20+94.04 TO 21+41.76

N MARCEY RD
BASELINE: SURVEY N MARCEY RD CENTERLINE
STA 0+32.70 TO STA 0+50.35

LEGEND

- (A) PROP 4" CONC. SDWK. CLASS A3 PER ARL. CO. STD. R-2.0
- (B) PROP CURB AND GUTTER PER ARL. CO. STD. R-2.0 (C-2)
- (C) PROP. 4" TOPSOIL AND SOD PER ARL. CO. SPECS 329100 & 329200 AND SELECTED & APPROVED SOIL FOR BACKFILL IF NEEDED
- (D) PROP. 2" ASPHALT CONCRETE SURFACE COURSE TYPE SM-9.5D PER VDOT SPEC. 211
- (E) PROP. 6" ASPHALT CONCRETE BASE COURSE TYPE BM-25.0A PER VDOT SPEC. 211
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TYPICAL UTILITY STRIP CROSS SECTION
(N.T.S)

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1/8/20
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APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

TYPICAL SECTIONS Military Rd and N Marcey Rd

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE: NTS

FILENAME: DC17-210-TYPICAL_SECTIONS-MARCEY.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

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STORM SEWER TABULATION

#486
TOP = 166.92
36" RCP INV. IN = 159.60 (447)
36" RCP INV. OUT NOT ACCESSIBLE,
INV. PER PLAN = 158.87 (490)

#490
TOP = 163.56
C/L STRUCTURE = 157.33
36" RCP INV. IN = NOT ACCESSIBLE (486)
INV. PER PLAN = 157.51
36" RCP INV. OUT = NOT ACCESSIBLE
INV. PER PLAN = 157.32 (495)

#495
TOP = 163.53
C/L STRUCTURE = 155.13
36" RCP IN NOT ACCESSIBLE,
PER PLAN = 155.78 (490)
36" RCP INV. OUT NOT ACCESSIBLE,
PER PLAN = 155.47 (503)

#503
INV. OUT (CULVERT) = 154.39

#439
TOP = 162.95
15" RCP INV. IN = 150.45 (422)
15" RCP INV. OUT = 149.70 (451)

#451
INV. OUT (CULVERT) = 145.97

SANITARY SEWER TABULATION

#9062
TOP = 171.25
C/L INV. = 163.55

#4868
TOP = 164.12
8" INV. IN TYPE "B" DROP CONNECTION = 160.38 PER PLAN INFO (9062)
8" INV. IN AT BOTTOM OF STRUCTURE = 152.50
8" INV. OUT = 152.47 (4867)

#4867
TOP = 161.76
8" INV. IN = 151.32 (4868)
15" INV. IN = 150.99 (1834)
15" INV. OUT = 150.86 (2A)

#14110
TOP = 171.08
8" INV. OUT = 162.18

#14109
TOP = 168.32
8" INV. IN = 158.12 (14110)
8" INV. OUT = 158.10 (9150)

#9150
TOP = 160.96
8" INV. IN = 156.91 (14109)
8" INV. IN = 156.31 (9149)
8" INV. OUT = 156.28 (9008)

Ex#1
TOP = 163.63
C/L INV. = 152.93

Ex#2
TOP = 164.62
C/L INV. = 154.81

Control Table

108	7020568.80	11875611.41	169.78	pipe and cap
109	7020956.62	11875568.75	165.20	drill hole
1444	7020819.97	11875566.09	161.26	FLY

1. THIS 6814-DC17 PROJECT UTILIZES SURVEY CONTROL AS ESTABLISHED FOR PREVIOUS ARLINGTON COUNTY PROJECT 5395-NE34. THE FOLLOWING APPLIES TO THE 5395-NE34 PROJECT:
   - BASELINE FROM ARLINGTON COUNTY GPS MONUMENT BN004 TO ARLINGTON COUNTY GPS MONUMENT BN005 WAS USED TO ESTABLISH THE DIRECTION RELATED TO VIRGINIA STATE GRID NORTH FOR THIS PROJECT.
   - THE BENCHMARK ELEVATION FOR ARLINGTON COUNTY GPS MONUMENT BN004 (ELEVATION = 217.50, SET 1999) WAS HELD FOR THE VERTICAL DATUM.
2. HORIZONTAL DISTANCES MEASURED AT THE AVERAGE ELEVATION OF THIS SITE SHOULD BE MULTIPLIED BY A COMBINED (ELEVATION×SCALE) FACTOR OF 0.999950868 TO BETTER REPRESENT DISTANCES ON VIRGINIA STATE PLANE.
3. UNDERGROUND UTILITY DESIGNATION WAS PERFORMED BY MID ATLANTIC UTILITY LOCATING ON 02/02/2018 AND SURVEYED BY ARLINGTON COUNTY. THE ABBREVIATION "D.A.T.U.R." AS SHOWN HEREON SIGNIFIES "DEPICTED ACCORDING TO UTILITY RECORDS". "EOI" SIGNIFIES "END OF INFORMATION".
4. ALL SANITARY SEWER DIAMETERS, WATER LINE DIAMETERS, AND BUILDING LOCATIONS ARE SHOWN PER ARLINGTON COUNTY GIS, ARE FOR REFERENCE ONLY, AND MAY NOT MEET MINIMUM ACCURACY STANDARDS.

ARLINGTON
VIRGINIA
DEPARTMENT OF
ENVIRONMENTAL SERVICES
Engineering Bureau - Survey Section
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201

I HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF NATHAN A. ORR, L.S. FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED FROM 03/12/2018 TO 03/30/2018; AND THAT THIS PLAT, MAP OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

COMMONWEALTH OF VIRGINIA
NATHAN A. ORR
Lic. No. 3178
05/15/18
LAND SURVEYOR

HORIZONTAL DATUM: BASED ON VIRGINIA COORDINATE SYSTEM 1983 NORTH ZONE.

VERTICAL DATUM: BASED ON NORTH AMERICAN VERTICAL DATUM 1988.

CONTOUR INTERVAL: 1'

BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM EXISTING LAND RECORDS AND DOES NOT REPRESENT A FIELD RUN BOUNDARY SURVEY.

PARTY CHIEF: SHRADER
SURVEY PM: ORR

PROJECT:
6814/DC17

TOPOGRAPHIC SURVEY
MILITARY ROAD
AT
36th ROAD NORTH
ARLINGTON COUNTY, VIRGINIA

SHEET 1 OF 1

ARLINGTON
VIRGINIA
DEPARTMENT OF
ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
2100 CLARENDON BOULEVARD, SUITE 813
ARLINGTON, VA 22201
PHONE: 703.228.3629
FAX: 703.228.3606

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SEAL

COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019760
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER (Gabriela Kock)	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

EXISTING CONDITIONS
Military Rd and 36th Rd N

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:
25 0 25
HORIZ: SCALE: 1" = 25'

FILENAME: DC17-214-EXISTING_CONDITIONS-36TH.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

STORM SEWER TABULATION

#1540
TOP = 253.78
15" RCP INV. OUT = 249.49 (1526)

#1526
TOP = 252.10
15" RCP INV. IN = 247.32 (1540)
15" RCP INV. OUT = 247.27 (1466)

#1466
TOP = 232.86
15" RCP INV. IN (per plan info) = 227.41 (1526)
21" RCP INV. OUT = 224.95' (1436)

SANITARY SEWER TABULATION
#9
TOP = 254.19
C/L INV. = 241.09

#1403
TOP = 253.86
C/L INV. = 237.34

#9602
TOP = 251.48
C/L INV. = 236.94

#9601
TOP = 237.49
C/L INV. = 228.83

#6561
TOP = 257.90
C/L INV. = 246.13

VCS 1983 NORTH ZONE

CONTROL TABLE

5	7016525.75	11878311.53	254.60	bn005
1000	7016554.23	11878246.97	252.24	FLY
1001	7016983.24	11877949.82	217.43	FLY

1. SURVEY CONTROL FOR THIS PROJECT WAS ESTABLISHED BY HOLDING EXISTING ARLINGTON COUNTY GPS MONUMENT BN005 FOR POSITION, AND THE AZIMUTH FROM BN005 TO EXISTING ARLINGTON COUNTY GPS MONUMENT BN004 FOR DIRECTION, RELATIVE TO VCS 1983 NORTH ZONE.
2. THE ELEVATION OF BN005 WAS USED TO OBTAIN ELEVATIONS RELATIVE TO NAVD 88.
3. HORIZONTAL DISTANCES MEASURED AT THE AVERAGE ELEVATION OF THIS SITE SHOULD BE MULTIPLIED BY A COMBINED (ELEVATIONxSCALE) FACTOR OF 0.999995399 TO BETTER REPRESENT DISTANCES ON VIRGINIA STATE PLANE.
4. UNDERGROUND UTILITY DESIGNATION WAS PERFORMED BY MID ATLANTIC UTILITY LOCATING ON 02/28/2018 AND SURVEYED BY ARLINGTON COUNTY. THE ABBREVIATION "D.A.T.U.R." AS SHOWN HEREON SIGNIFIES "DEPICTED ACCORDING TO UTILITY RECORDS". "EOI" SIGNIFIES "END OF INFORMATION". THE "EOI" IS PLACED AT THE END OF A LINE WHERE ELECTRONICALLY A UTILITY CAN NO LONGER BE FOLLOWED. COMMONLY, THIS HAPPENS WHERE A UTILITY CHANGES MATERIAL FROM CONDUCTIVE TO NON-CONDUCTIVE OR WHERE A UTILITY IS SUSPECTED TO END (STUB), BUT NO RECORD EXISTS TO PROVE IT.
5. ALL SANITARY SEWER DIAMETERS, WATER LINE DIAMETERS, AND BUILDING LOCATIONS ARE SHOWN PER ARLINGTON COUNTY GIS, ARE FOR REFERENCE ONLY, AND MAY NOT MEET MINIMUM ACCURACY STANDARDS.

ARLINGTON
VIRGINIA

DEPARTMENT OF
ENVIRONMENTAL SERVICES
Engineering Bureau - Survey Section
2100 Clarendon Boulevard, Suite 813
Arlington, VA 22201

I HEREBY CERTIFY THAT THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF NATHAN A. ORR, L.S. FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED FROM 02/27/2018 TO 02/28/2018; AND THAT THIS PLAT, MAP OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

COMMONWEALTH OF VIRGINIA
NATHAN A. ORR
Lic. No. 3178
06/06/18
LAND SURVEYOR

HORIZONTAL DATUM: BASED ON VIRGINIA COORDINATE SYSTEM 1983 NORTH ZONE.

VERTICAL DATUM: BASED ON NORTH AMERICAN VERTICAL DATUM 1988.

CONTOUR INTERVAL: 1'

BOUNDARY INFORMATION SHOWN HEREON WAS COMPILED FROM EXISTING LAND RECORDS AND DOES NOT REPRESENT A FIELD RUN BOUNDARY SURVEY.

PARTY CHIEF: LEMENI
SURVEY PM: ORR

PROJECT:
6799/DC17

TOPOGRAPHIC SURVEY
MILITARY ROAD
AT
MARCEY ROAD
ARLINGTON COUNTY, VIRGINIA

SHEET 1 OF 1

ARLINGTON
VIRGINIA

DEPARTMENT OF
ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
2100 CLARENDON BOULEVARD, SUITE 813
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SEAL
COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019706
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

EXISTING CONDITIONS
Military Rd and N Marcey Rd

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:
25 0 25
HORIZ: SCALE: 1" = 25'

SHEET 7 OF 37

FILENAME: DC17-214-EXISTING_CONDITIONS-MARCEY.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

FILENAME: DC17-228-DEMOLITION_PLAN.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

ARLINGTON
VIRGINIA

DEPARTMENT OF
ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
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PETER J. RIGBY JR.
Lic. No. 019706
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

DEMOLITION PLAN

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

25 0 25
HORIZ: SCALE: 1" = 25'

REVISED ON 05/23/2018

EROSION AND SEDIMENT CONTROL LEGEND

3.05	TEMPORARY SILT FENCE	SF	—x—x—
3.07	STORM DRAIN INLET PROTECTION	IP	
3.38	TREE PROTECTION	TP	— TP —
	LIMITS OF DISTURBANCE		— LOD —
	CRITICAL ROOT ZONE		— CRZ —

NOTES

1. CALL THE URBAN FORESTER AT 703-228-1863, 72 HOURS BEFORE THE START OF ANY LAND DISTURBANCE, TO DISCUSS AND SCHEDULE INSPECTION OF TREE PROTECTION.

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Lic. No. 019706
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER Gabriela Kock	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

E & S CONTROL PLAN PHASE I

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

25 0 25
HORIZ: SCALE: 1" = 25'

SHEET 9 OF 37

FILENAME: DC17-220-E_AND_S_PLAN.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

EROSION AND SEDIMENT CONTROL LEGEND

3.05	TEMPORARY SILT FENCE	SF	—, —, —
3.07	STORM DRAIN INLET PROTECTION	IP	
3.38	TREE PROTECTION	TP	— TP —
	LIMITS OF DISTURBANCE		— LOD —
	ROOT PRUNING	RP	— RP —
	CRITICAL ROOT ZONE		— CRZ —

NOTES

1. CALL THE URBAN FORESTER AT 703-228-1863, 72 HOURS BEFORE THE START OF ANY LAND DISTURBANCE, TO DISCUSS AND SCHEDULE INSPECTION OF TREE PROTECTION.

ARLINGTON
VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
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SEAL

COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019706
PROFESSIONAL ENGINEER
1/8/20

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/14/2020
TRANSPORTATION DIRECTOR	1/9/2020
PROJECT MANAGER	

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

E & S CONTROL PLAN
PHASE II

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

25 0 25
HORIZ: SCALE: 1" = 25'

FILENAME: DC17-220-E_AND_S_PLAN.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION:

THIS PROJECT CONSISTS OF IMPROVING PEDESTRIAN AND BICYCLE SAFETY AT THE INTERSECTIONS OF NORTH MILITARY ROAD AND 36TH RD NORTH AND NORTH MILITARY ROAD AND NORTH MARCEY ROAD BY PROVIDING CURB EXTENSIONS, ACCESSIBLE RAMPS, HIGH VISIBILITY CROSSWALK, MEDIAN REFUGE AND UPDATED PAVEMENT MARKINGS AND RELOCATION CURB INLET AND RELOCATION FIRE HYDRANT. THE TOTAL PROJECT AREA IS 7,363 SF (0.1690 AC) AND THE TOTAL LAND DISTURBED AREA IS 5,649 SF (0.1297 AC).

EXISTING SITE CONDITIONS:

THE SITE AT 36TH RD NORTH INTERSECTION IS LOCATE WITHIN THE GULF BRANCH WATERSHED AND THE SITE AT MARCEY RD INTERSECTION IS LOCATED WITHIN THE DONALDSON RUN WATERSHED. THE TOPOGRAPHY VARIES AT EACH LOCATION, AND THEY HAVE SLOPES RANGING FROM 1% TO 7%. ALL SITES HAVE A HYDROLOGICAL SOIL GROUP OF TYPE "B" AND THE SOIL TYPE IS "GLENELG-URBAN LAND COMPLEX". THERE ARE EXISTING DRAINAGE STRUCTURES SERVING THESE SITES IN THE FORM OF CURB INLETS. THE CURRENT LAND COVER IS PRIMARILY IMPERVIOUS.

ADJACENT PROPERTIES:

PRIVATE PROPERTIES ARE LOCATED ALONG THE ROADWAY.

OFF-SITE AREAS:

THE EXTENT OF OFFSITE CONSTRUCTION IS LIMITED TO CONNECTING TO THE EXISTING PUBLIC STREETS, DRIVEWAYS, AND SIDEWALKS ADJACENT TO AFFECTED PARCELS, AND CONNECTING TO EXITING UTILITIES.

CRITICAL AREAS:

THERE ARE NO STEEP SLOPES OR CRITICAL AREAS LOCATED WITHIN THE LIMITS OF DISTURBANCE.

PERMANENT STABILIZATION:

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH GRASS, MULCH OR SOD. SEE THE PROPOSED PLANS FOR ADDITIONAL INFORMATION.

STORMWATER RUNOFF CONSIDERATIONS:

	36TH RD NORTH		NORTH MARCEY RD	
TOTAL LAND DISTURBANCE	2,769 SF	0.0636 ACRES	2,880 SF	0.0661 ACRES
PRE-DEV IMPERVIOUS AREA	2,535 SF	0.0582 ACRES	2,759 SF	0.0633 ACRES
POST-DEV IMPERVIOUS AREA	2,399 SF	0.0551 ACRES	2,430 SF	0.0558 ACRES
DECREASED IMPERVIOUS AREA	136 SF	0.0031 ACRES	329 SF	0.0076 ACRES

SOILS INFORMATION:

THE FOLLOWING SOILS ARE FOUND ON SITE (SEE SOILS MAP ON SHEET 29 AND 30 FOR LOCATION)

SITE:	SOIL#:	SOIL NAME:	HYDROLOGIC GROUP:
INT. 36TH RD	7D	GLENELG-URBAN LAND COMPLEX	B
INT. MARCEY RD	7B	GLENELG-URBAN LAND COMPLEX	B

FLOODPLAIN AND RESOURCE PROTECTION AREA (RPA):

THE SITE AT THE INTERSECTION MILITARY RD AND 36TH ENCROACHES INTO THE RPA BOUNDARY. THE TOTAL AREA OF DISTURBANCE WITHIN THE RPA BOUNDARY IS 2,480 SQUARE FEET (. THERE WILL BE A TOTAL OF 2,287 SQUARE FEET OF IMPERVIOUS SURFACE WITHIN THE RPA BOUNDARY. NO TREES WITHIN THE BOUNDARY WILL BE REMOVED.

EROSION & SEDIMENT CONTROL PROJECT PHASING

1. PHASE I:
   - a. PRE-CONSTRUCTION MEETING WITH THE PROJECT OFFICER, CONTRACTOR, AND COUNTY INSPECTOR.
   - b. CONTRACTOR SHALL CONTACT THE ARLINGTON COUNTY FORESTER TO SCHEDULE PRE-CONSTRUCTION INSPECTION OF TREE PROTECTION MEASURES PRIOR TO ANY WORK NEAR THE CRITICAL ROOT ZONES OF EXISTING TREES.
   - c. INSTALL PERIMETER TREE DEMARCATION FENCING IN THE FORM OF TREE PROTECTION FENCE (TP) AS SHOWN ON E&S PHASE I PLAN.
   - d. PERFORM INITIAL PERIMETER CLEARING TO INSTALL REMAINDER OF PERIMETER CONTROLS SUCH AS SILT FENCE (SF) AS PER THE PHASE I PLAN.
   - e. SEED AND MULCH ALL EARTHEN CONTROLS.
   - f. CONTACT ARLINGTON COUNTY PROJECT OFFICER FOR A PERIMETER INSPECTION PRIOR TO CLEARING THE REMAINDER OF THE SITE IN ORDER TO OBTAIN PHASE II.
   - g. CLEAR THE SITE TO THE LIMITS AS SHOWN ON THE CONSTRUCTION PLANS.
2. PHASE II:
   - a. BEGIN UTILITY CONSTRUCTION, INSTALL ALL UNDERGROUND UTILITIES AND BEGIN SITE GRADING.
   - b. INLET PROTECTION (IP) SHALL BE PROVIDED AT STORM DRAIN INLETS AS THEY ARE CONSTRUCTED.
   - c. ONCE THE SITE IS BOUGHT TO NEAR FINAL GRADE, AND THE UTILITY CONSTRUCTION IS COMPLETE, COMMENCE CONSTRUCTION OF CURB & GUTTER, STREET, SIDEWALKS, AND OTHER IMPROVEMENTS.
   - d. STABILIZED ALL EARTHEN AREAS WITH SOD AND MULCH.
   - e. THE CONTROL MEASURES MAY NOT BE REMOVED UNTIL ALL OF THE DISTURBED AREAS HAVE BEEN STABILIZED AND ONLY AS APPROVED AND DIRECTED BY THE INSPECTOR.

RUNOFF SHALL BE TREATED WITH SILT FENCE AND INLET PROTECTION PRIOR TO ENTERING MAJOR STORM SEWER SYSTEMS.

EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE ARLINGTON COUNTY EROSION AND SEDIMENT CONTROL ORDINANCE. THE MINIMUM STANDARDS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE.

1. STRUCTURAL PRACTICES

a. SILT FENCE - VESCH 3.05

- a.a. SILT FENCE WILL BE INSTALLED WITH THE E&S PLAN TO FILTER RUNOFF FROM DISTURBED AREAS. RUNOFF SHALL NOT BE DIRECTED PARALLEL TO THE INSTALLATION OF SILT FENCE.
- a.b. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
- a.c. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM UNDERCUTTING.
- a.d. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE, THE FABRIC SHALL BE REPLACED IMMEDIATELY.
- a.e. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
- a.f. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, THEN PREPARED AND SEEDED.

b. STORM DRAIN INLET PROTECTION - VESCH 3.07

- b.a. ALL EXISTING & PROPOSED STORM SEWER INLETS IN AND AROUND THE PROJECT LIMITS SHALL BE PROTECTED DURING CONSTRUCTION. SEDIMENT-LADEN WATER SHALL BE FILTERED BEFORE ENTERING THE STORM SEWER INLETS.
- b.b. THE STRUCTURE SHALL BE INSPECTED AFTER EACH RAIN EVENT AND REPAIRS SHALL BE MADE AS NECESSARY.
- b.c. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

c. DEWATERING STRUCTURE - VESCH 3.26

- c.a. SEDIMENT LADEN OR TURBID WATER SHALL BE FILTERED, SETTLED OR SIMILARLY TREATED PRIOR TO DISCHARGE.
- c.b. THE FILTERING DEVICES MUST BE INSPECTED FREQUENTLY AND REPAIRED OR REPLACED ONCE THE SEDIMENT BUILD-UP PREVENTS THE STRUCTURE FROM FUNCTIONING AS DESIGNED.
- c.c. THE ACCUMULATED SEDIMENT WHICH IS REMOVED FROM A DEWATERING DEVICE MUST BE SPREAD ON-SITE AND STABILIZED OR DISPOSED OF AT AN APPROVED DISPOSAL SITE AS PER THE APPROVED PLAN.

d. TREE PROTECTION - VESCH 3.38

- d.a. ALL TREES ARE TO BE PROTECTED UNLESS OTHERWISE DIRECTED BY THE COUNTY INSPECTOR AND URBAN FORESTER. THE COUNTY'S URBAN FORESTER (703-228-1863) SHALL INSPECT ALL TREE PROTECTION 72 HOURS PRIOR TO THE START OF CONSTRUCTION. IN SPITE OF PRECAUTIONS, SOME DAMAGE TO PROTECTED TREES MAY OCCUR. IN SUCH CASES, THE FOLLOWING MAINTENANCE GUIDELINES SHALL BE FOLLOWED:
  - d.a.a. SOIL AERATION: IF THE SOIL HAS BECOME COMPACTED OVER THE ROOT ZONE OF ANY TREE, THE GROUND SHALL BE AERATED BY PUNCHING HOLES WITH AN IRON BAR. THE BAR SHALL BE DRIVEN 1-FOOT DEEP AND THEN MOVED BACK AND FORTH UNTIL THE SOIL IS LOOSENED. THIS PROCEDURE SHALL BE REPEATED EVERY 18 INCHES UNTIL ALL OF THE COMPACTED SOIL BENEATH THE CROWN OF THE TREE HAS BEEN LOOSENED.
  - d.a.b. REPAIR OF DAMAGE:
    - d.a.A.a. ANY DAMAGE TO THE CROWN, TRUNK, OR ROOT SYSTEM OF ANY TREE RETAINED ON THE SITE SHALL BE REPAIRED IMMEDIATELY.
    - d.a.A.b. WHENEVER MAJOR ROOT OR BARK DAMAGE OCCURS, REMOVE SOME FOLIAGE TO REDUCE THE DEMAND FOR WATER AND NUTRIENTS.
    - d.a.A.c. DAMAGED ROOTS SHALL IMMEDIATELY BE CUT OFF CLEANLY INSIDE THE EXPOSED OR DAMAGED AREA. CUT SURFACES SHALL BE PAINTED WITH APPROVED TREE PAINT, AND MOIST PEAT MOSS, BURLAP, OR TOPSOIL SHALL BE SPREAD OVER THE EXPOSED AREA.
    - d.a.A.d. TO TREAT BARK DAMAGE, CAREFULLY CUT AWAY ALL LOOSENED BARK BACK INTO THE UNDAMAGED AREA, TAPER THE CUT AT THE TOP AND BOTTOM, AND PROVIDE DRAINAGE AT THE BASE OF THE WOUND.
    - d.a.A.e. ALL TREE LIMBS DAMAGED DURING CONSTRUCTION OR REMOVED FOR ANY OTHER REASON SHALL BE CUT OFF ABOVE THE COLLAR AT THE PRECEDING BRANCH JUNCTION.
    - d.a.A.f. CARE FOR SERIOUS INJURIES SHALL BE PRESCRIBED BY A FORESTER OR A TREE SPECIALIST.
  - d.b. FERTILIZATION: BROADLEAF TREES THAT HAVE BEEN STRESSED OR DAMAGED SHALL RECEIVE A HEAVY APPLICATION OF FERTILIZER TO AID THEIR RECOVERY.
  - d.b.a. TREES SHALL BE FERTILIZED IN THE LATE FALL (AFTER OCTOBER 1) OR THE EARLY SPRING (FROM THE TIME FROST IS OUT OF THE GROUND UNTIL MAY 1). FALL APPLICATIONS ARE PREFERRED, AS THE NUTRIENTS WILL BE MADE AVAILABLE OVER A LONGER PERIOD OF TIME.
  - d.b.b. FERTILIZER SHALL BE APPLIED TO THE SOIL OVER THE FEEDER ROOTS. IN NO CASE SHALL IT BE APPLIED CLOSER THAN 3 FEET TO THE TRUNK. THE ROOT SYSTEM OF CONIFERS EXTENDS SOME DISTANCE BEYOND THE DRIP LINE. INCREASE THE AREA TO BE FERTILIZED BY ONE FOURTH THE AREA OF THE CROWN.
  - d.b.c. FERTILIZER SHALL BE APPLIED USING APPROVED FERTILIZATION METHODS AND EQUIPMENT.
  - d.b.d. FORMULATIONS AND APPLICATION RATES SHALL CONFORM TO THE GUIDELINES GIVEN IN TABLE 3.38-A OF VESCH.

2. VEGETATIVE PRACTICES

a. TOPSOILING (STOCKPILE) - VESCH 3.30

- a.a. TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATIONS MAY HAVE TO BE LOCATED OFF-SITE AND ARE TO BE STABILIZED WITH TEMPORARY VEGETATION. PRIOR TO LAND-DISTURBING ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY E&S PLAN (IF THE STOCKPILE IS LOCATED OFF-SITE). THIS SUPPLEMENTAL PLAN WOULD HAVE TO BE APPROVED BY THE PLAN APPROVING AUTHORITY BEFORE ANY OFF-SITE ACTIVITY COMMENCES.

b. TEMPORARY SEEDING - VESCH 3.31

- b.a. ALL DENUDED AREAS, WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME SHALL BE SEEDED WITH FAST GERMINATING TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED.
- b.b. SEE SHEET III-288 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) FOR ALLOWABLE PLANTING MATERIAL, SEEDING RATES, AND DATES. THE PLANTING REQUIREMENTS OF THE "SOUTH" SHALL BE FOLLOWED. LIMING SHALL BE BASED ON TABLE 3.31-A OF VESCH. FERTILIZERS SHALL BE APPLIED AS 600 LB/ACRE. THE FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2-4" OF SOIL. SEED SHALL BE EVENLY APPLIED AND SMALL GRAINS SHALL BE PLANTED NO MORE THAN 1.5" DEEP. SEEDING MADE IN FALL FOR WINTER COVER AND DURING HOT SUMMER MONTHS SHALL BE MULCHED.

c. EROSION CONTROL BLANKET AND MULCHING - VESCH 3.36 AND 3.35

- c.a. EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION AND TO ALLOW SEED TO GERMINATE PROPERLY. MULCH (STRAW OR FIBER) WILL BE USED ON RELATIVELY FLAT AREAS AND WILL BE APPLIED AS A SECOND STEP IN SEEDING OPERATION.

d. DUST CONTROL - VESCH 3.39

- d.a. DUST SHALL BE CONTROLLED USING A VARIETY OF METHODS SUCH AS VEGETATIVE COVER, MULCH, TILLAGE, IRRIGATION, SPRAY-ON ADHESIVES, STONE BARRIERS, AND CALCIUM CHLORIDE. THE IMPLEMENTATION OF THE DUST CONTROL METHODS SHALL BE INSTALLED PER SECTION 3.39 OF VESCH

e. PERMANENT SEEDING - VESCH 3.32

- e.a. SINCE THE SUBJECT SITE IS LOCATED WITHIN THE COASTAL PLAIN AREA OF VIRGINIA, SHEET III-304 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK SHALL BE FOLLOWED FOR FINAL SEEDING MATERIAL, SEEDING RATES, AND DATES OF APPLICATION.

f. SODDING - VESCH 3.33

- f.a. SODDED AREAS SHALL BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLANS. SOIL TESTS SHALL BE MADE TO DETERMINE THE EXACT REQUIREMENTS FOR LIME AND FERTILIZER. PRIOR TO LAYING SOD, SOIL SURFACE SHALL BE CLEAR OF TRASH, DEBRIS AND LARGE OBJECTS. QUALITY OF SOD SHALL BE STATE CERTIFIED TO ENSURE GENETIC PURITY AND HIGH QUALITY. SOD SHALL NOT BE LAID ON FROZEN SOIL SURFACE, OR IN EXCESSIVELY WET OR DRY WEATHER. SOD SHALL BE DELIVERED AND INSTALLED WITHIN 36 HOURS, AND SHALL BE INSTALLED PER PAGE III-339 OF VESCH.

THE EROSION AND SEDIMENT CONTROL INSPECTOR SHALL HAVE THE AUTHORITY TO ADD OR DELETE EROSION AND SEDIMENT CONTROLS AS NEEDED IN THE FIELD. IN ADDITION, NO SEDIMENT TRAPS OR BASINS MAY BE REMOVED WITHOUT PRIOR APPROVAL OF THE INSPECTOR.

EROSION AND SEDIMENT CONTROL MANAGEMENT MEASURES

LANDSCAPE / TREE PRESERVATION NOTES

PRIOR TO ANY LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL CONTACT THE ARLINGTON COUNTY ARBORIST TO SCHEDULE AN INSPECTION.

LAND CONSERVATION NOTES:

1. NO DISTURBED AREA WILL REMAIN DENUDED FOR MORE THAN 7 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE 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 100 FEET ARE TO BE OPEN AT ANY ONE TIME.
4. ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, SEEDED AND MULCHED WITHIN 5 DAYS AFTER BACKFILLING.
5. ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS ARE TO BE MULCHED AND SEEDED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES TO ALL SOIL STOCKPILES.
6. DURING CONSTRUCTION, ALL STORM SEWER INLETS WILL BE PROTECTED BY INLET PROTECTION.
7. ANY DISTURBED AREA NOT COVERED BY NOTE 1 ABOVE AND NOT PAVED, SODDED OR BUILT UPON BY NOV. 1, OR DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW MULCH AT THE RATE OF 2 TONS/ACRE AND OVER-SEEDED BY APRIL 15.
8. AT THE COMPLETION OF ANY PROJECT CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED.

EROSION & SEDIMENT CONTROL PROGRAM:

1. THE EROSION CONTROL PLAN IS INTENDED TO ESTABLISH ENTRANCES AND PERIMETER CONTROL MEASURES WHICH INCLUDES SILT FENCE (SF), INLET PROTECTION (IP), AND OTHER CONTROLS SPECIFIED ON THE PLANS.
2. WHERE CONSISTENT WITH JOB SAFETY REQUIREMENTS, ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES. NO MATERIAL SHALL BE PLACED IN STREAMBEDS. ANY STOCKPILED MATERIAL WHICH WILL REMAIN IN PLACE LONGER THAN 7 DAYS SHALL BE SEEDED AND MULCHED. WHEN SPOIL IS PLACED ON THE DOWNHILL SIDE OF TRENCH, IT SHALL BE BACKSLOPED TO DRAIN TOWARD THE TRENCH. WHEN NECESSARY TO DEWATER THE TRENCH, THE PUMP DISCHARGE HOSE SHALL OUTLET IN A STABILIZED AREA OR A SEDIMENT TRAPPING DEVICE.
3. ALL PRACTICES AND CONTROL DEVICES DESCRIBED HEREIN SHALL CONFORM TO THE CURRENT VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH). IN ADDITION, THE CONTRACTOR SHALL TAKE THE FOLLOWING STEPS TO MINIMIZE THE VOLUME OF SILT:
   - a. CONTRACTOR SHALL EVALUATE THE SITE TO DETERMINE EXTENSIVE CUT AND FILL AREAS, AND SHALL WORK THOSE AREAS TO MINIMIZE THE USE OF HEAVY EQUIPMENT. CONTRACTOR SHALL BRING DISTURBED AREAS TO GRADE (ROUGH OR FINISHED) AND STABILIZE THOSE AREAS WITH TEMPORARY OR PERMANENT VEGETATION. THESE DISTURBED AREAS SHALL BE STABILIZED PRIOR TO BEGINNING WORK IN ANOTHER AREA.
   - b. FILL AREAS SHALL BE COMPACTED COMPLETELY PRIOR TO THE END OF EACH WORK DAY. FILL SLOPE SURFACES SHALL BE KEPT ROUGH TO REDUCE SHEET EROSION OF THE SLOPES. CONTRACTOR SHALL RE-DIRECT CONCENTRATED RUNOFF, BY EARTH BERMS OR OTHER DEVICES, AROUND ACTIVELY DISTURBED AREAS TO STABILIZED OUTLETS.
   - c. CUT SLOPES SHALL BE PROTECTED FROM CONCENTRATED FLOW BY BERMS (ABOVE THE SLOPE) AND DIRECTED AROUND THE DISTURBED AREA TO STABILIZED OUTLETS.
4. MEASURES TO CONTROL EROSION AND SILTATION SHALL BE PROVIDED PURSUANT TO AND IN COMPLIANCE WITH CURRENT STATE AND LOCAL REGULATIONS. THE INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND/OR THE APPROVAL OF THE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OR HIS AGENT OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA AND CHAPTER 57 OF THE ARLINGTON COUNTY CODE.
5. ALL AREAS, ON OR OFF-SITE, THAT ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS SEED MIXTURE OR SOD THAT IS INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. ALL SLOPES 3:1 AND GREATER SHALL BE RECEIVE SOIL STABILIZATION IN ACCORDANCE WITH THE SPECIFICATIONS.
6. WHERE STREAM CROSSINGS ARE REQUIRED FOR EQUIPMENT, TEMPORARY CULVERTS SHALL BE PROVIDED.
7. FOR FURTHER REQUIREMENTS AND DETAILS OF TREE PRESERVATION, PLANTING, EROSION AND SEDIMENT CONTROL, SEE COUNTY CONSTRUCTION STANDARDS AND SPECIFICATIONS AND/OR THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
2. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN THE AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION AND SEDIMENT CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
7. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
9. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
10. ALL BIOFILTERS SHALL BE KEPT OFF-LINE UNTIL CONSTRUCTION IS COMPLETED AND ALL AREAS HAVE BEEN PROPERLY STABILIZED. THIS SHALL BE ACHIEVED BY USING INLET PROTECTION AT THE CURB CUTS AND STORMWATER CATCH BASINS LEADING DIRECTLY INTO THE BIOFILTERS.
11. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.

PRE-STORM EROSION & SEDIMENTATION CHECKLIST:

PER GENERAL EROSION AND SEDIMENT CONTROL NOTE 6, THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ANY ADDITIONAL EROSION AND SEDIMENT CONTROL (ESC) MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE COUNTY. THESE SUPPLEMENTARY PRACTICES ARE IN ADDITION TO THOSE SHOWN IN AN EROSION AND SEDIMENT CONTROL PLAN. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MODIFIED AS NEEDED TO ENSURE ONLY CLEAR WATER IS DISCHARGED FROM THE SITE.

THE FOLLOWING ACTIONS SHALL BE TAKEN PRIOR TO STORM EVENTS WITH PREDICTED HEAVY AND/OR LARGE VOLUME RAINFALL TO PREVENT SEDIMENT DISCHARGES FROM A CONSTRUCTION SITE. A TYPICAL SUMMER THUNDERSTORM IS AN EXAMPLE OF A STORM EVENT WITH PREDICTED HEAVY AND/OR LARGE VOLUME RAINFALL.

1. PERIMETER CONTROLS
   - a. SILT FENCE SHALL BE CHECKED FOR UNDERMINING, HOLES, OR DETERIORATION OF THE FABRIC. FENCING SHALL BE REPLACED IMMEDIATELY IF THE FABRIC IS DAMAGED OR WON. SILT FENCE MUST BE TRENCHED INTO THE GROUND PER STATE SPECIFICATIONS (VESCH STD & SPEC 3.09).
   - b. WOODEN STAKES OR STEEL POSTS SHALL BE PROPERLY SECURED UPRIGHT INTO THE GROUND. DAMAGED POSTS OR STAKES MUST BE REPLACED.
   - c. SEDIMENT THAT HAS ACCUMULATED AGAINST THE SILT FENCE SHALL BE REMOVED. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE LEVEL REACHES ONE-HALF THE HEIGHT OF THE FENCING.
   - d. HAY BALES OR A STONE BERM SHALL BE PLACED ACROSS THE CONSTRUCTION ENTRANCE TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE.
2. EXPOSED SLOPES AND SOIL
   - a. EXPOSED SLOPES NOT AT THE FINAL STABILIZATION PHASE SHALL BE COVERED WITH TARPS, PLASTIC SHEETING, OR EROSION CONTROL MATTING. COVERING MATERIAL SHALL BE PROPERLY SECURED/ANCHORED.
   - b. CONTROLS SHALL BE INSTALLED TO PREVENT CONCENTRATED FLOW DOWN AN EXPOSED SLOPE. BERMS OR DIVERSION DIKES SHALL BE INSTALLED AT THE TOP OF CUT/EXPOSED SLOPES TO DIRECT STORM FLOW AROUND THE DISTURBED AREA.
   - c. EXPOSED SLOPES AT THE FINAL STABILIZATION PHASE SHALL BE STABILIZED USING SLOPE STABILIZATION PRACTICES SUCH AS SOIL STABILIZATION BLANKETS OR MATTING AS SPECIFIED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH STD & SPEC 3.36). BLANKETS OR MATS MUST BE PROPERLY SECURED AND ANCHORED TO THE SLOPE USING STAPLES, PINS, OR STAKES.
   - d. SEEDED AREAS SHALL BE CHECKED AND RESEEDED AS NECESSARY TO COVER EXPOSED SOIL. RECENTLY SEEDED AREAS SHALL BE PROTECTED BY STRAW OR SOIL STABILIZATION BLANKETS TO PREVENT SEEDING FROM BEING WASHED AWAY.
3. STOCKPILES
   - a. STOCKPILED SOIL AND OTHER LOOSE MATERIALS THAT CAN BE WASHED AWAY SHALL BE COVERED WITH A TARP, PLASTIC SHEETING, OR OTHER STABILIZATION MATTING. THE COVER MUST BE PROPERLY SECURED/ANCHORED DOWN TO PREVENT IT FROM BEING BLOWN OFF AND EXPOSING MATERIALS TO RAIN. CONTROLS SUCH AS HAY BALES OR BOOMS SHALL BE PLACED ALONG THE PERIMETER OF THE STOCKPILE (DOWNHILL SIDE).
4. INLET PROTECTION
   - a. 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.

POLLUTION PREVENTION PLAN NOTES (STORMWATER MANUAL - SECTION 2.4)

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:
   - a. 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 FIREFIGHTING; 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 WATERS, ANY SUBSTANCE LIKELY, IN THE OPINION OF THE COUNTY MANAGER, TO HAVE AN ADVERSE EFFECT ON THE STORM SEWER SYSTEM OR STATE WATERS.

UTILITY INSTALLATION:

UNDERGRO

REVISED ON 05/23/2018

10/09/2019
date

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

Re: Erosion and Sediment Control Permit Application for:

Int. of Military rd and 36th Rd North & Military Rd and North Marcey Rd
street address

lot, block, section subdivision

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:

1. Reviewing the erosion and sedimentation (E&S) plan for the project.
2. Walking the site prior to construction to identify critical areas.
3. 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.
4. Regularily 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.
5. Reporting to the owner the presence inadequate or non functioning E&S controls when they are observed.
6. 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.
7. Calling (703) 228-0760 at least 80 hours before demolishing any structure.

I may be reached at (703) 228-3604 with questions about this plan or my execution of the duties of
telephone number
Responsible Land Disturber.

Sincerely,

signed

Peter J. Rigby Jr
name printed

P.E. 019746
professional registration (type and number)

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.

TABLE 3.31-B
(Revised June 2003)
TEMPORARY SEEDING SPECIFICATIONS
QUICK REFERENCE FOR ALL REGIONS

SEED		
APPLICATION DATES	**SPECIES**	**APPLICATION RATES**
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (Iolium multi-florum) & Cereal (Winter) Rye (Secale cereale)	50 -100 (lbs/acre)
Feb. 16 - Apr. 30	Annual Ryegrass (Iolium multi-florum)	60 - 100 (lbs/acre)
May 1 - Aug. 31	German Millet	50 (lbs/acre)

FERTILIZER & LIME

- Apply 10-10-10 **fertilizer** at a rate of 450 lbs. / acre (or 10 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:
1 - A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
2 - Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
3 - When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

TABLE 3.32-E
(Revised June 2003)
PERMANENT SEEDING SPECIFICATIONS FOR COASTAL PLAIN AREA

SEED[1]		
LAND USE	**SPECIES**	**APPLICATION RATES**
Minimum Care Lawn (Commercial or Residential)	Tall Fescue[1] **or** Bermudagrass[1]	175 - 200 lbs. 75 lbs.
High-Maintenance Lawn	Tall Fescue[1] **or** Bermudagrass[1] (seed) **or** Bermudagrass[1] (by other vegetative establishment method, see Std. & Spec. 3.34)	200-250 lbs. 40 lbs. (unhulled) 30 lbs. (hulled)
General Slope (3:1 or less)	Tall Fescue[1] Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop[2]	128 lbs. 2 lbs. 20 lbs. TOTAL: 150 lbs.
Low-Maintenance Slope (Steeper than 3:1)	Tall Fescue[1] Bermudagrass[1] Red Top Grass or Creeping Red Fescue Seasonal Nurse Crop[2] Sericea Lespedeza[3]	93-108 lbs. 0-15 lbs. 2 lbs. 20 lbs. 20 lbs. TOTAL: 150 lbs.

1 - When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCIA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCIA. A current turfgrass variety list is available at the local County Extension office or through VCIA at 804-746-4884 or at http://sudan.cses.vt.edu/html/Turf/turf/publications/publications2.html

2 - Use seasonal nurse crop in accordance with seeding dates as stated below:

February, March - April ……	Annual Rye
May 1st - August ……	Foxtail Millet
September, October - November 15th ……	Annual Rye
November 16th - January ……	Winter Rye

3 - May through October, use hulled seed. All other seeding periods, use unhulled seed. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30 -40 lbs/acre.

FERTILIZER & LIME

- Apply 10-20-10 **fertilizer** at a rate of **500** lbs. / acre (or 12 lbs. / 1,000 sq. ft.)
- Apply **Pulverized Agricultural Limestone** at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:
- A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
- Incorporate the lime and fertilizer into the top 4 – 6 inches of the soil by disking or by other means.
- When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin # 4, 2003 Nutrient Management for Development Sites at http://www.dcr.state.va.us/sw/e&s.htm#pubs

FILENAME: DC17-221-E_AND_S_DETAILS.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

ARLINGTON
VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
2100 CLARENDON BOULEVARD, SUITE 813
ARLINGTON, VA 22201
PHONE: 703.228.3629
FAX: 703.228.3606

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SEAL

COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019746
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

E & S CONTROL DETAILS 1

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

AS NOTED

REVISED ON 05/23/2018

DEWATERING DEVICE

FILTER BOX

ELEVATION VIEW

SOURCE: VA. DSWC

PLATE: 3.26-2

NOTES

1. DIMENSIONAL LUMBER SIZES SHOW.
2. GRAVEL SHALL BE VDOT COARSE AGGREGATE #3, # 357 OR #5.
3. WEIR HEIGHT MAY BE ADJUSTED BY PROJECT OFFICER OR INSPECTOR IN FLOOD PRONE AREAS.
4. PAINT 2"X4" WEIR, CLOSED BASKET, AND GUTTER WITH HIGH VISIBILITY INCANDESCENT ORANGE PAINT.
5. REMOVE SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE THE PROTECTION.

CURB INLET PROTECTION

REVISION & DATE

ARLINGTON VIRGINIA

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRAWING NO. 3.07-7 (ACG)

NOTES:

1. TREE PROTECTION FENCE (TPF) SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION. ARLINGTON COUNTY URBAN FORESTER SHALL BE NOTIFIED 72 HOURS PRIOR TO INSTALLATION OR ANY OTHER TREE PRESERVATION MEASURE SPECIFIED IN PLANS AND SHALL APPROVE LAYOUT.
2. NO PERSONNEL, VEHICLES, EQUIPMENT, CONSTRUCTION MATERIALS OR DEBRIS ALLOWED IN TREE PROTECTION AREAS WITHOUT WRITTEN CONSENT OF ARLINGTON COUNTY URBAN FORESTER.
3. REMOVE TPF ONLY WITH APPROVAL FROM ARLINGTON COUNTY URBAN FORESTER AFTER ALL SITE WORK HAS BEEN COMPLETED.
4. SIGN MATERIAL TO BE WEATHER RESISTANT.

6' CHAIN LINK TREE PROTECTION FENCE

311300.1 (2016) (02231.1)

1/2" = 1'-0"

ARLINGTON COUNTY DPR

CONSTRUCTION OF A SILT FENCE (WITH WIRE SUPPORT)

1. SET POSTS AND EXCAVATE A 4"X4" TRENCH UPSLOPE ALONG THE LINE OF POSTS.
2. STAPLE WIRE FENCING TO THE POSTS.

3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH.
4. BACKFILL AND COMPACT THE EXCAVATED SOIL.

EXTENSION OF FABRIC AND WIRE INTO THE TRENCH.

SOURCE: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood & Wyant

PLATE. 3.05-1

NOTES

1. ROOT PRUNING SHALL BE DONE WITH A TRENCHER OR VIBRATORY PLOW TO A DEPTH OF 12". ROOTS OVER 1.5" IN DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT, WHICH IS STILL ATTACHED TO THE TREE. DO NOT BREAK OR CHOP. DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND UTILITIES, LEAVE THE ROOT INTACT AND THREAD THE LINES UNDERNEATH.

2. ROOT PRUNING SHALL TAKE PLACE PRIOR TO ANY CLEARING AND GRADING. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING AND SHALL BE APPROVED BY ARLINGTON COUNTY URBAN FORESTER.

3. ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF AN ISA CERTIFIED ARBORIST.

4. BACKFILL THE ROOT-PRUNING TRENCH WITH APPROVED LOOSE TOPSOIL MIX AND TOP WITH 3-4" BARK MULCH AND MARK LOCATION FOR FUTURE REFERENCE. SILT FENCE MAY BE INSTALLED IN TRENCH PRIOR TO BACKFILLING AS LONG AS THE TRENCH IS NOT OPEN FOR LONGER THAN 48 HOURS WITHOUT WATERING.

5. ROOT PRUNING WORK SHALL NOT BE DONE WHEN MORE THAN THE TOP 1 INCH OF SOIL IS FROZEN. ROOT PRUNING SHALL NOT BE UNDERTAKEN WHEN THE SOIL IS WET AND CONDITIONS ARE MUDDY.

6. THE ARLINGTON COUNTY URBAN FORESTER SHALL BE NOTIFIED 72 HOURS PRIOR TO TRENCHING AND WHEN ALL ROOT PRUNING AND TREE PROTECTION FENCE INSTALLATION IS COMPLETE.

ROOT PRUNING

311300.5 (2019)

N.T.S.

ARLINGTON COUNTY DPR

NOTES:

1. GRAPHICALLY, THE CRITICAL ROOT ZONE (CRZ) IS REPRESENTED AS A CIRCULAR REGION MEASURED OUTWARD FROM A TREE TRUNK REPRESENTING THE AREA OF ROOTS THAT MUST BE MAINTAINED OR PROTECTED FOR THE TREE'S SURVIVAL.

2. THE CRZ OF A TREE IS THE ZONE IN WHICH THE MAJORITY OF THE ROOTS LAY. 95% OF THE ROOTS OF MOST TREES WILL BE FOUND IN THE UPPER 12-18" OF THE SOIL. MOST OF THE ROOTS THAT SUPPLY THE NUTRIENTS AND WATER TO THE TREE ARE FOUND JUST BELOW THE SOIL SURFACE. THE TOTAL AMOUNT OF A TREE'S ROOTS ARE GENERALLY PROPORTIONAL TO THE VOLUME OF THE TREE'S CANOPY. THEREFORE, IF THE ROOTS ONLY PENETRATE A THIN LAYER OF SOIL, THEN THE ROOTS MUST SPREAD FAR FROM THE TREE, BEYOND THE EXTENSION OF THE CANOPY.

3. PLOT ACCURATE TRUNK LOCATIONS OF ALL TREES GREATER THAN 3" DIAMETER AT BREAST HEIGHT (DBH) AND/OR TREE STANDS WITHIN DEVELOPMENT AREAS ON ALL PLANS FOR THE PROJECT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.

4. PLOT ACCURATE TRUNK LOCATIONS OF OFFSITE TREES WHICH WILL HAVE THEIR CRZ AFFECTED BY DEVELOPMENT AND DELINEATE THEIR ESTIMATED CRITICAL ROOT ZONE.

TREE PROTECTION DETAIL FOR DETERMINING CRITICAL ROOT ZONE

311300.3 (2019)

N.T.S.

ARLINGTON COUNTY DPR

ARLINGTON VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
2100 CLARENDON BOULEVARD, SUITE 813
ARLINGTON, VA 22201
PHONE: 703.228.3629
FAX: 703.228.3606

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SEAL

COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019710
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER Gabriela Kock	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

E & S CONTROL DETAILS 2

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

AS NOTED

SHEET 13 OF 37

FILENAME: DC17-221-E_AND_S_DETAILS.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) COVER PAGE

For Construction Activities At:

Intersection of Military Rd and 36th Rd N
& N Marcey Rd

Latitude: 38.91964º N / 38.90766º N (decimal degrees)

Longitude: 77.11990º W / 77.11055º W (decimal degrees)

Construction Activity Operator:

To Be Determined through BID selection

SWPPP Preparation Date:

October 09, 2019

CERTIFICATION

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Operator Name: _____

Title: _____

Signature: _____

Date: _____

1.0 SWPPP Documents Located Onsite & Available for Review

SWPPP Document Type	Located Onsite & Available for Review?	
Registration Statement	☐ Yes	☒ NA
Notice of Coverage Letter	☐ Yes	☒ NA
Construction General Permit	☐ Yes	☒ NA
Pollution Prevention Plan	☒ Yes	☐ NA
Erosion & Sediment Control Plan (or agreement in lieu of)	☒ Yes	☐ NA
Stormwater Management Plan	☒ Yes	☐ NA

2.0 Authorized Non-Stormwater Discharges

Type of Authorized Non-Stormwater Discharge	Likely Present at Your Project Site?	
External buildings wash down	☐ Yes	☒ No
Uncontaminated foundation or footing drains	☐ Yes	☒ No
Uncontaminated excavation dewatering	☒ Yes	☐ No
Landscape irrigation	☒ Yes	☐ No
Others [describe]	☐ Yes	☐ No

3.0 Pollution Prevention Awareness

Employees will be given a "walk through" of the site identifying areas of possible pollution and will be shown Erosion and Sediment Controls and Pollution Prevention Practices (identified in Sections 4.0 and 5.0 of this SWPPP) that are applicable to their assigned job duties. A refresher meeting and "walk through" will be conducted on an as needed basis.

4.0 Erosion & Sediment Controls

Select all that apply	Erosion & Sediment Control	Estimated Installation Date	Estimated Removal Date	Responsible Party
☐	Construction Entrance (Std. & Spec. 3.02)	Insert Date	Insert Date	Construction Activity Operator (See Cover Page of this SWPPP)
☒	Silt Fence (Std. & Spec. 3.05)	Insert Date	Insert Date	
☐	Culvert Inlet Protection (Std. & Spec. 3.08)	Insert Date	Insert Date	
☐	Outlet Protection (Std. & Spec. 3.18)	Insert Date	NA	
☒	Temporary Seeding (Std. & Spec. 3.31)	As required by 3.31	NA	
☐	Permanent Seeding (Std. & Spec. 3.32)	Insert Date	NA	
☒	Sodding (Std. & Spec. 3.33)	Insert Date	NA	
☒	Mulching (Std. & Spec. 3.35)	Insert Date	NA	
☐	Safety Fence (Std. & Spec 3.01)	Insert Date	Insert Date	

5.0 Potential Sources of Pollution & Pollution Prevention Practices

Pollutant-Generating Activity	Likely Present at your Project Site?	Pollutants: Sediment	Nutrients	Heavy Metals	pH (acids and bases)	Pesticides & Herbicides	Oil & Grease	Bacteria & Viruses	Trash, Debris, Solids	Other Toxic Chemicals	Pollution Prevention Practice	Responsible Party
Clearing, grading, excavating, and un-stabilized areas	☒ Yes ☐ No	X							X		(1)	Construction Activity Operator (See Cover Page of this SWPPP)
Paving operations	☒ Yes ☐ No	X					X		X		(2)	
Concrete washout and cement waste	☒ Yes ☐ No			X	X				X		(3)	
Structure construction, stucco, painting, and cleaning	☐ Yes ☒ No			X	X				X	X	(4)	
Dewatering operations	☒ Yes ☐ No	X	X						X		(5)	
Material delivery and storage	☒ Yes ☐ No	X	X	X	X		X		X	X	(6)	
Material use during building process	☒ Yes ☐ No		X	X	X		X		X	X	(7)	
Solid waste disposal	☒ Yes ☐ No								X	X	(8)	
Sanitary waste	☒ Yes ☐ No		X		X			X			(9)	
Landscaping operations	☒ Yes ☐ No	X	X			X			X	X	(10)	
Others [describe]	☐ Yes ☐ No	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	[X]	(11)	

Select all that apply	Stormwater Management Control	Estimated Installation Date	Responsible Party
☐	Infiltration (1 or 2)	Insert Date	Construction Activity Operator (See Cover Page of this SWPPP)
☐	Bioretention (1 or 2)	Insert Date	
☐	Others [describe]	Insert Date	
☐	Exempted	NA	NA

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. If serious hazards are present leave the area and call 911. LARGE SPILLS ARE LIKELY TO PRESENT A HAZARD.
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 703-228-6555
Washington Gas Emergency 703-750-1400

ARLINGTON
VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
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SEAL

COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019746
PROFESSIONAL ENGINEER
1/8/20

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

STORMWATER POLLUTION PREVENTION PLAN

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

AS NOTED

REVISED ON 05/23/2018
FILENAME: DC17-221-E_AND_S_DETAILS.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

36TH ROAD NORTH

DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet – Version 3.0

○ 2011 BMP Standards and Specifications ◉ 2013 Draft BMP Standards and Specifications

Project Name:	Intersection Improvement Military Road: 36th Rd North
Date:	10/16/2019
Linear Development Project?	Yes

CLEAR ALL

data input cells
constant values
calculation cells
final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 0.0636

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0.0000*
Post-Development TP Load Reduction for Site (lb/yr):	*0.0204*

Check:
BMP Design Specifications List: 2013 Draft Stds & Specs
Linear project? Yes
Land cover areas entered correctly? ✓
Total disturbed area entered? ✓

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed forest/open space					0.0000
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed		0.0054			0.0054
Impervious Cover (acres)		0.0582			0.0582
					0.0636

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested land					0.0000
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed		0.0085			0.0085
Impervious Cover (acres)		0.0551			0.0551
Area Check	OK.	OK.	OK.	OK.	0.0636

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre

Pre-ReDevelopment	Listed	Adjusted[1]
Forest/Open Space Cover (acres)	0.0000	0.0000
Weighted Rv(forest)	0.0000	0.0000
% Forest	0%	0%
Managed Turf Cover (acres)	0.0054	0.0054
Weighted Rv(turf)	0.2000	0.2000
% Managed Turf	8%	8%
Impervious Cover (acres)	0.0582	0.0582
Rv(impervious)	0.9500	0.9500
% Impervious	92%	92%
Total Site Area (acres)	**0.0636**	**0.0636**
Site Rv	**0.8863**	**0.8863**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0047	0.0047
Pre-ReDevelopment Treatment Volume (cubic feet)	204.6231	204.6231
Pre-ReDevelopment TP Load (lb/yr)	**0.1286**	**0.1286**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	2.0200	2.0200
Baseline TP Load (lb/yr) (**0.41 lbs/acre/yr** applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*0.0261*

[1] *Adjusted Land Cover Summary:*
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requirement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)

Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.0000
Weighted Rv(forest)	0.0000
% Forest	0%
Managed Turf Cover (acres)	0.0085
Weighted Rv (turf)	0.2000
% Managed Turf	13%
Impervious Cover (acres)	0.0551
Rv(impervious)	0.9500
% Impervious	87%
Final Site Area (acres)	**0.0636**
Final Post Dev Site Rv	**0.8498**

Land Cover Summary-Post

Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.0000
Weighted Rv(forest)	0.0000
% Forest	0%
Managed Turf Cover (acres)	0.0085
Weighted Rv (turf)	0.2000
% Managed Turf	13%
ReDev. Impervious Cover (acres)	0.0551
Rv(impervious)	0.9500
% Impervious	87%
Total ReDev. Site Area (acres)	**0.0636**
ReDev Site Rv	**0.8498**

Land Cover Summary-Post

Post-Development New Impervious	
New Impervious Cover (acres)	0.0000
Rv(impervious)	--

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.0045	Post-ReDevelopment Treatment Volume (acre-ft)	0.0045	Post-Development Treatment Volume (acre-ft)	--
Final Post-Development Treatment Volume (cubic feet)	196.1834	Post-ReDevelopment Treatment Volume (cubic feet)	196.1834	Post-Development Treatment Volume (cubic feet)	--
Final Post-Development TP Load (lb/yr)	**0.1233**	Post-ReDevelopment Load (TP) (lb/yr)*	**0.1233**	Post-Development TP Load (lb/yr)	--
Final Post-Development TP Load per acre (lb/acre/yr)	1.9400	Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.9400		
		Max. Reduction Required (Below Pre-ReDevelopment Load)	**20%**		
		TP Load Reduction Required for Redeveloped Area (lb/yr)	**0.0204**	**TP Load Reduction Required for New Impervious Area (lb/yr)**	**0**

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	**0.0204**
Linear Project TP Load Reduction Required (lb/yr):	0.0204

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	0.9197	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	0.8818

NORTH MARCEY ROAD

DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet – Version 3.0

○ 2011 BMP Standards and Specifications ◉ 2013 Draft BMP Standards and Specifications

Project Name:	Intersection Improvement Military Road: North Marcey Rd
Date:	10/16/2019
Linear Development Project?	Yes

CLEAR ALL

data input cells
constant values
calculation cells
final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 0.0661

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0.0000*
Post-Development TP Load Reduction for Site (lb/yr):	*0.0149*

Check:
BMP Design Specifications List: 2013 Draft Stds & Specs
Linear project? Yes
Land cover areas entered correctly? ✓
Total disturbed area entered? ✓

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed forest/open space					0.0000
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed		0.0028			0.0028
Impervious Cover (acres)		0.0633			0.0633
					0.0661

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested land					0.0000
Managed Turf (acres) -- disturbed, graded for yards or other turf to be mowed/managed		0.0103			0.0103
Impervious Cover (acres)		0.0558			0.0558
Area Check	OK.	OK.	OK.	OK.	0.0661

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre

Pre-ReDevelopment	Listed	Adjusted[1]
Forest/Open Space Cover (acres)	0.0000	0.0000
Weighted Rv(forest)	0.0000	0.0000
% Forest	0%	0%
Managed Turf Cover (acres)	0.0028	0.0028
Weighted Rv(turf)	0.2000	0.2000
% Managed Turf	4%	4%
Impervious Cover (acres)	0.0633	0.0633
Rv(impervious)	0.9500	0.9500
% Impervious	96%	96%
Total Site Area (acres)	**0.0661**	**0.0661**
Site Rv	**0.9182**	**0.9182**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0051	0.0051
Pre-ReDevelopment Treatment Volume (cubic feet)	220.3229	220.3229
Pre-ReDevelopment TP Load (lb/yr)	**0.1384**	**0.1384**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	2.0900	2.0900
Baseline TP Load (lb/yr) (**0.41 lbs/acre/yr** applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*0.0271*

[1] *Adjusted Land Cover Summary:*
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requirement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)

Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.0000
Weighted Rv(forest)	0.0000
% Forest	0%
Managed Turf Cover (acres)	0.0103
Weighted Rv (turf)	0.2000
% Managed Turf	16%
Impervious Cover (acres)	0.0558
Rv(impervious)	0.9500
% Impervious	84%
Final Site Area (acres)	**0.0661**
Final Post Dev Site Rv	**0.8331**

Land Cover Summary-Post

Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.0000
Weighted Rv(forest)	0.0000
% Forest	0%
Managed Turf Cover (acres)	0.0103
Weighted Rv (turf)	0.2000
% Managed Turf	16%
ReDev. Impervious Cover (acres)	0.0558
Rv(impervious)	0.9500
% Impervious	84%
Total ReDev. Site Area (acres)	**0.0661**
ReDev Site Rv	**0.8331**

Land Cover Summary-Post

Post-Development New Impervious	
New Impervious Cover (acres)	0.0000
Rv(impervious)	--

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.0046	Post-ReDevelopment Treatment Volume (acre-ft)	0.0046	Post-Development Treatment Volume (acre-ft)	--
Final Post-Development Treatment Volume (cubic feet)	199.9041	Post-ReDevelopment Treatment Volume (cubic feet)	199.9041	Post-Development Treatment Volume (cubic feet)	--
Final Post-Development TP Load (lb/yr)	**0.1256**	Post-ReDevelopment Load (TP) (lb/yr)*	**0.1256**	Post-Development TP Load (lb/yr)	--
Final Post-Development TP Load per acre (lb/acre/yr)	1.9000	Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.9000		
		Max. Reduction Required (Below Pre-ReDevelopment Load)	**20%**		
		TP Load Reduction Required for Redeveloped Area (lb/yr)	**0.0149**	**TP Load Reduction Required for New Impervious Area (lb/yr)**	**0**

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	**0.0149**
Linear Project TP Load Reduction Required (lb/yr):	0.0149

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	0.9903	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	0.8985

NOTE:

THE RUNOFF REDUCTION SPREADSHEET INFORMATION ON THIS PLAN IS FOR DATA TRACKING PURPOSES TO DOCUMENT THE AREA OF LAND DISTURBANCE AND TO CHARACTERIZE PRE- AND POST-DEVELOPMENT LAND USE CONDITIONS.

IN ACCORDANCE WITH ARLINGTON COUNTY'S CHESAPEAKE BAY TOTAL MAXIMUM DAILY LOAD (TMDL) ACTION PLAN, APPROVED BY THE VIRGINIA DEPARTMENT OF ENVIRONMENTAL QUALITY (DEQ) ON SEPTEMBER 1, 2015, LINEAR DEVELOPMENT PROJECTS CONDUCTED BY THE COUNTY ARE ADMINISTERED AND TRACKED AS FOLLOWS CONSISTENT WITH 9VAC25-870-69.A.4, 9VAC25-870-76, AND 9VAC25-870-92:

- POLLUTANT LOAD CHANGES WILL BE COMPUTED AS DESCRIBED IN SECTION 3.A OF THE ACTION PLAN.
- RETROFIT OPPORTUNITIES WILL BE EVALUATED FOR EACH PROJECT, USING THE SCREENING AND SELECTION CRITERIA APPLIED AND DESCRIBED IN THE ADOPTED STORMWATER MASTER PLAN.
- RETROFIT PROJECTS THAT MEET THE SCREENING CRITERIA AND ARE DETERMINED BY ARLINGTON TO BE FEASIBLE AND COST-EFFECTIVE WILL BE IMPLEMENTED WITH SPECIFIC LINEAR DEVELOPMENT PROJECTS. POLLUTANT LOAD REDUCTIONS FROM RETROFIT PROJECTS WILL BE COMPUTED AS DESCRIBED IN SECTION 5 OF THE ACTION PLAN.
- IN CASES WHERE RETROFIT PROJECTS ARE NOT FEASIBLE AND COST-EFFECTIVE FOR A PARTICULAR LINEAR PROJECT, ANY POLLUTANT OF CONCERN (POC) LOAD INCREASES THAT MIGHT OCCUR FOR THAT PROJECT WILL BE ADDRESSED BY LARGER OVERALL POC LOAD REDUCTIONS IN PLACE OR ADDED THROUGH TMDL ACTION PLAN IMPLEMENTATION.

IN THE ABOVE MANNER ARLINGTON, AS THE MS4 OPERATOR AND THE CONSTRUCTION SITE OPERATOR FOR ITS LINEAR DEVELOPMENT PROJECTS, IMPLEMENTS LINEAR PROJECTS AND RETROFIT PROJECTS IN A MANNER THAT ACHIEVES THE MOST TMDL POC REDUCTION FOR THE LEAST COST, WHILE FULLY ACCOUNTING FOR LOAD CHANGES THAT OCCUR WITH LINEAR DEVELOPMENT PROJECT ACTIVITY CONSISTENT WITH THE DEQ CHESAPEAKE BAY TMDL SPECIAL CONDITION GUIDANCE.

FILENAME: DC17-134-STORM.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

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DEPARTMENT OF ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
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2100 CLARENDON BOULEVARD, SUITE 813
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PHONE: 703.228.3629
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COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019706
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

STORMWATER MANAGEMENT - VRRM

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:
25 0 25
HORIZ: SCALE: 1" = 25'
5 0 5
VERT: SCALE: 1" = 5'

REVISED ON 05/23/2018

Appendix C. Water Quality Impact Assessment Data Sheet

Project Address	Date:
Intersection N Militar Road and 36th Road N	10/30/2019
Applicant Name/Affiliation:	Applicant Contact Information (phone and email):
Peter Rigby - Arlingto County	703-228-3604 / prigby@arlingtonva.us
Owner/Client Name:	Owner/Client Contact Information (phone and email):
Gabriela Kock DES, Arlington County Go.	703-228-3938 / gkock@arlingtonva.us

Section 1: Type of activity proposed

Activity type (check all that apply):

- ☑ New construction (residential, commercial, public, etc.)
- ☐ Alteration of non-residential structure
- ☐ Residential addition
- ☐ Detached residential structure
- ☐ Deck, patio, or retaining wall
- ☐ Landscaping (includes tree removal)
- ☑ Utility work
- ☐ Fence
- ☑ Other (please describe): Intersection Improvement

Section 2: Key details of the proposed activity

Complete all that apply		Explanation
Total area of disturbance on parcel (sf) LOD	2,769	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)	2,480	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		Existing condition	Proposed condition	Explanation
RPA encroachment (ft)	Left third of parcel or site	56.8	56.8	The **distance** (in feet) from the existing or proposed structure to the designated RPA feature (edge of stream or open channel, wetland, etc.). Encroachments of zero (0) indicate the project will impact the stream or other RPA feature.
	Middle third of parcel or site	8.4	8.4	
	Right third of parcel or site	98	98	
Total development footprint in RPA (sf)		2,480	2,480	The existing footprint includes the **area** of any existing structures, patios, decks, walkways, etc. Proposed foorprint is the anticipated post-project area of all structures, additions, decks, walkways, regraded area behind a retaining wall, etc.
Impervious footprint in RPA (sf)		2,246	2,284	Total **area** of impervious surfaces within the RPA (rooftops, pavement, etc.)

(OVER)

STAFF USE ONLY

Building/demolition/LDA/Fence permit number(s):

Major WQIA required? ☐ Yes ☐ No

Date WQIA/Exception request information complete:

Date Chesapeake Bay Preservation Ordinance and E/S ordinance (if applicable) approvals issued in Permits Plus:

Section 3: Plan and Narrative

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 measuresproposed. 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.

This is an Arlington county Intersection Improvement project which consists on improving pedestrian and bicycle safety by providing curb extensions, accessible curb ramps, high visibility crosswalk, median refuge and updated pavement markings and relocation fire hydrant. The total area of disturbance within the buffer is 2,480 square feet. There will be a small increase of 38 square feet of impervious surface (concrete sidewalk) within the RPA boundary. Existing drainage patterns will not be altered. There is no change in storm water quantity resulting from this project.
No trees within the RPA buffer will be removed.
Existing and proposed storm sewer will be used to drain the stormwater runoff and Storm Inlet protection will be used to prevent sediment enter into the drainage system.
Arlington County is proposing to mitigate possible impacts to the RPA using erosion and sediment control measures as shown on the drawings (sheets 10 and 11) which include temporary silt fence w/wire support, dewatering structure, sodding disturbed areas around the project. Also tree protection fence, and root pruning will be provided.
The contractor is required to contact the Arlington County Forester to schedule pre-construction inspection of tree protection measures prior to any work near the critical root zones of existing trees.

Additional Water Quality Impact Assessment Information

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.

Appendix D. Exception Request Form

Applicant:	Project address:
Peter Rigby - Arlington County	Intersection N Military Road and 36th Road N

Section 1: Brief description of exception request

The exception request is to allow Arlington County to disturb 2,480 square feet of land to carry out the Intersection Improvement project which has a small increase (38 SF) of impervious surface within the RPA boundary.

Section 2: Parcel, structure, and ownership information

Date parcel ownership began: Unknown

Date existing principal structure built: NA

Will existing principal structure remain intact?
☐ Yes ☐ No NA

Date(s) of construction of any prior work by current owner (alterations, additions, decks, patios, etc.)—list individually:

	Date	Type of prior work
1.	NA	
2.		
3.		
4.		

STAFF USE ONLY

- ☐ Allowable development in RPA (§ 61-7.A)
- ☐ Allowable modification in RPA (§ 61-7.B)
- ☐ Allowable encroachment in RPA (§ 61-7.C)
- ☐ Expansion of nonconforming structure or use in RPA (§ 61-14) (exception request required)
- ☐ New development in the RPA, redevelopment that increases impervious area in the RPA or encroaches further into the RPA, or any other proposed disturbance of any RPA component (exception request required)
- ☐ Exempted activity in RPA (§ 61-15) _____
- ☐ Proposed development in RMA on 15 percent slopes adjacent to RPA
- ☐ Other RMA activity_____

CBORC hearing required? ☐ Yes ☐ No

Date public notification sent certified mail:

Hearing date:

CBORC decision: ☐ Approved ☐ Not approved

Date of final approval letter:

EXISTING

PROPOSED

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DEPARTMENT OF
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FACILITIES & ENGINEERING DIVISION
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PETER J. RIGBY JR.
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1/8/20

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

STORMWATER MANAGEMENT - WQIA AND EXCEPTION REQUEST

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

NTS

FILENAME: DC17-220-E_AND_S_PLAN.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

CONSTRUCTION NOTES

1. PROP CURB AND GUTTER (C-2) ARL STD (R-2.0)
1C. PROP MOUNTABLE CURB ARL STD (R-2.7)
2. PROP SIDEWALK ARL STD (R-2.0)
2A. PROP MODIFIED RAMP (CG-12B) VDOT ROAD & BRIDGE STANDARDS (203.07) SEE CURB RAMP DETAIL SHEET #
2B. PROP RAMP (CG-12A) VDOT ROAD & BRIDGE STANDARDS (203.06) SEE CURB RAMP DETAIL SHEET #
2C. PROP RAMP (CG-12B) VDOT ROAD & BRIDGE STANDARDS (203.07) SEE CURB RAMP DETAIL SHEET #
3. PROP. ASPHALT - FULL DEPTH REPLACEMENT PER ARL CONSTR STD R-1.3
4. PROP ASPHALT - MILL AND OVERLAY PER PER ARL CONSTR STD R-1.3
5. PROP 6' BENCH PER DETAIL SHOWN ON SHEET 2 OR EQUIVALENT
6. PROP SOD AND 4" TOP SOIL PER ARL CONST STD & SPEC, SECTION 329200 SEEDING AND SODDING
7. CONCRETE RAISED MEDIAN MS-1A (STD 202.03) AND DETECTABLE WARNING CG-12 TYPE M2 (STD 204.05) PER VDOT 2016 ROAD & BRIDGE STDS
8. REMOVE EXISTING FIRE HYDRANT AND INSTALL NEW FIRE HYDRANT ON NEW LOCATION
9. GAS VALVE BOX VERTICAL ADJUSTMENT TO NEW GRADE
10. WATER METER BOX VERTICAL ADJUSTMENT TO NEW GRADE
11. WATER VALVE BOX VERTICAL ADJUSTMENT TO NEW GRADE
12. REMOVE EXISTING CURB RAMP AND INSTALL CONCRETE SIDEWALK AND CURB & GUTTER ACCORDING TO ARL STD (R-2.7, R-2.0)

PROFILE CENTERLINE MILITARY HIGHWAY

PERMIT REQUIREMENTS

THE FOLLOWING PERMITS WILL BE REQUIRED FOR THIS PROJECT.

1. ARLINGTON COUNTY LAND DISTURBING ACTIVITY (LDA) PERMIT
2. ARLINGTON COUNTY PUBLIC RIGHT-OF-WAY (PROW) PERMIT
3. ARLINGTON COUNTY TRANSPORTATION RIGHT-OF-WAY (TROW) PERMIT
4. NO VDOT PERMITS ARE REQUIRED.
5. NO WMATA PERMITS ARE REQUIRED.

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DEPARTMENT OF ENVIRONMENTAL SERVICES
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1/8/20

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER Gabriela Kock	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

PLAN AND PROFILE
Military Rd and 36th Rd N

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

25 0 25
HORIZ: SCALE: 1" = 25'

SHEET 17 OF 37

FILENAME: DC17-230-PLAN_PROFILE-36TH.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

CR-1 PLAN

RAMP: CG-12

ALIGNMENT: EOP_SB MILITARY TO 36TH

SCALE: 1" = 5'

CR-2 PLAN

RAMP: CG-12

ALIGNMENT: EOP_NB MILITARY

SCALE: 1" = 5'

CR-1 PROFILE

EOP_SB MILITARY TO 36TH

HOR. SCALE: 1" = 25'

VER. SCALE: 1" = 5'

CR-2 PROFILE

EOP_NB MILITARY

HOR. SCALE: 1" = 25'

VER. SCALE: 1" = 5'

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APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER Gabriela Kock	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

RAMP DETAIL AND CR-1, CR-2 PROFILE

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:
VERT. SCALE
HORIZ. SCALE

FILENAME: DC17-232-CURB_RETURN_PROFILES.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

CR-3 PLAN

RAMP: CG-12

ALIGNMENT: EOP_NB MILITARY TO 36TH

SCALE: 1" = 5'

CR-3 PROFILE

EOP_NB MILITARY TO 36TH

HOR. SCALE: 1" = 25'

VER. SCALE: 1" = 5'

CUT-THROUGH MEDIAN

Scale: 1" = 5'

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PROFESSIONAL ENGINEER
1/8/20

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

RAMP DETAIL AND CR-3 PROFILE

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:
VERT. SCALE
HORIZ. SCALE

SHEET 19 OF 37

FILENAME: DC17-232-CURB_RETURN_PROFILES.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

CONSTRUCTION NOTES

1. PROP CURB AND GUTTER (C-2) ARL STD (R-2.0)
1C. PROP MOUNTABLE CURB ARL STD (R-2.7)
2. PROP SIDEWALK ARL STD (R-2.0)
2A. PROP CURB RAMP (CG-12B) VDOT ROAD & BRIDGE STANDARDS (203.07) SEE CURB RAMP DETAIL SHEET #
2B. PROP CURB RAMP (CG-12A) VDOT ROAD & BRIDGE STANDARDS (203.06) SEE CURB RAMP DETAIL SHEET #
2C. PROP RESIDENTIAL CONCRETE DRIVEWAY ENTRANCE (DEPRESSED) ARL STD (R-2.4B) SEE CURB RAMP DETAIL SHEET #
3. PROP ASPHALT - FULL DEPTH REPLACEMENT PER ARL CONSTR STD R-1.3
4. PROP ASPHALT - MILL AND OVERLAY PER PER ARL CONSTR STD R-1.3
5. DO NOT DISTURB STONE WALL
6. PROP SOD AND 4" TOP SOIL PER ARL CONST STD & SPEC, SECTION 329200 SEEDING AND SODDING
7. PROP STANDARD CATCH BASIN, CB-2 PER ARL STD (D-1.2)
8. EXISTING FIRE HYDRANT TO BE REPLACED AND RELOCATED
9. ABANDON EXISTING STRUCTURE PER ARL CONSTR. SPEC 02500-3.5
10. PROP TEMPORARY EASEMENT
11. ADJUST EXISTING SANITARY MH TOP TO PROPOSED GRADE PER ARL CONSTR SPEC 02505-4.2

GENERAL NOTES:

1. CONTRACTOR SHALL NOTIFY PROJECT OFFICER AT LEAST ONE WEEK IN ADVANCE BEFORE THE PLANNED REMOVAL OF LOOP DETECTORS. PROJECT OFFICER SHALL THEN NOTIFY TE&O SIGNALS TEAM IMMEDIATELY THEREAFTER.
2. NEW LOOP DETECTORS TO BE INSTALLED BY OTHERS.

PROFILE CL MILITARY HIGHWAY

HOR. SCALE: 1" = 25'
VER. SCALE: 1" = 5'

PERMIT REQUIREMENTS

THE FOLLOWING PERMITS WILL BE REQUIRED FOR THIS PROJECT.

1. ARLINGTON COUNTY LAND DISTURBING ACTIVITY (LDA) PERMIT
2. ARLINGTON COUNTY PUBLIC RIGHT-OF-WAY (PROW) PERMIT
3. ARLINGTON COUNTY TRANSPORTATION RIGHT-OF-WAY (TROW) PERMIT
4. NO VDOT PERMITS ARE REQUIRED.
5. NO WMATA PERMITS ARE REQUIRED.

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1/8/20

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER (Gabriela Kock)	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

PLAN AND PROFILE Military Rd and N Marcey Rd

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:
25 0 25
HORIZ: SCALE: 1" = 25'
5 0 5
VERT: SCALE: 1" = 5'

FILENAME: DC17-230-PLAN_PROFILE-MARCEY.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

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CR-4 PLAN

RAMP: CG-12

ALIGNMENT: EOP_NB MILITARY TO MARCEY

SCALE: 1" = 5'

CR-4 PROFILE

EOP_NB MILITARY TO MARCEY

HOR. SCALE: 1" = 25'

VER. SCALE: 1" = 5'

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1/8/20

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER Gabriela Kock	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

RAMP DETAIL AND CR-4 PROFILE

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:
5 0 5
VERT. SCALE
25 0 25
HORIZ. SCALE

FILENAME: DC17-232-CURB_RETURN_PROFILES.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

CR-5 PLAN

RAMP: CG-12

ALIGNMENT: EOP-MILITARY AT MARCEY

SCALE: 1" = 5'

HORIZ. SCALE

CR-5 PROFILE

EOP-MILITARY AT MARCEY

HOR. SCALE: 1" = 25'

VER. SCALE: 1" = 5'

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PETER J. RIGBY JR.
Lic. No. 019706
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	Gabriela Kock 1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

RAMP DETAIL AND CR-5 PROFILE

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

VERT. SCALE

HORIZ. SCALE

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REVISED ON 05/23/2018

NOTE:
CROSS SECTIONS ARE BASED ON ALIGNMENT OF EDGE OF PAVEMENT

CROSS SECTIONS - CR #3

1+25.00

1+00.00

0+75.00

CROSS SECTIONS - CR #1

0+70.68

END CONSTRUCTION

0+65.00

CROSS SECTIONS - CR #2

0+32.50

END CONSTRUCTION

0+50.00

0+50.00

0+25.00

0+25.00

0+25.00

0+00.00

BEGIN CONSTRUCTION

0+10.00

BEGIN CONSTRUCTION

0+00.00

BEGIN CONSTRUCTION

1+27.32

END CONSTRUCTION

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PETER J. RIGBY JR.
Lic. No. 019746
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER (Gabriela Kock)	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

CROSS SECTIONS (CR1, CR2, CR3)

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:
Hor.: 1"=5'
Vert.: 1"=5'

5 0 5
GRAPHIC SCALE

FILENAME: DC17-234-CROSS_SECTIONS.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

CROSS SECTIONS - CR #4

1+00.00

0+75.00

0+50.00

0+25.00

1+42.29
END CONSTRUCTION (Match Existing)

0+00.00
BEGIN CONSTRUCTION (Match Existing)

1+25.00

NOTE:
CROSS SECTIONS ARE BASED ON ALIGNMENT OF EDGE OF PAVEMENT

ARLINGTON
VIRGINIA

DEPARTMENT OF ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
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SEAL

COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019706
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER (Gabriela Kock)	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

CROSS SECTIONS (CR4)

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:
Hor.: 1"=5'
Vert.: 1"=5'

5 0 5
GRAPHIC SCALE

FILENAME: DC17-234-CROSS_SECTIONS.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

Line Table						
Line #	Start Sta.	End Sta.	Bearing	Distance	Start (Northing, Easting)	End (Northing, Easting)
L1	-0+00.00	0+07.75	N 21° 46' 03" W	7.75'	(7020873.2868, 11875548.7505)	(7020880.4888, 11875545.8746)
L2	0+00.00	0+10.00	S 27° 20' 37" E	10.00'	(7020974.2076, 11875548.2875)	(7020965.3249, 11875552.8808)
L3	0+10.00	0+16.72	S 27° 37' 16" E	6.72'	(7020965.3249, 11875552.8808)	(7020959.3728, 11875555.9953)
L4	0+62.00	0+70.68	N 54° 28' 22" E	8.68'	(7020950.0920, 11875594.8740)	(7020955.1334, 11875601.9346)
L5	0+00.00	0+59.43	N 24° 23' 52" W	59.43'	(7020832.1766, 11875611.8230)	(7020886.2962, 11875587.2757)
L6	0+95.89	1+07.11	N 54° 26' 50" E	11.21'	(7020918.8024, 11875596.0007)	(7020925.3222, 11875605.1232)

Curve Table										
Curve #	Start Sta.	End Sta.	Radius	Chord Bearing	Chord Length	Delta (Δ)	Arc Length	Tangent	Start (Northing, Easting)	End (Northing, Easting)
C1	0+07.75	0+14.98	1408.72'	N 22° 57' 40" W	7.22'	0° 17' 37"	7.22'	3.61'	(7020880.4888, 11875545.8746)	(7020887.1376, 11875543.0577)
C2	0+14.98	0+27.50	1408.72'	N 23° 21' 45" W	12.52'	0° 30' 33"	12.52'	6.26'	(7020887.1376, 11875543.0577)	(7020898.6305, 11875538.0932)
C3	0+27.50	0+32.50	1408.72'	N 23° 43' 08" W	5.00'	0° 12' 12"	5.00'	2.50'	(7020898.6305, 11875538.0932)	(7020903.2082, 11875536.0819)
C4	0+16.72	0+62.00	26.50'	S 76° 34' 27" E	39.97'	97° 54' 22"	45.28'	30.43'	(7020959.3728, 11875555.9953)	(7020950.0920, 11875594.8740)
C5	0+59.43	0+95.89	26.50'	N 15° 01' 29" E	33.66'	78° 50' 42"	36.47'	21.78'	(7020886.2962, 11875587.2757)	(7020918.8024, 11875596.0007)
C6	1+07.11	1+18.34	16.50'	N 73° 59' 01" E	11.02'	39° 01' 17"	11.24'	5.85'	(7020925.3222, 11875605.1232)	(7020928.3632, 11875615.7169)
C7	1+18.34	1+27.51	13.50'	N 74° 03' 10" E	8.99'	38° 53' 00"	9.16'	4.77'	(7020928.3632, 11875615.7169)	(7020930.8323, 11875624.3579)

CONTROL POINTS

109	7020956.62	11875568.75	165.20	drill hole
1444	7020819.97	11875566.09	161.26	FLY

REVISED ON 05/23/2018

FILENAME: DC17-216-GEOMETRIC_CONTROL_PLAN.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

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COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019706
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

GEOMETRIC CONTROL
PLAN - 36TH RD N

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

25 0 25
HORIZ: SCALE: 1" = 25'

Line Table						
Line #	Start Sta.	End Sta.	Bearing	Distance	Start (Northing, Easting)	End (Northing, Easting)
L7	0+18.44	0+65.90	N 18° 14' 54" W	47.46'	(7016509.2546, 11878307.6463)	(7016554.3271, 11878292.7850)
L8	1+00.46	1+33.28	N 56° 28' 14" E	32.82'	(7016584.7157, 11878303.3145)	(7016602.8432, 11878330.6715)
L9	-0+00.00	0+33.43	N 22° 04' 22" W	33.43'	(7016516.7993, 11878261.8756)	(7016547.7780, 11878249.3136)

Curve Table										
Curve #	Start Sta.	End Sta.	Radius	Chord Bearing	Chord Length	Delta (Δ)	Arc Length	Tangent	Start (Northing, Easting)	End (Northing, Easting)
C8	0+00.00	0+08.30	13.50'	N 35° 51' 42" W	8.17'	35° 13' 36"	8.30'	4.29'	(7016494.5408, 11878318.2824)	(7016501.1620, 11878313.4962)
C9	0+08.30	0+18.44	16.50'	N 35° 51' 42" W	9.99'	35° 13' 36"	10.14'	5.24'	(7016501.1620, 11878313.4962)	(7016509.2546, 11878307.6463)
C10	0+65.90	1+00.46	26.50'	N 19° 06' 40" E	32.16'	74° 43' 08"	34.56'	20.23'	(7016554.3271, 11878292.7850)	(7016584.7157, 11878303.3145)
C11	1+33.28	1+42.29	23.50'	N 45° 29' 02" E	8.96'	21° 58' 23"	9.01'	4.56'	(7016602.8432, 11878330.6715)	(7016609.1231, 11878337.0584)

CONTROL POINTS

5	7016525.75	11878311.53	254.60	bn005
1001	7016983.24	11877949.82	217.43	FLY

REVISED ON 05/23/2018

FILENAME: DC17-216-GEOMETRIC_CONTROL_PLAN.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

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COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
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1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

GEOMETRIC CONTROL
PLAN - MARCEY

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

25 0 25
HORIZ: SCALE: 1" = 25'

REVISED ON 05/23/2018

KEYED NOTE:

1 REMOVE EXISTING FIRE HYDRANT

2 REMOVE EXISTING VALVE BOX AND COVER

WATERMAIN CONSTRUCTION NOTES:

1. —//——//——//— INDICATES EXISTING WATER MAIN TO BE REMOVED FOR THE INSTALLATION OF PROPOSED WATERMAIN, OR ABANDONED IN PLACE FOR PER ARLINGTON COUNTY SPECIFICATIONS AND STANDARDS.

2. TEST PITS SHALL BE MADE TO VERIFY EXACT LOCATION AND INVERTS OF EXISTING UTILITIES TO ALLOW FOR POSSIBLE CHANGES IN THE LINE AND GRADE. THESE TEST PITS SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE COUNTY AND ARE INCIDENTAL TO THE WATER MAIN WORK.

3. ALL WATER MAIN JOINTS INCLUDING ALL TEES, BENDS, PLUGS, VALVES, FIRE HYDRANTS ETC. SHALL BE RESTRAINED USING "MEGALUG", "TR-FLEX PIPE", OR APPROVED EQUAL. THE CONTRACTOR SHALL SUBMIT JOINT RESTRAINT DETAILS DESIGNED FOR PRESSURE OF 250 PSI PRIOR TO INSTALLATION OF PIPE. ALL TEES, BENDS, PLUGS, VALVES, FIRE HYDRANTS ETC. IN CONJUNCTION WITH JOINT RESTRAINT SHALL ALSO BE RESTRAINED WITH CONCRETE THRUST BLOCKS AS SHOWN ON THE PLANS.

PROFILE "A"

PROFILE "B"

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COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
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PROFESSIONAL ENGINEER
1/8/20

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER (Gabriela Kock)	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

WATERMAIN PLAN AND PROFILE - 36TH RD

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:
25 0 25
HORIZ. SCALE: 1" = 25'
5 0 5
VERT. SCALE: 1" = 5'

SHEET 27 OF 37

FILENAME: DC17-240-WATERMAIN_P_AND_P.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ

REVISED ON 05/23/2018

KEYED NOTE:

1 REMOVE EXISTING FIRE HYDRANT

2 REMOVE EXISTING VALVE BOX AND COVER

WATERMAIN CONSTRUCTION NOTES:

1. —//——//——//— INDICATES EXISTING WATER MAIN TO BE REMOVED FOR THE INSTALLATION OF PROPOSED WATERMAIN, OR ABANDONED IN PLACE FOR PER ARLINGTON COUNTY SPECIFICATIONS AND STANDARDS.

2. TEST PITS SHALL BE MADE TO VERIFY EXACT LOCATION AND INVERTS OF EXISTING UTILITIES TO ALLOW FOR POSSIBLE CHANGES IN THE LINE AND GRADE. THESE TEST PITS SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE COUNTY AND ARE INCIDENTAL TO THE WATER MAIN WORK.

3. ALL WATER MAIN JOINTS INCLUDING ALL TEES, BENDS, PLUGS, VALVES, FIRE HYDRANTS ETC. SHALL BE RESTRAINED USING "MEGALUG", "TR-FLEX PIPE", OR APPROVED EQUAL. THE CONTRACTOR SHALL SUBMIT JOINT RESTRAINT DETAILS DESIGNED FOR PRESSURE OF 250 PSI PRIOR TO INSTALLATION OF PIPE. ALL TEES, BENDS, PLUGS, VALVES, FIRE HYDRANTS ETC. IN CONJUNCTION WITH JOINT RESTRAINT SHALL ALSO BE RESTRAINED WITH CONCRETE THRUST BLOCKS AS SHOWN ON THE PLANS.

PROFILE "C"

HOR. SCALE: 1" = 25'
VER. SCALE: 1" = 5'

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COMMONWEALTH OF VIRGINIA
PETER J. RIGBY JR.
Lic. No. 019708
1/8/20
PROFESSIONAL ENGINEER

APPROVALS	DATE
QUALITY CONTROL ENGINEER	1.8.2020
CONSTRUCTION MANAGEMENT SUPERVISOR	1/14/20
WATER, SEWER, STREETS BUREAU CHIEF	1/21/20
TRANSPORTATION DIRECTOR	1/14/2020
PROJECT MANAGER	1/9/2020

REVISIONS	DATE

INTERSECTION IMPROVEMENT
DC17
MILITARY RD

WATERMAIN PLAN AND PROFILE - MARCEY

DESIGNED: L. DELACRUZ
DRAWN: L. DELACRUZ
CHECKED: P. RIGBY
MISS UTILITY TRANSMITTAL #: N/A

PLOTTED: JANUARY 23 2020

SCALE:

25 0 25
HORIZ. SCALE: 1" = 25'

5 0 5
VERT. SCALE: 1" = 5'

FILENAME: DC17-240-WATERMAIN_P_AND_P-MARCEY.DWG PATH: Q:\DATA\DC17\DESIGN\CAD\ACTIVE PLOTTED BY: LDELACRUZ