

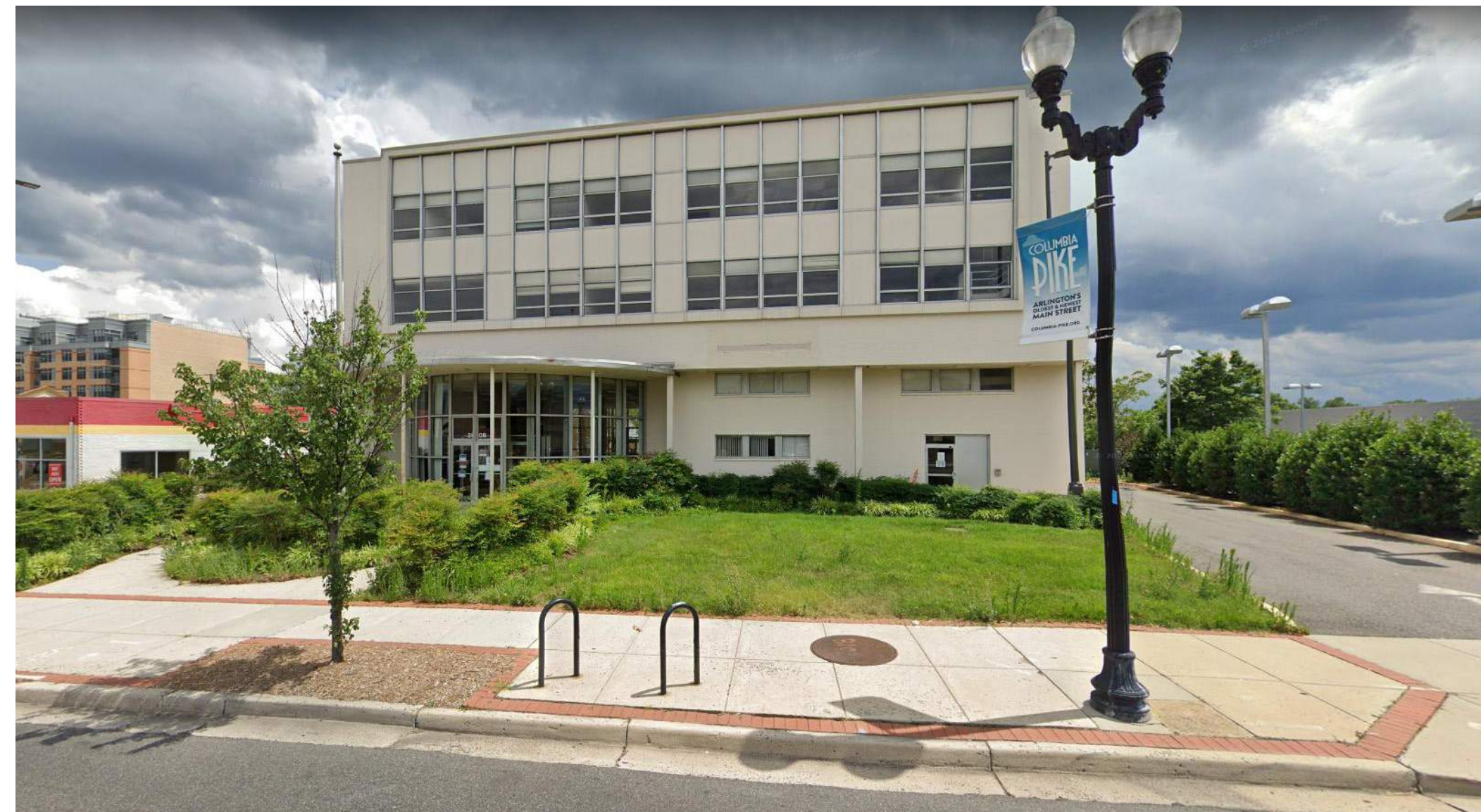
3108 COLUMBIA PIKE DEMOLITION

ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

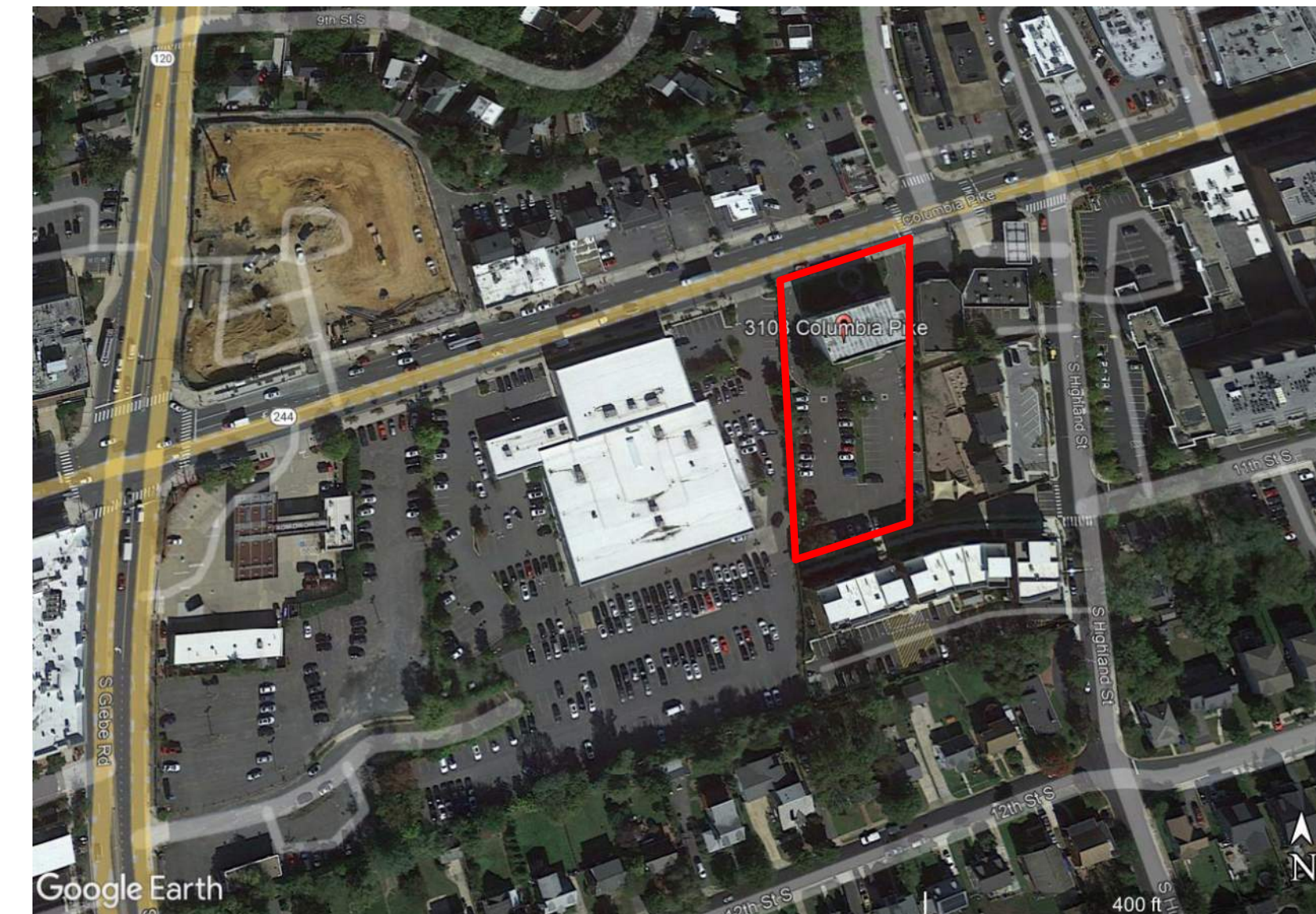
3108 COLUMBIA PIKE
ARLINGTON, VA 22204

ISSUED FOR BID

NOVEMBER 10, 2023



STREET VIEW



SATELLITE/ MAP VIEW

ARCHITECTURAL

Dewberry Architects Inc.

8401 ARLINGTON BLVD
FAIRFAX, VA 22031

703.698.9050

CIVIL

Dewberry Engineers, Inc.

8401 ARLINGTON BLVD
FAIRFAX, VA 22031

703.849.0100
703.849.0518 fax

ELECTRICAL

Dewberry Engineers, Inc.

8401 ARLINGTON BLVD
FAIRFAX, VA 22031

703.849.0100
703.849.0518 fax

3108 COLUMBIA PIKE DEMOLITION

ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES

3108 COLUMBIA PIKE

ARLINGTON, VIRGINIA 22204

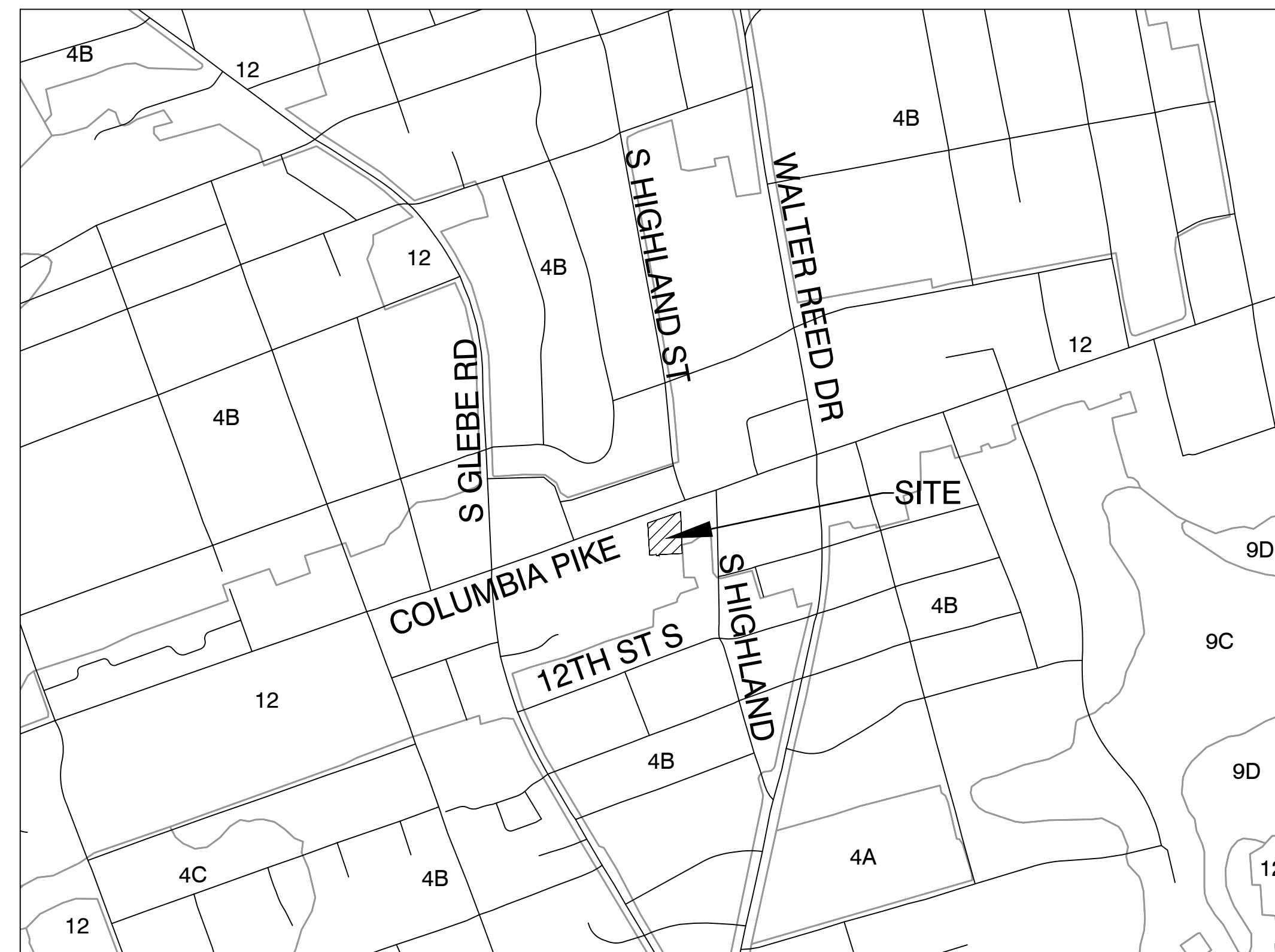
USE PERMIT # UPER22-00069

SWM # 23-0138

DATUM NOTES:

HORIZONTAL DATUM: THE SITE SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983 AS COMPUTED FROM FIELD RUN BOUNDARY AND HORIZONTAL SURVEY.

VERTICAL DATUM: THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICA VERTICAL DATUM OF 1988 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY.



VICINITY MAP

SCALE 1" = 500'

OWNER

NAME: THE COUNTY BOARD OF ARLINGTON
 ADDRESS: 2100 CLARENDON BLVD, SUITE 300
 ARLINGTON VA 22201
 TELEPHONE: (703) 228-3130

DEVELOPER

NAME: ARLINGTON COUNTY - DES
 FACILITIES DESIGN AND CONSTRUCTION
 ADDRESS: 1400 N. UHLE STREET, SUITE 403
 ARLINGTON VA 22201
 TELEPHONE: (703) 216-6555
 EMAIL: VMAISLIN@ARLINGTONVA.US

ENGINEER

NAME: DEWBERRY ENGINEERS INC.
 ADDRESS: 8401 ARLINGTON BOULEVARD
 FAIRFAX VA 22031
 TELEPHONE: (703) 849-0100

CONTRACTOR

NAME: TO BE DETERMINED
 ADDRESS: TO BE DETERMINED
 TELEPHONE: TO BE DETERMINED

SHEET INDEX

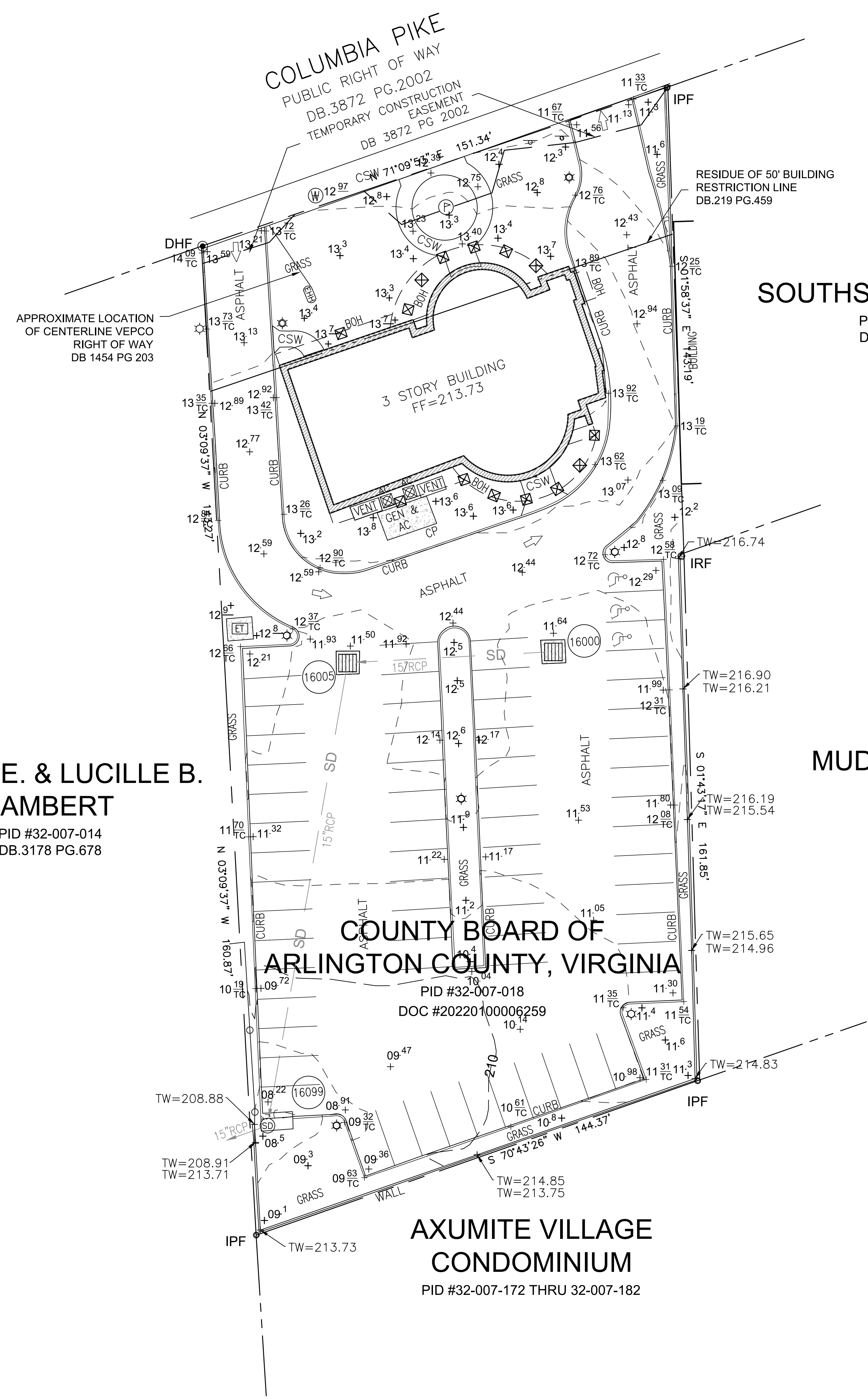
SHEET #	DRAWING #	DESCRIPTION
1	C-000	CIVIL COVER SHEET
2	C-001	GENERAL NOTES & LEGEND
3	C-002	BOUNDARY AND TOPOGRAPHY SURVEY
4	C-003	SITE DETAILS
5	C-100	EXISTING CONDITIONS AND DEMO PLAN
6	C-200	SITE PLAN
7	C-300	GRADING AND UTILITY PLAN
8	C-310	DRY UTILITY PLAN
9	C-320	STORM SEWER PLAN, PROFILES AND COMPUTATIONS
10	C-330	DRAINAGE AREA MAPS
11	C-331	ADEQUATE OUTFALL ANALYSIS
12	C-332	WATER QUALITY COMPUTATIONS
13	C-333	WATER QUALITY COMPUTATIONS
14	C-334	STORMWATER DETAILS
15	C-335	POLLUTION PREVENTION PLAN
16	C-800	MAINTENANCE OF TRAFFIC PLAN
17	C-810	EROSION AND SEDIMENT CONTROL PHASE 1
18	C-820	EROSION AND SEDIMENT CONTROL PHASE 2
19	C-860	EROSION AND SEDIMENT CONTROL DETAILS
20	C-870	EROSION AND SEDIMENT CONTROL NARRATIVE
21	C-900	TREE INVENTORY & PRESERVATION PLAN
22	C-901	LANDSCAPE PLAN
23	C-902	LANDSCAPE AND TREE PRESERVATION DETAILS
24	E-001	ELECTRICAL COVER SHEET
25	E-002	ELECTRICAL NOTES
26	E-101	ELECTRICAL SITE PLAN
27	E-102	LIGHTING PHOTOMETRIC SITE PLAN
28	E-501	ELECTRICAL DETAILS

P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site\Sheets\CEP\C-000 CIVIL COVER SHEET.dwg Jan 10, 2024 - 11:50am



ISSUED FOR BID 11-10-2023			ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	
			CIVIL COVER SHEET 3108 COLUMBIA PIKE DEMOLITION 3108 COLUMBIA PIKE ARLINGTON COUNTY, VIRGINIA 22204	
		DEWBERRY REVISIONS	SCALE: AS-SHOWN	C-000
				1 OF 28
1 01/09/24 ADDENDUM 1 NO. DATE DESCRIPTION BY		COUNTY REVISIONS		
SUBMITTED DATE: 8/4/2023 DESIGNED: BWB CHECKED: TCC		PROJECT/FILE NO. LDAP23-00146		
SCALE IN FEET 1" = 500' 1 INCH		VCS-83		

P:\PROJECT\50156517_3108 Columbia Pike\CAD\CIVIL-SITE-SURVEY\TOPOGRAPHY SURVEY.dwg Nov 01, 2023 - 4:40pm



SOUTHSIDE REDS, LLC

PID #32-007-019
DB.4533 PG.433

MUDITA REALTY, LLC

PID #32-007-170
DOC #20200100031709

BRUCE E. & LUCILLE B. LAMBERT

PID #32-007-014
DB.3178 PG.678

COUNTY BOARD OF ARLINGTON COUNTY, VIRGINIA

AXUMITE VILLAGE CONDOMINIUM

PID #32-007-172 THRU 32-007-182

NOTES

- THE HORIZONTAL COORDINATE SYSTEM IS REFERENCED TO VIRGINIA STATE GRID COORDINATE SYSTEM VCS 83, US SURVEY FOOT UNITS.
- THE SITE SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88)
- BOUNDARY INFORMATION SHOWN HEREON IS BASED ON EXISTING DEEDS AND PLATS OF RECORDS AND A LIMITED FIELD SURVEY PERFORMED ON 9/20/2022 .
- NO TITLE REPORT FURNISHED. ALL UNDERLYING EASEMENTS MAY NOT BE INDICATED ON THIS PLAT.
- THE TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF JESUS H. ECHEVARRIA, FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON 9/20/2022; AND THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.



LEGEND

- 16000 TOP=211.17
OUT=207.42
- 16005 TOP=211.12
IN=207.12
OUT=207.02
- 16099 TOP=208.57
IN=203.67
OUT=203.58

- AC AIR CONDITIONER
- BOH BUILDING OVERHANG
- CP CONCRETE PAD
- CSW CONCRETE SIDEWALK
- GEN GENERATOR
- IPF IRON PIPE FOUND
- IRF IRON ROD FOUND
- RCP REINFORCED CONCRETE PIPE
- TC TOP OF CURB
- TW TOP OF WALL
- AC AIR CONDITIONER
- C COLUMN
- EHH ELECTRIC HAND HOLE
- ET ELECTRIC TRANSFORMER
- I INLET
- F FLAG POLE
- HP HANDICAP PARKING SPACE
- L LIGHT POLE
- S SIGN
- WM WATER MANHOLE
- CLF CHAIN LINK FENCE
- SD STORM PIPE

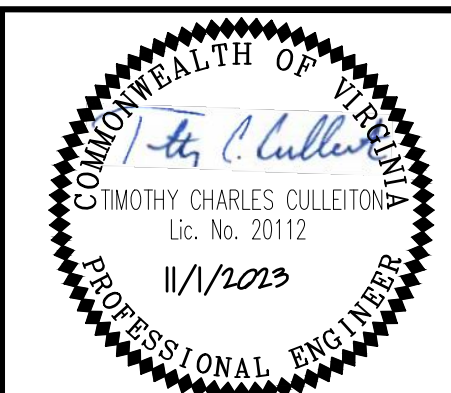
Dewberry Dewberry Engineers Inc.
8401 ARLINGTON BLVD.
FAIRFAX, VA 22031
PHONE: 703.849.0100
FAX: 703.849.0518

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

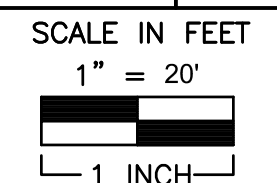
BOUNDARY AND TOPOGRAPHY SURVEY
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

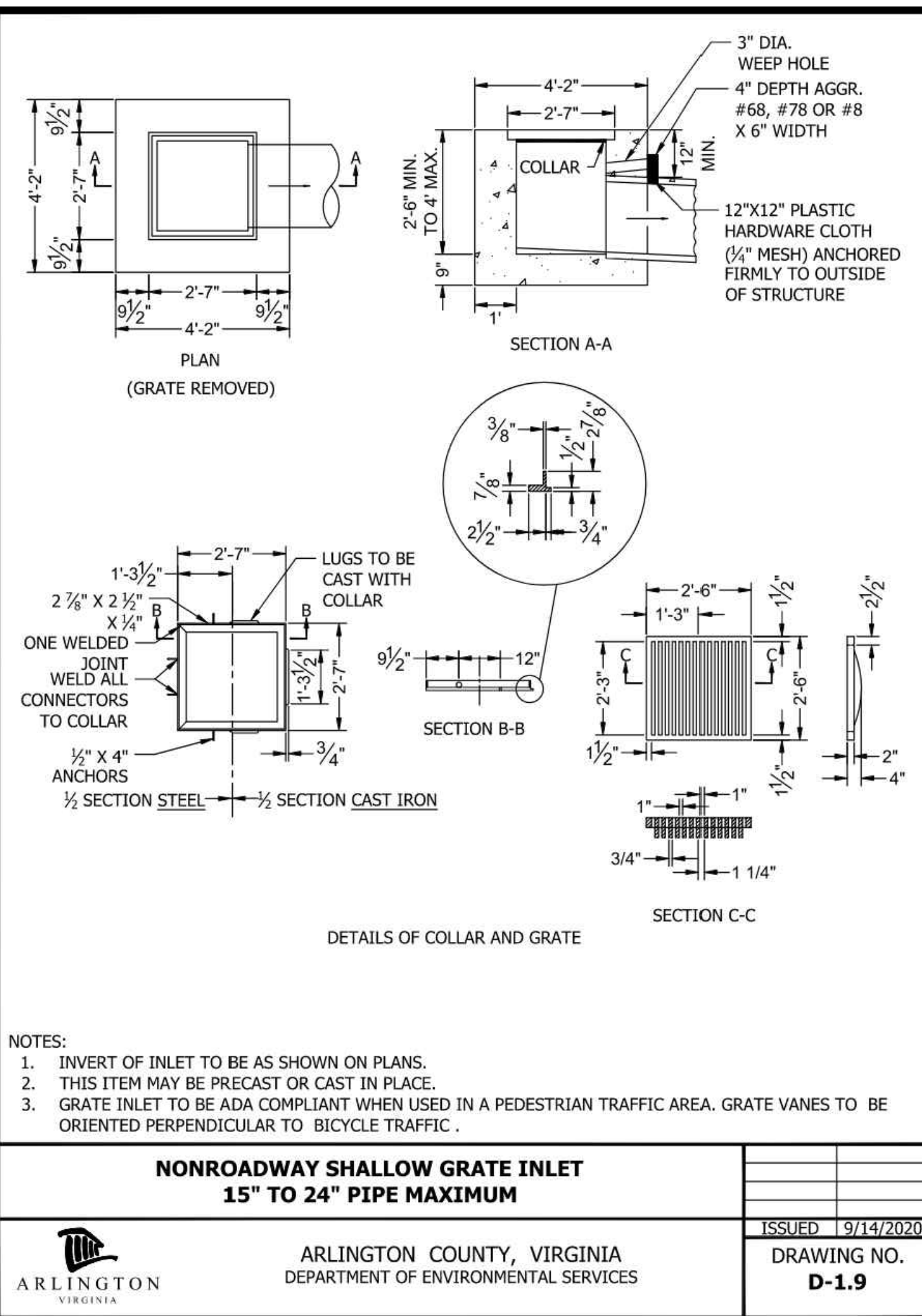
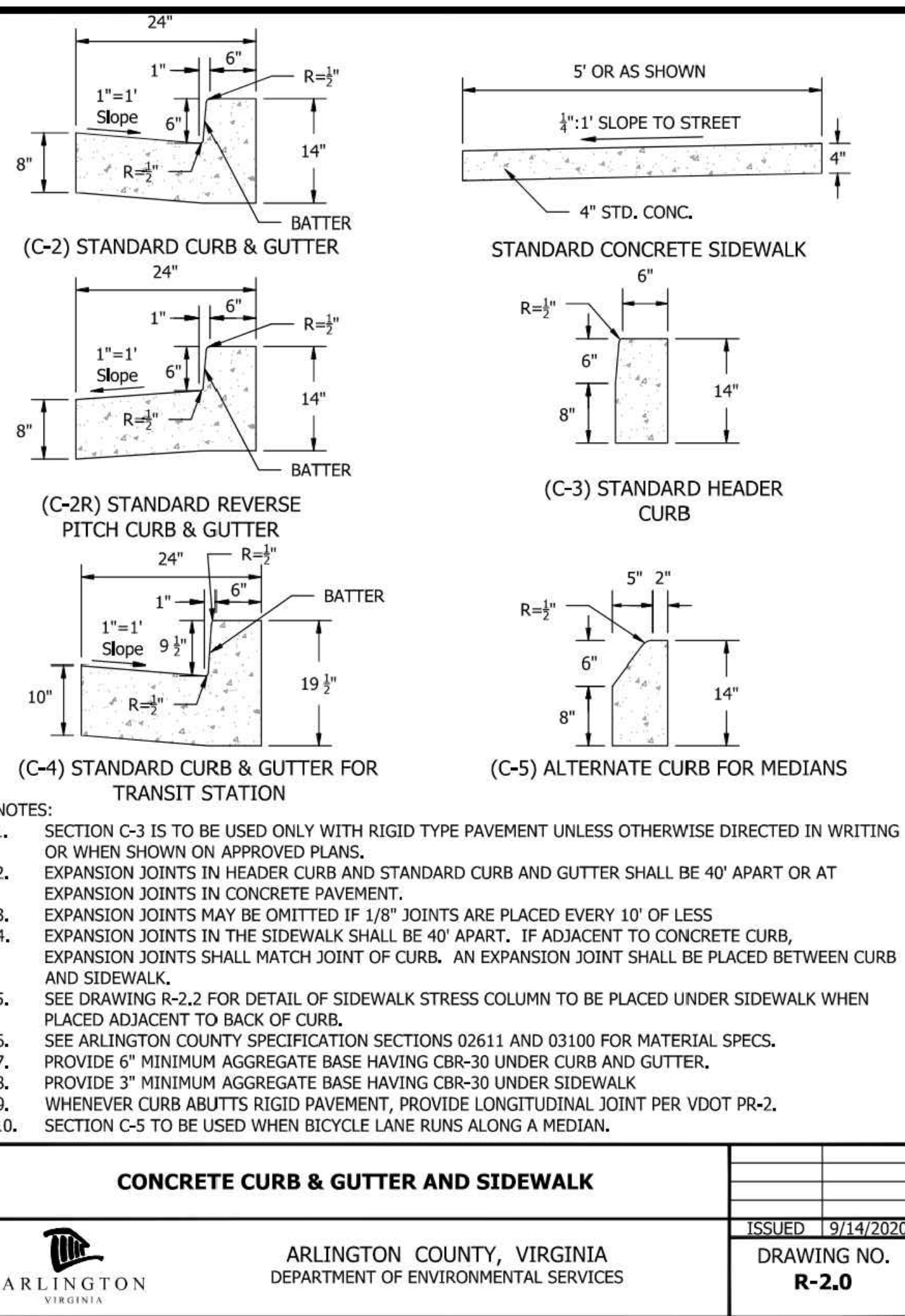
SCALE: AS-SHOWN C-002 3 OF 28

ISSUED FOR BID 11-10-2023



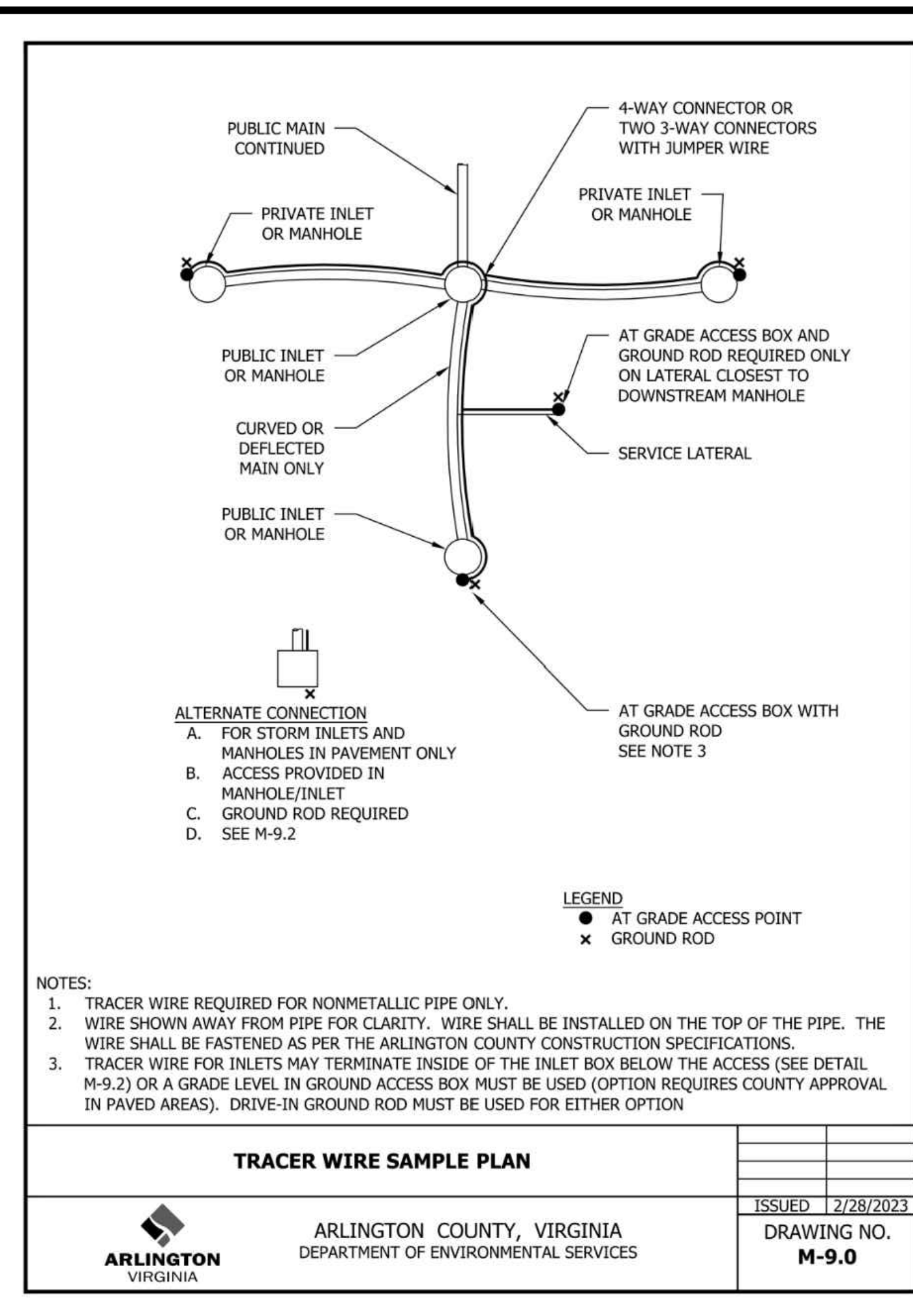
NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			
SUBMITTED DATE:	DESIGNED:	PROJECT/FILE NO.	
8/4/2023	BWB	LDAP23-00146	
CHECKED:	TCC		



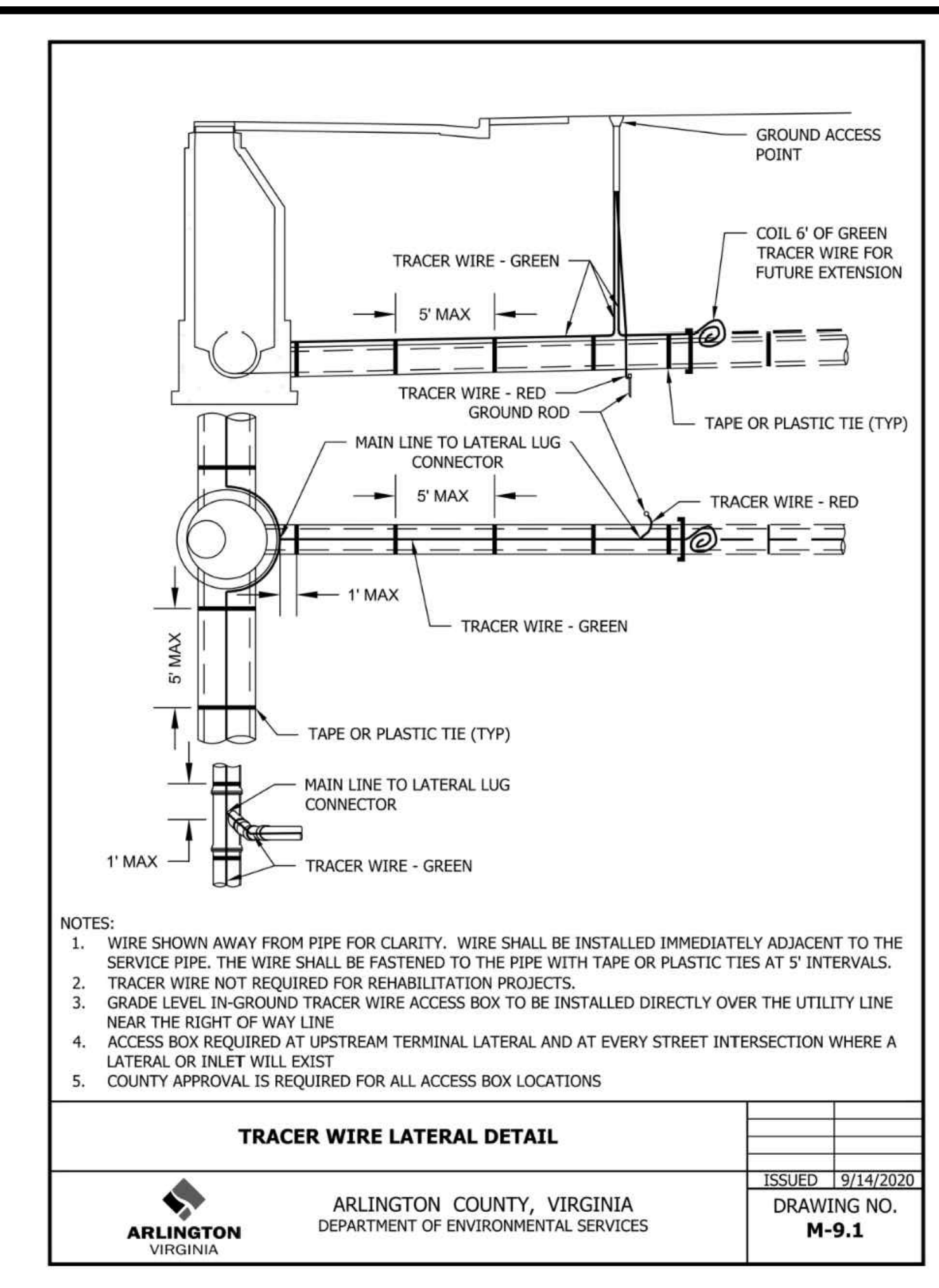


CONCRETE CURB & GUTTER AND SIDEWALK	
ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	ISSUED 9/14/2020 DRAWING NO. R-2.0

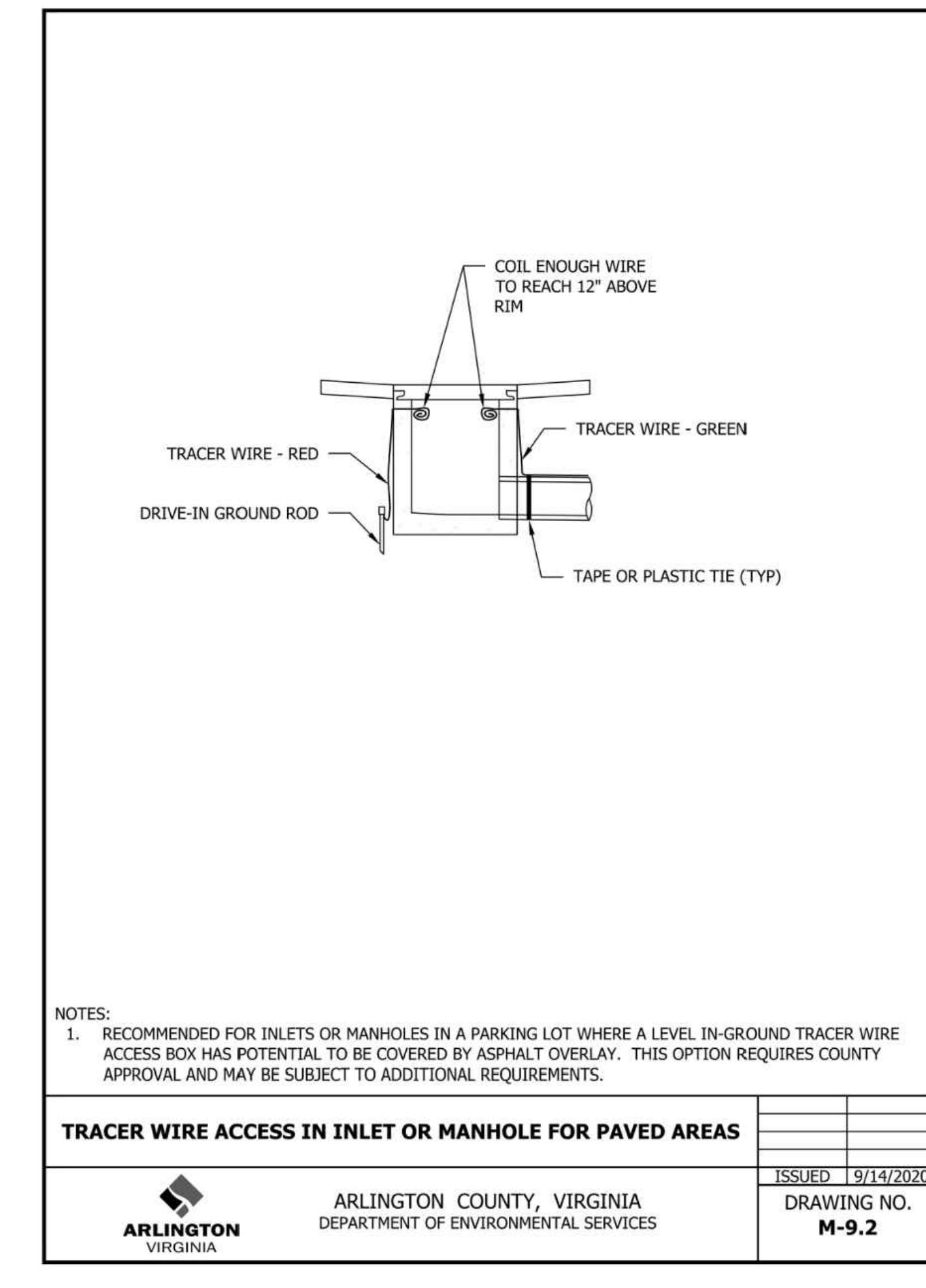
NONROADWAY SHALLOW GRATE INLET 15" TO 24" PIPE MAXIMUM	
ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	ISSUED 9/14/2020 DRAWING NO. D-1.9



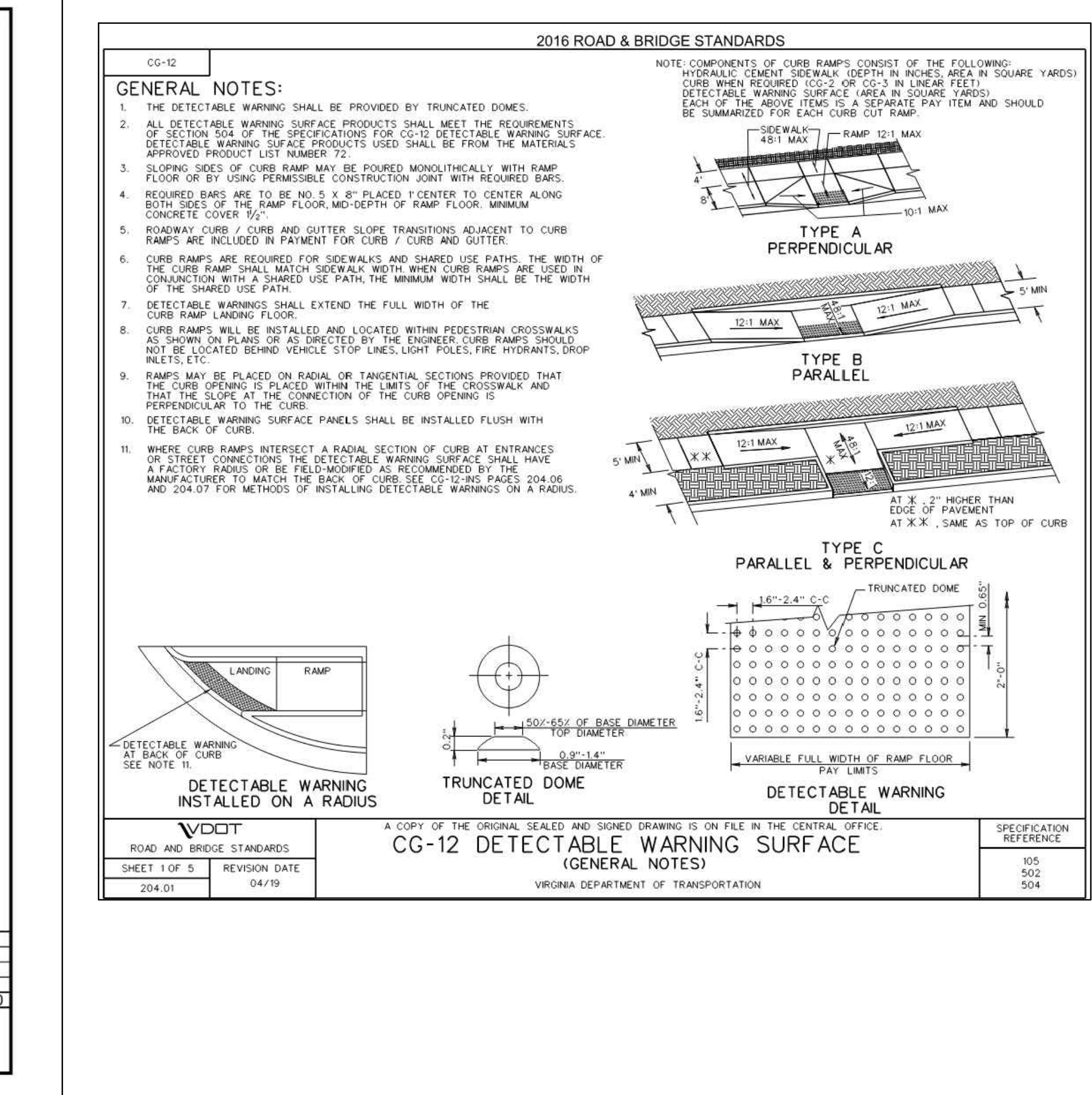
TRACER WIRE SAMPLE PLAN	
ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	ISSUED 2/28/2023 DRAWING NO. M-9.0



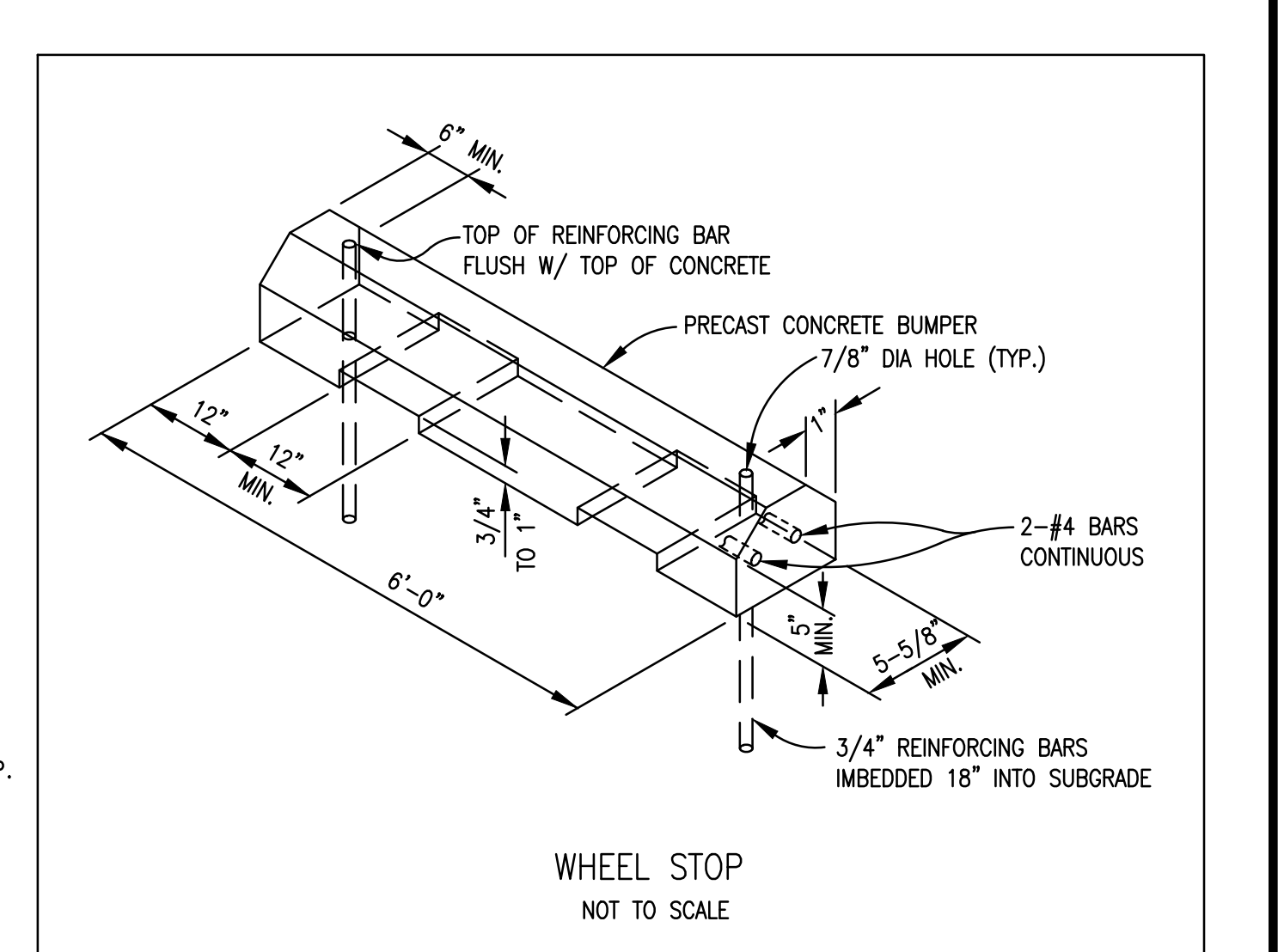
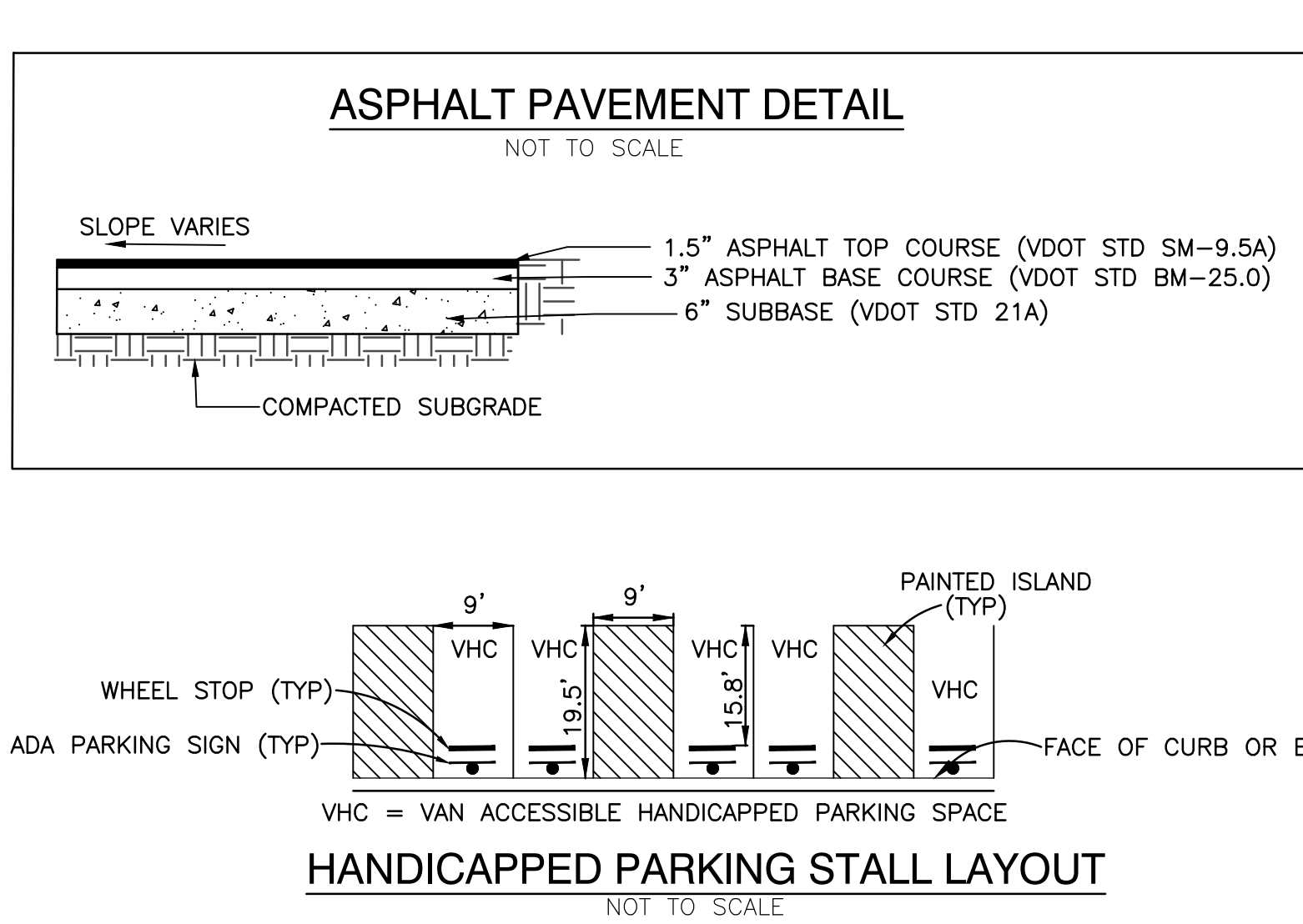
TRACER WIRE LATERAL DETAIL	
ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	ISSUED 9/14/2020 DRAWING NO. M-9.1



TRACER WIRE ACCESS IN INLET OR MANHOLE FOR PAVED AREAS	
ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	ISSUED 9/14/2020 DRAWING NO. M-9.2



CG-12 DETECTABLE WARNING SURFACE (GENERAL NOTES)	
ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	ISSUED 9/14/2020 DRAWING NO. M-9.2



ISSUED FOR BID 11-10-2023	
1 01/09/24	ADDENDUM 1
NO.	DATE
COUNTY REVISIONS	
SUBMITTED DATE:	DESIGNED: BWB
8/4/2023	CHECKED: TCC
PROJECT/FILE NO. LDAP23-00146	
SCALE IN FEET AS SHOWN	
1 INCH	

Dewberry Dewberry Engineers Inc.
 8401 ARLINGTON BLVD. FAIRFAX, VA 22031
 PHONE: 703.849.0100 FAX: 703.849.0518

ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES

SITE DETAILS
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-003** 4 OF 28

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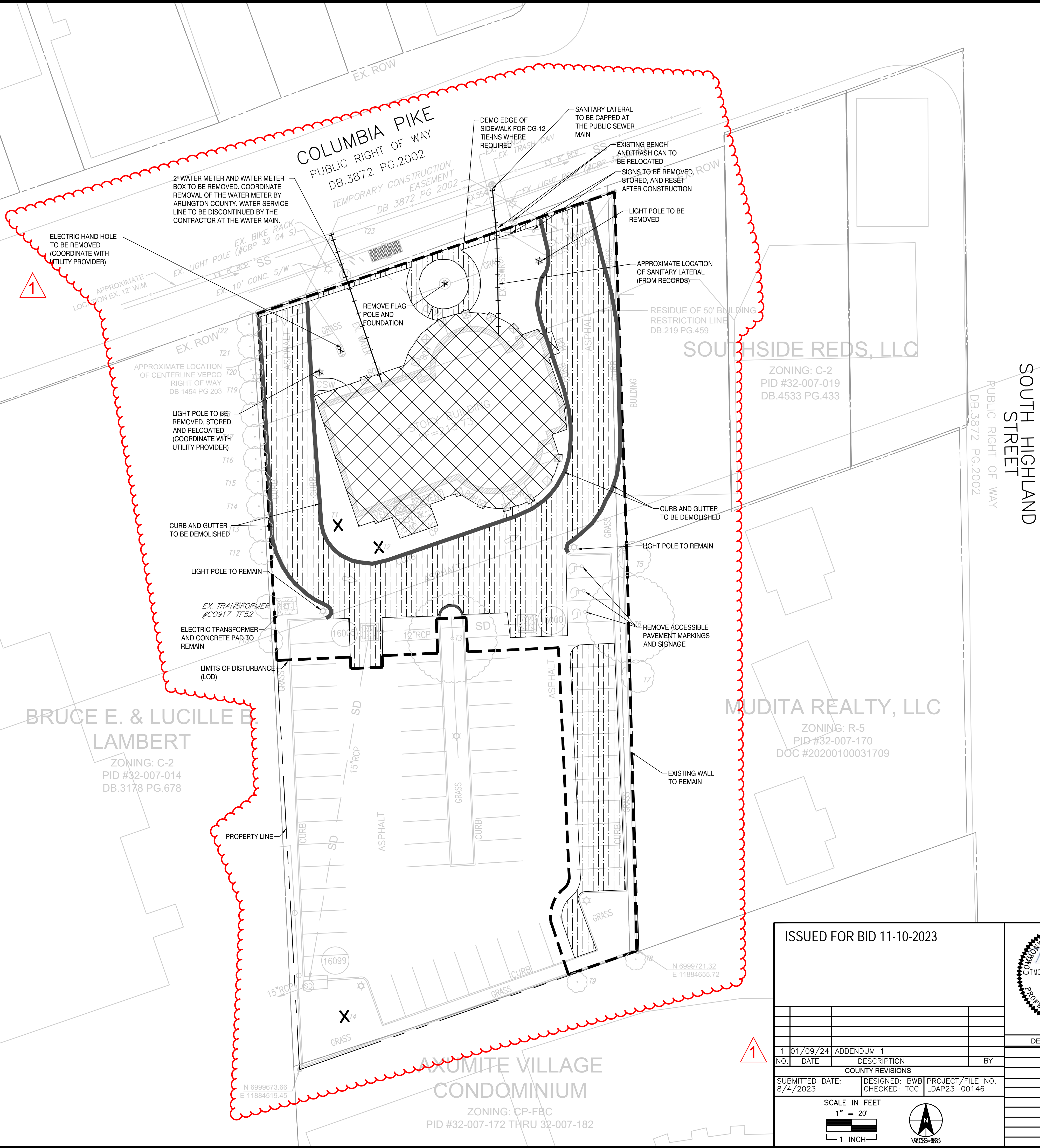
P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site Sheets\CEP-X-100_EXISTING CONDITIONS AND DEMO PLAN.dwg Jun 10, 2024 - 11:50am

EXISTING CONDITIONS & DEMOLITION NOTES

1. THE PROPERTY SHOWN HEREON APPEARS ON ARLINGTON COUNTY REAL PROPERTY IDENTIFICATION MAP NUMBER 074-05, AS REAL PROPERTY CODE (RPC) NUMBER 32-007-018, AND IS ZONED S-3A.
2. THE TOTAL AREA OF THE PROPERTY IS 43,101 SF (0.99 AC).
3. NO FEMA 100 YEAR FLOODPLAIN EXIST WITHIN THE PROJECT AREA PER FEMA FIRM MAP 510130039C EFFECTIVE 08/19/2013
4. THE SOIL TYPES LOCATED WITHIN THE BOUNDARY OF THE PROPERTY ARE URBAN LAND-UDORTHEENTS, PER THE ARLINGTON COUNTY, VIRGINIA SOIL SURVEY. THE HYDROLOGICAL SOIL GROUP RATING IS D.
5. IN ACCORDANCE WITH ARLINGTON COUNTY, VIRGINIA STREAMS, WATERSHEDS, AND RESOURCE PROTECTION AREAS MAP, THE PROPERTY IS NOT LOCATED WITHIN A RESOURCE PROTECTION AREA.
6. WHERE EXISTING PAVEMENT IS TO BE REMOVED WITHIN THE CRITICAL ROOT ZONE OF A TREE, LEAVE PAVEMENT IN PLACE AS LONG AS POSSIBLE DURING CONSTRUCTION. REMOVE PAVEMENT WITH THE ROLLBACK TECHNIQUE. KEEP EQUIPMENT ON PAVING, AND LIMIT OVERDIG. ONCE PAVEMENT HAS BEEN REMOVED, VEHICULAR TRAFFIC IS STRICTLY PROHIBITED UNTIL PAVING IS REPLACED. REPLACED PAVING SHOULD BE A BRIDGED, TREE-FRIENDLY DETAIL WITH NO COMPACTION BEYOND 85%. COORDINATE WITH THE URBAN FORESTER WHEN PROCESS OR CONSTRUCTION DETAILS CAN'T FOLLOW THIS SPECIFICATION. THIS NOTE DOES NOT APPLY TO ROADWAYS UNLESS SPECIFICALLY CALLED OUT ON PLAN.
7. WHERE CURB IS TO BE REMOVED WITHIN THE CRITICAL ROOT ZONE OF A TREE IT SHALL BE DONE BY HAND AND ROOTS SHALL BE PRUNED BY HAND. WORK SHALL BE COORDINATED WITH THE URBAN FORESTER TO LIMIT DAMAGE TO EXISTING TREES.

DEMOLITION LEGEND

- EX. CURB & GUTTER TO BE DEMOLISHED
- EX. UTILITY TO BE ABANDONED/REMOVED
- EX. BUILDING /STRUCTURE TO BE DEMOLISHED
- EX. PARKING LOT/HARDSCAPE TO BE DEMOLISHED
- LIMITS OF CLEARING AND GRADING



**ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES**

EXISTING CONDITIONS AND DEMO PLAN
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

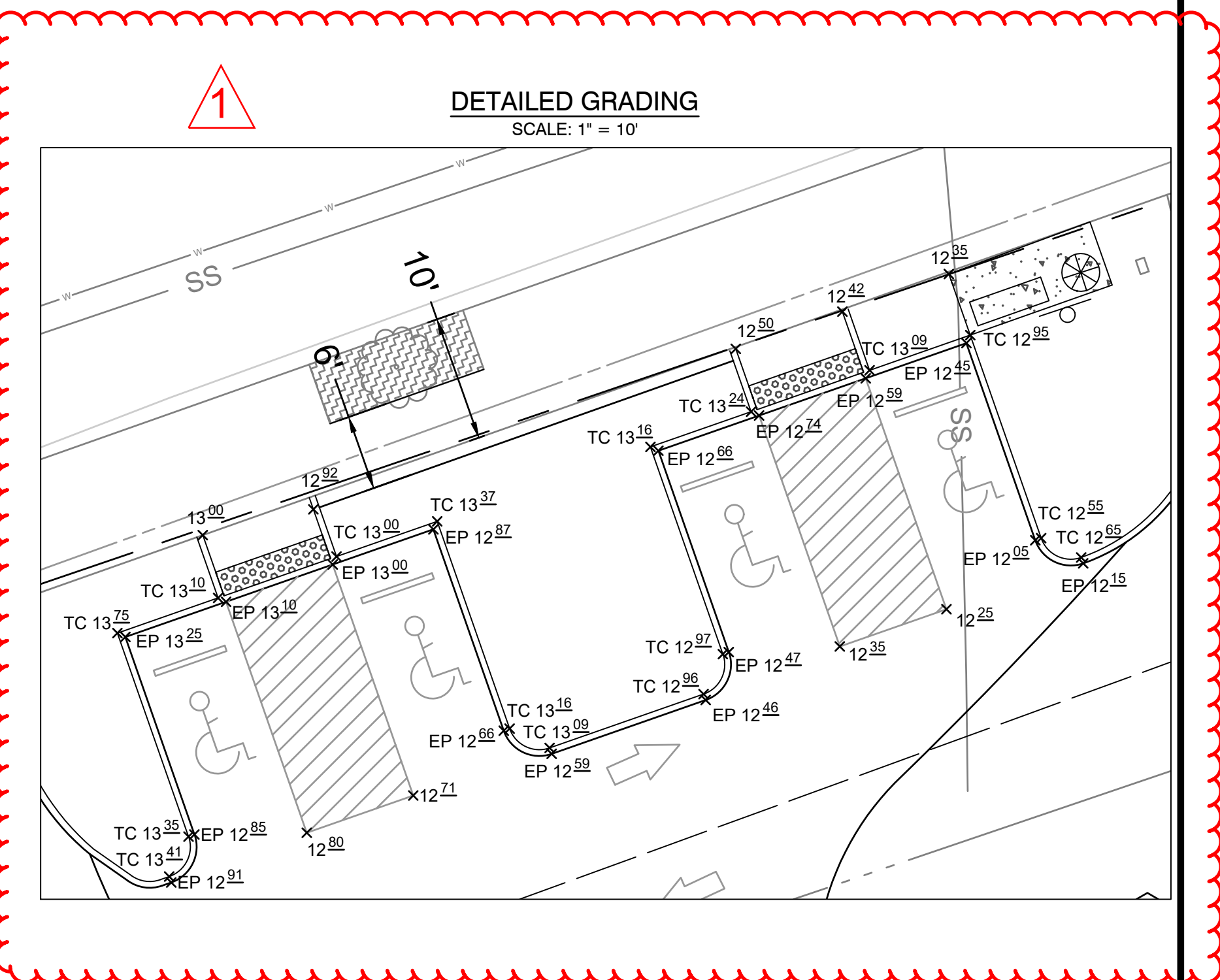
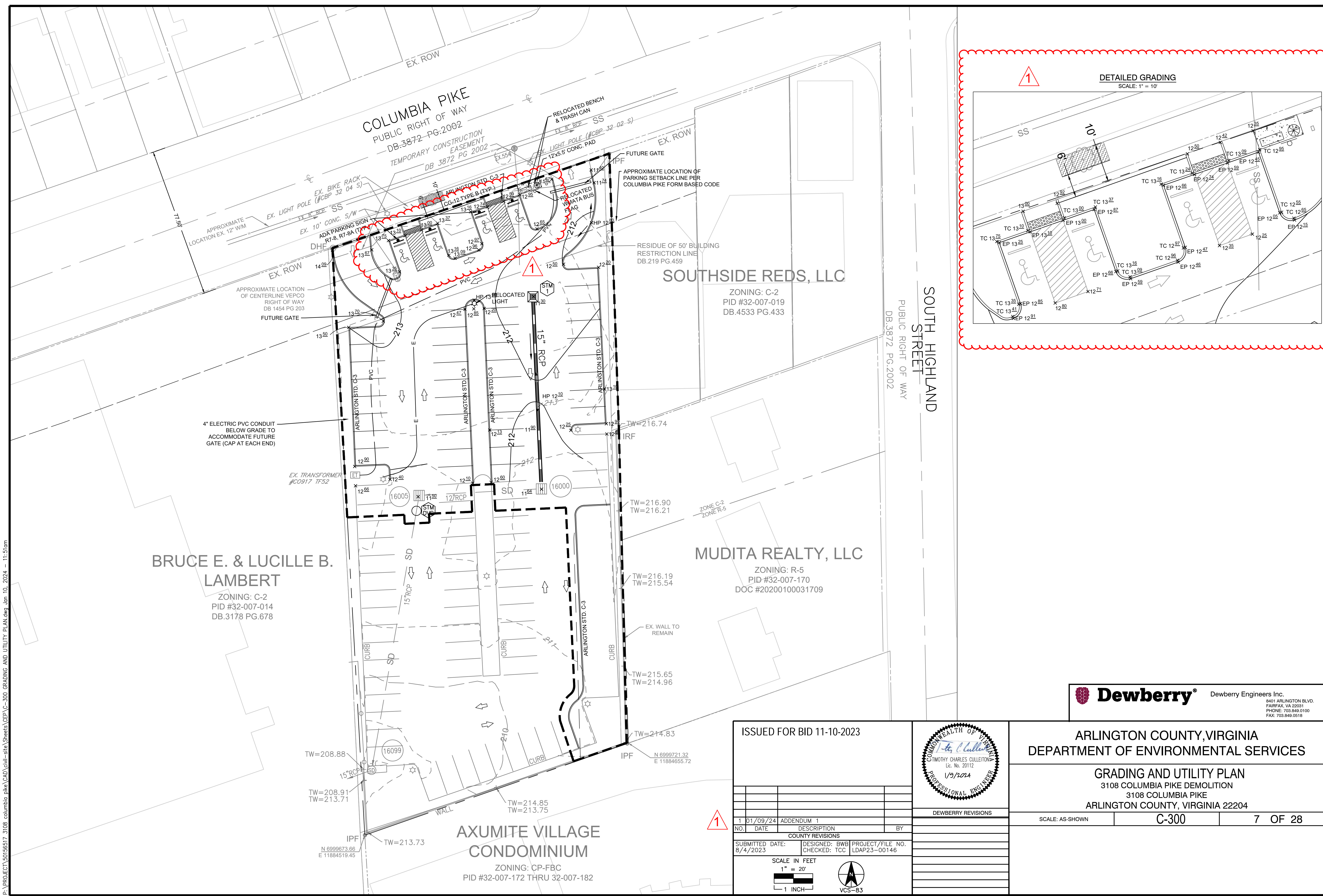
SCALE: AS-SHOWN	C-100	5 OF 28
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ISSUED FOR BID 11-10-2023

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE:		DESIGNED: BWB	PROJECT/FILE NO.
8/4/2023		CHECKED: TCC	LDAP23-00146

SCALE IN FEET
1" = 20'
1 INCH

P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site\Sheets\CEP\C-300 GRADING AND UTILITY PLAN.dwg, Jan 10, 2024 - 11:51am



BRUCE E. & LUCILLE B. LAMBERT
 ZONING: C-2
 PID #32-007-014
 DB.3178 PG.678

SOUTHSIDE REDS, LLC
 ZONING: C-2
 PID #32-007-019
 DB.4533 PG.433

MUDITA REALTY, LLC
 ZONING: R-5
 PID #32-007-170
 DOC #20200100031709

AXUMITE VILLAGE CONDOMINIUM
 ZONING: CP-FBC
 PID #32-007-172 THRU 32-007-182

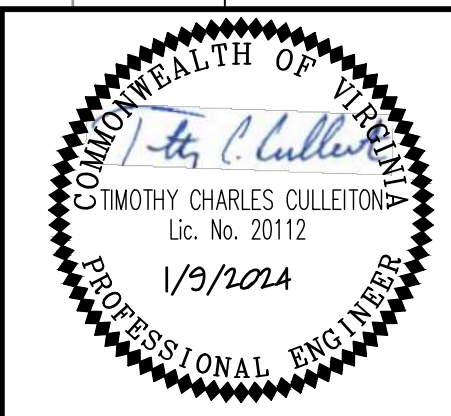
Dewberry Dewberry Engineers Inc.
 8401 ARLINGTON BLVD. FAIRFAX, VA 22031
 PHONE: 703.849.0100 FAX: 703.849.0518

ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES

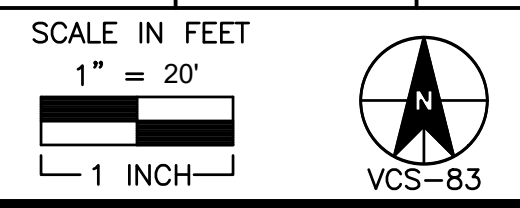
GRADING AND UTILITY PLAN
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-300** 7 OF 28

ISSUED FOR BID 11-10-2023



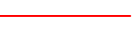






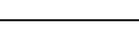


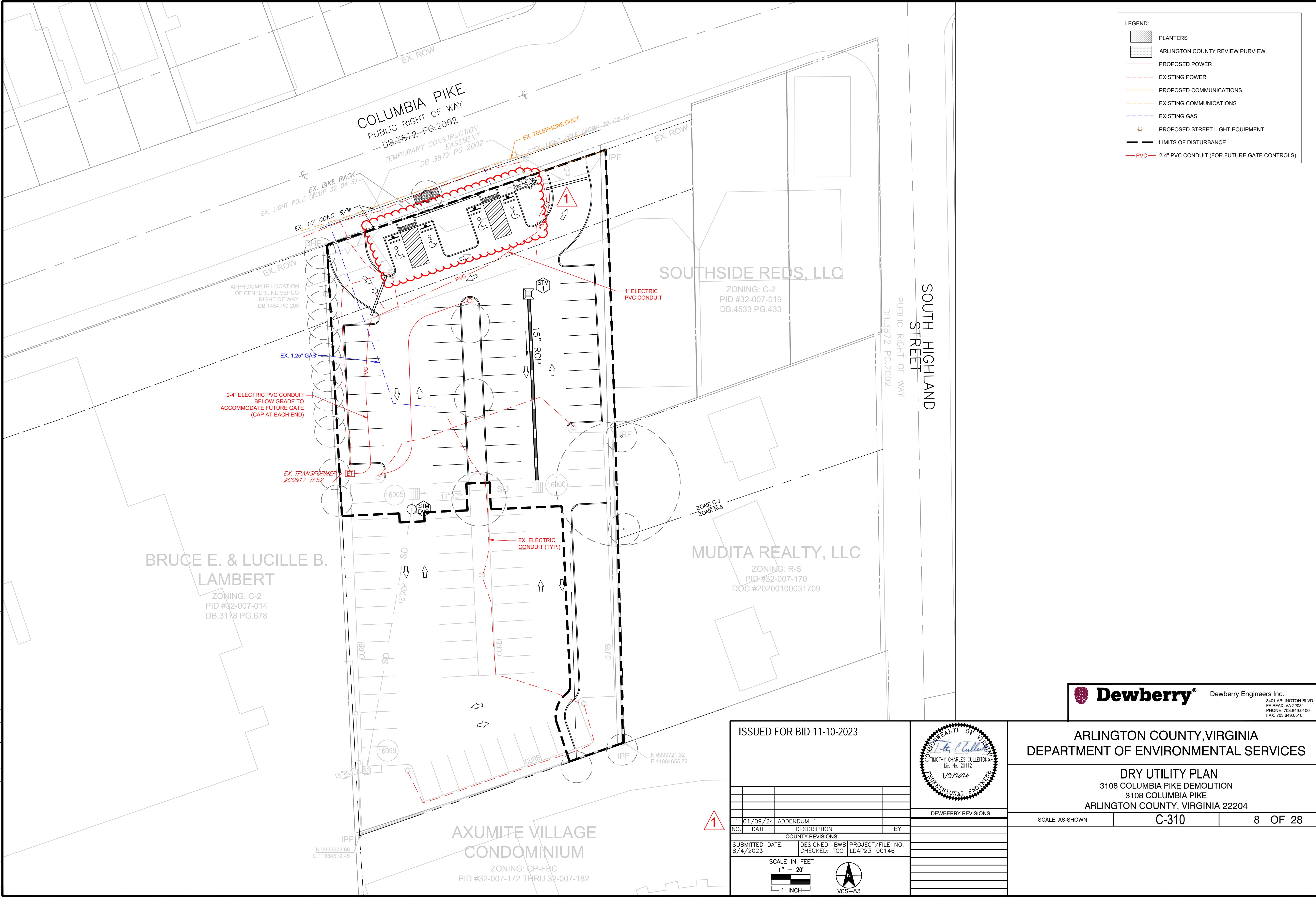
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SUBMITTED DATE: 8/4/2023		DESIGNED: BWB	PROJECT/FILE NO. LDAP23-00146
		CHECKED: TCC	



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LEGEND:

-  PLANTERS
-  ARLINGTON COUNTY REVIEW PURVIEW
-  PROPOSED POWER
-  EXISTING POWER
-  PROPOSED COMMUNICATIONS
-  EXISTING COMMUNICATIONS
-  EXISTING GAS
-  PROPOSED STREET LIGHT EQUIPMENT
-  LIMITS OF DISTURBANCE
-  PVC 2-4" PVC CONDUIT (FOR FUTURE GATE CONTROLS)



BRUCE E. & LUCILLE B. LAMBERT
 ZONING: C-2
 PID #32-007-014
 DB.3178 PG.678

SOUTHSIDE REDS, LLC
 ZONING: C-2
 PID #32-007-019
 DB.4533 PG.433

MUDITA REALTY, LLC
 ZONING: R-5
 PID #32-007-170
 DOC #20200100031709

AXUMITE VILLAGE CONDOMINIUM
 ZONING: CP-FBC
 PID #32-007-172 THRU 32-007-182

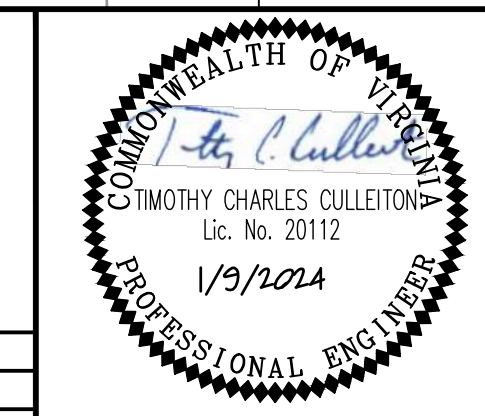
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 8401 ARLINGTON BLVD.
 FAIRFAX, VA 22031
 PHONE: 703.849.0100
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ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRY UTILITY PLAN
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-310** 8 OF 28

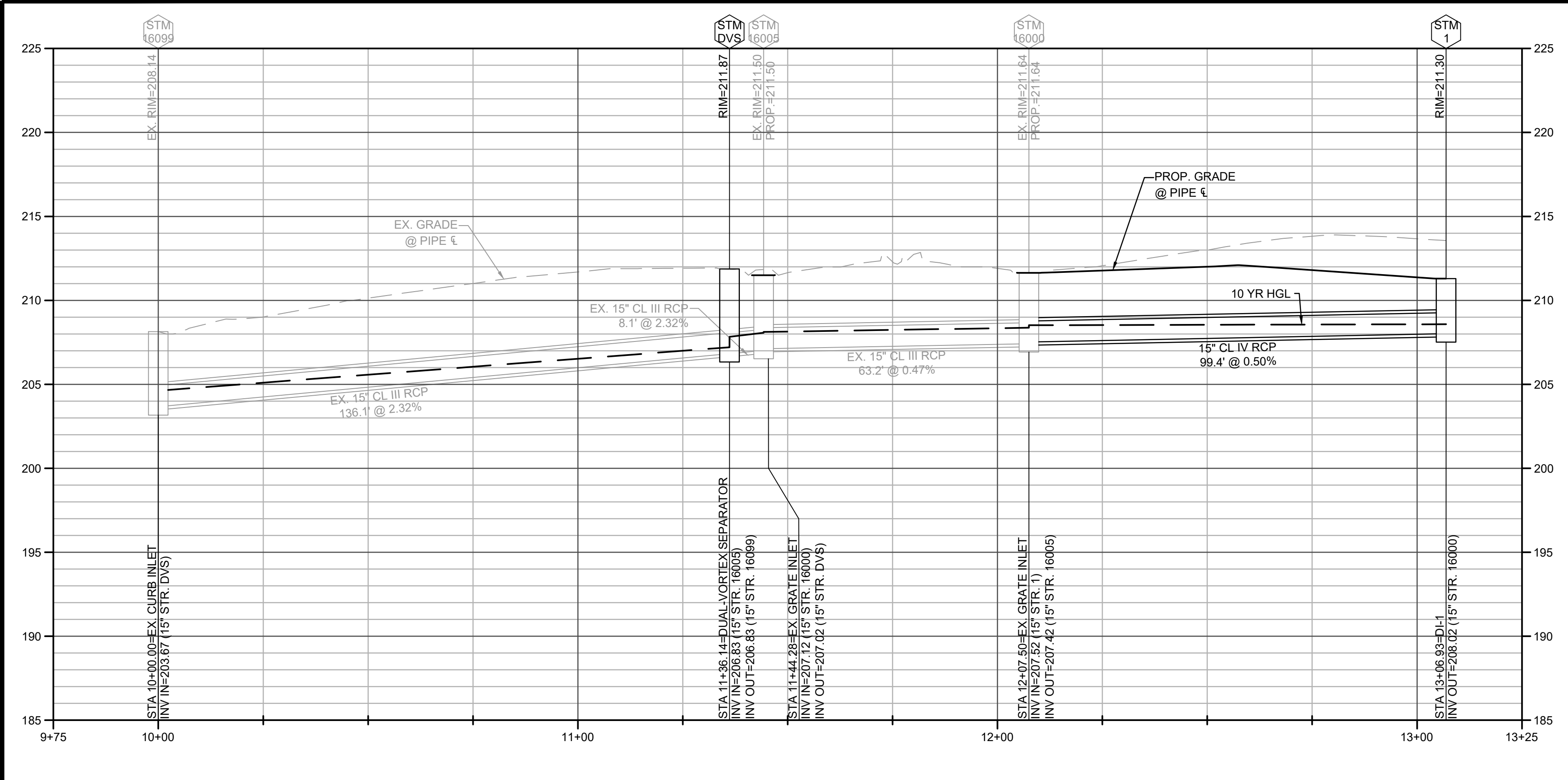
ISSUED FOR BID 11-10-2023



DEWBERRY REVISIONS	
NO.	DESCRIPTION
1	01/09/24 ADDENDUM 1
NO.	DATE DESCRIPTION BY
COUNTY REVISIONS	
SUBMITTED DATE:	DESIGNED: BWB PROJECT/FILE NO.
8/4/2023	CHECKED: TCC LDAP23-00146
SCALE IN FEET	
1" = 20'	
1 INCH	



VCS-83



STORM SEWER DESIGN COMPUTATIONS

FROM	OUTLET TO	INC. DRAINAGE AREA (ACRES)	ACQUM. DRAINAGE AREA (ACRES)	"C" COEFFICIENT	INCREMENTAL CA	ACCUMULATED CA	TIME TO INLET (MIN)	RAINFALL INTENSITY (IN/HR)	INCREMENTAL "Q" (CFS)	ACCUMULATED "Q" (CFS)	UPPER INVERT ELEVATION	LOWER INVERT ELEVATION	FALL (FT)	LENGTH OF RUN (FT)	SLOPE (%)	PIPE DIAMETER (IN)	"n"	MAXIMUM "Q" (CFS)	"V" VELOCITY (FPS)	FLOW TIME (SEC)
16000	16005	0.06	0.22	0.83	0.05	0.19	5.0	6.84	0.3	1.3	207.42	207.12	0.30	63.2	0.47%	15	0.013	4.4	3.1	20.4
16005	DVS	0.20	0.42	0.80	0.16	0.35	5.0	6.84	1.1	2.4	207.02	206.83	0.19	8.1	2.33%	15	0.013	9.9	6.5	1.3
DVS	16099	0.00	0.42	0.00	0.00	0.35	5.0	6.84	0.0	2.4	206.83	203.67	3.16	136.1	2.32%	15	0.013	9.8	6.4	21.1

HYDRAULIC GRADE LINE COMPUTATIONS

Inlet Str.	Outlet Water Surf Elev (ft)	Do (in)	Qo (cfs)	Lo (ft)	Sfo (%)	Hf (ft)	JUNCTION LOSS														Final H (ft)	Inlet Water Surf Elev (ft)	Opening Elev. (ft)
							Vo (fps)	Ho (ft)	Qi (cfs)	Vi (fps)	QVi	Vi ² /2g	Hi (ft)	Angle (deg)	Ha (ft)	Ht (ft)	1.3Ht	0.5Ht					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)			
DVS	204.67	15	2.40	136.14	0.14	0.19	6.45	0.16	2.40	6.46	15.50	0.65	0.23	0	0.00	0.39		0.19	0.38	205.05	211.87		
16005	207.83	15	2.40	8.14	0.14	0.01	6.46	0.16	1.30	3.10	4.04	0.15	0.05	77	0.10	0.31	0.40	0.20	0.21	208.04	211.12		
16000	208.12	15	1.30	63.22	0.04	0.03	3.10	0.04	0.96	2.90	2.79	0.13	0.05	90	0.09	0.17	0.23		0.25	208.37	211.17		
STM 1	208.52	15	0.96	99.43	0.02	0.02	2.90	0.03	0.00	0.00	0.00	0.00	0.00	0	0.00	0.03	0.04		0.06	208.58	211.80		

DI-1 INLET DESIGN COMPUTATIONS

Qi (Orifice) = $C_o \cdot A \cdot (2gd)^{0.5}$	$C_o = 0.67$ (For $d > 0.8'$)					
Qi (Weir) = $C_w \cdot P \cdot d^{1.5}$	$C_w = 3.00$ (For $d < 0.8'$)					
$g \text{ (ft/s}^2\text{)} = 32.17$						
Area (sf) = 2.33	A (50% Clogged) = 1.17	$C_o \cdot A = 0.78$				
Perimeter (ft) = 9.00	P (50% Clogged) = 4.50	$C_w \cdot P = 13.50$				
Number	Q Incr. (cfs)	D (weir)	D (orifice)	Controlling D	Top Elev	10 YR-WSE
STM 1	0.96	0.17'	0.02'	Weir	211.30	211.47



ISSUED FOR BID 11-10-2023

NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			
SUBMITTED DATE:	DESIGNED: BWB	PROJECT/FILE NO.	
8/4/2023	CHECKED: TCC	LDAP23-00146	

SCALE IN FEET
1" = 20'
1 INCH

DEWBERRY REVISIONS

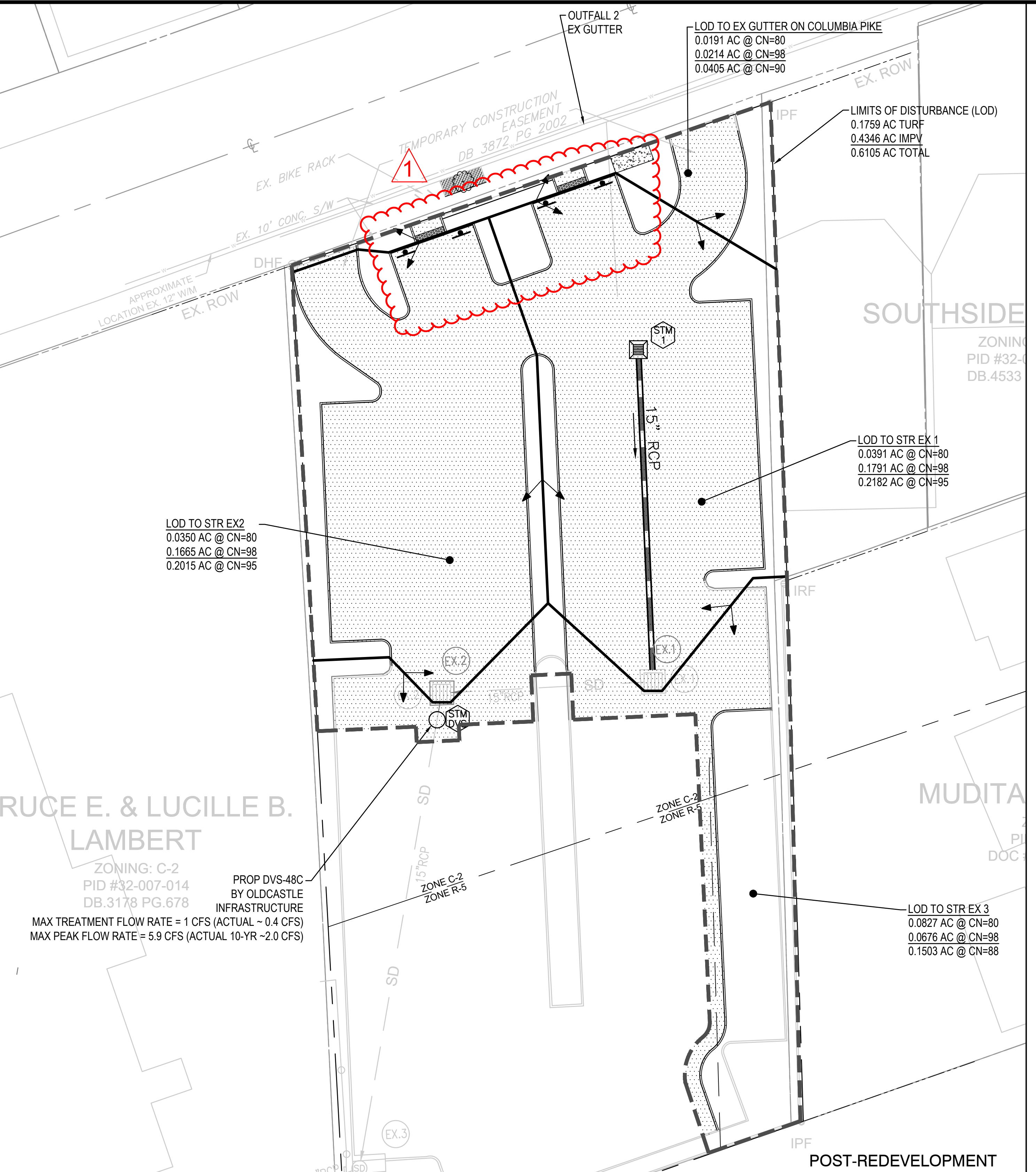
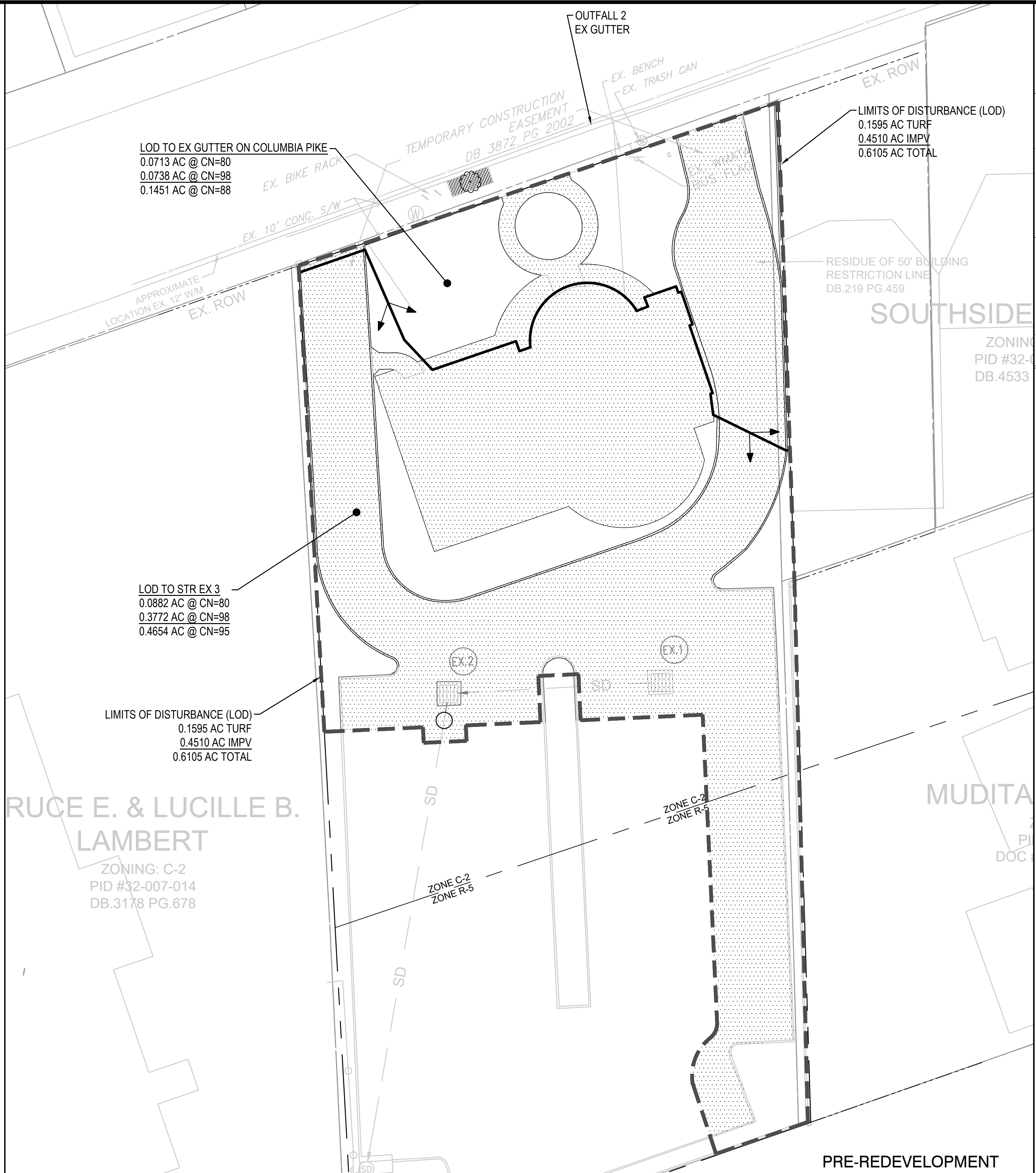
ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

STORM SEWER PLAN, PROFILES AND COMPUTATIONS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-320** 9 OF 28

P:\PROJECT\50156517_3108 Columbia Pike\CAD\CIVIL-SITE\SHEETS\CEP\C-320 STORM SEWER PLAN, PROFILES AND COMPUTATIONS.dwg Nov. 08, 2023 - 2:03pm

P:\PROJECT\50156517_3108_columbia_pike\CAD\civil-site\Sheets\C-330-STORMWATER MANAGEMENT PLAN.dwg Jun 10, 2024 - 11:53am



DRAINAGE AREA MAP NARRATIVE

PRE-REDEVELOPMENT
THE EXISTING SITE CONSISTS OF AN OFFICE BUILDING, ASPHALT PARKING LOT, AND CLOSED STORM SEWER SYSTEM. A MAJORITY OF THE SITE DRAINS TO A CLOSED STORM SYSTEM THROUGH ONSITE INLETS INCLUDING TWO GRATE INLETS (EX 1, EX2) AND A CURB INLET (EX3). THE REMAINDER OF THE SITE FLOWS TOWARD COLUMBIA PIKE INTO THE GUTTERPAN CONTINUING EAST TOWARDS S. HIGHLAND STREET.

POST-REDEVELOPMENT
DRAINAGE PATTERNS REMAIN LARGELY THE SAME IN THE POST-REDEVELOPMENT CONDITION. WITH THE EXPANSION OF THE ASPHALT PARKING LOT THERE IS ONE ADDITIONAL GRATE INLET (STR. 1) THAT TIES TO THE EXISTING CLOSED SYSTEM. THE SITE IMPROVEMENTS SLIGHTLY ALTER THE ONSITE DRAINAGE PATTERNS WITH LESS AREA DRAINING OVERLAND TOWARDS COLUMBIA PIKE.

IMPERVIOUS TABULATION

	PRE-DEVELOPMENT	POST-DEVELOPMENT
IMPERVIOUS	0.4510 AC.	0.4346 AC.
TURF	0.1595 AC.	0.1759 AC.
TOTAL	0.6105 AC.	0.6105 AC.

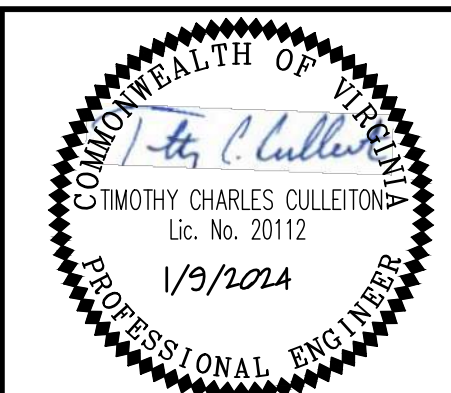
Dewberry Dewberry Engineers Inc.
8401 ARLINGTON BLVD. FAIRFAX, VA 22031
PHONE: 703.849.0100 FAX: 703.849.0518

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRAINAGE AREA MAPS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN C-330 10 OF 28

ISSUED FOR BID 11-10-2023



NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	

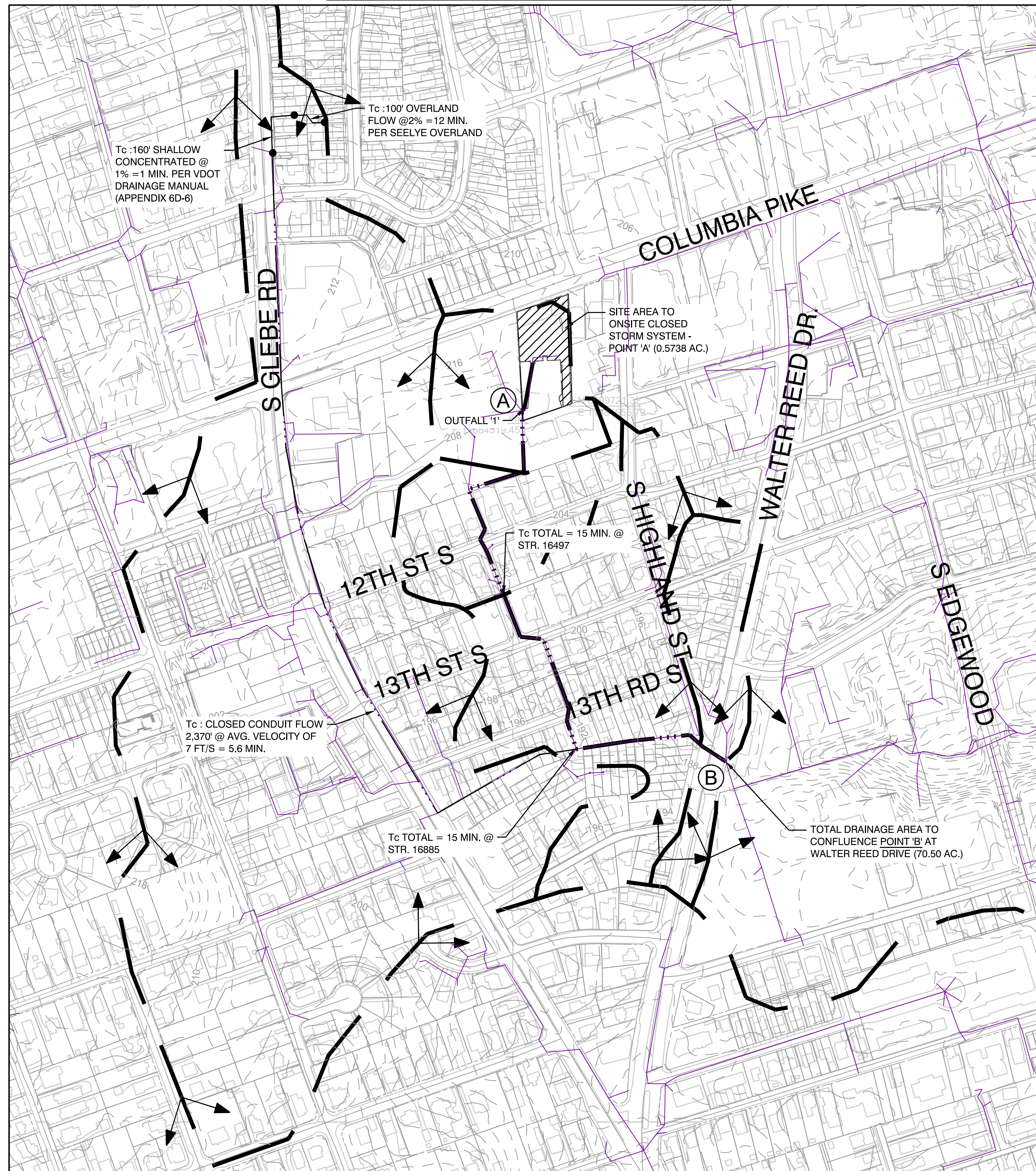
COUNTY REVISIONS

SUBMITTED DATE: 8/4/2023
DESIGNED: BWB
CHECKED: TCC
PROJECT/FILE NO. LDAP23-00146

SCALE IN FEET
1" = 20'
1 INCH



STORM DRAINAGE OUTFALL AND EXTENT OF REVIEW MAP



OUTFALL ANALYSIS (2-YR) - STORM SEWER COMPUTATIONS

OUTLET		INC. DRAINAGE AREA (ACRES)		ACCUM. DRAINAGE AREA (ACRES)	% COEFFICIENT	INCREMENTAL CA	ACCUMULATED CA	TIME TO INLET (MIN)	RAINFALL INTENSITY (IN/HR)	INCREMENTAL "Q" (CFS)	ACCUMULATED "Q" (CFS)	UPPER INVERT ELEVATION	LOWER INVERT ELEVATION	FALL (FT)	LENGTH OF RUN (FT)	SLOPE (%)	PIPE DIAMETER (IN)	"n"	MAXIMUM "Q" (CFS)	"V" VELOCITY (FPS)	FLOW TIME (SEC)	RIM ELEV. (GIS)	APPROX. COVER
EX.3	D-8	1.23	1.23	0.80	0.98	0.98	5.0	5.15	5.1	5.1	203.45	202.95	0.50	37.0	1.35%	21	0.013	18.4	6.4	5.8	208.6	3.4	
D-8	EX-2	0.68	1.91	0.80	0.54	1.53	5.0	5.15	2.8	7.9	202.95	201.21	1.74	128.5	1.35%	21	0.013	18.4	7.2	17.7	207.0	2.3	
EX-2	EX-1	0.12	2.03	0.80	0.10	1.62	5.0	5.15	0.5	8.4	201.11	199.69	1.42	162.0	0.88%	21	0.013	14.8	6.3	25.8	207.0	4.1	
EX-1	16366	2.06	4.09	0.80	1.65	3.27	5.0	5.15	8.5	16.9	199.59	197.59	2.00	119.8	1.67%	24	0.013	29.2	9.6	12.5	205.9	4.3	
16366	16389	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	197.49	197.00	0.49	31.8	1.54%	24	0.013	28.1	9.2	3.4	204.2	4.7	
16389	16418	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	196.90	196.20	0.70	41.6	1.68%	24	0.013	29.3	9.6	4.3	203.9	5.0	
16418	16480	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	196.10	195.00	1.10	92.8	1.19%	24	0.013	24.6	8.4	11.0	203.8	5.7	
16480	16497	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	194.90	194.50	0.40	26.3	1.52%	30	0.013	50.6	9.1	2.9	203.8	6.4	
16497	16606	4.36	8.45	0.75	3.27	6.54	10.0	4.12	13.5	27.0	194.40	193.10	1.30	127.9	1.02%	30	0.013	41.4	8.9	14.3	203.5	6.6	
16606	16610	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	193.00	192.30	0.70	64.8	1.08%	30	0.013	42.6	9.1	7.1	203.5	8.0	
16610	16801	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	192.20	186.10	6.10	204.7	2.98%	30	0.013	70.8	13.3	15.4	202.0	7.3	
16801	16838	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	186.00	185.50	0.50	37.6	1.33%	30	0.013	47.3	9.9	3.8	191.9	3.4	
16838	16885	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	185.40	184.50	0.90	82.1	1.10%	30	0.013	42.9	9.2	9.0	192.1	4.2	
16885	16872	47.13	55.58	0.75	35.35	41.89	15.0	3.45	121.9	144.5	184.40	183.00	1.40	155.2	0.90%	54	0.013	186.8	13.0	12.0	192.2	3.3	
16872	16862	0.00	55.58	0.00	0.00	41.89	15.0	3.45	0.0	144.5	182.90	180.00	2.90	163.1	1.78%	54	0.013	262.2	16.8	9.7	190.2	2.8	
16862	16883	0.00	55.58	0.00	0.00	41.89	15.0	3.45	0.0	144.5	179.90	179.00	0.90	48.1	1.87%	54	0.013	269.0	17.2	2.8	186.8	2.4	
16883	16897	11.15	66.73	0.78	8.70	50.59	15.0	3.45	0.0	174.5	178.90	178.00	0.90	32.0	2.81%	54	0.013	329.8	20.7	1.5	186.1	2.7	
16897	16911	0.00	66.73	0.00	0.00	50.59	15.0	3.45	0.0	174.5	177.90	177.30	0.60	45.2	1.33%	54	0.013	226.6	15.6	2.9	186.1	3.7	
16911	16982	3.76	70.49	0.80	3.01	53.59	15.0	3.45	10.4	184.9	177.20	176.00	1.20	84.3	1.42%	54	0.013	234.6	16.3	5.2	185.6	3.9	

INVERTS PER ARLINGTON CO. APPROVED USE PERMIT #U-3224-09-1

PIPE LENGTHS AND STR. #S PER ARLINGTON CO. GIS OPEN DATA

STORMWATER MANAGEMENT PLAN AND ADEQUATE OUTFALL NARRATIVE

AS SHOWN, THE 3108 COLUMBIA PIKE DEMOLITION PROJECT IS DEFINED BY APPROXIMATELY 0.6105 ACRES OF DISTURBED AREA. THE PROJECT WILL RESULT IN A SMALL DECREASE IN IMPERVIOUS COVER OF APPROXIMATELY 0.0114 ACRES. THE 3108 COLUMBIA PIKE SITE IS LOCATED WITHIN THE ARLINGTON BRANCH WATERSHED.

WATER QUALITY NARRATIVE (ARLINGTON COUNTY CODE §60-11.A - 9VAC25-870-65)

BECAUSE THE DISTURBED AREA (SITE) INCLUDES NEW DEVELOPMENT ON PRIOR DEVELOPED LAND, THE VIRGINIA RUNOFF REDUCTION METHOD (VRRM) REDEVELOPMENT WORKSHEET IS USED TO SHOW WATER QUALITY COMPLIANCE. SEE SHEETS C-332-C-333.

THE TOTAL PROJECT LOAD REDUCTION REQUIRED FOR PHOSPHORUS IS ESTIMATED TO BE 0.0950 LB/YR. THE ESTIMATED TOTAL PROJECT LOAD REDUCTION ACHIEVED FOR PHOSPHORUS IS 0.1806 LB/YR. THIS REDUCTION WILL BE PROVIDED BY ONE (1) MANUFACTURED TREATMENT DEVICES (MTD) CONSISTING OF ONE (1) DUAL-VORTEX SEPARATOR (DVS-48C). THIS MTD IS A HYDRODYNAMIC SEPARATOR BY OLDCASTLE INFRASTRUCTURE AND IS LISTED ON THE VIRGINIA STORMWATER BMP CLEARINGHOUSE AS AN ACCEPTABLE TREATMENT DEVICE. THE DVS-48C WILL BE SITED IN THE LOCATION SHOWN ON SHEET C-300.

WATER QUANTITY NARRATIVE (ARLINGTON COUNTY CODE §60-11.A - 9VAC25-870-66)

OUTFALL DESCRIPTIONS

THERE ARE (2) OUTFALLS WHERE RUNOFF LEAVES THE SITE:

OUTFALL 1 IS AT EXISTING DRAINAGE STRUCTURE #3 (EX 3), PER AVAILABLE ARLINGTON COUNTY GIS INFORMATION, DOWNSTREAM OF EX 3 THE CONVEYANCE SYSTEM IS A CLOSED STORM SEWER SYSTEM THROUGHOUT THE EXTENT OF REVIEW TO POINT 'B' SHOWN ON THE OUTFALL AND EXTENT OF REVIEW MAP, THIS SHEET.

OUTFALL 2 IS THE EXISTING GUTTER PAN ADJACENT TO THE PROJECT ON COLUMBIA PIKE. THE EXISTING GUTTER ENDS AT A CURB INLET ON COLUMBIA PIKE AT SOUTH HIGHLAND STREET. DOWNSTREAM OF THE CURB INLET THE CONVEYANCE SYSTEM APPEARS TO BE A CLOSED STORM SEWER SYSTEM. UNDER POST-DEVELOPMENT CONDITIONS, RUNOFF FROM THE PROJECT AREA WILL BE LESS THAN PRE-DEVELOPMENT. THE ESTIMATED REDUCTION IN 2- AND 10-YR 24-HOUR DISCHARGE TO OUTFALL 2 DUE TO THE PROJECT IS APPROXIMATELY 0.2 CFS AND 0.4 CFS, RESPECTIVELY. BECAUSE THIS IS A REDUCTION IN DISCHARGE AND NO KNOWN DRAINAGE COMPLAINTS, THE RECEIVING CONVEYANCE SYSTEM IS ASSUMED TO BE ADEQUATE.

CHANNEL PROTECTION (§9VAC25-870-66.B) ADEQUACY

CONCENTRATED FLOW FROM THE DISTURBED AREA DISCHARGES TO OUTFALL '1' THROUGH A CLOSED CONDUIT STORM SYSTEM AT POINT 'A'. APPROXIMATELY 0.5700 ACRES OF THE DISTURBED AREA DRAINS TO ONSITE INLET TO EX3 WHERE IT LEAVES THE SITE AT OUTFALL '1'. THE FLOW IS CONVEYED VIA THE CLOSED SYSTEM SOUTH THROUGH SINGLE FAMILY NEIGHBORHOODS CROSSING 12TH ST S, 13TH ST S, AND 13TH RD S BEFORE A CHANGE IN DIRECTION TO THE EAST TOWARDS WATER REED DRIVE TO POINT 'B'.

STORM VELOCITY COMPUTATIONS FOR THE 2-YR STORM USING THE RATIONAL METHOD ARE PROVIDED ON THIS SHEET WHICH EXCEED THE TWO-YEAR 24 HOUR STORM PEAK FLOW. THE CLOSED SYSTEM IS CONSTRUCTED SOLELY OF REINFORCED CONCRETE PIPE AND THE CALCULATED VELOCITIES ARE NON-EROSIVE FOR THE SYSTEM THROUGHOUT THE EXTENT OF REVIEW DESCRIBED BELOW.

FLOOD PROTECTION (§9VAC25-870-66.C) ADEQUACY

CONCENTRATED FLOW FROM THE DISTURBED AREA DISCHARGES TO OUTFALL '1' THROUGH A CLOSED CONDUIT STORM SYSTEM AT POINT 'A'. APPROXIMATELY 0.5700 ACRES OF THE DISTURBED AREA DRAINS TO ONSITE INLETS TO EX3 WHERE IT LEAVES THE SITE AT OUTFALL '1'. THE FLOW IS CONVEYED VIA THE CLOSED SYSTEM SOUTH THROUGH SINGLE FAMILY NEIGHBORHOODS CROSSING 12TH ST S, 13TH ST S, AND 13TH RD S BEFORE A CHANGE IN DIRECTION TO THE EAST TOWARDS WATER REED DRIVE TO POINT 'B'.

THERE IS NO KNOWN CASES OF LOCALIZED FLOODING FOR THE STORM SYSTEM ANALYZED FOR FLOOD PROTECTION. STORM CAPACITY COMPUTATIONS FOR THE 10-YR STORM USING THE RATIONAL METHOD ARE PROVIDED ON THIS SHEET WHICH EXCEED THE TEN-YEAR 24 HOUR PEAK FLOW. THE CLOSED SYSTEM IS ADEQUATE TO CONVEY THE PEAK FLOW RATE WITHIN THE STORMWATER CONVEYANCE SYSTEM FOR THE EXTENT OF REVIEW DESCRIBED BELOW.

LIMITS OF ANALYSIS

CHANNEL PROTECTION (§9VAC25-870-66.B.4.A) & FLOOD PROTECTION (§9VAC25-870-66.C.3.A)

THE LIMITS OF ANALYSIS FOR BOTH CHANNEL AND FLOOD PROTECTION SHALL EXTEND TO A POINT WHERE THE SITE'S CONTRIBUTING DRAINAGE AREA IS LESS THAN OR EQUAL TO 1.0% OF THE TOTAL WATERSHED AREA. THIS POINT (POINT 'B') IS PROVIDED IN THE 'STORM DRAINAGE OUTFALL AND EXTENT OF REVIEW MAP', THIS SHEET. THE SITE'S CONTRIBUTING DRAINAGE AREA TO OUTFALL '1' IS 0.5700 ACRES. AT THE LIMITS OF ANALYSIS (POINT 'B') THE TOTAL WATERSHED AREA IS APPROXIMATELY 75.50 ACRES, WHICH IS GREATER THAN 100 TIMES THE CONTRIBUTING SITE AREA. FROM THE POINT OF THE SITE OUTFALL '1' TO THE LIMITS OF ANALYSIS, STORMWATER IS CONVEYED THROUGH A CLOSED CONDUIT SYSTEM.

ADEQUACY CONCLUSION

IT IS THE OPINION OF THE ENGINEER THAT THE OUTFALL IS ADEQUATE AND THAT THE PROPOSED DEVELOPMENT RESULTING IN A FLOW DECREASE WILL NOT HAVE ANY ADVERSE IMPACT ON LOWER LYING PROPERTIES AND WILL NOT AGGRAVATE ANY EXISTING DRAINAGE PROBLEM OR CAUSE A NEW DRAINAGE PROBLEM TO DOWNSTREAM PROPERTIES.

OUTFALL ANALYSIS (10-YR) - STORM SEWER COMPUTATIONS

OUTLET		INC. DRAINAGE AREA (ACRES)		ACCUM. DRAINAGE AREA (ACRES)	% COEFFICIENT	INCREMENTAL CA	ACCUMULATED CA	TIME TO INLET (MIN)	RAINFALL INTENSITY (IN/HR)	INCREMENTAL "Q" (CFS)	ACCUMULATED "Q" (CFS)	UPPER INVERT ELEVATION	LOWER INVERT ELEVATION	FALL (FT)	LENGTH OF RUN (FT)	SLOPE (%)	PIPE DIAMETER (IN)	"n"	MAXIMUM "Q" (CFS)	"V" VELOCITY (FPS)	FLOW TIME (SEC)	RIM ELEV. (GIS)	APPROX. COVER
EX.3	D-8	1.23	1.23	0.80	0.98	0.98	5.0	5.15	5.1	5.1	203.45	202.95	0.50	37.0	1.35%	21	0.013	18.4	6.4	5.8	208.6	3.4	
D-8	EX-2	0.68	1.91	0.80	0.54	1.53	5.0	5.15	2.8	7.9	202.95	201.21	1.74	128.5	1.35%	21	0.013	18.4	7.2	17.7	207.0	2.3	
EX-2	EX-1	0.12	2.03	0.80	0.10	1.62	5.0	5.15	0.5	8.4	201.11	199.69	1.42	162.0	0.88%	21	0.013	14.8	6.3	25.8	207.0	4.1	
EX-1	16366	2.06	4.09	0.80	1.65	3.27	5.0	5.15	8.5	16.9	199.59	197.59	2.00	119.8	1.67%	24	0.013	29.2	9.6	12.5	205.9	4.3	
16366	16389	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	197.49	197.00	0.49	31.8	1.54%	24	0.013	28.1	9.2	3.4	204.2	4.7	
16389	16418	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	196.90	196.20	0.70	41.6	1.68%	24	0.013	29.3	9.6	4.3	203.9	5.0	
16418	16480	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	196.10	195.00	1.10	92.8	1.19%	24	0.013	24.6	8.4	11.0	203.8	5.7	
16480	16497	0.00	4.09	0.00	0.00	3.27	5.0	5.15	0.0	16.9	194.90	194.50	0.40	26.3	1.52%	30	0.013	50.6	9.1	2.9	203.8	6.4	
16497	16606	4.36	8.45	0.75	3.27	6.54	10.0	4.12	13.5	27.0	194.40	193.10	1.30	127.9	1.02%	30	0.013	41.4	8.9	14.3	203.5	6.6	
16606	16610	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	193.00	192.30	0.70	64.8	1.08%	30	0.013	42.6	9.1	7.1	203.5	8.0	
16610	16801	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	192.20	186.10	6.10	204.7	2.98%	30	0.013	70.8	13.3	15.4	202.0	7.3	
16801	16838	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	186.00	185.50	0.50	37.6	1.33%	30	0.013	47.3	9.9	3.8	191.9	3.4	
16838	16885	0.00	8.45	0.00	0.00	6.54	10.0	4.12	0.0	27.0	185.40	184.50	0.90	82.1	1.10%	30	0.013	42.9	9.2	9.0	192.1	4.2	
16885	16872	47.13	55.58	0.75	35.35	41.89	15.0	3.45	121.9	144.5	184.40	183.00	1.40	155.2	0.90%	54	0.013	186.8	13.0	12.0	192.2	3.3	
16872	16862	0.00	55.58	0.00	0.00	41.89	15.0	3.45	0.0	144.5	182.90	180.00	2.90	163.1	1.78%	54	0.013	262.2	17.5	9.3	190.2	2.8	
16862	16883	0.00	55.58	0.00	0.00	41.89	15.0	3.45	0.0	144.5	179.90	179.00	0.90	48.1	1.87%	54	0.013	269.0	17.7	2.7	186.8	2.4	
16883	16897	11.15	66.																				

VRRM COMPUTATIONS

Project Name: **3108 COLUMBIA PIKE**
 Date: **12/18/2023**
 Linear Development Project? **No**

CLEAR ALL
 (Ctrl+Shift+R)

data input cells
 constant values
 calculation cells
 final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) → **0.6105**

Maximum reduction required: **10%**
 The site's net increase in impervious cover (acres) is: **0.0000**
 Post-Development TP Load Reduction for Site (lb/yr): **0.0806**

Check:
 BMP Design Specifications List: 2013 Draft Stds & Specs
 Linear project? **No**
 Land cover areas entered correctly? **✓**
 Total disturbed area entered? **✓**

Pre-ReDevelopment Land Cover (acres)					
	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed forest/open space					0.0000
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.1595	0.1595
Impervious Cover (acres)				0.4510	0.4510
					0.6105

Post-Development Land Cover (acres)					
	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.0000
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.1759	0.1759
Impervious Cover (acres)				0.4346	0.4346
Area Check	OK.	OK.	OK.	OK.	0.6105

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

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

LAND COVER SUMMARY -- PRE-REDEVELOPMENT		
Land Cover Summary-Pre		
Pre-ReDevelopment	Listed	Adjusted ¹
Forest/Open Space Cover (acres)	0.0000	0.0000
Weighted Rv(forest)	0.0000	0.0000
% Forest	0%	0%
Managed Turf Cover (acres)	0.1595	0.1595
Weighted Rv(turf)	0.2500	0.2500
% Managed Turf	26%	26%
Impervious Cover (acres)	0.4510	0.4510
Rv(impervious)	0.9500	0.9500
% Impervious	74%	74%
Total Site Area (acres)	0.6105	0.6105
Site Rv	0.7671	0.7671

LAND COVER SUMMARY -- POST DEVELOPMENT					
Land Cover Summary-Post (Final)		Land Cover Summary-Post		Land Cover Summary-Post	
Post ReDev. & New Impervious		Post-ReDevelopment		Post-Development New Impervious	
Forest/Open Space Cover (acres)	0.0000	Forest/Open Space Cover (acres)	0.0000		
Weighted Rv(forest)	0.0000	Weighted Rv(forest)	0.0000		
% Forest	0%	% Forest	0%		
Managed Turf Cover (acres)	0.1759	Managed Turf Cover (acres)	0.1759		
Weighted Rv (turf)	0.2500	Weighted Rv (turf)	0.2500		
% Managed Turf	29%	% Managed Turf	29%		
Impervious Cover (acres)	0.4346	ReDev. Impervious Cover (acres)	0.4346	New Impervious Cover (acres)	0.0000
Rv(impervious)	0.9500	Rv(impervious)	0.9500	Rv(impervious)	--
% Impervious	71%	% Impervious	71%		
Final Site Area (acres)	0.6105	Total ReDev. Site Area (acres)	0.6105		
Final Post Dev Site Rv	0.7483	ReDev Site Rv	0.7483		

Treatment Volume and Nutrient Load		
Pre-ReDevelopment Treatment Volume (acre-ft)	0.0390	0.0390
Pre-ReDevelopment Treatment Volume (cubic feet)	1,700,0198	1,700,0198
Pre-ReDevelopment TP Load (lb/yr)	1.0681	1.0681
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.7500	1.7500
Baseline TP Load (lb/yr) <small>(0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)</small>		0.2503

Treatment Volume and Nutrient Load					
Final Post-Development Treatment Volume (acre-ft)	0.0381	Post-ReDevelopment Treatment Volume (acre-ft)	0.0381	Post-Development Treatment Volume (acre-ft)	--
Final Post-Development Treatment Volume (cubic feet)	1,658,3474	Post-ReDevelopment Treatment Volume (cubic feet)	1,658,3474	Post-Development Treatment Volume (cubic feet)	--
Final Post-Development TP Load (lb/yr)	1.0419	Post-ReDevelopment TP Load (lb/yr)*	1.0419	Post-Development TP Load (lb/yr)	--
Final Post-Development TP Load per acre (lb/acre/yr)	1.7100	Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.7100		
		Max. Reduction Required (Below Pre-ReDevelopment Load)	10%		
		TP Load Reduction Required for Redeveloped Area (lb/yr)	0.0806	TP Load Reduction Required for New Impervious Area (lb/yr)	0

¹ Adjusted Land Cover Summary:
 Pre-ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.
 Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).
 Column 1 shows load reduction requirement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

Post-Development Requirement for Site Area	
TP Load Reduction Required (lb/yr)	0.0806

Nitrogen Loads (Informational Purposes Only)			
Pre-ReDevelopment TN Load (lb/yr)	7.6412	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	7.4538

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.0000	0.0000	0.0000	0.0000	0.0000	OK.
IMPERVIOUS COVER (ac)	0.3456	0.0676	0.0000	0.0000	0.0000	OK.
IMPERVIOUS COVER TREATED (ac)	0.3456	0.0000	0.0000	0.0000	0.0000	OK.
MANAGED TURF AREA (ac)	0.0741	0.0827	0.0000	0.0000	0.0000	OK.
MANAGED TURF AREA TREATED (ac)	0.0741	0.0000	0.0000	0.0000	0.0000	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³) **1,658.3474**

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft ³)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	0.7911	0.1936	0.0000	0.0000	0.0000	0.9847
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.1580	0.0000	0.0000	0.0000	0.0000	0.1580
TP LOAD REMAINING (lb/yr)	0.6330	0.1936	0.0000	0.0000	0.0000	0.8266
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.0419
TP LOAD REDUCTION REQUIRED (lb/yr)	0.0806
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.1580
TP LOAD REMAINING (lb/yr):	0.8839
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.0000 **
** TARGET TP REDUCTION EXCEEDED BY 0.0774 LB/YEAR **	

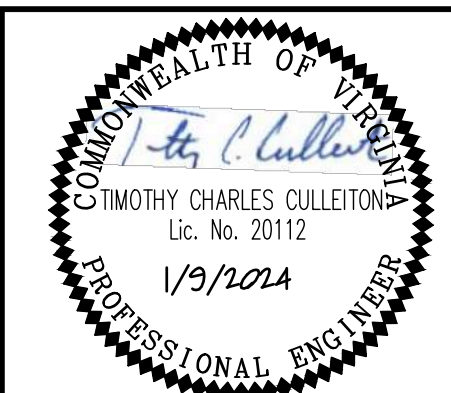
Total Nitrogen (For Informational Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	7.4538
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.0000
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	7.4538

1



ISSUED FOR BID 11-10-2023



ARLINGTON COUNTY, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES

WATER QUALITY COMPUTATIONS
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	

SUBMITTED DATE: 8/4/2023
 DESIGNED: BWB
 CHECKED: TCC
 PROJECT/FILE NO. LDAP23-00146

SCALE IN FEET
 1" = 20'



SCALE: AS-SHOWN **C-332** 12 OF 28

Drainage Area A

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.0000	0.0000
Managed Turf (acres)				0.0741	0.0741	0.2500
Impervious Cover (acres)				0.3456	0.3456	0.9500
Total					0.4197	

Stormwater Best Management Practices (RR = Runoff Reduction)

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft ³)	Runoff Reduction (ft ³)	Remaining Runoff Volume (ft ³)	Total BMP Treatment Volume (ft ³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0	0.0741	0.3456	0.0000	0.0000	1,259.0474	1,259.0474	20	0.0000	0.7902	0.1580	0.6321	
14.b. Manufactured Treatment Device-Filtering	0			0.0000	0.0000	0.0000	0.0000	20	0.0000	0.0000	0.0000	0.0000	
14.c. Manufactured Treatment Device-Generic	0			0.0000	0.0000	0.0000	0.0000	20	0.0000	0.0000	0.0000	0.0000	

TOTAL IMPERVIOUS COVER TREATED (ac) 0.3456 AREA CHECK: OK.
 TOTAL MANAGED TURF AREA TREATED (ac) 0.0741 AREA CHECK: OK.

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr) 0.0806

TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr) 0.7911
 TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.1580
 TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.0000
 TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr) 0.1580
 TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr) 0.6330

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.0000
 NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr) 0.0000
 TOTAL NITROGEN REMOVED IN D.A. A (lb/yr) 0.0000

Tv = 1259.0474 CF (TREATMENT VOLUME TO DVS-60C)
 DA = 0.4197 AC (DRAINAGE AREA TO DVS-60C IN AC)
 DA = 18282 SF (DRAINAGE AREA TO DVS-60C IN SF)
 Qa = 0.07 FT (RUNOFF VOLUME IN FEET = Tv/DA)
 Qa = 0.84 IN (RUNOFF VOLUME IN WATERSHED INCHES)
 P = 1 IN (RAINFALL, 1" IN VIRGINIA FOR WATER QUALITY)
 CN = 99 (NRCS ADJUSTED CURVE NUMBER TO DVS-60C)

Equation 11.11, pg 11-31 of VA SWM HANDBOOK, 2011

$$CN = \frac{1000}{[10 + 5P + 10Qa - 10(Qa^2 + 1.25QaP)^{0.5}]}$$

HEC-1 INPUT

LINE ID.....1.....2.....3.....4.....5.....6.....7.....8.....9.....10

1 ID 3108 COLUMBIA PIKE DEMOLITION

2 ID ARLINGTON COUNTY, VIRGINIA

3 ID 1" RAINFALL DEPTH

4 ID TREATMENT FLOW RATE TO DVS-48C

*DIAGRAM

5 IT 1 1500

6 IO 5

* WATER QUALITY RAINFALL DEPTH = 1"

7 JR PREC 1

* DVS

8 KM TO DVS-48C (0.4197 AC @ NRCS ADJUSTED RCN=99 @ TC=5 MIN)

9 KO 21

10 BA 0.00066

11 PB 1.0

* NOAA ATLAS C RAINFALL DISTRIBUTION

12 IN 6

13 PC 0 0.0013 0.0023 0.0034 0.0044 0.0055 0.0065 0.0076 0.0087 0.0098

14 PC 0.0109 0.0121 0.0132 0.0143 0.0155 0.0167 0.0178 0.019 0.0202 0.0214

15 PC 0.0226 0.0238 0.0251 0.0263 0.0276 0.0288 0.0301 0.0314 0.0327 0.034

16 PC 0.0353 0.0366 0.0379 0.0393 0.0406 0.042 0.0434 0.0447 0.0461 0.0475

17 PC 0.0489 0.0504 0.0518 0.0532 0.0547 0.0562 0.0576 0.0591 0.0606 0.0621

18 PC 0.0636 0.0651 0.0667 0.0682 0.0697 0.0713 0.0729 0.0745 0.076 0.0776

19 PC 0.0793 0.0809 0.0826 0.0843 0.0861 0.0879 0.0898 0.0916 0.0936 0.0955

20 PC 0.0975 0.0996 0.1017 0.1038 0.106 0.1082 0.1104 0.1127 0.115 0.1174

21 PC 0.1198 0.1223 0.1247 0.1273 0.1298 0.1324 0.1351 0.1378 0.1405 0.1432

22 PC 0.1461 0.149 0.1521 0.1554 0.1588 0.1623 0.166 0.1699 0.1739 0.178

23 PC 0.1823 0.1868 0.1914 0.1961 0.201 0.2061 0.2117 0.2179 0.2247 0.2321

24 PC 0.24 0.249 0.2591 0.2702 0.2825 0.2955 0.3157 0.337 0.3662 0.4067

25 PC 0.4766 0.5933 0.6338 0.663 0.6843 0.7045 0.7176 0.7298 0.7409 0.751

26 PC 0.76 0.7679 0.7753 0.7821 0.7883 0.7939 0.799 0.8039 0.8086 0.8132

27 PC 0.8177 0.822 0.8261 0.8301 0.834 0.8377 0.8412 0.8446 0.8479 0.851

28 PC 0.854 0.8568 0.8595 0.8622 0.8649 0.8676 0.8702 0.8727 0.8753 0.8778

29 PC 0.8802 0.8826 0.885 0.8873 0.8896 0.8918 0.894 0.8962 0.8983 0.9004

30 PC 0.9025 0.9045 0.9064 0.9084 0.9103 0.9121 0.9139 0.9157 0.9174 0.9191

31 PC 0.9208 0.9224 0.924 0.9256 0.9271 0.9287 0.9303 0.9318 0.9334 0.9349

32 PC 0.9364 0.9379 0.9394 0.9409 0.9424 0.9439 0.9453 0.9468 0.9482 0.9496

33 PC 0.9511 0.9525 0.9539 0.9553 0.9566 0.9579 0.9594 0.9607 0.9621 0.9634

34 PC 0.9647 0.966 0.9673 0.9686 0.9699 0.9712 0.9724 0.9737 0.9749 0.9762

35 PC 0.9774 0.9786 0.9798 0.981 0.9822 0.9834 0.9845 0.9857 0.9868 0.9879

36 PC 0.9891 0.9902 0.9913 0.9924 0.9935 0.9945 0.9956 0.9967 0.9977 0.9987

37 PC 1

38 LS 99

39 UD 0.05

40 *

41 ZZ

PEAK FLOW AND STAGE (END-OF-PERIOD) SUMMARY FOR MULTIPLE PLAN-RATIO ECONOMIC COMPUTATIONS

FLOWS IN CUBIC FEET PER SECOND, AREA IN SQUARE MILES

TIME TO PEAK IN HOURS

RATIOS APPLIED TO PRECIPITATION

OPERATION	STATION	AREA	PLAN	RATIO 1
HYDROGRAPH AT	DVS	.00	1	0.41
				12.10

*** NORMAL END OF HEC-1 ***

UNCONTROLLED AREA

Drainage Area B

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.0000	0.0000
Managed Turf (acres)				0.0827	0.0827	0.2500
Impervious Cover (acres)				0.0676	0.0676	0.9500
Total					0.1503	

Site Information - Revised 9/19/2017

Project SWM #	LDA Permit #	Disturbed Area (acres)	% Pre-Impervious	% Post-Impervious	Pre-Development TP load (lb/yr)	Post-Development TP load (lb/yr)	TP load reduction achieved (lb/yr)	Pre-Development TN load (lb/yr)	Post-Development TN load (lb/yr)	TN load reduction achieved (lb/yr)	Total Site Area (acres)	Pre-Forest Area (acres)	Pre-Turf Area (acres)	Pre-Impervious Area (acres)	Post-Forest Area (acres)	Post-Turf Area (acres)	Post-Impervious Area (acres)	Pre-Runoff Volume	Post-Runoff Volume	Runoff Volume Reduction Achieved	Site Latitude (Decimal Degrees)	Site Longitude (Decimal Degrees)	Anticipated Start Date
23-0138	LDA00146	0.6105	73.9	71.2	1.07	1.04	0.16	7.64	7.45	0.00	0.6105	0.0000	0.1595	0.4510	0.0000	0.1759	0.4346	1700.0198	1658.3474	0.0000	38.861423	-77.089453	7/15/2024

Stormwater Management Facility Information - Revised 3/19/2019

Facility Type**	Description	Location	LDA Permit #	Project SWM #	Building Permit #	Facility ID	BMP downstream of another BMP (in Series)?	Upstream (Primary) BMP	Chesapeake Bay Segment	Watershed	HUC6	Soils	Runoff Treated (in)	Volume Treated (ft ³)	Treated Area (acres)	Forest Area (acres)	Turf Area (acres)	Impervious Area (acres)	RPC	Phosphorus Efficiency (%)	Nitrogen Efficiency (%)	Sediment Efficiency (%)	TP load removed (lbs)	TN load removed (lbs)
MANUFACTURED BMP	Hydrodynamic Separator	Parking Lot	LDA00146	23-0138		23-0138A	No		POTTF_VA	Arlington Branch	PL25	C/D	1.00	1259.0	0.4197	0.0000	0.0741	0.3456	32007018	20.00	0.00	0.00	0.1580	0.00



ISSUED FOR BID 11-10-2023

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

WATER QUALITY COMPUTATIONS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN

C-333

13 OF 28

DEWBERRY REVISIONS

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	

COUNTY REVISIONS

SUBMITTED DATE: 8/4/2023

DESIGNED: BWB

CHECKED: TCC

PROJECT/FILE NO. LDAP23-00146

SCALE IN FEET

1" = 20'

1 INCH

VCS-83

DUAL-VORTEX SEPARATOR (DVS)

DESCRIPTION

The Dual-Vortex Separator (DVS) is a hydrodynamic stormwater treatment device used to remove pollutants from urban runoff. Impervious surfaces and other urban and suburban landscapes generate a variety of contaminants that can enter stormwater and pollute downstream receiving waters. The DVS is designed to capture and retain sediment as well as floating trash, debris and oils. The concentration of metals and other constituents associated with sediment or floating pollutants may also be reduced.

FUNCTION

Stormwater runoff enters the DVS unit through an inlet pipe. Inflow is split evenly between two vortex tubes by a V-shaped weir. The shape and diameter of the vortex tubes promotes circular motion of the incoming stormwater at increased velocities to enhance particle settling through centrifugal force. The system is also designed with an extended flow path to maximize hydraulic residence time which allows increased time to settle out solids. Settled pollutants are collected in an isolated storage area at the bottom of the structure, while floating trash, debris and petroleum hydrocarbons are retained behind baffles that contain the vortex chambers. During peak runoff events, flow in excess of design treatment flow overtops the bypass weir and exits the system without entering the treatment chambers to interrupt the treatment process or re-entrain captured pollutants. Treatment and bypass flows exit the system through an outlet pipe that is plumbed at the same elevation as the inlet pipe.

CONFIGURATION

The internal components of the DVS system are fabricated from stainless steel and mounted in a manhole or vault structure. The system is typically delivered as a complete unit for installation by the contractor. Installation includes excavation, preparation of the base rock, setting the unit, plumbing the inlet and outlet piping, backfill and placement of the finished surface at grade. Access to the installed system is allowed through ductile iron casting or hatch covers. The number of access points provided is dependent on the size and configuration of the system.

MAINTENANCE OVERVIEW

State and local regulations require all stormwater management systems to be inspected on a regular basis and maintained as necessary to ensure performance and protect downstream receiving waters. Without maintenance, excessive pollutant buildup can limit system performance by reducing the operating capacity and increase the potential for scouring of pollutants during periods of high flow.

INSPECTION EQUIPMENT

The following equipment is helpful when conducting DVS inspections:

- | Recording device (pen and paper form, voice recorder, iPad, etc.)
- | Suitable clothing (appropriate footwear, gloves, hardhat, safety glasses, etc.)
- | Traffic control equipment (cones, barricades, signage, flagging, etc.)
- | Manhole hook or pry bar
- | Flashlight
- | Tape measure
- | Measuring stick or sludge sampler
- | Long-handled net (optional)
- | Replacement Sorbent Pads

INSPECTION PROCEDURES

Inspection is essential to consistent system performance and is easily completed. Inspection is typically conducted a minimum of twice per year but since pollutant transport and deposition varies from site to site, a site-specific maintenance frequency should be established during the first two or three years of operation. DVS inspections are visual and are conducted without entering the unit. To complete an inspection, safety measures including traffic control should be deployed before the access covers are removed. Once the covers have been removed, the following items should be checked and recorded (see form provided on page 5) to determine whether maintenance is required:

- | Inspect the internal components and note whether there are any broken or missing parts. In the unlikely event that internal parts are broken or missing, contact Oldcastle Infrastructure at (800) 579-8819 to determine appropriate corrective action.
- | Note whether the inlet or outlet pipe is blocked or obstructed.
- | Observe, quantify and record the accumulation of floating trash and debris in the baffled chambers around the vortex tubes. The significance of accumulated floating trash and debris is a matter of judgement. A long-handled net may be used to retrieve the bulk of trash and debris at the time of inspection if full maintenance due to accumulation of oils or sediment is not yet warranted.
- | Observe, quantify and record the accumulation of oils in the baffled chambers around the vortex tubes. If sorbent pads have been used to absorb free oil and grease, observe and record their condition. Unless the sorbent pads are tethered to the internal baffles, spent pads may be netted and replaced at the time of inspection. The significance of accumulated floating oils is a matter of judgement. However, if there is evidence of an oil or fuel spill, immediate maintenance is warranted.
- | Finally, observe, quantify and record the accumulation of sediment in the sediment storage sump. A calibrated dipstick, tape measure or sludge sampler may be used to determine the amount of accumulated sediment. The depth of sediment may be determined by calculating the difference between the measurement from the rim of the DVS to the top of the accumulated sediment and the measurement from the rim of the DVS to the bottom of the DVS structure. Finding the top of the accumulated sediment takes some practice and a light touch, but increasing resistance as the measuring device is lowered toward the bottom of the unit indicates the top of the accumulated sediment.

MAINTENANCE INDICATORS

Maintenance should be scheduled if any of the following conditions are identified during inspection:

- | Internal components are broken or missing.
- | Inlet or outlet piping is obstructed.
- | The accumulation of floating trash and debris that cannot be retrieved with a net and/or oil in the baffled chambers around the vortex tubes is significant.
- | Tethered sorbent pads, if used, are dirty or saturated.
- | The sediment level in the sediment storage sump is greater than 12 inches. The capacity of the sediment sump is 18 inches of sediment depth for all DVS models. Sediment depths greater than 18 inches will begin to affect the performance of the system.

MAINTENANCE EQUIPMENT

The following equipment is helpful when conducting DVS maintenance:

- | Suitable clothing (appropriate footwear, gloves, hardhat, safety glasses, etc.)
- | Traffic control equipment (cones, barricades, signage, flagging, etc.)
- | Manhole hook or pry bar
- | Confined space entry equipment, if needed
- | Flashlight
- | Tape measure
- | Sorbent pads
- | Vacuum truck

MAINTENANCE PROCEDURES

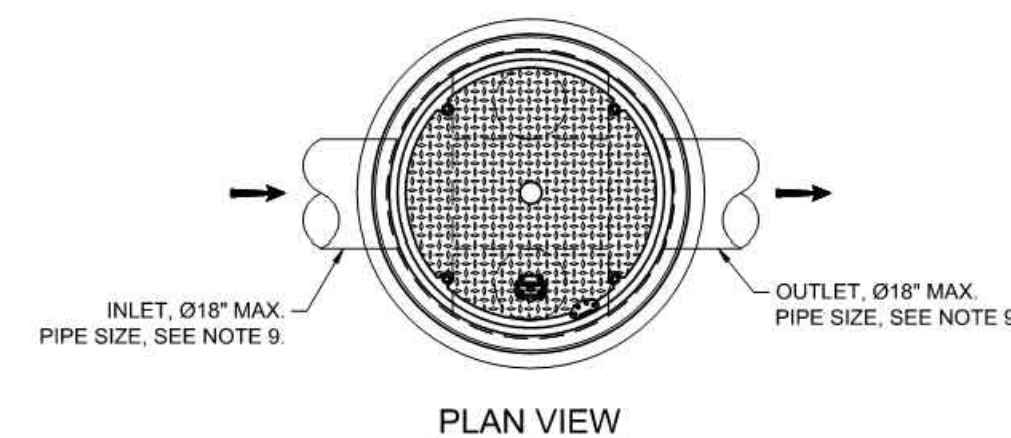
Maintenance should be conducted during dry weather when no flow is entering the system. All maintenance, except possibly the attachment of sorbent pads (if required), may be conducted without entering the DVS structure. Once safety measures such as traffic control are deployed, the access covers may be removed and the following activities may be conducted to complete maintenance:

- | Remove floating trash, debris and oils from the water surface using an extension on the end of the boom hose of the vacuum truck. Continue using the vacuum truck to completely dewater the structure through the vortex tubes and evacuate all accumulated sediment from the sediment sump. Some jetting may be required to fully evacuate sediment from the sump. This is easily achieved by inserting a jet hose through the vortex tube opposite the tube used for vacuum hose access.
- | If sorbent pads are required and are tethered to the structure, only personnel that are OSHA Confined Space Entry trained and certified may enter the structure to remove and replace the spent pads.
- | The structure does not need to be refilled with water after maintenance is complete. The system will fill with water when the next storm event occurs.
- | All material removed from the DVS during maintenance must be disposed of in accordance with local regulations. In most cases, the material may be handled in the same manner as disposal of material removed from sumped catch basins or manholes.

DUAL-VORTEX SEPARATOR INSPECTION AND MAINTENANCE LOG	
DVS Model _____	Inspection Date _____
Location _____	
Condition of Internal Components	Notes: _____
<input type="checkbox"/> Good <input type="checkbox"/> Damaged <input type="checkbox"/> Missing	
Inlet or Outlet Blockage or Obstruction	Notes: _____
<input type="checkbox"/> Yes <input type="checkbox"/> No	
Floating Trash and Debris	Notes: _____
<input type="checkbox"/> Significant <input type="checkbox"/> Not Significant	
Floating Oils	Notes: _____
<input type="checkbox"/> Significant <input type="checkbox"/> Not Significant <input type="checkbox"/> Spill	
Sediment Depth	Notes: _____
<input type="checkbox"/> Inches of Sediment _____	
Maintenance Requirements	
<input type="checkbox"/> Yes - Schedule Maintenance <input type="checkbox"/> No - Schedule Re-Inspection	

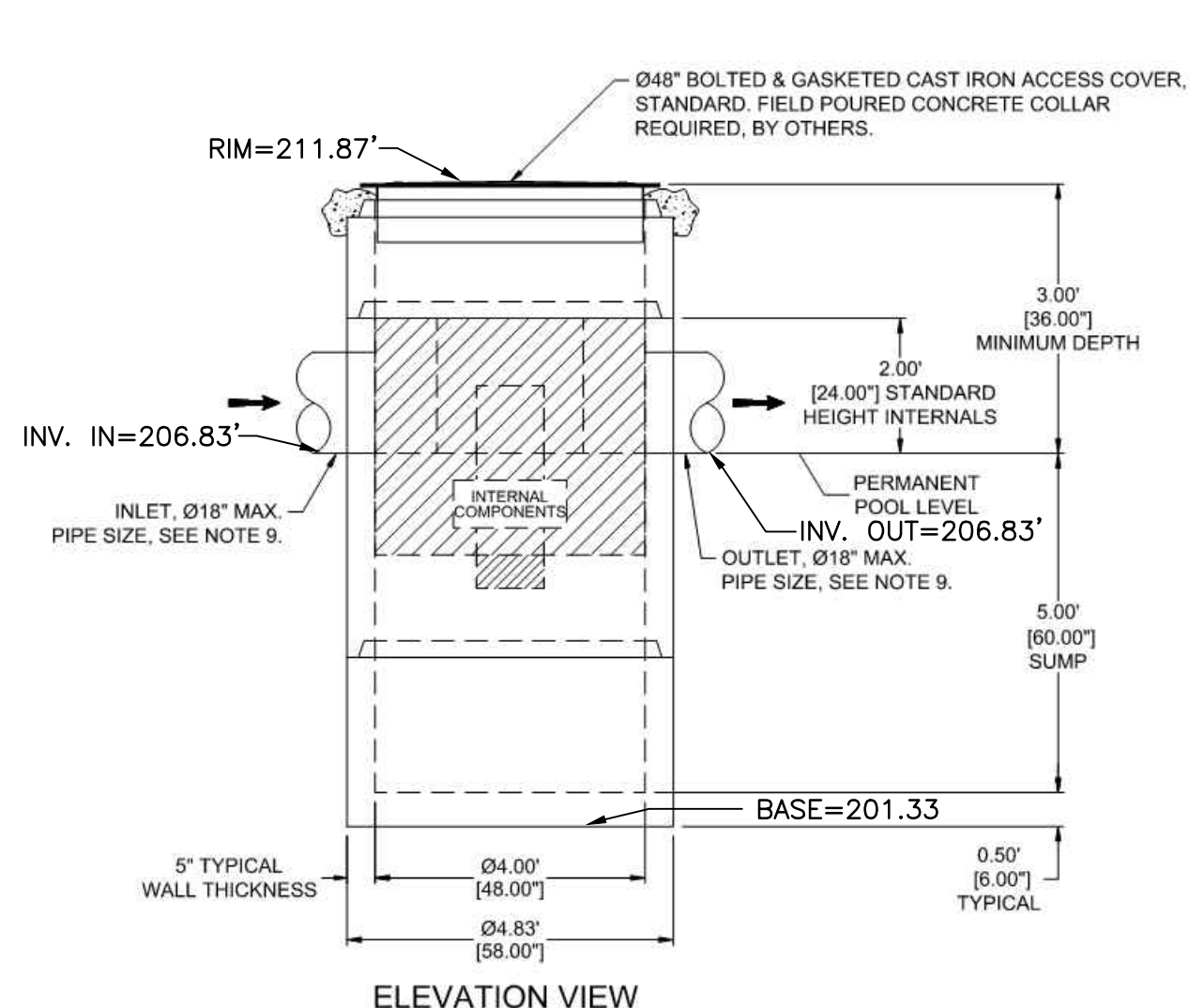
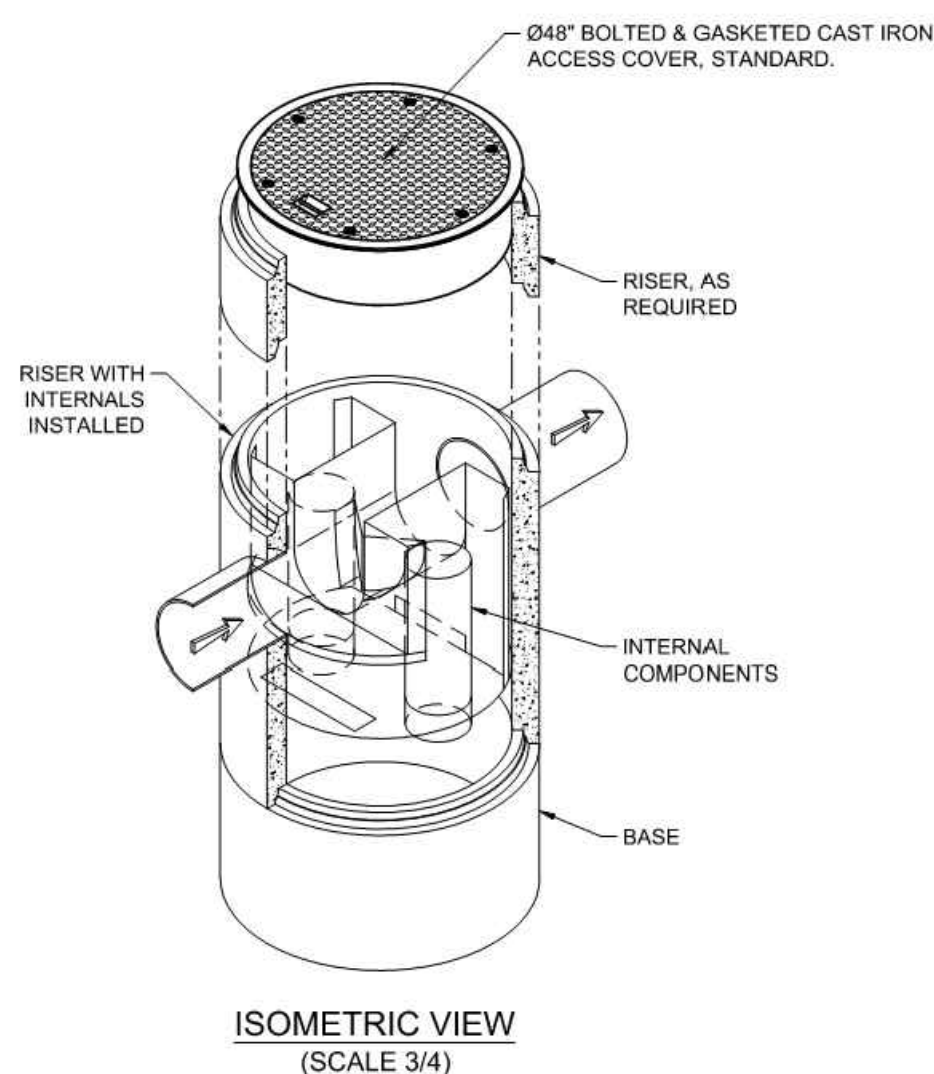
SITE SPECIFIC DATA				
Structure ID	DVS			
Water Quality Flow Rate (cfs)	0.41' CFS			
Peak Flow Rate (cfs)	2.4' CFS			
Rim Elevation	211.87			
Pipe Data	Pipe Angle	Pipe Size	Pipe Type	Invert Elevation
Inlet	180	15"	RCP	206.83
Inlet				
Outlet at 0'	15"	RCP		206.83
*Angle is Clockwise from Outlet at 0'.				
Notes:				

*SEE SHEET C-333 FOR SUPPORTING COMPUTATIONS
*SEE SHEET C-320 FOR SUPPORTING COMPUTATIONS



NOTES:

- DESIGN LOADINGS:
 - A. AASHTO HS-20-44 IMPACT.
 - B. DESIGN FILL: 1' MAXIMUM.
 - C. ASSUMED WATER TABLE: BELOW INVERT.
 - D. DRY LATERAL EARTH PRESSURE (EP) = 45 PCF.
 - E. LATERAL LIVE LOAD SURCHARGE = 80 PSF (APPLIED TO 8' BELOW GRADE).
 - F. NO LATERAL SURCHARGE FROM ADJACENT BUILDINGS, WALLS, PIERS, OR FOUNDATIONS.
- CONCRETE 28 DAY COMPRESSIVE STRENGTH SHALL BE 5,000 PSI MINIMUM.
- STEEL REINFORCEMENT: REBAR ASTM A-615 OR A-706, GRADE 60.
- CEMENT: ASTM C-150 SPECIFICATION.
- REQUIRED NATIVE ALL-OVERLAP SOIL BEARING PRESSURE = 2,500 PSF.
- REFERENCE STANDARD:
 - A. ASTM C 478
 - B. ASTM C 497
- THIS STRUCTURE IS DESIGNED TO THE PARAMETERS NOTED HEREIN. PLEASE VERIFY THAT THESE PARAMETERS MEET PROJECT REQUIREMENTS (I.E. LIVE LOAD, FILL RANGE, WATER TABLE). IF DESIGN PARAMETERS ARE INCORRECT, REVIEWING ENGINEER/AUTHORITY SHALL NOTIFY OLDCASTLE INFRASTRUCTURE UPON REVIEW OF THIS SUBMITTAL.
- TREATMENT CAPACITY IS DEPENDENT ON LOCAL REGULATORY REQUIREMENTS. BYPASS CAPACITY IS DEPENDENT ON OUTLET PIPE DIAMETER. CONTACT OLDCASTLE INFRASTRUCTURE FOR PROJECT SPECIFIC TREATMENT AND BYPASS SIZING RECOMMENDATIONS.
- STANDARD INLET/OUTLET PIPE CONFIGURATION TO ENTER AND EXIT STRUCTURE AT 180° SPECIAL ANGLED CONFIGURATIONS AVAILABLE.
- OVERSIZED HOLES TO ACCOMMODATE SPECIFIC PIPE TYPE MUST BE CONCENTRIC TO PIPE ID. ALL ANNUAL SPACES SHALL BE FILLED WITH A MINIMUM OF 3000 PSI CONCRETE FOR FULL THICKNESS OF PRECAST WALLS.
- CONTRACTOR RESPONSIBLE TO ENSURE ADEQUATE BEARING SURFACE IS PROVIDED (I.E. COMPACTED & LEVEL PER PROJECT SPECIFICATIONS).
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT OLDCASTLE INFRASTRUCTURE.



Oldcastle Infrastructure

PH: 800.579.8819 www.oldcastleinfrastructure.com

THIS PRODUCT IS PROTECTED BY THE FOLLOWING US PATENT: 7,182,874; RELATED FOREIGN PATENTS; OR OTHER PATENTS PENDING.

Dual-Vortex Separator DVS-48C

DATE	DESCRIPTION	BY
8/4/2023	DESIGNED: BWB CHECKED: TCC	PROJECT/FILE NO. LDAP23-00146

SCALE: 1" = 1' IN FEET

1 INCH

NOTES:

- CONTRACTOR SHALL COORDINATE A PRE-INSTALLATION MEETING FOR THE DVS WITH ARLINGTON COUNTY OFFICE OF SUSTAINABILITY AND ENVIRONMENTAL MANAGEMENT (OSEM). EMAIL StormwaterReview@arlingtonva.us TO SCHEDULE
- UPON COMPLETION OF THE DUAL-VORTEX SEPARATOR INSTALLATION, THE CONTRACTOR SHALL PROVIDE WRITTEN CERTIFICATION TO THE MANUFACTURER THAT THE DEVICE IS INSTALLED PROPERLY.

Dewberry Dewberry Engineers Inc.

8401 ARLINGTON BLVD.
FAIRFAX, VA 22031
PHONE: 703.849.0100
FAX: 703.849.0518

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

STORMWATER DETAILS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN C-334 14 OF 28

ISSUED FOR BID 11-10-2023

NO. DATE DESCRIPTION BY

SUBMITTED DATE: 8/4/2023

DESIGNED: BWB
CHECKED: TCC

PROJECT/FILE NO.
LDAP23-00146

SCALE: 1" = 1' IN FEET

1 INCH

DEWBERRY REVISIONS

PROFESSIONAL ENGINEER

TIMOTHY CHARLES CULLETON
Lic. No. 20112
11/8/2023

Watershed / Impaired Waters / Total Maximum Daily Load (TMDL) Information

This project site is in the Chesapeake Bay and Potomac River watersheds; TMDLs have been established for sediment, nutrients (nitrogen, phosphorus), and PCBs. A TMDL has also been established for bacteria in the Four Mile Run Watershed. Measures will be taken to minimize the discharge of these pollutants of concern to the storm drain system and surface waters.

- Site inspections will be conducted every four (4) business days
- Permanent or temporary soil stabilization shall be applied to denuded areas within seven days after final grade is reached on any portion of the site.
- Nutrients shall be applied in accordance with manufacturer's recommendations or an approved nutrient management plan and shall not be applied during rainfall events, during windy conditions, or when rain is in the immediate 48-hour forecast.
- For projects located in the Potomac River Watershed, measures will be taken to prevent /minimize the discharge of PCBs from the project site. Proper sediment controls and stabilization measures will be implemented. Debris and waste materials generated during demolition activities shall be properly disposed in accordance with local, state, and federal regulations.
- Arlington County's TMDL Action Plan for Bacteria covers the entire County. Measures will be taken to prevent /minimize the discharge of bacteria from the project site. Pollution prevention controls focused on managing dumpsters, portable lavatories, and other wastes will be implemented (additional information is provided in Section 6.0 Potential Sources of Pollution & Pollution Prevention Practices).

1.0 SWPPP Documents Located Onsite & Available for Review

SWPPP Documents	Located Onsite & Available for Review?	
• LDA Permit	<input type="checkbox"/> Yes	
• Erosion & Sediment Control Plan (or agreement in lieu of)	<input type="checkbox"/> Yes	
• Pollution Prevention Plan	<input type="checkbox"/> Yes	
• Stormwater Management Plan	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A
• Construction General Permit	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A
• Notice of Coverage Letter	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A
• Registration Statement	<input type="checkbox"/> Yes	<input type="checkbox"/> N/A

Required documents are kept in a centralized location on the project site (i.e. mail box or another container marked SWPPP). Permits are displayed on site.

2.0 Authorized Non-Stormwater Discharges

Types of Authorized Non-Stormwater Discharges	Likely Present at Project Site?	
• Uncontaminated / filtered excavation dewatering	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
• Uncontaminated / filtered wash water	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
• Potable water sources that do not create an in-stream impact	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
• Pumped uncontaminated ground water	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> NA
• Landscape irrigation	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> NA
• Other _____	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> NA

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5.0 Pollution Prevention Practices (PPP)

Pollution prevention practices (PPP) including daily good housekeeping efforts will be employed at the project site to prevent pollution discharges. Equipment, tools and materials needed for cleanup (brooms, shovels, vacuums, trash bags) will be readily available on site.

The following selected ("checked") activities will be conducted during this project and the corresponding pollution prevention controls and practices will be implemented. Specific controls and additional information are included as applicable.

- (1) **Clearing, Grading, Excavating - Sediment Control / Stabilization (PPP1)**
 - Erosion and sediment controls selected and/or described in Section 4.0 will be installed and maintained to protect resources and prevent sediment from leaving the site/LOD and entering the storm drain system or surface waters.
 - Sediment tracking onto paved areas outside the LOD / construction entrances will be swept up
 - Plastic sheeting, tarps, 2" deep straw cover, mulch and/or erosion matting will be used for temporary stabilization of exposed soil / slopes.
 - The Pre-Storm Site Preparation Checklist will be followed and implemented.
- (2) **Saw Cutting and Paving Operations (PPP2)**
 - Slurry or other debris shall not enter a storm drain or surface water.
 - Spill containment techniques such as the use of sand bags or booms around the immediate work area shall be used to contain and capture any non-stormwater discharges.
 - Slurry from saw cutting operations must be contained, collected (vacuumed), and disposed of properly.
- (3) **Concrete Operations - Washout and Waste Management (PPP3)**

Concrete wash out will be conducting in a leak-proof container or leak-proof settling basin that is designed so that no overflows can occur due to inadequate sizing or precipitation. Hardened concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wastes.

 - Concrete wash water shall not be discharged to a storm drain or surface water.
 - Washout facilities will be sized appropriately for the needs of the project.
 - Washout facilities will not be located near storm drains.
 - Mixers and truck chutes will be washed out in designated contained washout areas
 - No tracking from washout areas will occur.
 - Plastic sheeting, boards, or tarps will be placed under concrete truck chutes during pouring
 - Concrete washout areas will not be used for dewatering

Description of temporary controls that will be used:

The selected concrete wash out facility will be used:

- Washout Structure - Wood Planks
- Washout Structure - Straw Bales
- Prefabricated Containment System - Type: _____
- Other: _____

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- (4) **Washing Activities (PPP4)**

Wash water discharges to the storm drain system or surface waters are prohibited. The following pollution prevention practices and controls will be implemented where applicable:

 - Wash water or liquid wastes shall not enter a storm drain or surface waters.
 - A suitable containment system for cleaning equipment such as a drum, prefabricated system, lined container, or portable wash pad will be provided.
 - The wash / containment area will be sized appropriately for the needs of the project.
 - The wash / containment area(s) will be situated away from storm drains.
 - Containers will be monitored for leaks or damage. Containers will be replaced as needed.

Washout containment / controls for this project will include:

- (5) **Dewatering Operations (PPP5)**

Construction site dewatering will not be discharged without the use of controls. Sediment laden or turbid water associated with dewatering shall be filtered, settled or similarly treated prior to discharge. The dewatering detail on approved ESC plan will be used. Dewatering operations will be monitored to ensure the controls being used are effective (clear water being discharged) and no clogging or overflow is occurring. Controls will be cleaned out or replaced when the control is no longer effective at removing sediment. Pumping will be conducted so that the rate of discharge does not overwhelm the dewatering system and allows for adequate settling and/or filtration.

Dewatering controls that will be used:

- Filter bag on stone bed with haybales
- Portable sediment tank
- Manufactured / customized system

- (6) **Materials / Chemical Use and Storage (PPP6)**

Areas will be designated for material delivery and storage. These areas will be near construction entrances and not situated near storm drains. Lay downs areas will be shown on plans. Storage and containment areas will be adequately enclosed or covered. Additional pollution prevention practices and controls include:

- Stockpiled soil and other loose materials that can be washed away shall be covered with a tarp, plastic sheeting, or other stabilization matting when not being actively accessed. Covers must be properly secured / anchored down to prevent the covering from being blown off and exposing materials to rain. Controls such as hay bales or booms should be placed along the perimeter of stock pile (downhill side).
- Stockpiled materials located on the edge of roadways will not obstruct flow along the curb line (gutter). Adequate space between the curb and stockpile will be left to allow stormwater to flow along the curb line. Pipes or boards laid over curbs may be used to create the flow through space.
- Secondary containment will be used for storage of fuels, oil, grease, paint, solvents, sealers, cleaners, and other chemicals. Materials will be kept secured and covered when not in use.

- (7) **Equipment and Vehicle Fueling / Maintenance (PPP7)**

Designated areas for refueling vehicles or equipment or perform maintenance will be located away from storm drains and surface waters. Additional pollution prevention practices and controls include:

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- Vehicles and equipment will be inspected daily for leaks. Any leaks or spills will be addressed upon discovery.
- Containment measures will be used when conducting fueling (e.g. place fuel mats, spill pads, boards, or plastic sheeting on ground) to contain drips, leaks, spills.
- Fuel tank (s) will have containment.
- Fuel tanks and containers will be inspected daily for signs of damage.
- Employees will be instructed not to "top off" or overfill vehicles or equipment to prevent spills.
- Secondary containment and secure storage will be provided for fuel, oil, solvent and/or lubricants.
- Drip pans, sheeting, and/or absorbent pads will be placed under heavy equipment when not in use (i.e. overnight) to capture any potential leaks.

- (8) **Waste Management (PPP8)**

Trash, waste, and construction debris will be managed and disposed of properly. Designated areas for trash and debris collection will be situated as far away from storm drains as possible. Additional pollution prevention practices and controls include:

- A sufficient number of waste containers will be kept on a site to handle the quantity of waste produced.
- Waste collection / pick up will be conducted as necessary to prevent overfilling.
- Containers will have lids or covers that can be used to cover open containers at the end of the work day and prior to rain events. Roll off containers will be kept covered when not being accessed. Lids and doors on dumpsters and/or trash can will be kept closed.
- Waste containers will be checked frequently for damage / leaks. Any cleaning will be conducting using DRY methods. Waste containers will not be power washed or hosed out unless the wash water is collected and disposed of into the sanitary sewer system.
- Damaged containers / receptacles (leaking, cracked, corroded, or otherwise deteriorating) will be replaced.

- (9) **Portable Lavatories (PPP9)**

Portable lavatory units will be properly situated and maintained to prevent pollution releases. Additional pollution prevention practices and controls include:

- Portable lavatories will be situated away from storm drains and surface waters.
- Portable lavatories will be kept level and have secondary containment (i.e. trays) if situated on paved surfaces.
- Units will be inspected for leaks or damage will be conducted frequently.
- Routine maintenance / cleaning will occur, and units will be replaced if damaged or leaking.

- (10) **Nutrient Management / Fertilizer Application (PPP10)**

Fertilizer will be applied in accordance with manufacturer's recommendations. Fertilizer will not be applied during rainfall events or windy conditions, or when rain is forecasted. Fertilizer will be properly secured and stored under cover when not being used. Residual fertilizer on paved surfaces will be swept up.

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7.0 Spill Prevention, Response, and Reporting

Spills and leaks will be cleaned up upon discovery using dry cleaning methods (placement of absorbent materials, sweeping, shoveling, bagging, proper disposal). Spills will not be hosed down unless the wash water is contained, collected and disposed of properly.

Spill kits will be kept on site. The spill kit shall be labeled, stocked, and readily accessible. **Employees will be informed of the location of the spill kit(s) and how to respond to and report spills.**

Spill kits should contain absorbent materials, pads, socks, plastic bags, and personal protective equipment (gloves, eye protection). Shovels/brooms should be accessible.

Location(s) of spill kit(s) on site:

1.)

2.)

3.)

Spill Response and Reporting:

- Check for hazards (flammable material, noxious fumes, cause of spill) – if flammable liquid, turn off engines and nearby electrical equipment. **If serious hazards are present leave the area and call 911.**
- Ensure the spill area is safe to enter and does not pose an immediate threat to health and safety
- Stop the spill source.
- Notify personnel in area of spill and potential dangers.
- Ask for assistance to block off area and help with cleanup efforts.
- Take measures to prevent a spill from spreading and/or entering storm drains (socks, booms, soil)
- Clean up spill using dry methods and dispose of materials in accordance with Safety Data Sheet specification and local, state, and federal regulations.
- Never flush or "hose down" a spill down into a storm drain.
- If spilled material has entered a storm drain or surface water, call the Fire Department (911)

Emergency Contacts:

- Arlington County Fire & Police 911 / 703-558-2222
- DES Water, Sewer, Streets 24-Hour Emergency 703-228-6555
- Washington Gas Emergency Line 703-750-1400
- VA Dept. of Emergency Management (24 hour) 804-674-2400

• Water or sewer breaks, or overflows will be reported to Arlington County Department of Environmental Services, Water, Sewer, Streets 24-Hour Emergency # 703-228-6555

• Leaking underground storage tanks will be reported to the Virginia Department of Environmental Quality Northern Regional Office, 703-583-3800 and the Arlington County Fire Prevention Office, 703-228-4644

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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 OR ARLINGTON COUNTY DETERMINES THE DISCHARGE TO BE A SIGNIFICANT SOURCE OF POLLUTANTS TO SURFACE WATERS:
 - a. WATER LINE FLUSHING (MANAGED IN A MANNER TO AVOID AN INSTREAM IMPACT); LANDSCAPE IRRIGATION; DIVERTED STREAM FLOWS; RISING GROUND WATERS; UNCONTAMINATED GROUND WATER INFILTRATION (AS DEFINED AT 40 CFR 35.2005(20)); UNCONTAMINATED PUMPED GROUND WATER; DISCHARGES FROM POTABLE WATER SOURCES; FOUNDATION DRAINS; AIR CONDITIONING CONDENSATION; IRRIGATION WATER; SPRINGS; WATER FROM CRAWL SPACE PUMPS; FOOTING DRAINS; LAWN WATERING; INDIVIDUAL RESIDENTIAL CAR WASHING; FLOWS FROM RIPARIAN HABITATS AND WETLANDS; DECHLORINATED SWIMMING POOL DISCHARGES; STREET WATER WASHING; DISCHARGES OR FLOWS FROM EMERGENCY FIREFIGHTING ACTIVITIES; AND, OTHER ACTIVITIES GENERATING DISCHARGES IDENTIFIED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY AS NOT REQUIRING VPDES AUTHORIZATION.
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, SLURRY/WASH WATER FROM SAW CUTTING ACTIVITIES, ETC.) FROM BEING DISCHARGED INTO ARLINGTON COUNTY'S MUNICIPAL STORM SEWER SYSTEM (MS4), OR STREAM NETWORK.
3. PER CHAPTER 26.5C OF THE ARLINGTON COUNTY CODE, IT SHALL BE UNLAWFUL FOR ANY PERSON TO DISCHARGE DIRECTLY OR INDIRECTLY INTO THE STORM SEWER SYSTEM OR STATE WATERS, ANY SUBSTANCE LIKELY, IN THE OPINION OF THE COUNTY MANAGER, TO HAVE AN ADVERSE EFFECT ON THE STORM SEWER SYSTEM OR STATE WATERS.

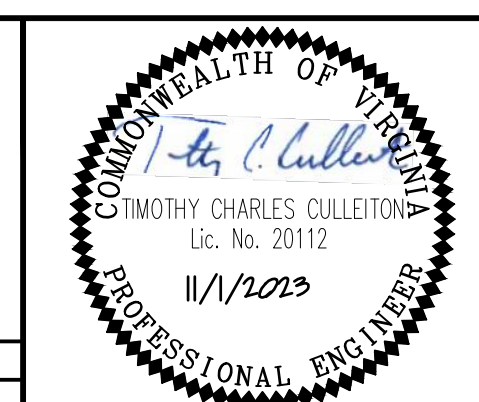


ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

POLLUTION PREVENTION PLAN
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

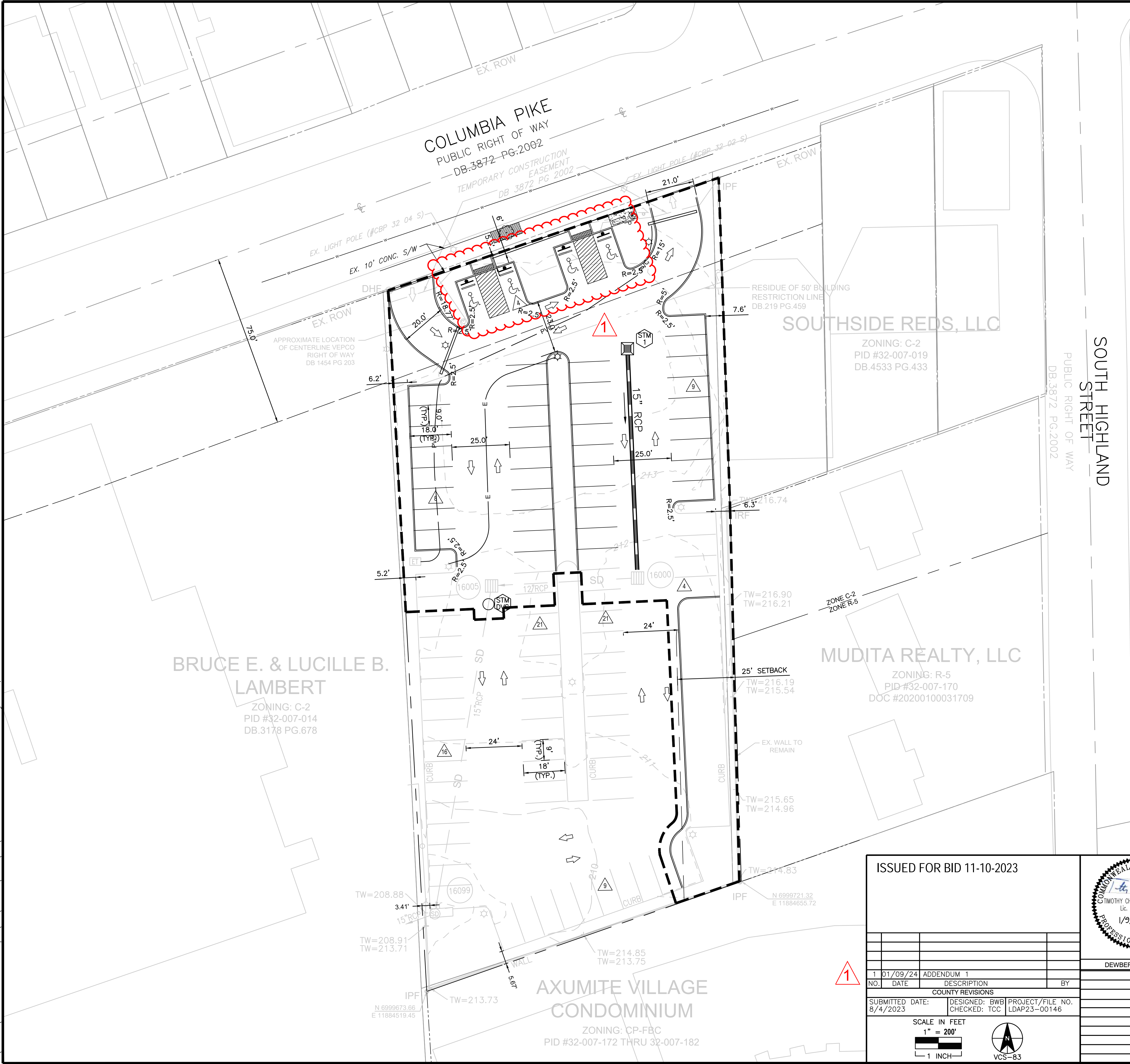
SCALE: AS-SHOWN **C-335** 15 OF 28

ISSUED FOR BID 11-10-2023			
NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			
SUBMITTED DA	DESIGNED: BWB	PROJECT/FILE NO.	
8/4/2023	CHECKED: TCC	LDAP23-00146	
SCALE: AS SHOWN			
1" = 1' IN FEET			
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DEWBERRY REVISIONS

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BRUCE E. & LUCILLE B. LAMBERT
 ZONING: C-2
 PID #32-007-014
 DB.3178 PG.678

COLUMBIA PIKE
 PUBLIC RIGHT OF WAY
 DB.3872 PG.2002

SOUTHSIDE REDS, LLC
 ZONING: C-2
 PID #32-007-019
 DB.4533 PG.433

MUDITA REALTY, LLC
 ZONING: R-5
 PID #32-007-170
 DOC #20200100031709

AXUMITE VILLAGE CONDOMINIUM
 ZONING: CP-FBC
 PID #32-007-172 THRU 32-007-182

SOUTH HIGHLAND STREET
 PUBLIC RIGHT OF WAY
 DB.3872 PG.2002

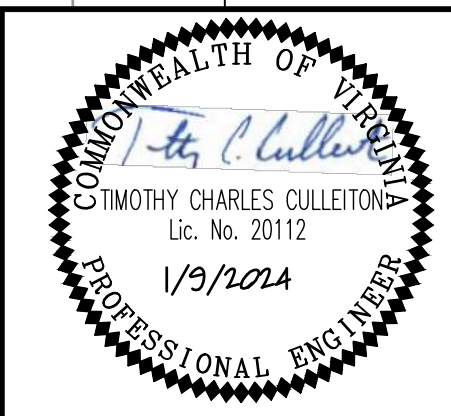


ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

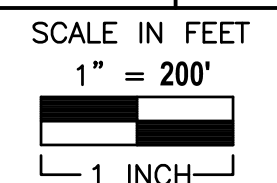
MAINTENANCE OF TRAFFIC PLAN
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-800** 16 OF 28

ISSUED FOR BID 11-10-2023



NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE:		DESIGNED: BWB	PROJECT/FILE NO.
8/4/2023		CHECKED: TCC	LDAP23-00146



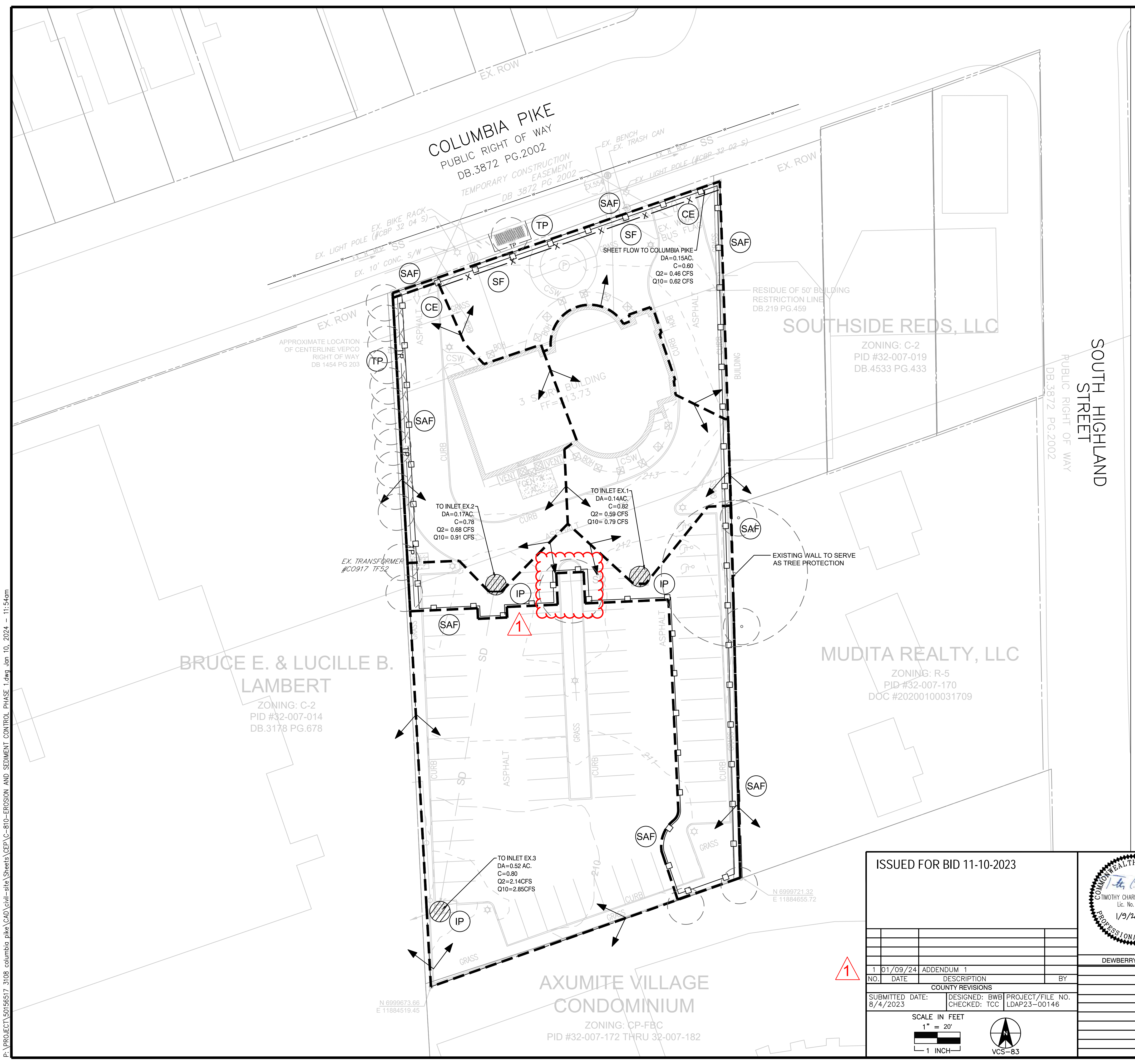
VIRGINIA UNIFORM CODING SYSTEM

FOR EROSION AND SEDIMENT CONTROL PRACTICES

NO	TITLE	KEY	SYMBOL
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3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.07	STORM DRAINAGE INLET PROTECTION	IP	
3.08	TREE PRESERVATION AND PROTECTION	TP	
DRAINAGE DIVIDES			

--- LIMITS OF CLEARING & GRADING
 ○ CRITICAL ROOT ZONE

EROSION & SEDIMENT CONTROL NOTES:
 THIS SHEET DEPICTS PHASE 1 OF A 2 PHASE EROSION & SEDIMENT CONTROL PLAN FOR THE SITE. PHASE 1 IS INTENDED FOR INSTALLATION OF PERIMETER CONTROLS. PHASE 2 IS FOR FINAL INFRASTRUCTURE CONDITIONS. REFER TO SHEET C-870 FOR E&S NARRATIVE.

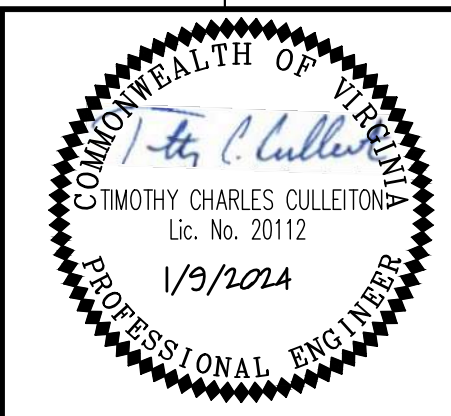


Dewberry Dewberry Engineers Inc.
 8401 ARLINGTON BLVD. FAIRFAX, VA 22031
 PHONE: 703.849.0100 FAX: 703.849.0518

ARLINGTON COUNTY, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES

EROSION AND SEDIMENT CONTROL PHASE 1
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN C-810 17 OF 28



ISSUED FOR BID 11-10-2023

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE: 8/4/2023		DESIGNED: BWB	PROJECT/FILE NO. LDAP23-00146
		CHECKED: TCC	

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 1" = 20'
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VCS-83

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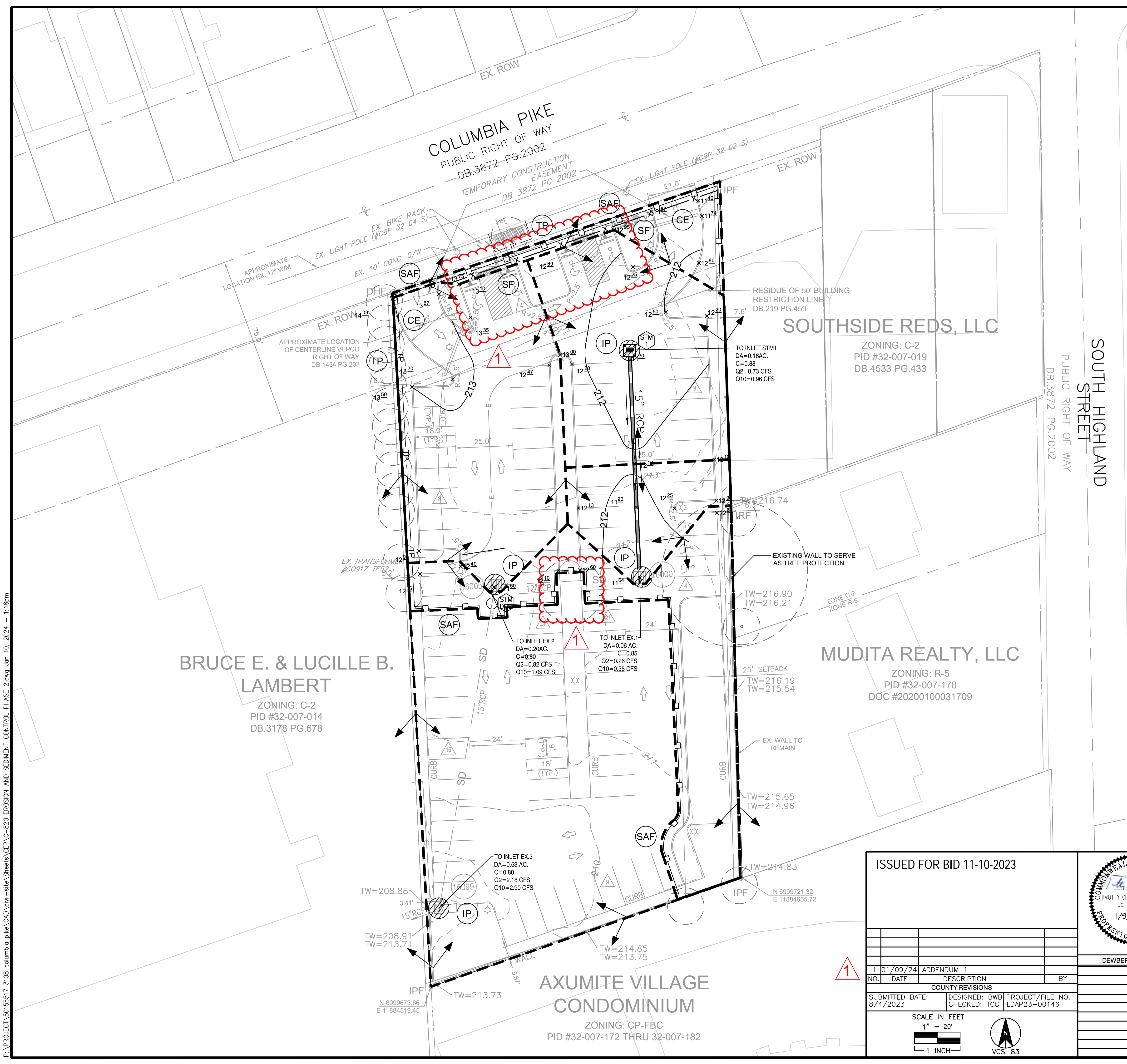
VIRGINIA UNIFORM CODING SYSTEM

NO	TITLE	KEY	SYMBOL
3.01	SAFETY FENCE	SAF	
3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.05	SILT FENCE	SF	
3.07	STORM DRAINAGE INLET PROTECTION	IP	
3.38	TREE PRESERVATION AND PROTECTION	TP	
DRAINAGE DIVIDES			

--- LIMITS OF CLEARING & GRADING

○ CRITICAL ROOT ZONE

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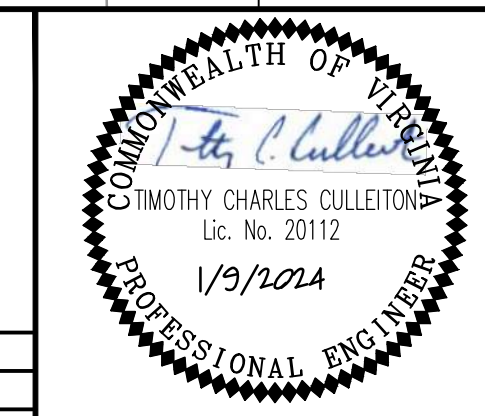
Dewberry Dewberry Engineers Inc.
 8401 ARLINGTON BLVD. FAIRFAX, VA 22031
 PHONE: 703.849.0100 FAX: 703.849.0518

ARLINGTON COUNTY, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES

EROSION AND SEDIMENT CONTROL PHASE 2
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

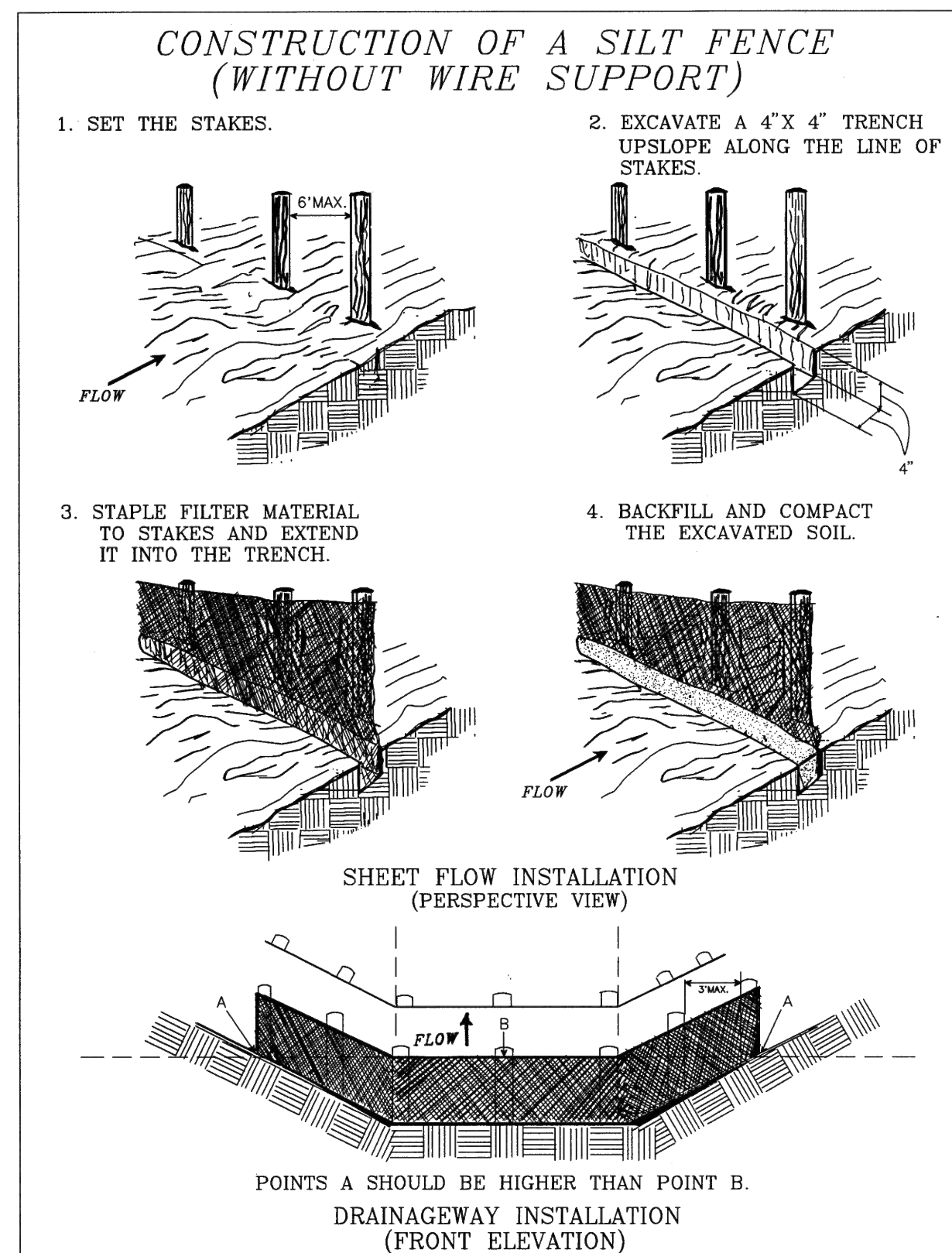
SCALE: AS-SHOWN C-820 18 OF 28

ISSUED FOR BID 11-10-2023



NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE:		DESIGNED:	PROJECT/FILE NO.
8/4/2023		BWB	LDAP23-00146
CHECKED:		TCC	
SCALE IN FEET			
1" = 20'			
1 INCH			
VCS-83			

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Source: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood and Wyant Plate 3.05-2

NOV 1, 2023

date

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

Re: Erosion and Sediment Control Permit Application for:
3108 COLUMBIA PIKE

street address
32-007-018

lot, block, section subdivision
LDAP 23-00146

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. Regularly inspecting the site during construction to ensure that all E&S controls are functioning and are adequate to address erosion and sedimentation. Inspect the site 48 hours after a runoff-generating storm, and provide a copy of the inspection findings to the county.
5. Reporting to the owner the presence of 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.

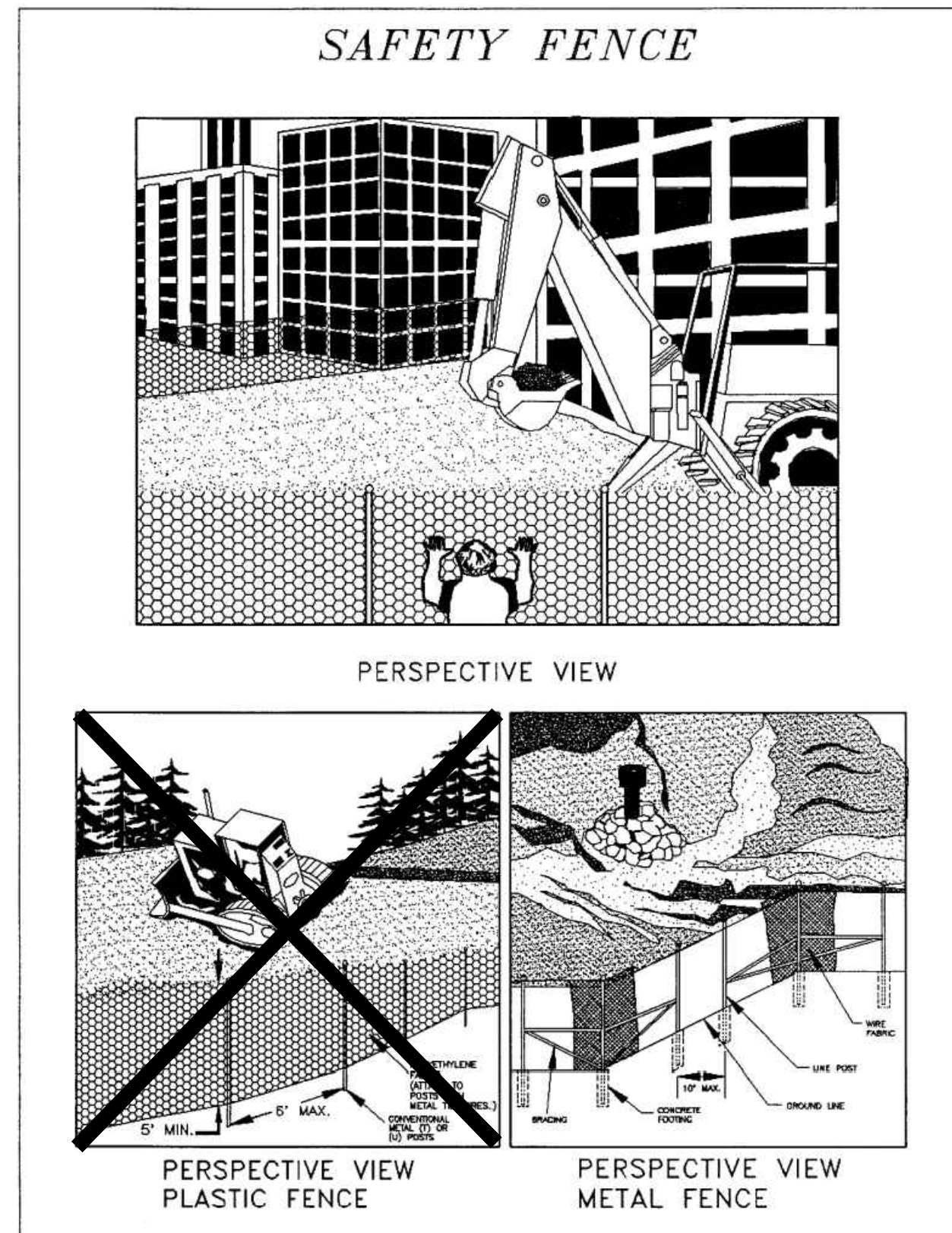
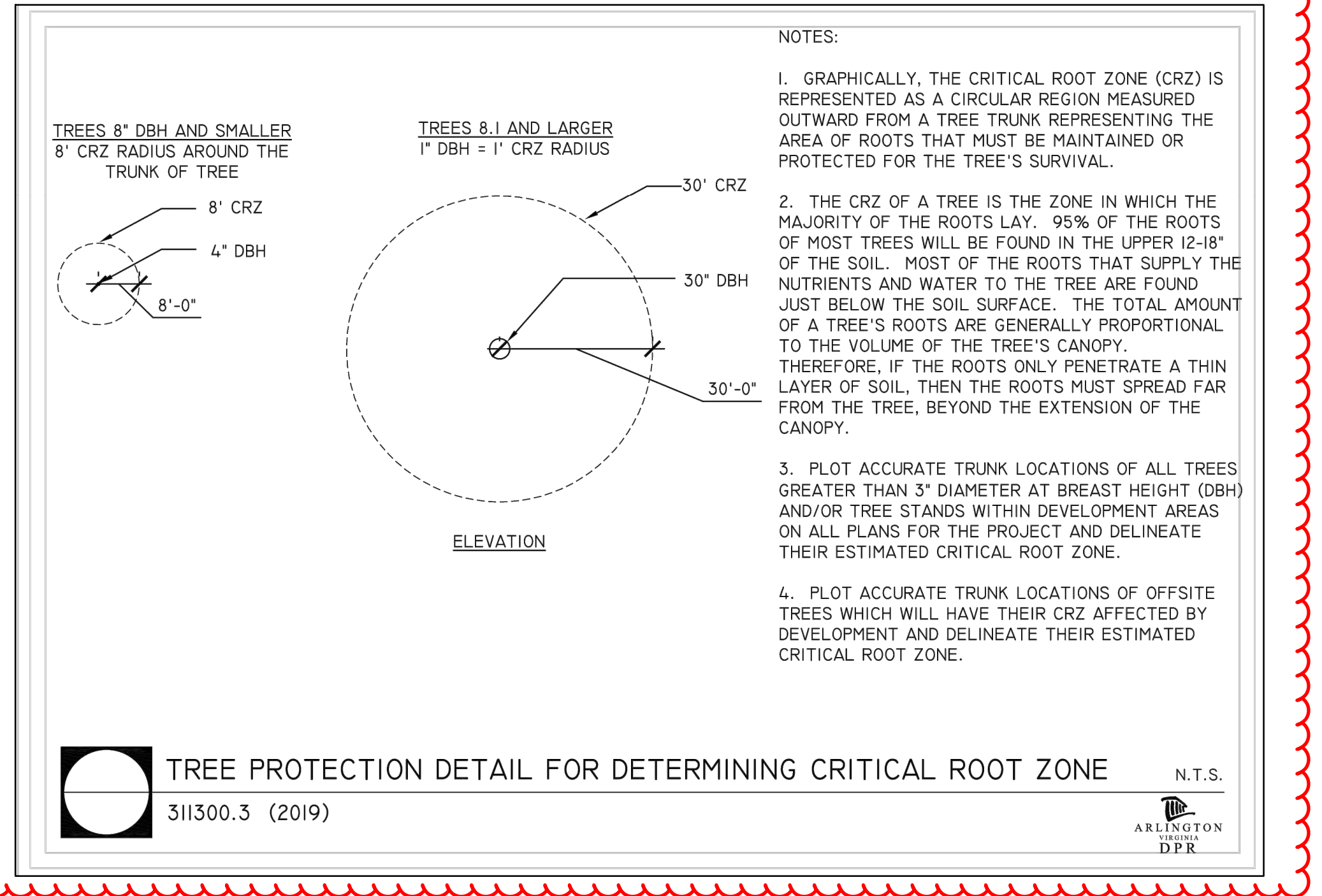
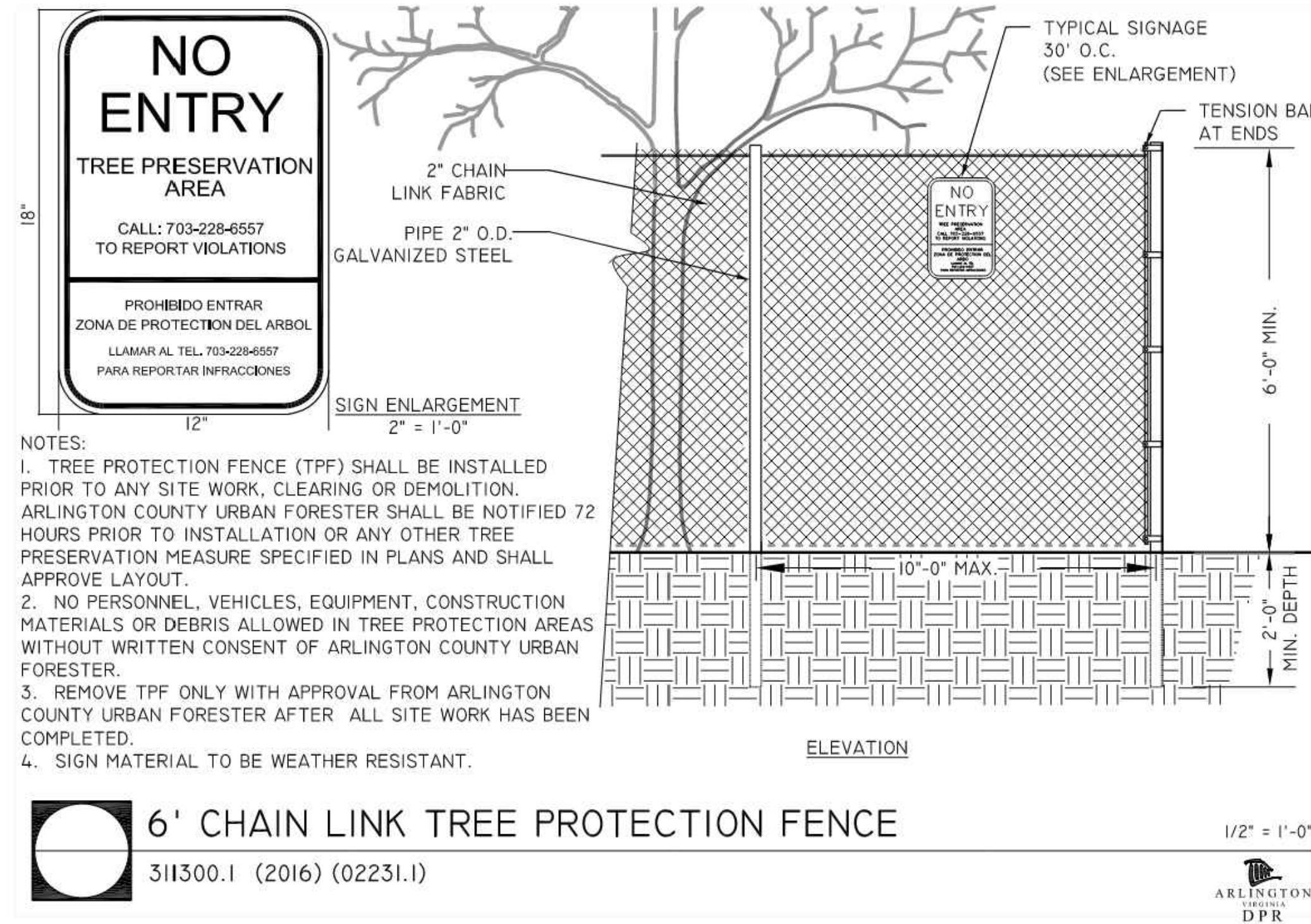
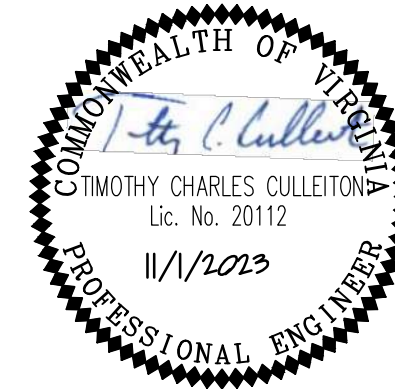
I may be reached at 703 849 0497 with questions about this plan or my execution of the duties of
Responsible Land Disturber.

Sincerely,
Timothy C. Culleiton

TIMOTHY C. CULLEITON

name printed
VA PE #20112

professional registration (type and number)



Source: Adapted from Conwed Plastics and VDOT Road and Bridge Standards Plate 3.01-1

STONE CONSTRUCTION ENTRANCE

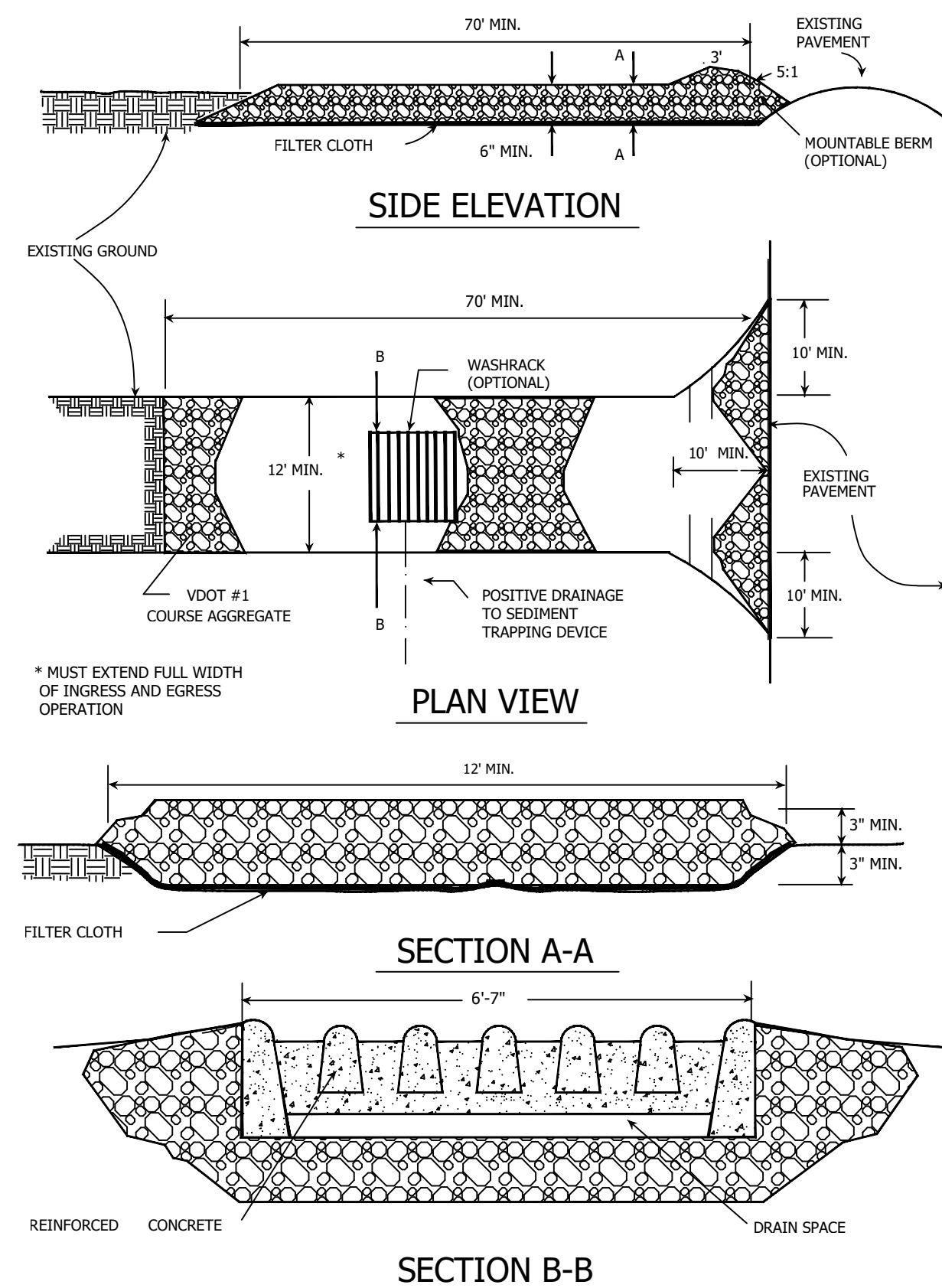


Plate 3.02-1

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8401 ARLINGTON BLVD.
FAIRFAX, VA 22031
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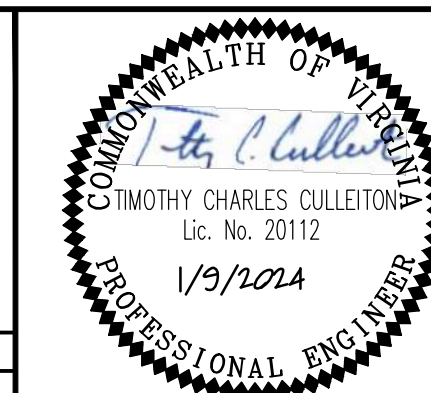
ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

EROSION AND SEDIMENT CONTROL DETAILS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **C-860** 19 OF 28

ISSUED FOR BID 11-10-2023

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE:		DESIGNED: BWB	PROJECT/FILE NO.
8/4/2023		CHECKED: TCC	LDAP23-00146



DEWBERRY REVISIONS

EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION:

THIS PROJECT IS LOCATED AT 3108 COLUMBIA PIKE, APPROXIMATELY 750' EAST FROM THE INTERSECTION OF S. GLEBE ROAD AND COLUMBIA PIKE. THIS PLAN PROPOSES THE DEMOLITION OF THE EXISTING BUILDING AND EXPANSION OF THE EXISTING PARKING AREA. THE SITE IS LOCATED WITHIN THE ARLINGTON BRANCH WATER SHED AND THE TOTAL DISTURBED AREA IS APPROXIMATELY 0.6105 ACRES.

EXISTING SITE CONDITIONS:

THE PROJECT SITE CONSISTS OF A VACANT OFFICE BUILDING, PARKING LOT, AND ASSOCIATED INFRASTRUCTURE. THE MAJORITY OF THE SITE CONSISTS OF IMPERVIOUS AREA AND GENERALLY SLOPES TO THE SOUTHWEST.

ADJACENT PROPERTIES:

THE SITE IS BOUNDED BY COLUMBIA PIKE TO THE NORTH, A CAR DEALERSHIP TO THE WEST, CONDOMINIUMS TO THE SOUTH, AND A MIX OF COMMERCIAL AND RESIDENTIAL TO THE EAST.

OFF-SITE AREAS:

THERE IS NO PROPOSED OFF-SITE WORK OR DISTURBANCE PROPOSED WITH THIS PROJECT.

EROSION AND SEDIMENT CONTROL MEASURES:

THE EROSION AND SEDIMENT CONTROL MEASURES FOR THIS PROJECT AREA INCLUDE SAFETY FENCE, SILT FENCE AND CONSTRUCTION ENTRANCE.

PERMANENT STABILIZATION:

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

STORMWATER RUNOFF CONSIDERATIONS:

TOTAL LAND DISTURBANCE.....= 26,593 SF (0.6105 ACRES)

PRE-IMPROVEMENT IMPERVIOUS AREA.....= 19,847 SF (0.4519 ACRES)

POST-IMPROVEMENT IMPERVIOUS AREA.....= 18,931 SF (0.4346 ACRES)

DECREASED IMPERVIOUS AREA.....= 716 SF (0.0164 ACRES)



SOILS INFORMATION:

THE FOLLOWING SOILS ARE FOUND ON SITE (SEE SOILS MAP ON SHEET 1 (COVER SHEET) FOR LOCATION)

SOIL# SOIL NAME HYDROLOGIC GROUP ERODABILITY

12 URBAN LAND-UDORTHTENTS VARIES N/A

CRITICAL AREAS:

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

EROSION & SEDIMENT CONTROL PROJECT PHASING

PHASE I:

- 1. PRE-CONSTRUCTION MEETING WITH THE PROJECT OFFICER, CONTRACTOR, URBAN FORESTER, RESPONSIBLE LAND DISTURBER, AND COUNTY INSPECTOR
2. INSTALL THE TEMPORARY CONSTRUCTION ENTRANCE IN THE LOCATION SHOWN ON THE E&S PHASE I PLAN. MUD AND DEBRIS SHALL BE WASHED FROM ALL TRUCKS EXITING THE SITE. WASHWATER SHALL BE CAPTURED AND FILTERED.
3. INSTALL TREE PROTECTION FENCE (TP) AS SHOWN ON E&S PHASE I PLAN.
4. INSTALL PERIMETER CONTROLS AS SHOWN ON E&S PHASE I PLAN

PHASE II:

- 1. BEGIN UTILITY CONSTRUCTION. INSTALL ALL UNDERGROUND UTILITIES AND BEGIN SITE GRADING.
2. ONCE THE SITE IS BOUGHT TO NEAR FINAL GRADE, AND THE UTILITY CONSTRUCTION IS COMPLETE, COMMENCE CONSTRUCTION OF CURB & GUTTER, STREET, SIDEWALKS, AND OTHER IMPROVEMENTS
3. THE CONTROL MEASURES MAY NOT BE REMOVED UNTIL ALL OF THE DISTURBED AREAS HAVE BEEN STABILIZED AND ONLY AS APPROVED AND DIRECTED BY THE INSPECTOR.

EROSION AND SEDIMENT CONTROL MEASURES

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

THE EROSION AND SEDIMENT CONTROL INSPECTOR SHALL HAVE THE AUTHORITY TO ADD OR DELETE EROSION AND SEDIMENT CONTROLS AS NEEDED IN THE FIELD.

STRUCTURAL PRACTICES

TEMPORARY CONSTRUCTION ENTRANCE - VESCH 3.02

- 1. A TEMPORARY CONSTRUCTION ENTRANCE WITH A WASH RACK SHALL BE INSTALLED AT THE EXISTING ACCESS POINT TO THE SITE. DURING MUDDY CONDITIONS, DRIVERS OF CONSTRUCTION VEHICLES WILL BE REQUIRED TO WASH THEIR WHEELS BEFORE RE-ENTERING THE LOCAL ROADWAYS.
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY.
3. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
4. THE USE OF WATER TRUCKS TO REMOVE MATERIALS DROPPED, WASHED, OR TRACKED INTO ROADWAYS WILL NOT BE PERMITTED UNDER ANY CIRCUMSTANCES.

SILT FENCE - VESCH 3.05

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

STORM DRAIN INLET PROTECTION - VESCH 3.07

- 1. ALL EXISTING & PROPOSED STORM SEWER INLETS WITHIN THE PROJECT LIMITS SHALL BE PROTECTED DURING CONSTRUCTION. SEDIMENT-LADEN WATER SHALL BE FILTERED BEFORE ENTERING THE STORM SEWER INLETS. INLETS MUST NOT CAUSE FLOODING.
2. INLET PROTECTION SHALL BE INSPECTED AFTER EACH RAIN EVENT AND REPAIRS SHALL BE MADE AS NECESSARY.
3. STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

TREE PROTECTION

- 1. TREES SHALL BE PROTECTED PER THE REQUIREMENTS OF THE CHESAPEAKE BAY PRESERVATION ORDINANCE AND THE CURRENT ANSI STANDARDS FOR MANAGEMENT OF TREES AND SHRUBS DURING SITE PLANNING, SITE DEVELOPMENT, AND CONSTRUCTION.
2. ALL TREES SHOWN TO BE PROTECTED ON THE PLAN ARE TO BE PROTECTED UNLESS OTHERWISE DIRECTED BY THE FORESTER. THE COUNTY'S URBAN FORESTER BE CONTACTED AT URBANFORESTRY@ARLINGTONVA.US AND ALLOWED TO INSPECT ALL TREE PROTECTION 72 HOURS PRIOR TO THE START OF CONSTRUCTION. IN SPITE OF PRECAUTIONS, SOME DAMAGE TO PROTECTED TREES MAY OCCUR. IN SUCH CASES, THE COUNTY URBAN FORESTER SHALL DIRECT THE PROJECT TO REMEDIATE DAMAGE FOLLOWING CURRENT ANSI STANDARDS, OR WORK WITH THE PROJECT TO REPLACE TREES, IF THEY ARE DAMAGED BEYOND REPAIR.

TEMPORARY SEEDING - VESCH 3.31

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

PERMANENT SEEDING - VESCH 3.32

- 1. SINCE THE SUBJECT SITE IS LOCATED WITHIN THE COASTAL PLAIN AREA OF VIRGINIA, SHEET III-304 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK SHALL BE FOLLOWED FOR FINAL SEEDING MATERIAL, SEEDING RATES, AND DATES OF APPLICATION, EXCEPT IN RESOURCE PROTECTION AREAS.
2. IN RESOURCE PROTECTION AREAS, THE ARLINGTON COUNTY RESOURCE PROTECTION AREA SEED MIX, OR AN APPROVED EQUAL, SHALL BE APPLIED. APPLY AT 50 LBS/ACRE (2 LB/1000 SF) BETWEEN AUGUST 15TH AND MAY 15TH.

Table with 3 columns: PERCENT OF MIX (%), LATIN NAME, COMMON NAME. Lists various seed mix components like Lolium multiflorum, Elymus virginicus, etc.

SODDING - VESCH 3.33

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

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

EROSION AND SEDIMENT CONTROL MANAGEMENT MEASURES

LANDSCAPE / TREE PRESERVATION NOTES

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

LAND CONSERVATION NOTES:

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

EROSION & SEDIMENT CONTROL PROGRAM:

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

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- 1. UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND/OR ARLINGTON COUNTY STANDARDS AND SPECIFICATIONS.
2. THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
3. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
4. A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
5. PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN THE AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION AND SEDIMENT CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.

- 7. ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
8. DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
9. THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
10. ALL POST-CONSTRUCTION STORMWATER MANAGEMENT FACILITIES SHALL BE KEPT OFF-LINE UNTIL CONSTRUCTION IS COMPLETED AND ALL AREAS HAVE BEEN PROPERLY STABILIZED.
11. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.

PRE-STORM EROSION & SEDIMENTATION CHECKLIST:

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

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

1. PERIMETER CONTROLS

- a. SILT FENCE SHALL BE CHECKED FOR UNDERMINING, HOLES, OR DETERIORATION OF THE FABRIC. FENCING SHALL BE REPLACED IMMEDIATELY IF THE FABRIC IS DAMAGED OR WON. SILT FENCE MUST BE TRENCHED INTO THE GROUND PER STATE SPECIFICATIONS (VESCH STD & SPEC 3.09).
b. WOODEN STAKES OR STEEL POSTS SHALL BE PROPERLY SECURED UPRIGHT INTO THE GROUND. DAMAGED POSTS OR STAKES MUST BE REPLACED.
c. SEDIMENT THAT HAS ACCUMULATED AGAINST THE SILT FENCE SHALL BE REMOVED. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE LEVEL REACHES ONE-HALF THE HEIGHT OF THE FENCING.
d. HAY BALES OR A STONE BERM SHALL BE PLACED ACROSS THE CONSTRUCTION ENTRANCE TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE.

2. EXPOSED SLOPES AND SOIL

- a. EXPOSED SLOPES NOT AT THE FINAL STABILIZATION PHASE SHALL BE COVERED WITH STRAW, TARPS, PLASTIC SHEETING, OR EROSION CONTROL MATTING. COVERING MATERIAL SHALL BE PROPERLY SECURED/ANCHORED.
b. CONTROLS SHALL BE INSTALLED TO PREVENT CONCENTRATED FLOW DOWN AN EXPOSED SLOPE. BERMS OR DIVERSION DIKES SHALL BE INSTALLED AT THE TOP OF CUT/EXPOSED SLOPES TO DIRECT STORM FLOW AROUND THE DISTURBED AREA.
c. EXPOSED SLOPES AT THE FINAL STABILIZATION PHASE SHALL BE STABILIZED USING SLOPE STABILIZATION PRACTICES SUCH AS SOIL STABILIZATION BLANKETS OR MATTING AS SPECIFIED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH STD & SPEC 3.36). BLANKETS OR MATS MUST BE PROPERLY SECURED AND ANCHORED TO THE SLOPE USING STAPLES, PINS, OR STAKES.
d. SEEDED AREAS SHALL BE CHECKED AND RESEEDED AS NECESSARY TO COVER EXPOSED SOIL. RECENTLY SEEDED AREAS SHALL BE PROTECTED BY STRAW OR SOIL STABILIZATION BLANKETS TO PREVENT SEEDING FROM BEING WASHED AWAY.

3. STOCKPILES

- a. STOCKPILED SOIL AND OTHER LOOSE MATERIALS THAT CAN BE WASHED AWAY SHALL BE COVERED WITH A TARP. PLASTIC SHEETING, OR OTHER STABILIZATION MATTING. THE COVER MUST BE PROPERLY SECURED/ANCHORED DOWN TO PREVENT IT FROM BEING BLOWN OFF AND EXPOSED MATERIALS TO RAIN. CONTROLS SUCH AS HAY BALES OR BOOMS SHALL BE PLACED ALONG THE PERIMETER OF THE STOCKPILE (DOWNHILL SIDE).

UTILITY INSTALLATION:

UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:

- 1. NO MORE THAN 100 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
2. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
3. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT STREAMS OR OFF-SITE PROPERTY.
4. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
5. STABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
6. APPLICABLE SAFETY REGULATIONS SHALL BE COMPLIED WITH.
9. ANY DISTURBED AREA NOT COVERED BY NOTE #1 ABOVE AND PAVED, SODDED OR BUILT UPON BY NOVEMBER 1ST, OR DISTURBED AFTER THAT DATE, SHALL BE MULCHED WITH HAY OR STRAW AT THE RATE OF 2 TONS PER ACRE AND OVER-SEEDED NO LATER THAN MAY 15TH.
10. AT THE COMPLETION OF THE CONSTRUCTION PROJECT AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED. ARLINGTON COUNTY INSPECTOR TO APPROVE REMOVAL OF ALL TEMPORARY SILTATION MEASURES.

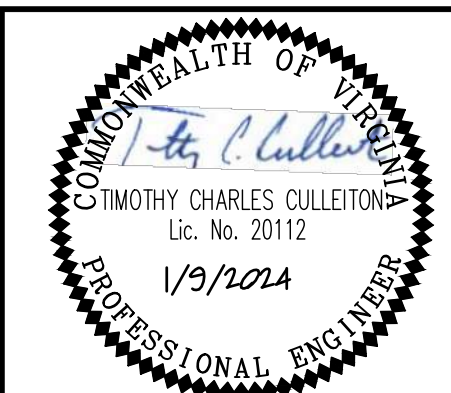
MAINTENANCE PROGRAM:

THE FOLLOWING MAINTENANCE PROGRAM WILL BE IMPLEMENTED FOR THE CONTROLS SPECIFIED IN THIS NARRATIVE AND ON THE PLAN:

- 1. THE SITE SUPERINTENDENT OR HIS/HER REPRESENTATIVE SHALL MAKE A VISUAL INSPECTION OF ALL CONTROLS AND NEWLY STABILIZED AREA (I.E. SEEDED AND MULCHED AND/OR SODDED AREAS) ON A DAILY BASIS, ESPECIALLY AFTER A HEAVY RAINFALL EVENT TO ENSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE WORK DAY INCLUDING RE-SEEDED AND MULCHING OR RE-SODDING IF NECESSARY.
2. ALL SEDIMENT TRAPPING DEVICES SHALL BE CLEARED OUT AT 50% TRAP CAPACITY AND THE SEDIMENT SHALL BE DISPOSED OF BY SPREADING ON THE SITE OR IF NOT SUITABLE FOR FILL, HAULING AWAY AND DEPOSITING AT AN ACCEPTABLE DUMP SITE.
3. THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PREVENT MUD AND/OR OTHER DEBRIS FROM ENTERING EXISTING SWMBMP FACILITIES OR WATERWAYS. SHOULD OFF-SITE AREAS BECOME POLLUTED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING THE AFFECTED AREAS TO THE SATISFACTION OF THE INSPECTOR.
4. AT THE COMPLETION OF CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ANY REMAINING DENUDED AREAS SHALL BE STABILIZED. CERTAIN DEVICES MAY BE REMOVED PRIOR TO CONSTRUCTION COMPLETION BUT ONLY WITH THE APPROVAL OF THE COUNTY INSPECTOR.
5. AFTER CONSTRUCTION OPERATIONS HAVE ENDED, ALL DISTURBED AREAS SHALL BE STABILIZED. UPON APPROVAL OF THE COUNTY INSPECTOR, SEDIMENT CONTROLS SHALL BE REMOVED AND THE GROUND PERMANENTLY STABILIZED WITH ESTABLISHED VEGETATION WITHIN 30 DAYS.



ISSUED FOR BID 11-10-2023



ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES

EROSION AND SEDIMENT CONTROL NARRATIVE 3108 COLUMBIA PIKE DEMOLITION 3108 COLUMBIA PIKE ARLINGTON COUNTY, VIRGINIA 22204

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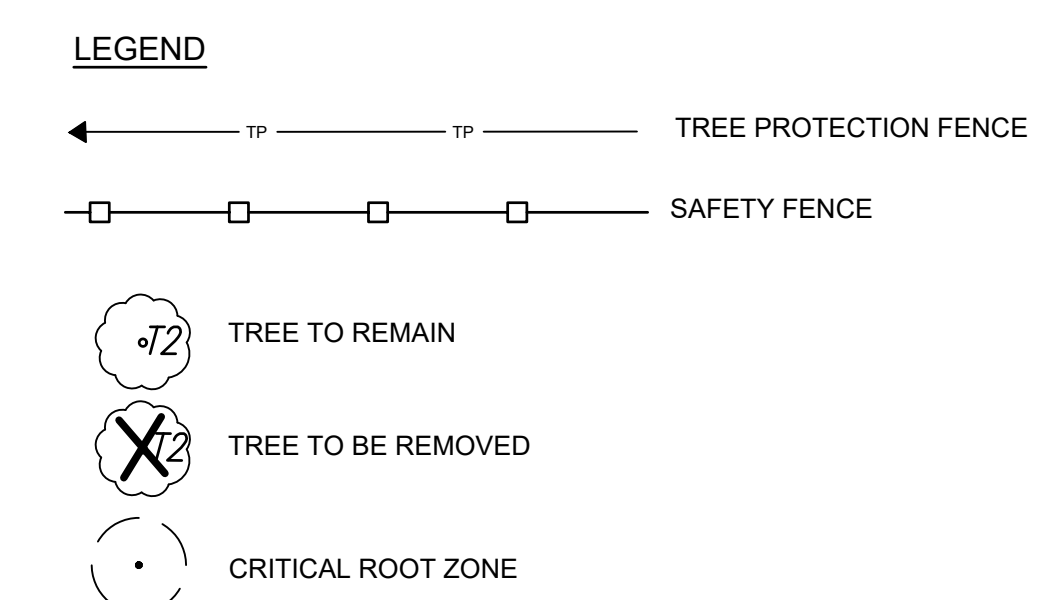
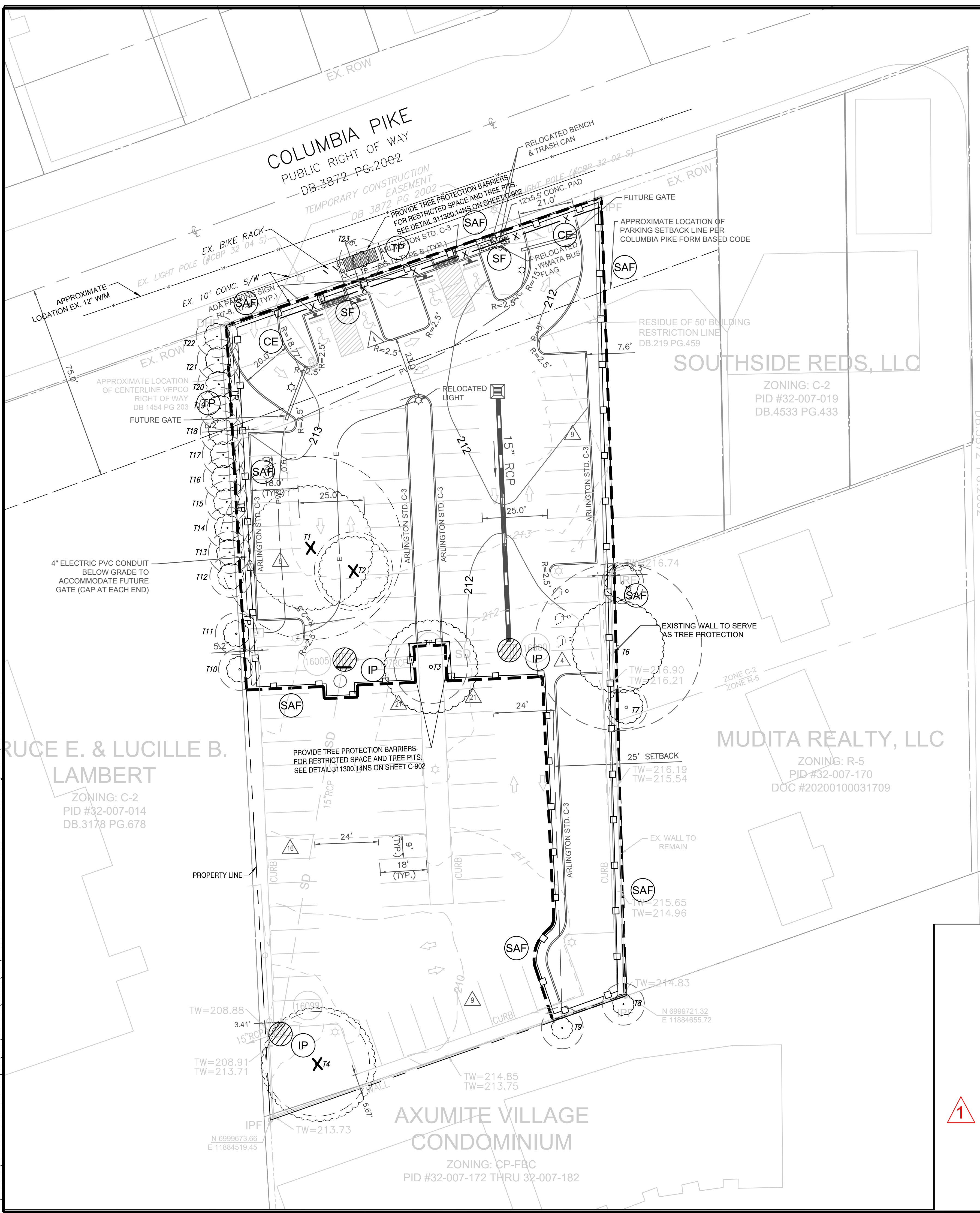
DEWBERRY REVISIONS

Table with 3 columns: SCALE: AS-SHOWN, C-870, 20 OF 28

Table with 3 columns: SUBMITTED DATE: 8/4/2023, DESIGNED: BWB, CHECKED: TCC, PROJECT/FILE NO. LDAP23-00146

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CANOPY CALCULATIONS

CANOPY CALCULATION (SQUARE FEET)	
PARCEL SIZE	43,165 SF
TREE CANOPY REQUIRED (10%)	4,317 SF
LARGE CANOPY TREE CONSERVED (X2 BONUS)	0
SMALL CANOPY TREE CANOPY CONSERVED	0
TREE CANOPY REMAINING TO PLANT	4,317 SF
TREE CANOPY PLANTED	5,381.25 SF
TOTAL TREE CANOPY (CONSERVATION AND PLANTING)	5,381.25 SF

TREE SURVEY INFORMATION

3108 COLUMBIA PIKE
 TREE SURVEY INFORMATION COMPLETED BY: JANICE M. CENA #MA-4469A DATE 6/7/2023

TR EE #	BOTANICAL NAME	COMMON NAME	SIZE (DBH)	SPECIES RATING	CONDITI ON	ACTION	REPLACEMEN T CALCULATION	REPLACEMEN T	CRZ IMPACTE D	CANOPY CONSERVED	CONSERVATIO N CREDIT	NOTES
T1	Magnolia grandiflora	Southern magnolia	35	80	0.85	Remove	23.80	5	100%			INSIDE LOD
T2	Acer platanoides	Norway maple	15	50	0.20	Remove	1.50	1	100%			INSIDE LOD
T3	Acer platanoides	Norway maple	14	50	0.45	Preserve	3.15				0	
T4	Acer platanoides	Norway maple	20	50	0.20	Remove	2	1	0			
T5	Carpinus caroliniana	American hornbeam	3	80	0.80	Preserve	1		25%			OFFSITE
T6	Morus alba	White mulberry	32	30	0.50	Preserve	4.80		12%			OFFSITE
T7	Quercus bicolor	Swamp white oak	3	85	0.85	Preserve	1		23%			OFFSITE
T8	Lagerstroemia	Crape myrtle	3	70	0.80	Preserve	1		20%			OFFSITE
T9	Quercus phellos	Willow Oak	5	75	0.80	Preserve	1		20%			OFFSITE
T10	Cercis canadensis	Redbud	6	75	0.40	Preserve	1		25%			OFFSITE
T11	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		25%			OFFSITE
T12	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T13	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T14	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T15	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T16	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T17	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T18	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T19	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T20	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T21	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T22	Ilex	Nellie R Stevens Holly	6	70	0.80	Preserve	1		20%			OFFSITE
T23	Acer rubrum	Red maple	4	70	0.20	Preserve	1		1%			STREET TREE
TOTAL:								7		0	0	

Dewberry Dewberry Engineers Inc.
 8401 ARLINGTON BLVD. FAIRFAX, VA 22031
 PHONE: 703.849.0100 FAX: 703.849.0518

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NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	

COUNTY REVISIONS

SUBMITTED DATE:	DESIGNED:	PROJECT/FILE NO.
8/4/2023	BWB	LDAP23-00146
CHECKED:	TCC	

SCALE IN FEET
 1" = 20'
 1 INCH

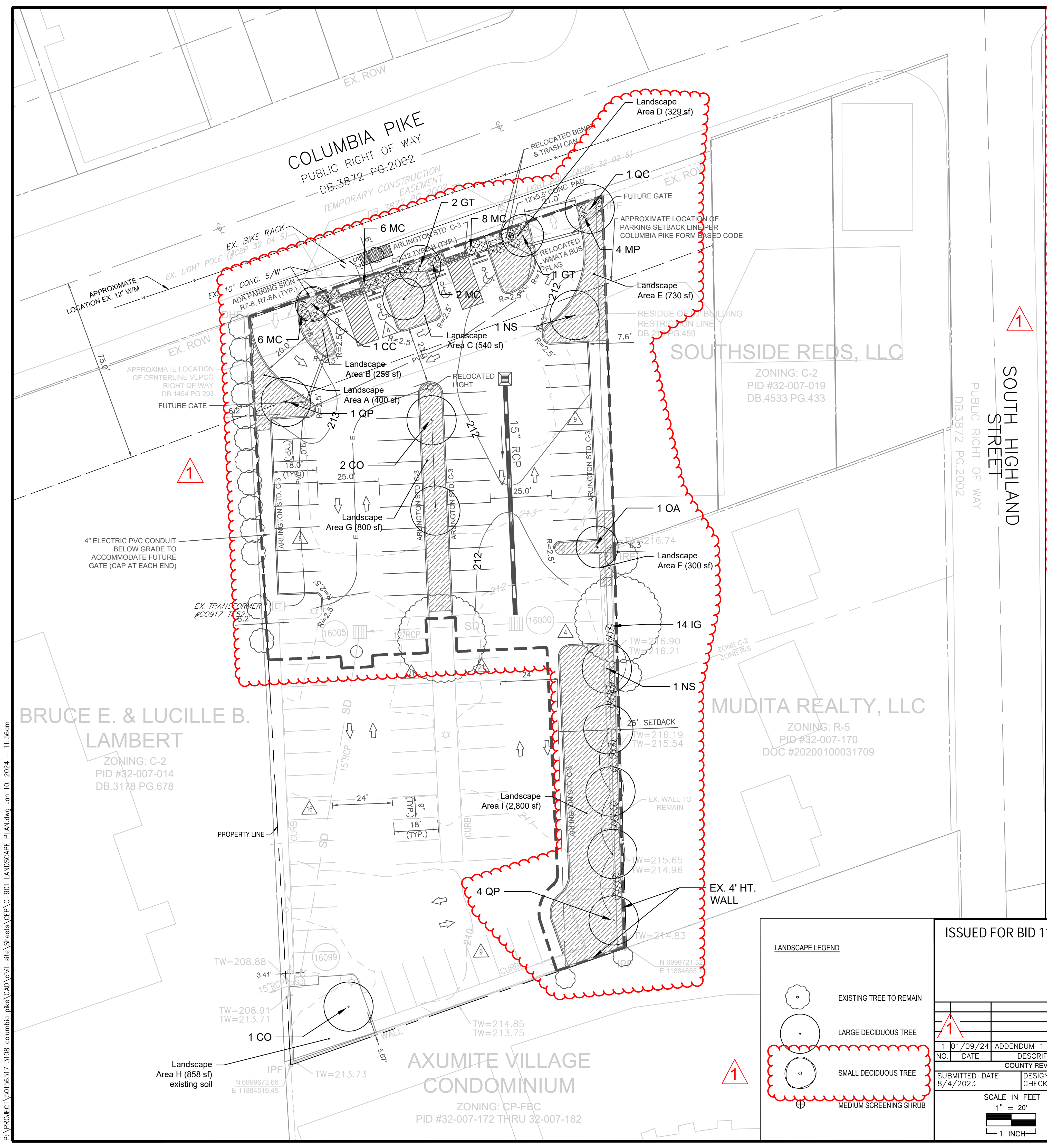
VCS-83

DEWBERRY REVISIONS

ARLINGTON COUNTY, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES

TREE INVENTORY & PRESERVATION PLAN
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN
 C-900
 21 OF 28



ON-SITE TREE SOIL VOLUME CALCULATIONS

PLANTING AREA	# OF TREES	SOIL VOLUME PROVIDED	AVERAGE SOIL VOL PROVIDED PER TREE	REQUIRED SOIL VOLUME PER TREE
A	1	1200 CF	1200 CF	1200 CF
B	1	777 CF	777 CF	600 CF
C	2	1620 CF	810 CF	750 CF
D	1	987 CF	987 CF	750 CF
E	2	2190 CF	1095 CF	1000 CF
F	1	765	765 CF	750 CF
G	2	2,400 CF	1,200 CF	1000 CF
H	1	1,716 CF	1,716 CF (24" ex. soil depth)	1200 CF
I	5	8,400 CF	1,680 CF	1000 CF

SOILS LEGEND

▨ TREE AND PLANTING BED AREA
36" DEPTH

CANOPY CALCULATIONS

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TOTAL TREE CANOPY (CONSERVATION AND PLANTING)	5,381.25 SF

TREE REPLACEMENT CALCULATIONS SEE TREE INVENTORY ON SHEET C-900

REPLACEMENT TREES REQUIRED	7
REPLACEMENT TREES PROVIDED	10

TREE PLANTING CALCULATIONS

TREE PLANTING

SYMBOL	SPECIES	COMMON NAME	SIZE	AMOUNT	SPACING	COVERAGE	TOTAL COVERAGE	COMMENTS	REPLACEMENT TREES	
CO	CELTIS OCCIDENTALIS	COMMON HACKBERRY	2-2 1/2" CAL.	3	PER PLAN	393.75	1181.25		3	
CC	CERCIS CANADENSIS	EASTERN REDBUD	1 3/4-2" CAL.	1	PER PLAN	137.50	137.50	SINGLE TRUNK		
GT	GLEDTISIA TRIACANTHOS INERMIS 'SHADEMASTER'	SHADEMASTER HONEYLOCUST	2-2 1/2" CAL.	3	PER PLAN	312.50	937.50			
NS	NYSSA SYLVATICA	TUPELO	1 3/4-2" CAL.	2	PER PLAN	312.50	625.00		2	
OA	OXYDENDRUM ARBOREUM	SOURWOOD	1 3/4-2" CAL.	1	PER PLAN	137.50	137.50			
QC	QUERCUS COCCINEA	SCARLET OAK	2-2 1/2" CAL.	1	PER PLAN	393.75	393.75			
QP	QUERCUS PHELLOS	WILLOW OAK	1 3/4-2" CAL.	5	PER PLAN	393.75	1968.75		5	
SHRUB PLANTING										
MC	MORELLA CERIFERA 'DON'S DWARF'	DON'S DWARF SOUTHERN WAX MYRTLE	24-30"	26	PER PLAN			FULL		
IG	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	24-30"	14	PER PLAN			FULL		
TOTAL:							5381.25			10

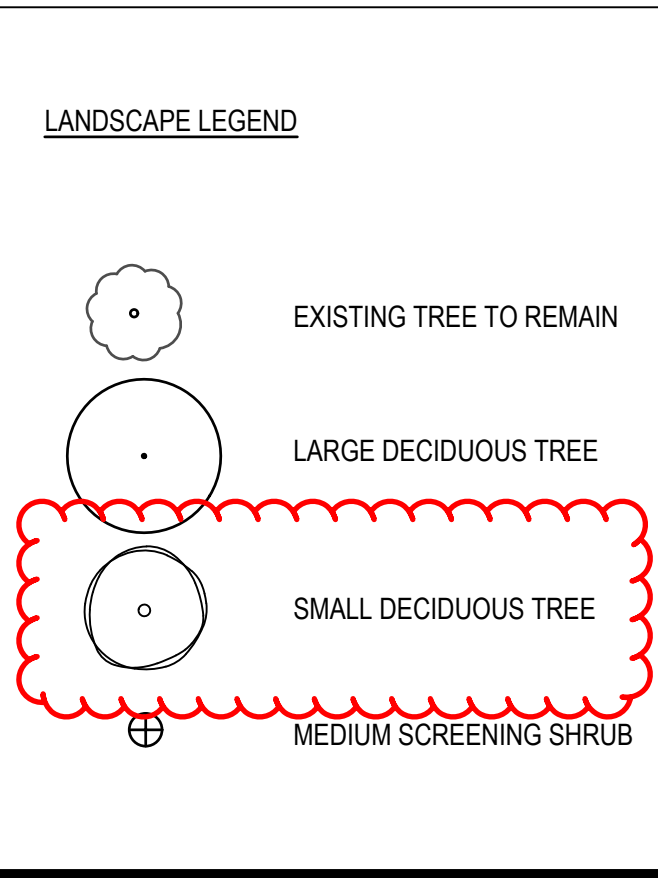
- TREE PLANTING
- PLANTS SHALL BE FURNISHED AND INSTALLED AS INDICATED ON THE LANDSCAPE PLAN.
 - PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY AND COMPLY WITH MOST RECENT ANSI Z60.1 STANDARDS.
 - PLANTS SHALL BE PLANTED ON THE DAY OF DELIVERY. IF NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE-DAY PERIOD AFTER DELIVERY. ANY PLANTS NOT INSTALLED DURING THIS PERIOD SHALL BE REJECTED. ALL PLANTS KEPT ON SITE FOR ANY PERIOD SHOULD BE WATERED AND CARED FOR USING ANSI A300 STANDARDS.
 - NO STAKES SHALL BE USED TO STABILIZE TREES, UNLESS DIRECTED BY THE ARLINGTON COUNTY URBAN FORESTER.
 - TREES PLANTED SHALL RECEIVE A 3-INCH-THICK LAYER OF SHREDDED HARDWOOD MULCH, IN A 6 FOOT RING SURROUNDING THE TREE, WITH A 6 INCH CLEAR AREA NEAR THE TRUNK.
 - PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE ROOT BALL ONLY.
 - PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOP SOIL THAT IS IN MUDDY OR FROZEN CONDITION. TREES AND SHRUBS SHALL BE INSTALLED BETWEEN 09/15 AND 12/15 OR BETWEEN 03/15 AND 06/15. CONTACT THE ARLINGTON COUNTY URBAN FORESTER TO OBTAIN A DEFERRAL OR APPROVAL FOR PLANTING OUT OF SEASON.
 - NO PLANT, EXCEPT GROUNDCOVERS, SHALL BE PLANTED WITHIN TWO FEET OF A SIDEWALK, 5 FEET FROM A FENCE, 10 FEET FROM A BUILDING, OR 15 FEET FROM OVERHEAD UTILITY LINES.
 - TREES AND SHRUBS SHALL BE PLANTED IN HOLES TWO TO THREE TIMES AS WIDE AND TO THE DEPTH OF THE ROOT BALL.
 - PLANTS SHALL BE PLANTED IN HEALTHY, UNCOMPACTED SOIL. SEE THE PLANTING DETAIL FOR SOIL SPECIFICATION.
 - SET ALL PLANTS PLUMB AND STRAIGHT AT SUCH LEVEL THAT NORMAL OR NATURAL RELATIONSHIP BETWEEN THE PLANT AND THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE THE PLANT IN THE CENTER OF THE PIT.
 - INJURED ROOTS SHALL BE PRUNED TO CLEAN ENDS BEFORE PLANTING WITH CLEAN, SHARP TOOLS. THE LEADER OF TREES SHALL NOT BE CUT BACK.
 - AT THE END OF THE PROJECT, PRESERVED AND PLANTED TREES MUST BE INSPECTED AND APPROVED BY AN ARLINGTON COUNTY URBAN FORESTER.



BRUCE E. & LUCILLE B. LAMBERT
ZONING: C-2
PID #32-007-014
DB.3178 PG.678

MUDITA REALTY, LLC
ZONING: R-5
PID #32-007-170
DOC #20200100031709

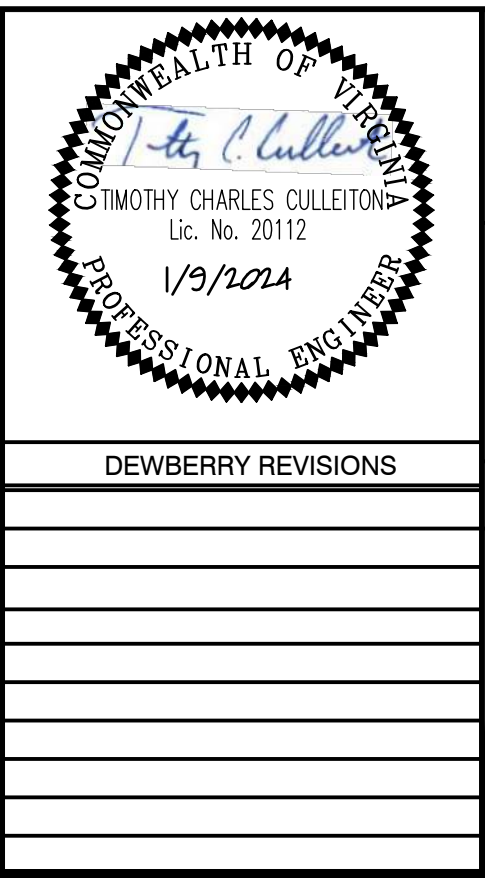
AXUMITE VILLAGE CONDOMINIUM
ZONING: CP-FBC
PID #32-007-172 THRU 32-007-182



ISSUED FOR BID 11-10-2023

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE: 8/4/2023		DESIGNED: BWB	PROJECT/FILE NO. LDAP23-00146
		CHECKED: TCC	

SCALE IN FEET
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1 INCH



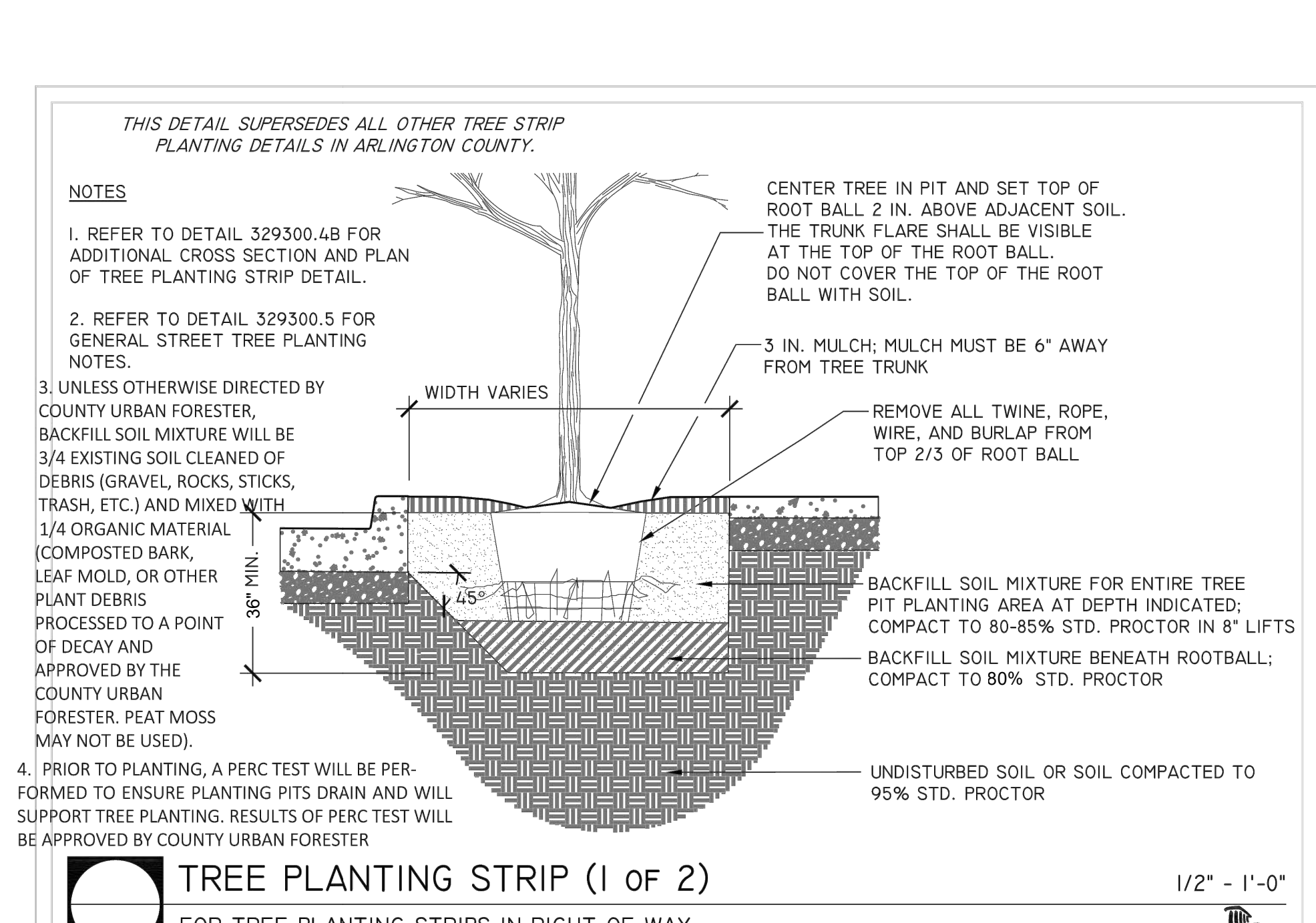
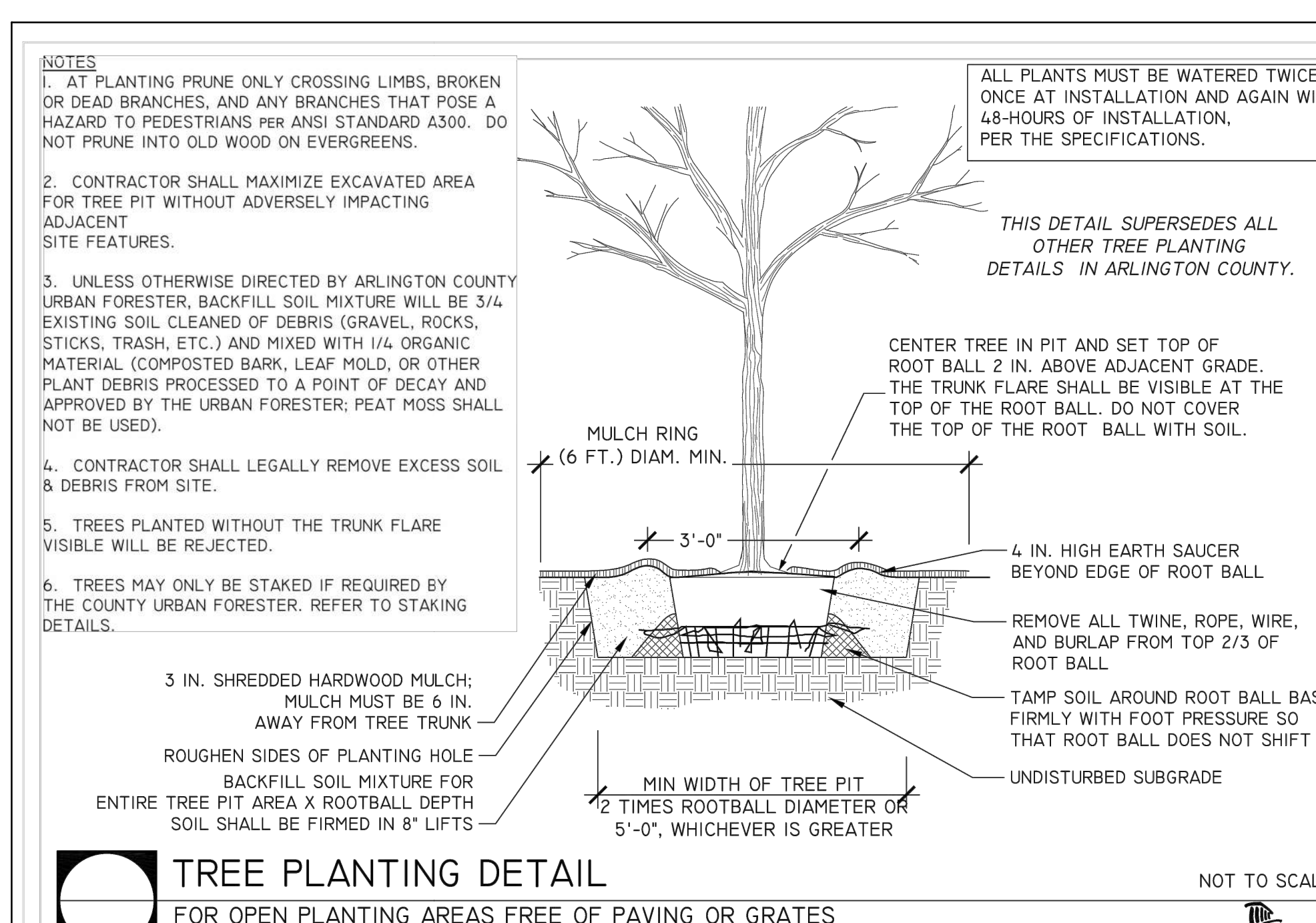
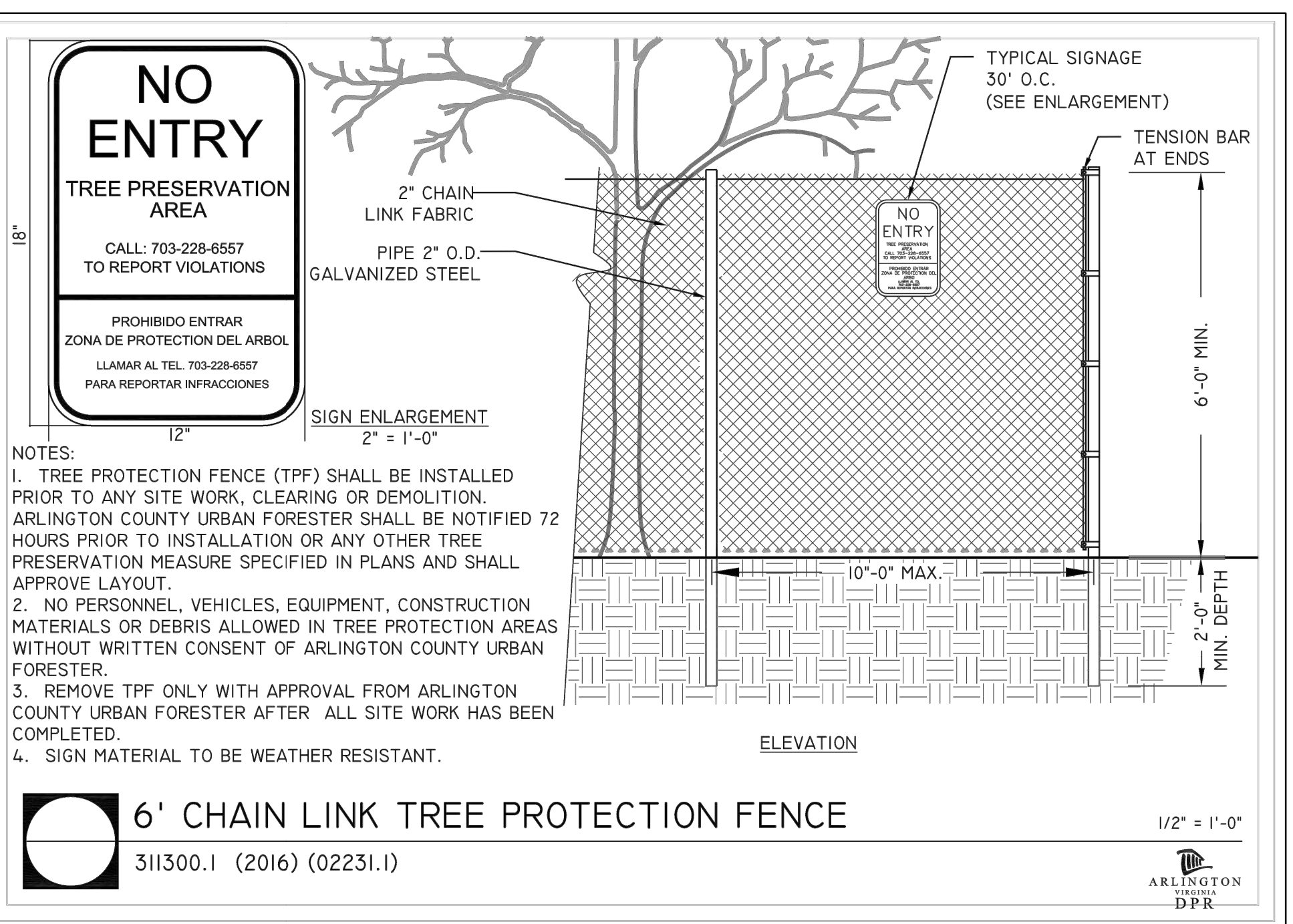
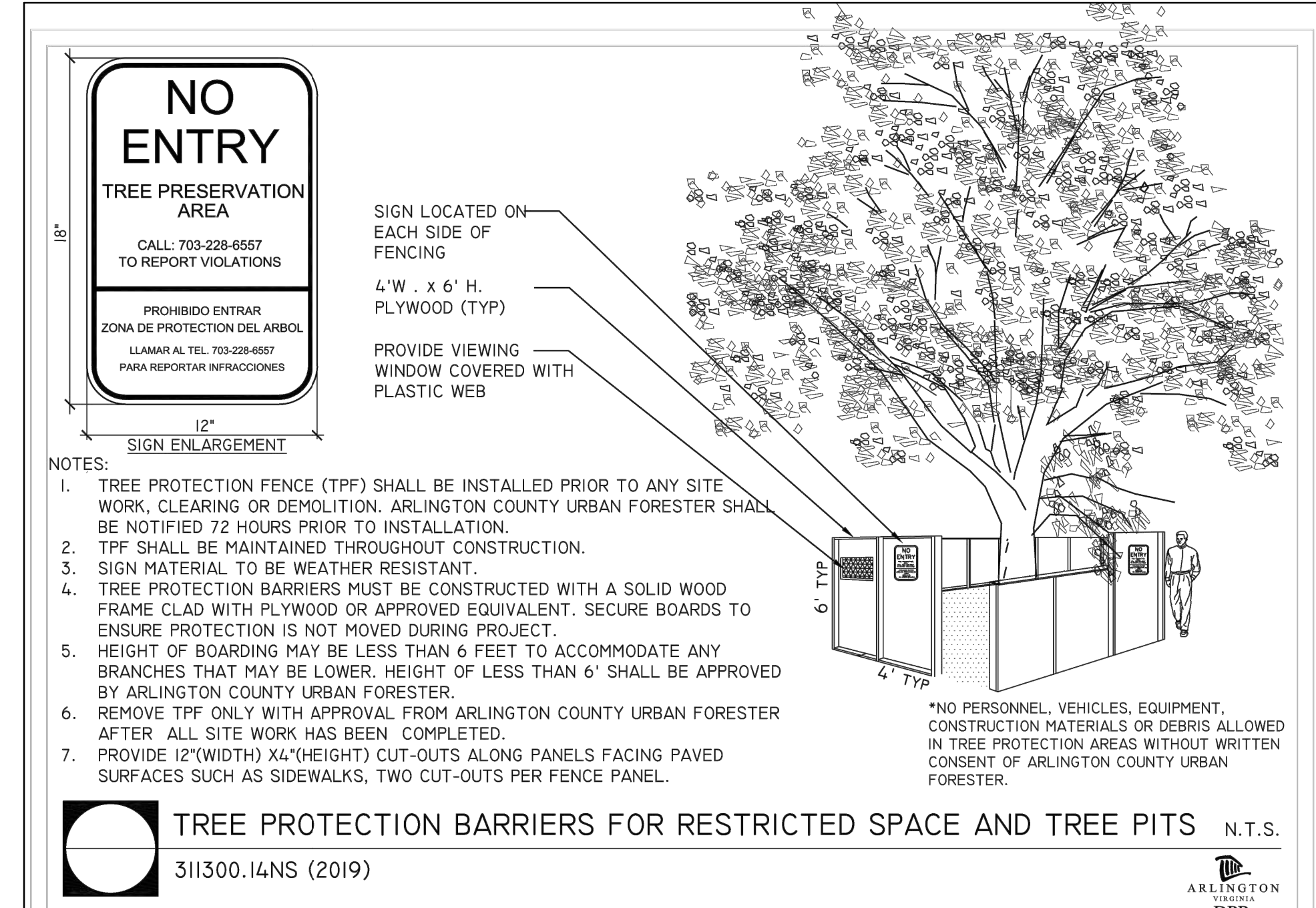
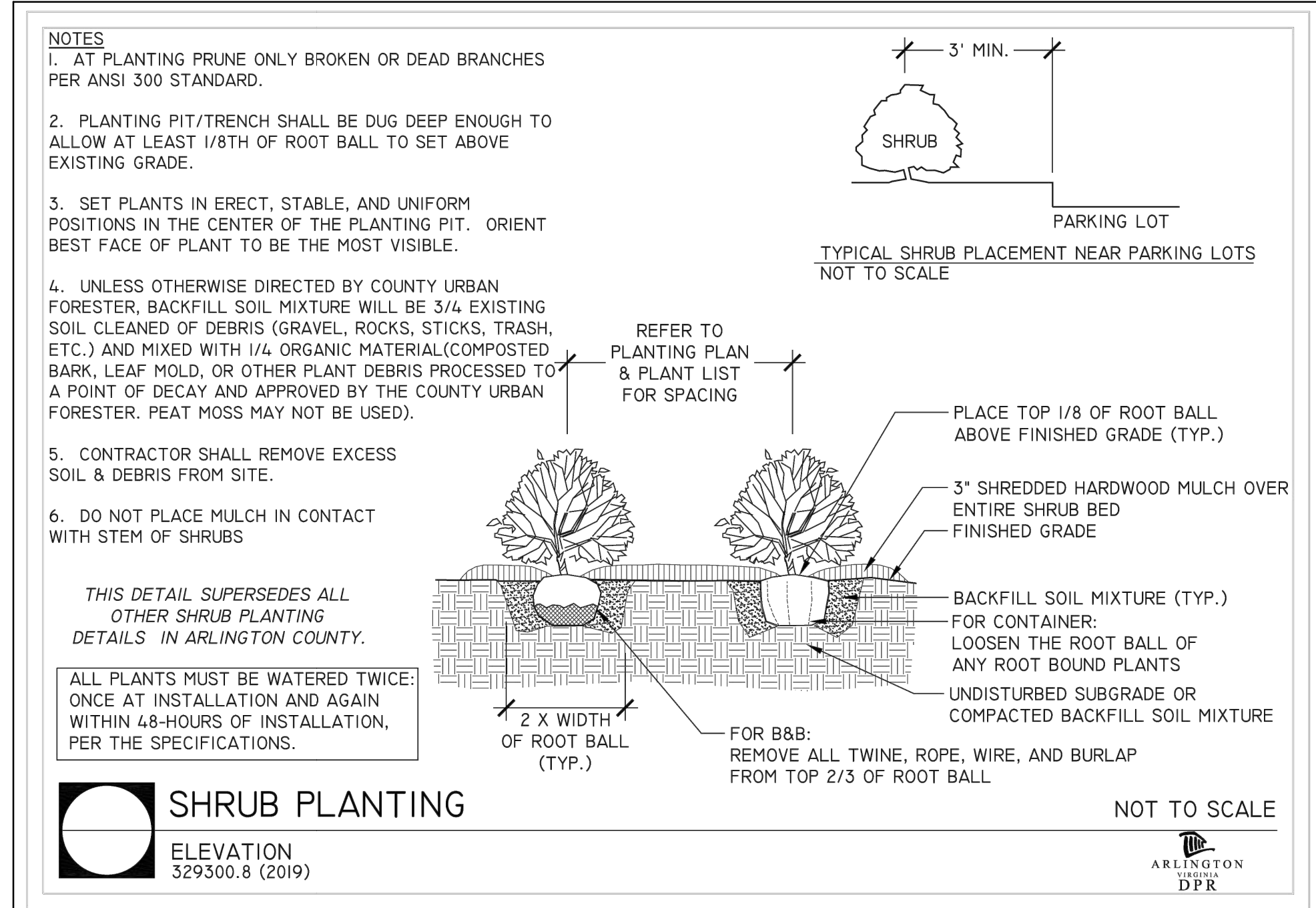
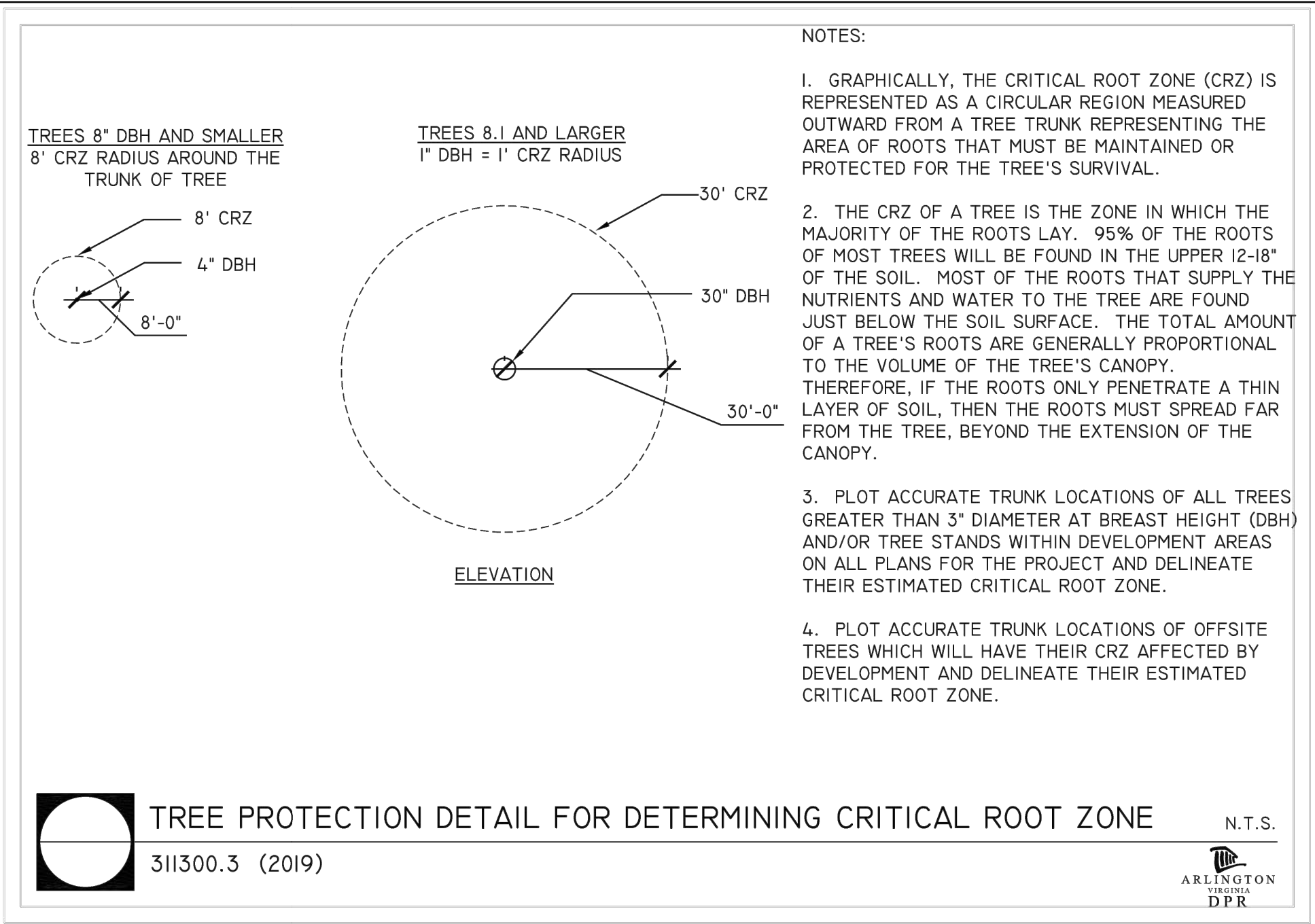
ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LANDSCAPE PLAN
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN
C-901
22 OF 28

DEWBERRY REVISIONS

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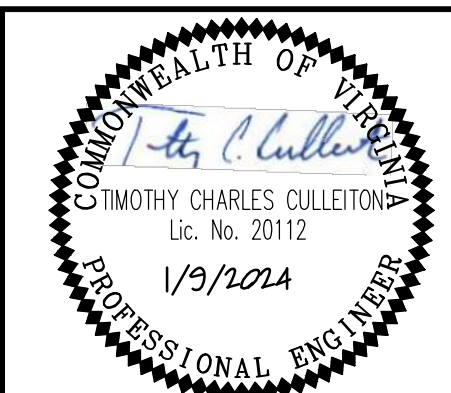


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TREE CONSERVATION NOTES:

- BEFORE ANY GRADING, DEMOLITION, OR OTHER DISTURBANCE, INCLUDING TREE REMOVAL, A PRECONSTRUCTION MEETING SHALL BE HELD WITH AN ARLINGTON COUNTY URBAN FORESTER. CHANGES TO THE PLAN, BASED ON FIELD CONDITIONS, MAY BE REQUESTED BY THE URBAN FORESTER AT THE TIME OF THE PRECONSTRUCTION MEETING.
- TREE PROTECTION SHALL BE INSTALLED PER PLAN, WITH ANY CHANGES REQUESTED AT THE PRECONSTRUCTION MEETING, AND INSPECTED BY AN ARLINGTON COUNTY URBAN FORESTER. EROSION AND SEDIMENT CONTROLS ARE INSPECTED BY THE DEPARTMENT OF ENVIRONMENTAL SERVICES.
- REMOVAL OF TREES, NOTED FOR REMOVAL ON THE PLAN, INSIDE A TREE PRESERVATION AREA SHALL BE PERFORMED, BY HAND, WITHOUT GROUND DISTURBANCE, OR DISTURBANCE TO NEARBY PRESERVED TREES. TREES IN THESE AREAS SHALL BE CUT FLUSH TO THE GROUND, WITHOUT STUMP GRINDING.
- NO CHANGES SHALL BE MADE TO TREE PRESERVATION OR PROPOSED LANDSCAPE UNLESS DIRECTED BY AN ARLINGTON COUNTY URBAN FORESTER.
- DO NOT REMOVE TREES ON OTHER PROPERTIES, OR RIGHTS-OF-WAY, WITHOUT WRITTEN PERMISSION OF THE OWNER.
- TREE PROTECTION AREAS SHALL HAVE ALL NON-NATIVE INVASIVE VINES REMOVED AT THE END OF THE PROJECT. WHERE DEEMED NECESSARY BY THE COUNTY URBAN FORESTER TO ENSURE TREE SURVIVAL, THE PROTECTION AREA SHALL BE COVERED WITH SHREDDED HARDWOOD MULCH, OR OTHER ORGANIC MULCH AS APPROVED BY THE COUNTY URBAN FORESTER.
- AT THE END OF THE PROJECT, PRESERVED AND PLANTED TREES MUST BE INSPECTED AND APPROVED BY AN ARLINGTON COUNTY URBAN FORESTER.

ISSUED FOR BID 11-10-2023



ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

LANDSCAPE AND TREE PRESERVATION DETAILS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

NO.	DATE	DESCRIPTION	BY
1	01/09/24	ADDENDUM 1	
COUNTY REVISIONS			
SUBMITTED DATE: 8/4/2023		DESIGNED: BWB	PROJECT/FILE NO. LDAP23-00146
		CHECKED: TCC	

SCALE IN FEET AS SHOWN
1 INCH

DEWBERRY REVISIONS

NO.	DATE	DESCRIPTION	BY

SCALE: AS-SHOWN **C-902** 23 OF 28

Dewberry Dewberry Engineers Inc.
8401 ARLINGTON BLVD. FAIRFAX, VA 22031 PHONE: 703.849.0100 FAX: 703.849.0518

01 - ELECTRICAL LEGEND			
	ELECTRIC PHOTOCCELL		KILOWATT-HOUR METER
	WALL MOUNTED INCANDESCENT OR H.I.D. FIXTURE		MOLDED CASE CIRCUIT BREAKER
	EXTERIOR LIGHT FIXTURE		DRAW OUT TYPE CIRCUIT BREAKER
	120/208V PANELBOARD		
	277/480V PANELBOARD		
	TELEPHONE CABINET		
	DRY TYPE TRANSFORMER - SIZE AS INDICATED		
	BRANCH CIRCUIT WIRING CONCEALED IN CEILING OR WALL - CROSSMARKS DENOTE NUMBER OF CONDUCTORS.		
	EMT CONDUIT WITH CONDUCTORS UNDER FLOOR		
	HOME RUN TO PANELBOARD - NUMBER OF ARROWS DENOTES NUMBER OF CIRCUITS (2 SHOWN) - NUMBER OF CROSSMARKS DENOTES NUMBER OF WIRES WHEN MORE THAN TWO - GROUNDING CONDUCTOR IS NOT TYPICALLY INDICATED WITH CROSSMARK		
	GROUND CONNECTION		

02 - ELECTRICAL ABBREVIATIONS			
A	AMPS	IG	ISOLATED GROUND
AF	AMP FRAME	JB	JUNCTION BOX
A.F.F.	ABOVE FINISHED FLOOR	KVA	KILO-VOLT-AMPERES
AHJ	AUTHORITY HAVING JURISDICTION	KW	KILOWATT
ARCH	ARCHITECT	LAS	LIGHTNING ARRESTOR
AT	AMP TRIP	LTG	LIGHTING
ATC, BMS, EMCS	DIV. 15 CONTROLS	MCA	MINIMUM CIRCUIT AMPACITY
ATS	AUTOMATIC TRANSFER SWITCH	MCB	MAIN CIRCUIT BREAKER
A/V	AUDIO-VISUAL	MCC	MOTOR CONTROL CENTER
BLDG	BUILDING	+ OR MH	MOUNTING HEIGHT
C	CONDUIT	MI	MINERAL INSULATED
(C)	CEILING MOUNTED	MLO	MAIN LUGS ONLY
C/B	CIRCUIT BREAKER	MOP	MAXIMUM OVERCURRENT PROTECTION
CD	CANDELA	MS	MAIN SWITCHBOARD
CKT	CIRCUIT	(N)	NEW
COMM	COMMUNICATIONS	N.C.	NORMALLY CLOSED
CU	COPPER	NEC	NATIONAL ELECTRICAL CODE
DED.	DEDICATED	NF	NON-FUSED
DN	DOWN	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
DO	DITTO/DO OVER	NFSS	NON-FUSED SAFETY SWITCH
DPV	DRY PIPE VALVE CABINET	NIC	NOT IN CONTRACT
DWG.	DRAWING	N.O.	NORMALLY OPEN
(E)	EXISTING	NO OR #	NUMBER
EA	EACH	OCPD	OVERCURRENT PROTECTION DEVICE
EC	EMPTY CONDUIT	P	POLE
ELEV.	ELEVATOR	PE	PASSENGER ELEVATOR
EMER	EMERGENCY	Ø OR PH	PHASE
EMR	ELEVATOR MACHINE ROOM	PNL	PANEL
EMT	ELECTRIC METALLIC TUBING	RECEPT	RECEPTACLE
EPO	EMERGENCY POWER OFF	RM	ROOM
EUH	ELECTRIC UNIT HEATER	SE	SERVICE ELEVATOR
EWG	ELECTRIC WATER COOLER	SN	SOLID NEUTRAL
EWH	ELECTRIC WATER HEATER	ST	SHUNT TRIP
F	FUSE	SWBD	SWITCHBOARD
FA	FIRE ALARM	TEL	TELEPHONE
F.C.A.	FAULT CURRENT AVAILABLE	TELECOM	TELECOMMUNICATIONS
F.C.R.	FAULT CURRENT RATING	THD	TOTAL HARMONIC DISTORTION
FLUOR	FLUORESCENT	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSION
FPTD	FAN POWER TERMINAL DEVICE	TYP	TYPICAL
FSS	FUSED SAFETY SWITCH	UL	UNDERWRITERS LABORATORIES
F.T.L.	FEED THRU LUGS	U.N.O.	UNLESS NOTED OTHERWISE
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	UPS	UNINTERRUPTIBLE POWER SOURCE
GFI	GROUND FAULT INTERRUPTER	V	VOLTS ALTERNATING CURRENT
GFP	GROUND FAULT PROTECTION	VFC	VARIABLE FREQUENCY CONTROLLER
G, GND, GRD	GROUND	(w)	WALL MOUNTED
HZ	HERTZ	W/	WITH
HP	HORSEPOWER	WP	WEATHERPROOF
IBC	INTERNATIONAL BUILDING CODE	XFMR	TRANSFORMER

03 - DRAWING REFERENCE SYMBOLS	
SYMBOL	DESCRIPTION
	TERMINAL DEVICE
	HEAT (KVA)
	EQUIPMENT NUMBER (KITCHEN, REPRODUCTION EQUIPMENT ETC., REFER TO SCHEDULES)
	GENERAL NOTE
	SPECIFIC
	REFERENCE NUMBER SECTION
	DRAWING NUMBER
	DIRECTION OF VIEW
	REFERENCE NUMBER DETAIL/PARTIAL PLAN
	DRAWING NUMBER
	LIMITS OF PARTIAL PLAN
	DETAIL REFERENCE
	DETAIL REFERENCE NUMBER
	DRAWING NUMBER
	REVISION MARK
	REVISION CLOUD

SHEET INDEX	
Sheet Number	Sheet Title
E-001	ELECTRICAL COVER SHEET
E-002	ELECTRICAL NOTES
E-101	ELECTRICAL SITE PLAN
E-102	LIGHTING PHOTOMETRIC SITE PLAN
E-501	ELECTRICAL DETAILS

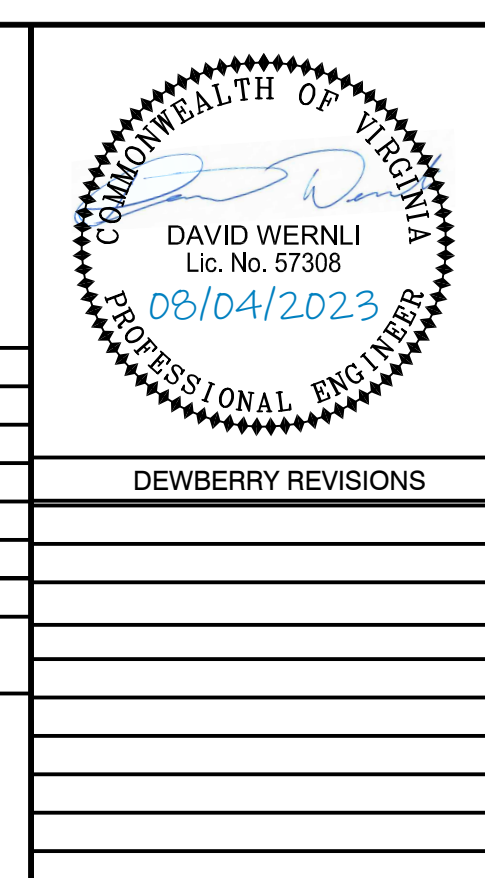
Dewberry Dewberry Engineers Inc.
 8401 ARLINGTON BLVD.
 FAIRFAX, VA 22031
 PHONE: 703.949.0100
 FAX: 703.949.0518

ISSUED FOR BID 11-10-2023

NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			
SUBMITTED DATE: 8/3/2023		DESIGNED: EH	PROJECT/FILE NO. LDAP23-00146
		CHECKED: DW	

SCALE IN FEET
 1" = 20'

 1 INCH



ARLINGTON COUNTY, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES

ELECTRICAL COVER SHEET
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN E-001 24 OF 28

TENANT ELECTRICAL NOTES

GENERAL

- ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH NATIONAL ELECTRICAL CODE AND ALL APPLICABLE LOCAL CODES AS ADOPTED AND MODIFIED BY THE LOCAL CODE AUTHORITY. REFER TO THE ARCHITECTURAL DOCUMENTS FOR ADDITIONAL CODE AND LOCAL CODE AUTHORITY REQUIREMENTS. ALL TRADES SHALL COORDINATE ON PLACEMENT OF NEW EQUIPMENT, REFER TO THE TENANT GENERAL NOTES AND TENANT DEMOLITION NOTES FOR ADDITIONAL REQUIREMENTS.
- ANY ARCHITECTURAL GENERAL CONDITIONS SHALL GOVERN ALL PRODUCTS AND THE EXECUTION OF WORK.
- UNLESS NOTED OTHERWISE ALL EXISTING ELECTRICAL FIXTURES AND DEVICES SHALL REMAIN (THOSE INSTALLED UNDER PREVIOUS CONTRACT).
- ELECTRICAL PLANS ARE DIAGRAMMATIC ONLY. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT LOCATIONS, DIMENSIONS, AND METHOD OF MOUNTING FOR LIGHTING FIXTURES, FIRE ALARM DEVICES, CEILING DEVICES, RECEPTACLES, SWITCHES, EXIT SIGNS, TELEPHONE, AND DATA OUTLETS.
- CONTRACTOR SHALL VISIT SITE PRIOR TO BID TO DETERMINE EXACT SCOPE OF WORK.
- ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO CREATE MINIMAL POWER OUTAGES FOR THE OWNER. ALL SUCH OUTAGES SHALL BE CAREFULLY COORDINATED WITH THE OWNER SO THAT POWER TO ESSENTIAL SERVICES CAN BE MAINTAINED.
- CONTRACTOR SHALL GUARANTEE HIS WORKMANSHIP AND ALL MATERIALS AND EQUIPMENT FOR A PERIOD OF ONE YEAR IN WRITING COMMENCING UPON ACCEPTANCE OF INSTALLATION BY OWNER.
- CONTRACTOR SHALL MAINTAIN ACCESS, SAFETY, AND CLEANLINESS IN AREA THAT AFFECTS THE FLOW OF PEDESTRIAN TRAFFIC IN THE BUILDING, DUE TO RENOVATION.
- THE CONTRACTOR SHALL GIVE ALL NECESSARY NOTICES, OBTAIN ALL PERMITS AND PAY ALL GOVERNMENT SALES TAXES, FEES, AND OTHER COSTS, INCLUDING UTILITY CONNECTIONS OR EXTENSIONS, IN CONNECTION WITH HIS WORK. FILE ALL NECESSARY PLANS, PREPARE ALL DOCUMENTS AND OBTAIN ALL NECESSARY APPROVALS OF ALL GOVERNMENTAL DEPARTMENTS HAVING JURISDICTION; OBTAIN ALL REQUIRED CERTIFICATES OF INSPECTION OF HIS WORK AND DELIVER SAME TO THE ARCHITECT BEFORE REQUEST FOR ACCEPTANCE AND FINAL PAYMENT FOR WORK.
- ALL MATERIALS AND EQUIPMENT FURNISHED FOR THIS PROJECT SHALL BE NEW EQUIPMENT SHALL BE NEW AND U.L. LISTED AS MANUFACTURED BY CUTLER HAMMER, GENERAL ELECTRIC, SQUARE D, OR SIEMENS.
- SUBMITTALS SHALL INCLUDE LIGHTING FIXTURES, PANELBOARD, SUBMITTAL DATA SHALL CONTAIN ONLY INFORMATION RELEVANT TO THE PARTICULAR EQUIPMENT OR MATERIALS TO BE FURNISHED FOR THIS SPECIFIC PROJECT. CATALOG SHEETS WHICH DESCRIBE SEVERAL DIFFERENT ITEMS IN ADDITION TO THOSE ITEMS TO BE USED SHALL NOT BE SUBMITTED UNLESS RELEVANT INFORMATION IS CLEARLY MARKED. SIMILAR EQUIPMENT SHALL BE SUBMITTED IN ONE COMPLETE SUBMITTAL PACKAGE (I.E. ALL PANELBOARDS, ALL LIGHTING FIXTURES, ETC.). TOTAL NUMBER OF SUBMITTALS SHALL BE KEPT TO A MINIMUM.

DISTRIBUTION EQUIPMENT AND OVERCURRENT PROTECTION

- MOLDED CASE CIRCUIT BREAKERS SHALL BE OPERATED BY A TOGGLE-TYPE HANDLE AND SHALL HAVE A QUICKMAKE, QUICKBREAK, OVER-CENTER SWITCHING MECHANISM THAT IS MECHANICALLY TRIP-FREE FROM THE HANDLE SO THAT THE CONTACTS CANNOT BE HELD CLOSED AGAINST SHORT CIRCUITS AND ABNORMAL CURRENTS. TRIPPING DUE TO OVERLOAD OR SHORT CIRCUIT SHALL BE CLEARLY INDICATED BY THE HANDLE AUTOMATICALLY ASSUMING A POSITION MIDWAY BETWEEN THE MANUAL ON AND OFF POSITIONS. ALL LATCH SURFACES SHALL BE GROUND AND POLISHED. POLES SHALL BE SO CONSTRUCTED THAT THEY CAN OPEN, CLOSE AND TRIP SIMULTANEOUSLY. BREAKERS SHALL BE COMPLETELY ENCLOSED IN A MOLDED CASE WITH THE AMPERE RATINGS CLEARLY VISIBLE. CONTACTS SHALL BE NON-WELDING SILVER ALLOY. BREAKERS SHALL BE UL LISTED FOR USE WITH 75°C AND 90°C INSULATED WIRE. CIRCUIT BREAKER RATINGS, MODIFICATIONS, ETC., SHALL BE AS INDICATED ON THE DRAWINGS. MOLDED-CASE CIRCUIT BREAKERS SHALL BE AS FOLLOWS:
 - THERMAL, MAGNETIC TYPE THAT PROVIDES INVERSE TIME-DELAY OVERLOAD AND INSTANTANEOUS SHORT CIRCUIT PROTECTION BY MEANS OF A THERMAL MAGNETIC ELEMENT
 - AMBIENT COMPENSATED STANDARD THAT PROVIDES INVERSE TIME-DELAY OVERLOAD AND INSTANTANEOUS SHORT CIRCUIT PROTECTION BY MEANS OF A THERMAL MAGNETIC ELEMENT. COMPENSATION SHALL ALLOW THE BREAKER TO CARRY RATED CURRENT BETWEEN 25°C AND 50°C WITH TRIPPING CHARACTERISTICS THAT ARE APPROXIMATELY THE SAME THROUGHOUT THIS TEMPERATURE RANGE
 - MULTI-POLE BREAKERS SHALL BE OF THE COMMON TRIP TYPE HAVING A SINGLE OPERATING HANDLE, EXCEPT THAT 240-VOLT MULTI-POLE BREAKERS SMALLER THAN 50-AMPERES MAY CONSIST OF FACTORY-CONNECTED, SINGLE-POLE BREAKERS WITH A COMMON TRIP HANDLE.
 - ALL CIRCUIT BREAKERS SHALL BE FULL SIZE AND BOLT-ON.

RACEWAYS AND CONDUCTORS

- ALL CONDUCTORS SHALL BE COPPER. ALL CONDUCTORS #8 AWG AND LARGER SHALL BE STRANDED. CONDUCTOR SIZES #10 AWG, #12 AWG, AND #14 AWG SHALL BE SOLID. ALL CONDUCTORS SHALL BE STANDARD CODE TYPE "THW," "THWN," "THWN" OR "XHHW" INSULATED EXCEPT AS REQUIRED OTHERWISE PER THE NEC. ALL CONDUCTORS SHALL BE DURABLY MARKED ON THE SURFACE TO INDICATE RATED VOLTAGE, INSULATION CODE, USE, MANUFACTURER, AND AWG SIZE. THE COLOR CODING SHALL BE CONTINUOUS AND SHALL EXTEND TO PANELS AND MOTORS. WHERE INSULATION COLOR CODING IS NOT AVAILABLE FOR CONDUCTORS #8 AWG AND LARGER, USE COLOR CODED PLASTIC TAPE AT EACH CONDUCTOR TERMINATION. ALL #8 AWG AND SMALLER CONDUCTORS SHALL BE SPLICED WITH PREINSULATED SPRING CONNECTORS. CONNECTORS SHALL BE SCOTCHLOK, BUCHANAN B-CAP, OR APPROVED EQUAL. ALL #6 AWG AND LARGER COPPER CONDUCTORS TERMINATED ON LUGS OF PANELBOARDS SHALL BE TERMINATED WITH COPPER U.L. LISTED COMPRESSION CONNECTORS SUCH AS THOMAS & BETTS #54100 OR #54200 SERIES CONNECTORS. ALL #6 AWG AND LARGER COPPER CONDUCTOR TWO WAY SPLICES SHALL BE MADE WITH BARREL CONNECTORS REQUIRING COMPRESSION ON EACH END. ALL #6 AWG AND LARGER COPPER CONDUCTOR TAPPING AND PIGTAILING SHALL BE MADE USING "C" TYPE COMPRESSION TAPS SUCH AS THOMAS AND BETTS #54700 SERIES CONNECTORS. CONNECTOR SHALL BE U.L. LISTED FOR TYPE OF CONDUCTORS TO BE TAPPED. THE MANUFACTURERS RECOMMENDED INSTALLING TOOLS WITH REQUIRED NUMBER OF COMPRESSIONS SHALL BE USED FOR ALL TERMINATIONS.
- ALL WIRE SIZES INDICATED ARE BASED ON DIRECT PATHS WITH 90° BENDS AS NECESSARY FROM THE OUTLET/UTILIZATION EQUIPMENT TO THE PANELBOARD, WITH A MAXIMUM 2% VOLTAGE DROP ON FEEDER CONDUCTORS AND A MAXIMUM VOLTAGE DROP OF 3% FOR BRANCH CIRCUIT CONDUCTORS. WHERE FIELD CONDITIONS DO NOT ALLOW, OR IF FOR ANY REASON THE ROUTE SELECTED IS DIFFERENT, THE WIRE SIZE AND CONDUIT IF NECESSARY SHALL BE INCREASED TO MAINTAIN THESE MINIMUM VOLTAGE DROP REQUIREMENTS AT NO ADDITIONAL COST TO THE OWNER. REGARDLESS, ALL 20 AMP, 120 VOLT HOMERUNS SHALL BE A MINIMUM #12 AWG UNLESS LENGTHS EXCEED 60', THEN CONDUCTORS SHALL BE A MINIMUM #10 AWG. ALL 20 AMP, 277 VOLT HOMERUNS SHALL BE A MINIMUM #12 AWG UNLESS LENGTHS EXCEED 165', THEN CONDUCTORS SHALL BE A MINIMUM #10 AWG.
- THE ACTUAL NUMBER OF WIRES REQUIRED MAY NOT BE INDICATED FOR ALL CIRCUITS, ONLY THOSE WHERE CLARIFICATION IS NECESSARY. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL WIRES NECESSARY FOR THE PROPER FUNCTION OF THE SYSTEM WHETHER INDICATED ON THE DRAWINGS OR NOT AT NO ADDITIONAL COST.
- ALL RIGID, EMT AND FLEXIBLE CONDUIT SHALL BE U.L. LISTED. ALL CONDUIT SHALL BE SUITABLE FOR THE INTENDED SERVICE AND LOCATION. ANY MATERIALS LOCATED WITHIN ENVIRONMENTAL AIR PLENUMS SHALL BE U.L. LISTED FOR THE APPLICATION OR APPROVED IN WRITING BY ALL APPLICABLE LOCAL CODE AUTHORITIES. THE CONTRACTOR SHALL COORDINATE ALL RACEWAY SYSTEM COMPONENTS AND LOCATIONS WITH ALL NEW WORK. CONTRACTOR SHALL COORDINATE WITH WORK OF OTHER TRADES. CONTRACTOR SHALL COORDINATE WITH ALL EQUIPMENT, ARCHITECTURAL AND STRUCTURAL ELEMENTS, PLENUM AND CHASE LIMITATIONS AND REQUIREMENTS OF DRAWINGS AND SPECIFICATIONS. CONTRACTOR IS RESPONSIBLE FOR TIMELY PLACEMENT OF SLEEVES, CUTTING AND PATCHING OF NEW CONSTRUCTION TO FIT WORK OF THIS SECTION, LOCATION OF CHASE SPACE FOR VERTICAL ROUTING OF RACEWAY SYSTEMS AND LOCATION OF PLENUM SPACE FOR HORIZONTAL ROUTING OF RACEWAY SYSTEMS. DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT OF SYSTEMS AND WORK. DRAWINGS ARE NOT TO BE SCALED. IN PREPARATION OF THE DRAWINGS, A REASONABLE EFFORT TO COORDINATE RACEWAY SYSTEMS HAVE BEEN MADE, HOWEVER, SPACE REQUIREMENTS, EQUIPMENT ARRANGEMENTS, AND SITE CONDITIONS VARY, AND THE RESPONSIBILITY FOR ACCESS, LOCATION, PROPER FIT AND TIMELY COMPLETION RESTS WITH THE CONTRACTOR.

EXTERIOR

ALL EXTERIOR CONDUIT SHALL BE HOT DIPPED GALVANIZED STEEL OR ALUMINUM EMT WITH GALVANIZED COMPRESSION CONNECTORS, UNLESS EXPOSED TO STRIKING OR HARM AND THEN CONDUIT SHALL BE RIGID STEEL.

- FURNISH JUNCTION AND PULL BOXES WHERE REQUIRED BY THE CODE OR WHERE INDICATED OR REQUIRED TO FACILITATE PULLING WIRES REGARDLESS OF WHETHER SHOWN ON THE DRAWINGS OR NOT AT NO ADDITIONAL COST. BOXES SHALL BE STEEL, HOT-DIPPED GALVANIZED AFTER FABRICATION, AND SHALL HAVE INDUSTRY STANDARD KNOCKOUTS NECESSARY TO ACCOMMODATE THE CONDUITS AT POINT OF INSTALLATION. SECTIONALIZED BOXES SHALL BE USED WHEREVER POSSIBLE TO GROUP ADJACENT DEVICES UNDER A SINGLE PLATE. ALL BOXES SHALL HAVE LUGS OR EARS INSIDE TO SECURE COVERS. OUTLET BOXES SHALL BE DEEP TYPE, FOUR INCH SQUARE, AND HAVE DEVICE COVERS WITH CENTER OPENINGS AS REQUIRED. OUTLET BOXES FOR EXPOSED SWITCHES, RECEPTACLES, AND PULL BOXES SHALL BE OF THE CAST ALUMINUM "CONDULET" TYPE, CROUSE-HINDS, STONOCO OR EQUAL. EXPOSED SHALL BE DEFINED AS LOCATED IN VIEW OF A PERSON WITHIN OR OUTSIDE OCCUPIABLE SPACE NOT CONCEALED WITHIN PLENUM OR WALL SPACES. EXPOSED SHALL INCLUDE BOTH INTERIOR AND EXTERIOR LOCATIONS WHERE SURFACE MOUNTING OR CONDUIT SUPPORTED STAND ALONE BOXES ARE REQUIRED. OUTLET BOXES IN OUTDOOR OR WET LOCATIONS SHALL ALSO HAVE GASKETED WEATHERPROOF ALUMINUM CAST-METAL COVERS WITH INDIVIDUAL GASKETED SPRING-LATCHED HINGED OUTLET COVERS. OUTLET BOXES FOR 20 AMPERE 120 VOLT OR 277 VOLT CIRCUITS SHALL HAVE A GREEN INSULATED #12 AWG SOLID COPPER CONDUCTOR GROUNDING POINT WITH GROUND SCREW.
- THE TENANT RENOVATION EQUIPMENT GROUNDING SYSTEM SHALL CONSIST OF THE ELECTRICALLY CONTINUOUS METALLIC CONDUIT SYSTEM TOGETHER WITH INSULATED EQUIPMENT GROUNDING CONDUCTORS. EVERY ITEM OF EQUIPMENT SERVED BY THE ELECTRICAL SYSTEM SHALL BE BONDED TO THE BUILDING EQUIPMENT GROUND. THE EQUIPMENT GROUNDING SYSTEM SHALL BE DESIGNED SO ALL METALLIC STRUCTURES, ENCLOSURES, RACEWAYS, JUNCTION BOXES, OUTLET BOXES, CABINETS, MACHINE FRAMES, PORTABLE EQUIPMENT AND OTHER CONDUCTIVE ITEMS IN CLOSE PROXIMITY WITH ELECTRICAL CIRCUITS OPERATE CONTINUOUSLY AT GROUND POTENTIAL, AND PROVIDE A LOW IMPEDANCE PATH FOR POSSIBLE GROUND FAULT CURRENTS. THE SYSTEM SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE. ALL BRANCH CIRCUITS AND FEEDERS SHALL HAVE A GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR SIZED IN ACCORDANCE WITH THE NEC.

LIGHTING

- LIGHTING FIXTURES, REMOTE BALLASTS, REMOTE TRANSFORMERS, AND ACCESSORIES, WHETHER INDICATED IN THE LIGHTING FIXTURE SCHEDULE OR NOT AND LOCATED IN A DAMP OR WET LOCATION AS DEFINED BY THE NEC, SHALL BE U.L. LISTED FOR DAMP OR WET LOCATION ACCORDINGLY.

SHOP DRAWING SUBMITTAL REQUIREMENTS:

- CONTRACTOR SHALL PROVIDE ELECTRICAL SHOP DRAWING SUBMITTAL PACKAGES AS REQUIRED FOR THIS PROJECT. THE ELECTRICAL SHOP DRAWING SUBMITTAL PACKAGE SHALL BE SUBMITTED TO THE ENGINEER UNDER ONE SUBMITTAL PACKAGE. REFER TO THE ELECTRICAL NOTES AND DOCUMENTS FOR ADDITIONAL SUBMITTAL PACKAGE INFORMATION AND REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COST OF ENGINEERING REVIEW TIME ASSOCIATED WITH THE RE-REVIEW OF INCOMPLETE AND/OR INACCURATE SUBMITTAL DATA AND FOR SUBMITTING MULTIPLE PACKAGES OF EACH DISCIPLINE. ALL SHOP DRAWING SUBMITTAL DATA WITHIN EACH SUBMITTAL PACKAGE SHALL BE CERTIFIED BY THE OWNER, PARTNER, CORPORATE OFFICER, OR OTHER PERSON DULY AUTHORIZED TO SIGN LEGALLY BINDING DOCUMENTS FOR THE CONTRACTOR(S). THE CERTIFICATION STATEMENT SHALL READ EXACTLY AS FOLLOWS:

I HEREBY CERTIFY THAT THIS SHOP DRAWING, PRODUCT DATA, AND/OR SAMPLE HAS BEEN CHECKED PRIOR TO SUBMITTAL AND THAT IT HAS BEEN COORDINATED WITH EXISTING CONDITIONS AND COMPLIES IN ALL RESPECTS WITH THE REQUIREMENTS OF THE CONTRACT DOCUMENTS AND PHYSICAL SPACE LIMITATIONS FOR THE PROJECT.

(NAME OF THE SUBCONTRACTOR)

SIGNED: _____

NAME: _____

POSITION: _____

DATE: _____

A MINIMUM PERIOD OF TWO (2) WEEKS, EXCLUSIVE OF TRANSMITTAL TIME, WILL BE REQUIRED IN THE ENGINEER'S OFFICE EACH TIME A SHOP DRAWING, PRODUCT DATA AND/OR SAMPLES ARE SUBMITTED OR RESUBMITTED FOR REVIEW. THIS TIME PERIOD WILL COMMENCE ONCE THE SHOP DRAWING, PRODUCT DATA AND/OR SAMPLES ARE RECEIVED IN THE ENGINEER'S OFFICE CONTINGENT UPON THE SHOP DRAWING, PRODUCT DATA AND/OR SAMPLES BEING RECEIVED IN THE ENGINEER'S OFFICE BEFORE 3:00 PM. IF THE SHOP DRAWING, PRODUCT DATA AND/OR SAMPLES ARE RECEIVED IN THE ENGINEER'S OFFICE AFTER 3:00 PM, THE TIME PERIOD WILL NOT START UNTIL THE NEXT BUSINESS DAY. THIS TIME PERIOD SHALL BE CONSIDERED BY THE CONTRACTOR WHEN SCHEDULING THE WORK.

SHOP DRAWING AND PRODUCT DATA - SUBMITTAL REVIEW STATUS:

SHOP DRAWING AND PRODUCT DATA SUBMITTALS WILL BE RETURNED MARKED "REVIEWED NO EXCEPTIONS", "REVIEWED EXCEPTIONS NOTED", "INFORMATION ONLY", "REVISE AND RESUBMIT", OR "REJECTED".

IF STAMPED "REVISE AND RESUBMIT" OR "REJECTED", THE SHOP DRAWING OR PRODUCT DATA SHALL BE REVISED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS. IF MARKED "REVIEWED, EXCEPTIONS NOTED" DOCUMENTATION THAT ADDRESSES ONLY THE NOTED EXCEPTIONS IN THE FORM OF A LETTER, SUPPLEMENTAL INFORMATION, OR COMPLETE RESUBMITTAL SHALL BE FORWARDED TO THE OWNER, ARCHITECT AND ENGINEER FOR RECORD PURPOSES ONLY. IF MARKED "REVIEWED NO EXCEPTIONS" OR "INFORMATION ONLY" NO ADDITIONAL SUBMITTAL WILL BE REQUIRED.

IF THE COPY STAMPED "REVIEWED NO EXCEPTIONS" OR "INFORMATION ONLY" IS ALTERED FOR ANY REASON AFTER IT HAS BEEN STAMPED, THE "REVIEWED NO EXCEPTIONS" OR "INFORMATION ONLY" SHALL AUTOMATICALLY BE VOIDED AND THE SUBMITTAL STATUS REVISED TO "REVIEWED EXCEPTIONS NOTED", "REVISE AND RESUBMIT", OR "REJECTED" DEPENDING ON THE ALTERATIONS.

ALL WORK SHALL BE DONE IN ACCORDANCE WITH SHOP DRAWINGS STAMPED "REVIEWED NO EXCEPTIONS", "REVIEWED EXCEPTIONS NOTED", OR "INFORMATION ONLY" INsofar AS THESE ARE IN AGREEMENT WITH THE CONTRACT DOCUMENTS. WHEREVER DIFFERENCES OCCUR BETWEEN THE SHOP DRAWINGS AND THE CONTRACT DOCUMENTS, THE CONTRACT DOCUMENTS SHALL GOVERN THE WORK.

ELECTRICAL DEMOLITION NOTES

- THE CONTRACTOR SHALL REMOVE SUCH EXISTING WORK AS CALLED FOR ON THE DRAWINGS OR AS REQUIRED TO CLEAR THE AREAS OF NEW CONSTRUCTION.
- WHERE EXISTING EQUIPMENT IS TO BE RELOCATED, EXTREME CARE SHALL BE TAKEN TO PREVENT DAMAGE DURING THE REMOVAL AND REINSTALLATION. WHERE DAMAGE OCCURS, THE EQUIPMENT SHALL BE REPLACED OR REPAIRED TO THE SATISFACTION OF THE ARCHITECT, AT NO ADDITIONAL COST TO THE OWNER. ALL ITEMS SHALL BE THOROUGHLY CLEANED, REPAIRED AND IF REQUIRED, PAINTED BEFORE BEING INSTALLED AT THEIR NEW LOCATION.
- ALL EQUIPMENT REMOVED THAT IS NOT BEING REUSED SHALL REMAIN THE PROPERTY OF THE OWNER AND SHALL BE STORED OR DISPOSED OF AS DIRECTED.
- EXCEPT AS OTHERWISE NOTED, ALL EXISTING ELECTRICAL WORK WHICH WILL NOT BE RENDERED OBSOLETE AND WHICH MAY BE DISTURBED DUE TO ANY CHANGES REQUIRED UNDER THIS CONTRACT, SHALL BE RESTORED TO ITS ORIGINAL OPERATING CONDITION. OTHER ELECTRICAL WORK OR MATERIAL RENDERED OBSOLETE SHALL BE ABANDONED WHERE CONCEALED AND REMOVED WHERE EXPOSED. OLD UNUSED WIRING AND DEVICES SHALL BE CONCEALED AND REMOVED WHERE EXPOSED. OLD UNUSED WIRING AND DEVICES SHALL BE REMOVED FROM THE ABANDONED (CONCEALED) CONDUITS. OUTLETS SHALL BE PROVIDED WITH BLANK COVERS. ANY CONDUITS STURBED OUT OF MASONRY SURFACE SHALL BE CUT INTO SURFACE AND PATCHED.
- WHERE EXISTING ELECTRICAL WORK INTERFERES WITH NEW WORK AND WHERE SUCH INSTALLATIONS ARE TO REMAIN IN USE, THE INSTALLATIONS SHALL BE DISCONTINUED AND RELOCATED AND/OR RECONNECTED TO COORDINATE WITH THE WORK INDICATED ON THE CONTRACT DRAWINGS AND AS SPECIFIED.
- WHERE EXISTING RACEWAYS THAT ARE NOT TO BE REUSED INTERFERE WITH NEW WORK, THESE RACEWAYS SHALL BE REMOVED BACK TO THE NEAREST JUNCTION BOX OR PULL BOX AND THE OPENINGS BLANKED.
- EXISTING RACEWAYS AND/OR WIRING MAY BE REUSED WHERE PRACTICABLE. EXCEPT AS OTHERWISE INDICATED, PANELBOARD CABINETS SHALL NOT BE USED FOR OTHER PURPOSES THAN CIRCUIT PROTECTION AND DISTRIBUTION POINTS AND SHALL NOT BE USED AS JUNCTION OR PULL BOXES.
- ALL WORK SHALL BE PERFORMED IN SUCH A MANNER TO CREATE MINIMAL POWER OUTAGES FOR THE OWNER. ALL SUCH OUTAGES SHALL BE CAREFULLY COORDINATED WITH THE OWNER SO THAT POWER TO ESSENTIAL SERVICES CAN BE MAINTAINED.
- CONTRACTOR SHALL MAINTAIN CONTINUITY OF BRANCH CIRCUITS SERVING MULTIPLE ITEMS OF WHICH ONE OR MORE ARE BEING DEMOLISHED. CONDUCTORS AND CONDUITS FOR THOSE ITEMS BEING DEMOLISHED SHALL BE REMOVED AS FAR AS PRACTICABLE.
- IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO REMOVE ALL EXISTING ELECTRICAL EQUIPMENT NOT REUSED OR NOT NECESSARY FOR THE COMPLETION OF THIS PROJECT.
- ALL EQUIPMENT INDICATED TO REMAIN IN PLACE SHALL REMAIN IN NORMAL OPERATION AT ALL TIMES DURING CONSTRUCTION. IF ANY BRANCH CIRCUIT WIRING FEEDING THIS EQUIPMENT IS DAMAGED DURING CONSTRUCTION, THE CONTRACTOR SHALL REPLACE WITH NEW BRANCH CIRCUIT WIRING OF THE SAME SIZE AND TYPE AS EXISTING AT NO COST TO THE OWNER.
- REFER TO THE GENERAL NOTES AND SPECIFICATIONS FOR ADDITIONAL INFORMATION.

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**ARLINGTON COUNTY, VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES**

ELECTRICAL NOTES
 3108 COLUMBIA PIKE DEMOLITION
 3108 COLUMBIA PIKE
 ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN **E-002** 25 OF 28

ISSUED FOR BID 11-10-2023



DEWBERRY REVISIONS

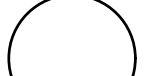
NO.	DATE	DESCRIPTION	BY

COUNTY REVISIONS		
SUBMITTED DATE: 8/3/2023	DESIGNED: EH CHECKED: DW	PROJECT/FILE NO. LDAP23-00146

SCALE IN FEET

1" = 20'

1 INCH



VCS-83



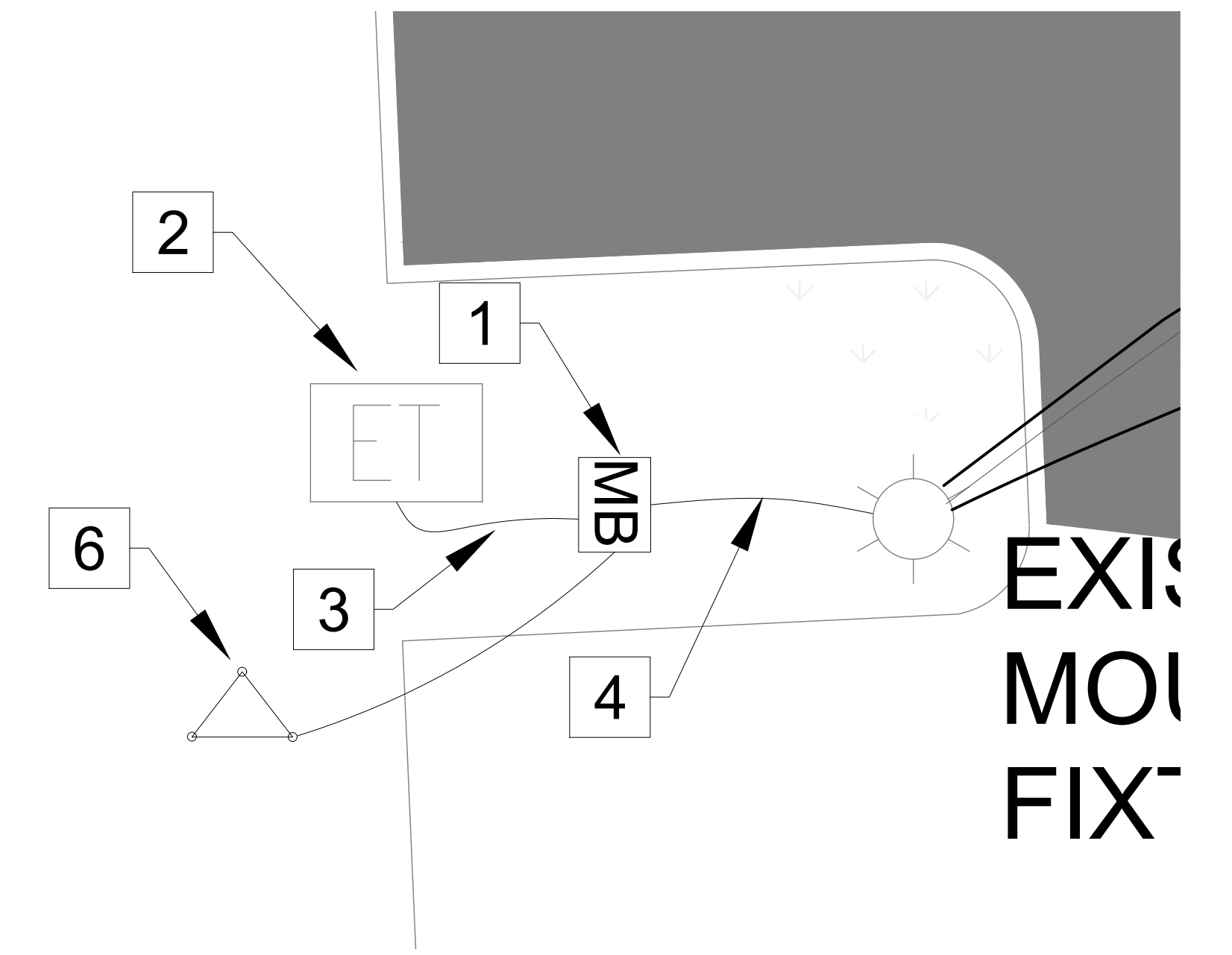
01 - ELECTRICAL SITE PLAN

GENERAL NOTES:

1. TEST PITS ARE TO BE UTILIZED FOR POLE FOUNDATIONS WITH POTENTIAL UTILITY CONFLICTS BEFORE EXCAVATION. ENGINEER OF RECORD IS TO BE NOTIFIED IF CONFLICTS ARE IDENTIFIED.
2. ALL NEW BRANCH CIRCUIT WIRING SHALL BE 2#8+#8G IN 1" SCH40 PVC CONDUIT, U.O.N. CONDUCTOR INSULATION SHALL BE TYPE XHHW OR RHW2. INSTALL MINIMUM OF 24" BELOW GRADE. PROVIDE METAL TRACE-TAPE ABOVE ALL NON-METALLIC CONDUIT.
3. CONDUIT SHOWN AS THIN AND GRAY IS EXISTING UNDERGROUND CONDUIT.

KEY NOTES:

1. PROVIDE NEW UTILITY METER BASE, SERVICE DISCONNECT, AND LOAD CENTER "P/NL-SITE". COORDINATE METER AND UTILITY INTERFACE REQUIREMENTS WITH ELECTRICAL UTILITY PROVIDER. REFER TO DETAIL 1, E-501 FOR FURTHER INFORMATION. CONFIRM VOLTAGE FOR LIGHTS IN FIELD AND COORDINATE SERVICE VOLTAGE APPROPRIATELY.
2. EXISTING UTILITY TRANSFORMER.
3. PROPOSED ELECTRICAL FROM EXISTING UTILITY TRANSFORMER. PROVIDE (2) 4" C DIRECT-BURIED FROM UTILITY POLE BASE TO METER BASE LOCATION. COORDINATE EXACT REQUIREMENTS AND ROUTING WITH ELECTRICAL UTILITY. REFER TO DETAIL 3, E-501 FOR CONDUIT ARRANGEMENT, CONDUCTORS AND TIE-IN FROM UTILITY TRANSFORMER TO METER BASE BY UTILITY. COORDINATE ROUTING AND ADDITIONAL REQUIREMENTS WITH UTILITY.
4. PROVIDE CIRCUITING FOR LIGHTING FIXTURES ROUTED BELOW GRADE. PROVIDE 2#8+#8G IN 1" CONDUIT. CIRCUIT SHALL EXIT SERVICE DISCONNECT AND ROUTE TO NEAREST LIGHTING FIXTURE. MAINTAIN MINIMUM 24" OF COVER AT ALL TIMES. REFER TO DETAIL 6, E-501 FOR CONNECTION TO LIGHTING FIXTURE POLE BASE.
5. NEW LOCATION OF RELOCATED POLE-MOUNTED LIGHTING FIXTURE. REFER TO DETAIL 6, E-501 FOR MOUNTING, GROUNDING, AND CIRCUITING DETAIL.
6. PROVIDE GROUNDING ELECTRODES FROM MAIN SYSTEM BONDING JUMPER AND GROUND BUS. REFER TO DETAIL 2, E-501 FOR FURTHER INFORMATION.
7. EXISTING DUAL-HEAD LIGHT FIXTURE AND POLE SHALL BE RELOCATED. REFER TO DRAWING FOR NEW LOCATION. DEMOLISH EXISTING BASE AND ASSOCIATED CONDUIT.
8. DEMOLISH EXISTING SINGLE-HEAD LIGHTING FIXTURE, POLE AND BASE AND ASSOCIATED CONDUIT.
9. PROVIDE CIRCUITING FOR LIGHTING FIXTURES ROUTED BELOW GRADE. PROVIDE 2#8+#8G IN 1" CONDUIT. REFER TO DETAIL 6, E-501 FOR CONNECTION TO LIGHTING FIXTURE POLE BASE.
10. INTERCEPT EXISTING CONDUIT AT THIS POINT AND EXTEND CONDUIT AND CONDUCTOR USING 2#8+#8G IN 1" CONDUIT. TO EXISTING LIGHT POLE AS SHOWN IN DETAIL 01 ON THIS DRAWING.



02 - ENLARGED PLAN

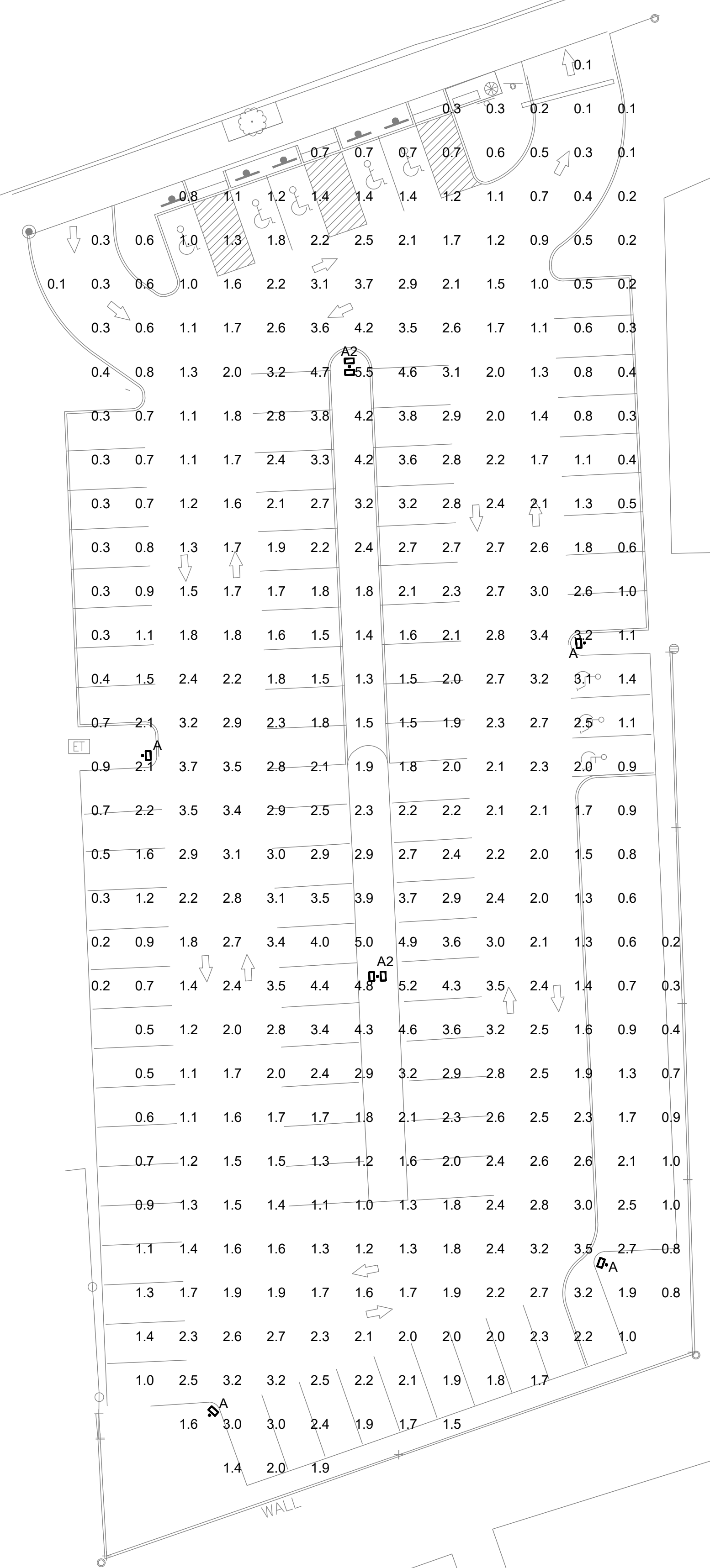


ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

ELECTRICAL SITE PLAN
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN E-101 26 OF 28

ISSUED FOR BID 11-10-2023		
DEWBERRY REVISIONS		
NO.	DATE	DESCRIPTION
COUNTY REVISIONS		
SUBMITTED DATE:	DESIGNED: EH	PROJECT/FILE NO.
8/3/2023	CHECKED: DW	LDAP23-00146
SCALE IN FEET		
1" = 20'		



01 - LIGHTING PHOTOMETRIC SITE PLAN

DRAWING GENERAL NOTES :

1. LIGHTING PHOTOMETRIC DATA IS BASED ON A GENERIC LED FIXTURE WITH TYPE 3 DISTRIBUTION AND APPROXIMATELY 11,285 TOTAL LUMEN OUTPUT. ALL LIGHTING ON SITE IS EXISTING FIXTURES TO REMAIN OR BE RELOCATED, AND EXACT MODEL DATA IS NOT KNOWN AT THIS TIME.
2. PHOTOMETRIC STATISTICS ARE BASED UPON A POLE HEIGHT OF 25'.
3. CONTRIBUTIONS FROM EXISTING STREET LIGHTING AND LIGHTING FROM ADJACENT PROPERTIES ARE NOT INCLUDED IN THE PHOTOMETRIC ANALYSIS.

Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
□	A	4	Lithonia Lighting	RSX2 LED P1 40K R3S	RSX Area Luminaire Size 2 P1 Lumen Package 4000K CCT Type R3S Distribution		1	RSX2 LED P1 40K R3S.ies	11285	0.8	72
□	A2	2	Lithonia Lighting	RSX2 LED P1 40K R3S	RSX Area Luminaire Size 2 P1 Lumen Package 4000K CCT Type R3S Distribution		2	RSX2 LED P1 40K R3S.ies	11285	0.8	144

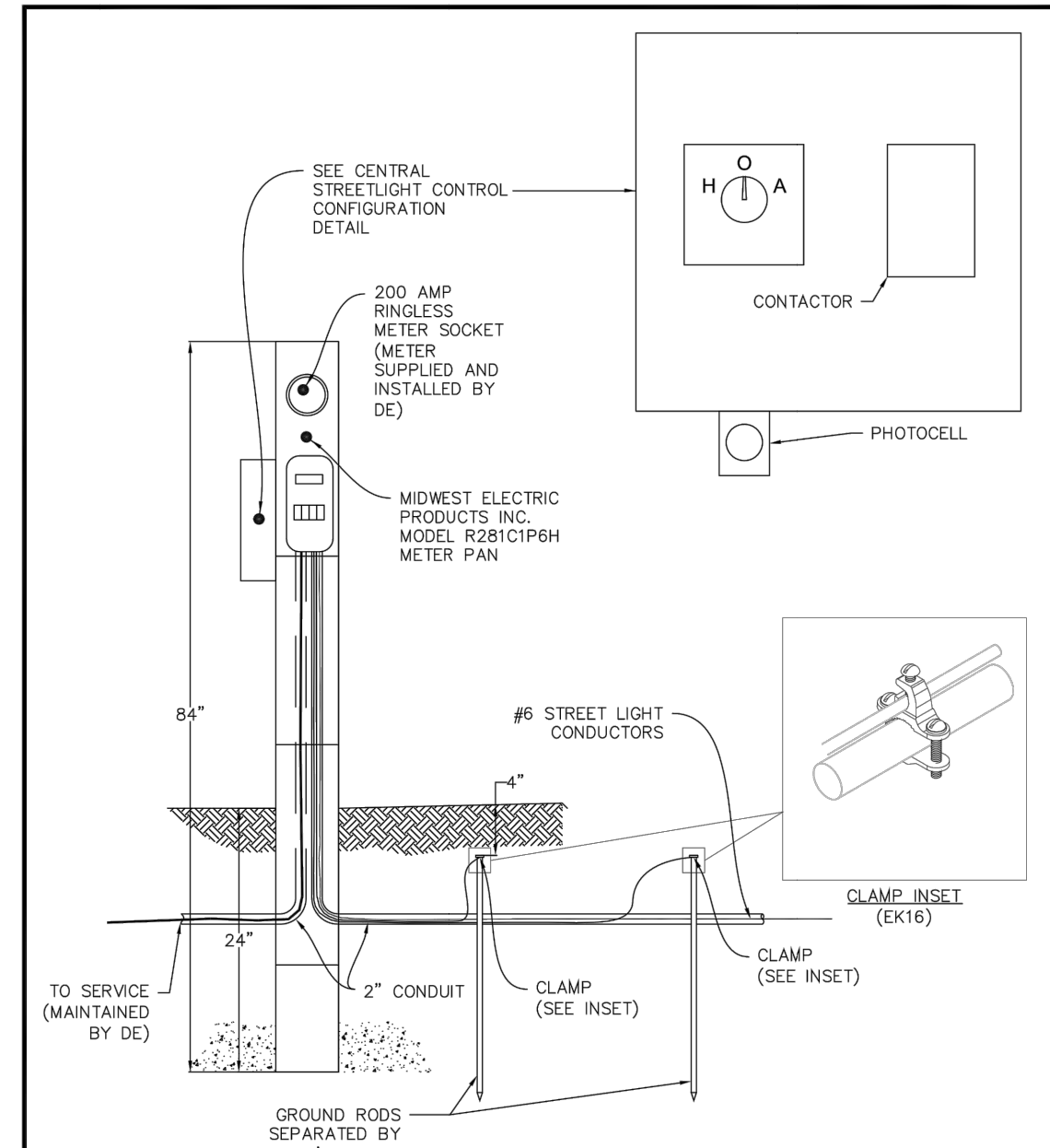
Description	Symbol	Avg	Max	Min	Max/Min	Avg/Min
Parking Lot	+	1.7 fc	4.9 fc	0.1 fc	49.0:1	17.0:1

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ISSUED FOR BID 11-10-2023			ARLINGTON COUNTY, VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES	
			LIGHTING PHOTOMETRIC SITE PLAN 3108 COLUMBIA PIKE DEMOLITION 3108 COLUMBIA PIKE ARLINGTON COUNTY, VIRGINIA 22204	
		SCALE: AS-SHOWN		E-102
				27 OF 28
COUNTY REVISIONS NO. DATE DESCRIPTION BY		DEWBERRY REVISIONS		
SUBMITTED DATE: 8/3/2023 DESIGNED: EH CHECKED: DW		PROJECT/FILE NO. LDAP23-00146		
SCALE IN FEET 1" = 20' 				

480/277V, 1PH, 3W UTILITY SERVICE CONDUCTORS

- NOTES:
- DETAIL IS DIAGRAMMATIC ONLY. COORDINATE EXACT REQUIREMENTS WITH SITE CONDITIONS AND UTILITY.
 - PROVIDE MILBANK METER PEDESTAL, SERVICE RATED, 100A M.C.B., 480V/277, 8 POLE, 42KAIC METER PEDESTAL AND LOAD CENTER IN TYPE 3R ENCLOSURE, OR SIMILAR AS APPROVED BY ELECTRICAL UTILITY. COMPLY WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS IN ADDITION TO REQUIREMENTS OF DRAWINGS AND ELECTRICAL UTILITY. CONTRACTOR SHALL VERIFY APPROVAL OF PEDESTAL WITH ELECTRICAL UTILITY PRIOR TO PROCUREMENT.
 - PROVIDE COMPATIBLE CIRCUIT BREAKERS AS INDICATED ON ELECTRICAL LOAD SCHEDULES BELOW.
 - SERVICE DISCONNECT SHALL BE SEPARATED BY PERMANENT BARRIER FROM ADJOINING COMPARTMENTS.
 - PEDESTAL SHALL BE SET ON CONCRETE PAD. CONTRACTOR SHALL PROVIDE PAD AND BACKFILL AROUND INSTALLATION TO ENSURE PEDESTAL IS PLUMB AND PAD IS LEVEL WITH ADJACENT GRADE.
 - ENSURE ADEQUATE WORKING SPACE AS REQUIRED BY NEC 110.26 IS MAINTAINED UPON COMPLETION.



NOTES:

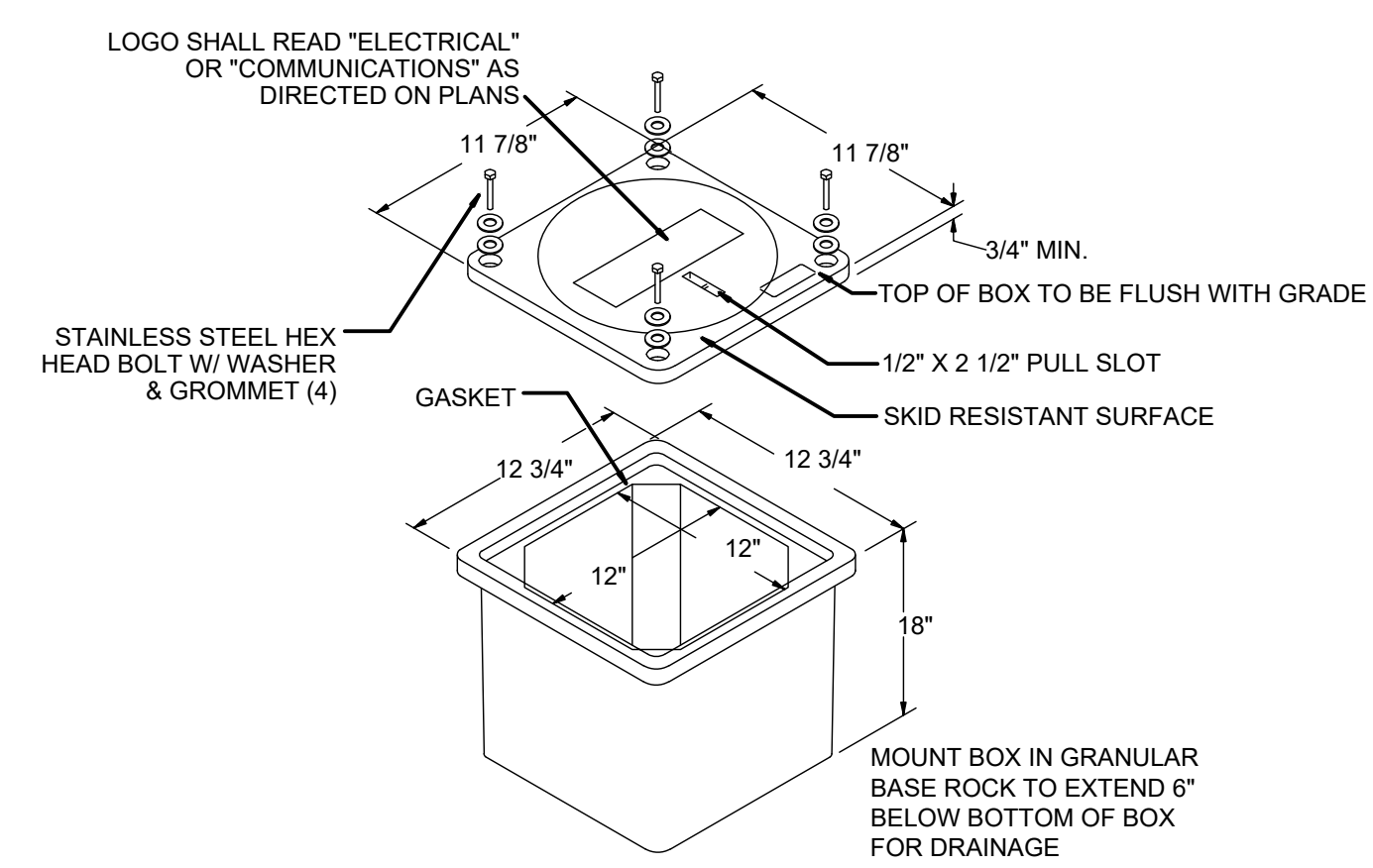
- RESISTANCE TEST SHALL BE CARRIED OUT DURING THE METER PEDESTAL INSTALLATION.
- MAXIMUM RESISTANCE SHALL NOT EXCEED 25 OHMS.

ELECTRICAL SERVICE

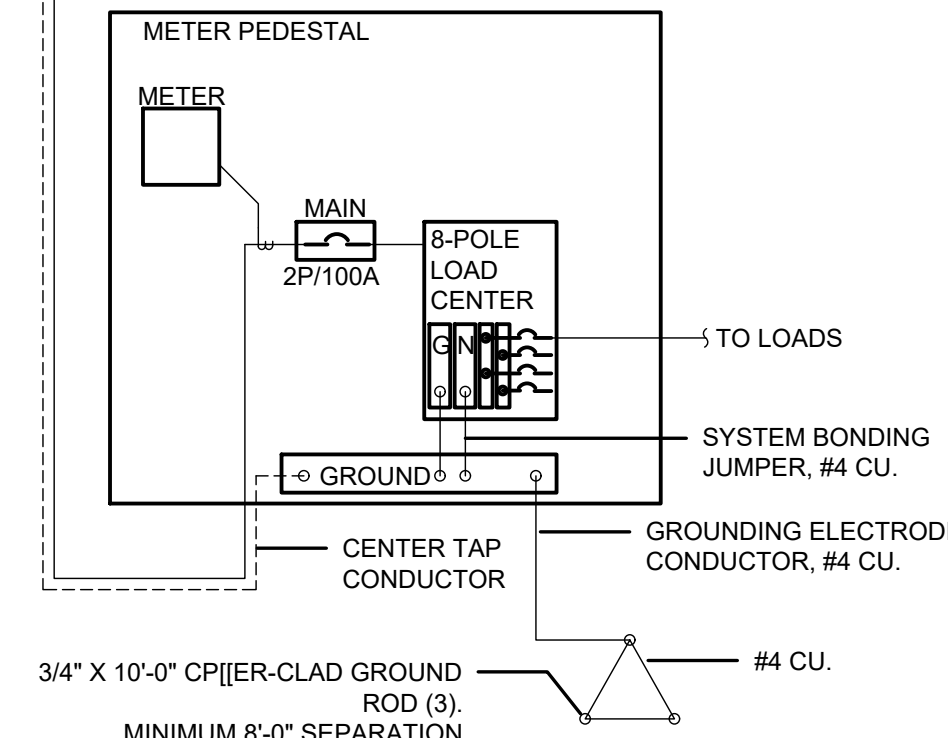
ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRAWING NO. **14100-01**

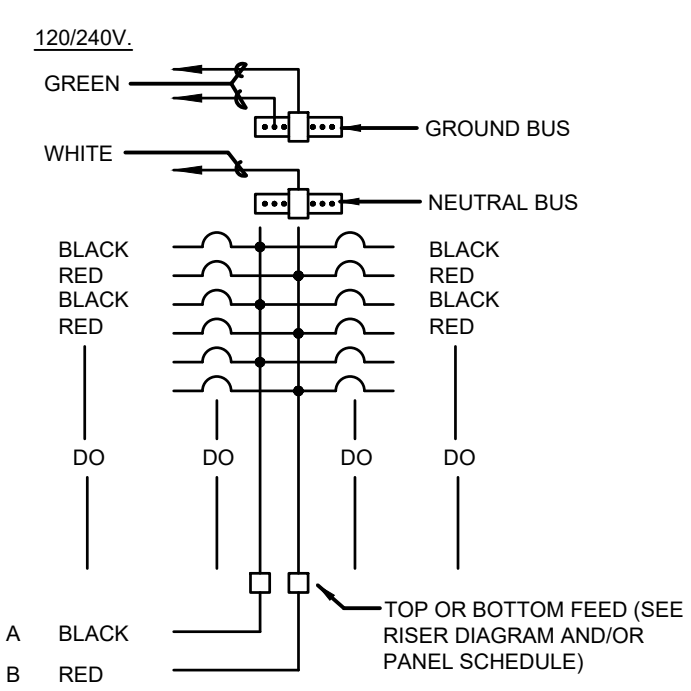
1 METER PEDESTAL DETAIL
NOT TO SCALE



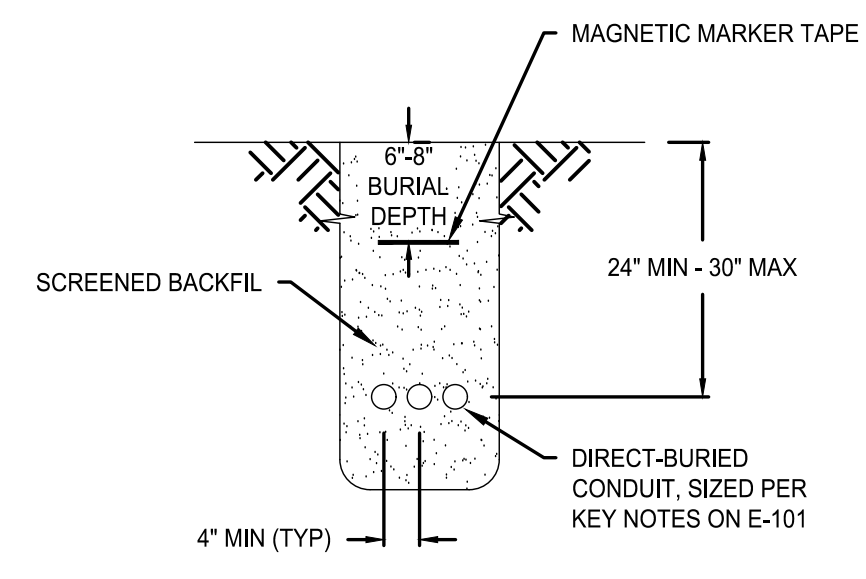
7 ELECTRICAL HAND HOLE DETAIL
NOT TO SCALE



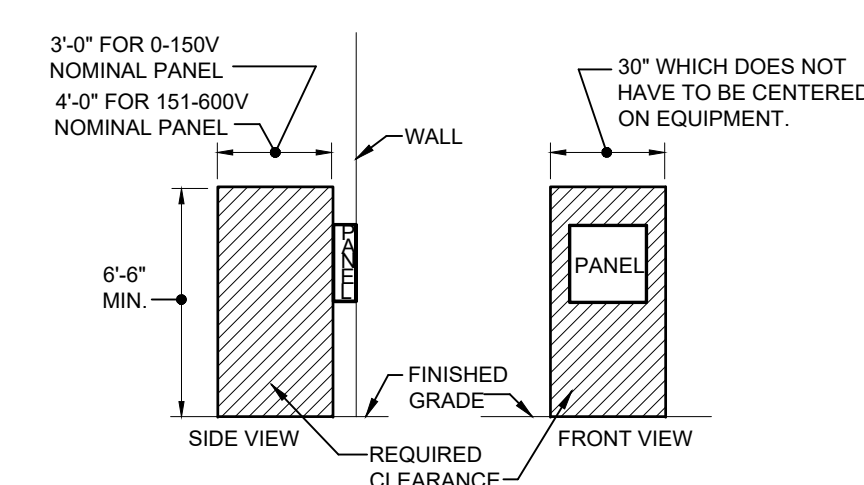
2 ELECTRICAL DISTRIBUTION AND GROUNDING DIAGRAM
NOT TO SCALE



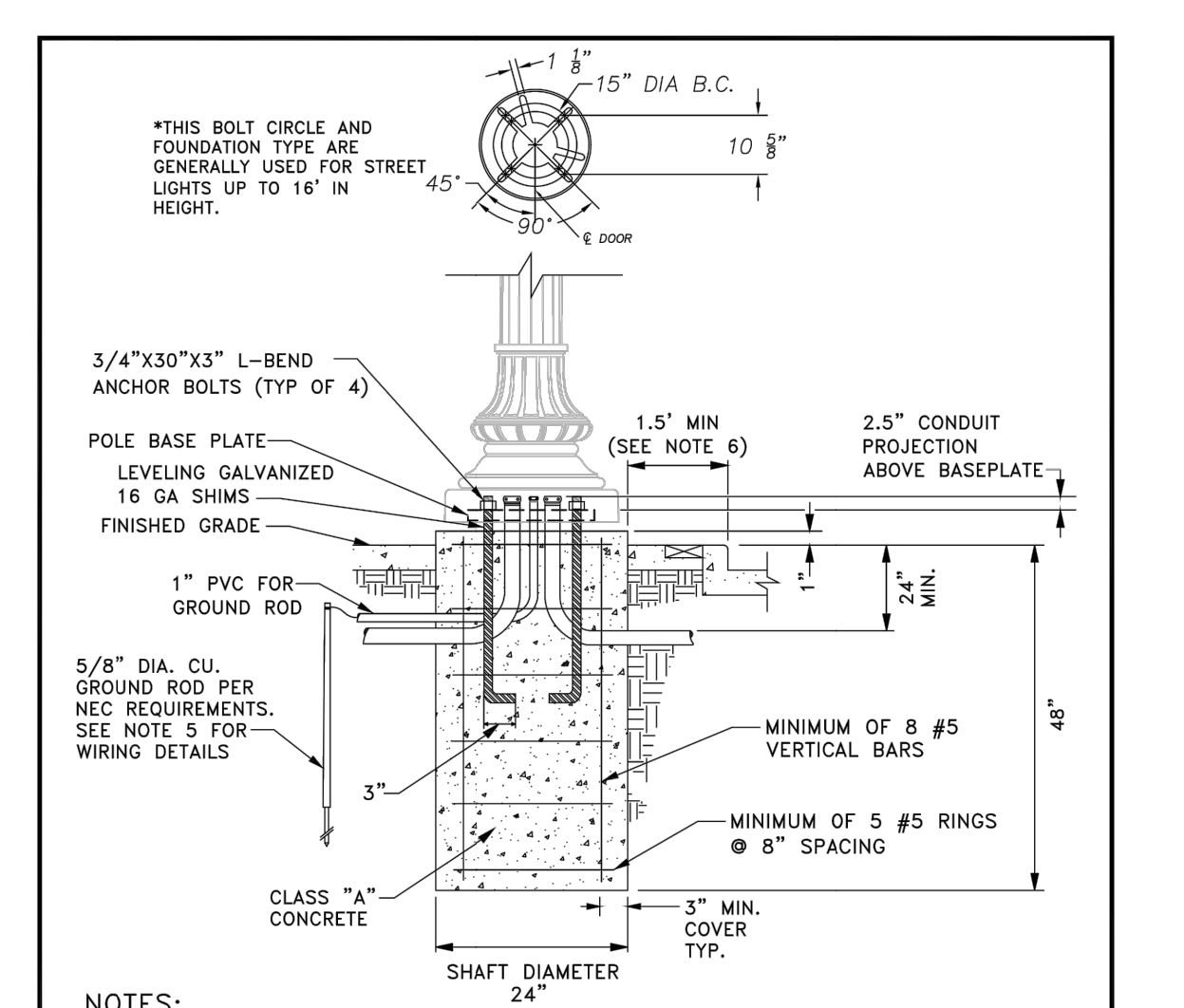
4 ELECTRICAL PANEL COLOR CODE DETAIL
NOT TO SCALE



3 ELECTRICAL DIRECT BURIED CONDUIT
NOT TO SCALE



5 TYPICAL PANELBOARD CLEARANCE DETAIL
NOT TO SCALE



- NOTES:
- BOLT HOLE PATTERN SHALL BE PARALLEL TO THE CURB.
 - TOP OF THE FOUNDATION SHALL BE 1" ABOVE FINISHED GRADE.
 - POLE BASE SHALL BE LEVELED WITH SHIMS.
 - ALL BARS SHALL HAVE MINIMUM OF 3" OF CONCRETE COVER ON PLANS; CONFIRM FIELD ADJUSTMENT AS REQUIRED.
 - NO WIRING DETAILS ARE SHOWN IN THIS DRAWING. REFER TO DRAWING 14050-01 FOR WIRING DETAIL.
 - MINIMUM OFFSET FROM FACE OF CURB, REFER TO SPECIFIC STATION AND OFFSET DISTANCES ON PLANS; CONFIRM FIELD ADJUSTMENT AS REQUIRED.
 - THE CONTACT LENGTH SHALL BE PER NEC ARTICLE 250. GENERALLY, THE GROUND ROD SHALL BE BELOW MOISTURE LEVEL WITH MINIMUM SOIL CONTACT OF 8', OR 45 DEGREE ANGLE, OR LAID 30" DEEP HORIZONTALLY.
 - CONTRACTOR TO ENSURE ADEQUATE SPACING BETWEEN CONDUITS FOR INSTALLATION OF BUSHINGS/BELLED ENDS

STREETLIGHT POLE FOUNDATION
STANDARD DEPTH

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRAWING NO. **14060-01**

6 LIGHTING POLE BASE DETAIL
NOT TO SCALE

PANEL L1A1

CONDUIT SIZE		WIRE SIZE	SERVING	KVA AD	KVA BD	CKT BKR	CKT NO	LOAD TYPE	LOAD TYPE	CKT NO	CKT BKR	KVA AD	KVA BD	SERVING	WIRE SIZE	CONDUIT SIZE
3/4"	2#8	PARKING LTG.	1.50	1.50	2P-20	1	C			2	1P-20			SPARE		
		SPARE			1P-20	3	C			4	1P-20			SPARE		
		SPARE			1P-20	5				6				SPACE		
		SPARE			1P-20	7				8				SPACE		

CONNECTED KVA		NEC DEMAND FACTOR	DEMAND (kVA)
CONTINUOUS LOADS (C)	3.00	125%	3.75
NON-CONTINUOUS LOADS (NC)	0.00	100%	0.00
RECEPTACLES LOADS (R)	0.00	10KVA + 50%	0.00
KITCHEN LOADS (K)	0.00	100%	0.00
LARGEST MOTOR (LM)	0.00	125% OF LARGEST	0.00
ELEVATOR (EL)	0.00	100%	0.00

TOTAL CONNECTED = 3 KVA
TOTAL DEMAND = 4 KVA

8 ELECTRICAL HAND HOLE DETAIL
NOT TO SCALE

ISSUED FOR BID 11-10-2023

DAVID WERNLI
Lic. No. 57308
08/04/2023

DEWBERRY REVISIONS

NO.	DATE	DESCRIPTION	BY
COUNTY REVISIONS			
SUBMITTED DATE:	DESIGNED:	PROJECT/FILE NO.	
8/3/2023	EH	LDAP23-00146	
CHECKED:	DW		

SCALE IN FEET
1" = 20'
1 INCH

VCS-83

ARLINGTON COUNTY, VIRGINIA
DEPARTMENT OF ENVIRONMENTAL SERVICES

ELECTRICAL DETAILS
3108 COLUMBIA PIKE DEMOLITION
3108 COLUMBIA PIKE
ARLINGTON COUNTY, VIRGINIA 22204

SCALE: AS-SHOWN

E-501

28 OF 28

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FAX: 703.949.0518