

NOTES: THE SUBJECT PROPERTY IS IDENTIFIED ON ARLINGTON COUNTY REAL PROPERTY IDENTIFICATION MAP NO. 044-11 AS REAL PROPERTY CODE (RPC) 17-027-008, WHICH IS ZONED RA6-15. THE SUBJECT PROPERTY IS LOCATED IN ZONE "X" AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY, FLOOD INSURANCE RATE MAP (FIRM), COMMUNITY PANEL NO. 51013C0039C, FOR ARLINGTON COUNTY, VA, DATED AUGUST 19, 2013. ZONE "X" IS NOT IDENTIFIED AS A SPECIAL FLOOD HAZARD ZONE AREA. THE HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO VIRGINIA COORDINATE SYSTEM OF 1983 (VCS83) NORTH ZONE. THE HORIZONTAL DATUM SHOWN HEREON IS BASED ON A GPS SURVEY PERFORMED BY VIKA VIRGINIA, LLC ON MARCH 15, 2012. BOUNDARY INFORMATION SHOWN HEREON IS BASED UPON A FIELD RUN SURVEY BY VIKA VIRGINIA, LLC THE SURVEY CONTROL ESTABLISHED BY VIKA VIRGINIA, LLC AND USED TO DETERMINE THE BOUNDARY HAS A HORIZONTAL PRECISION OF 1:70,208 WHICH EXCEEDS THE MINIMUM HORIZONTAL PRECISION OF 1:20,000 AS REQUIRED BY THE COMMONWEALTH OF VIRGINIA. FIRST AMERICAN TITLE INSURANCE COMPANY ALTA COMMITMENT FOR TITLE INSURANCE, COMMITMENT NO. VA-21-3199A (REVISION 1) WITH AN EFFECTIVE DATE OF NOVEMBER 29, 2021 AT 8:00 AM HAS BEEN INCORPORATED INTO THIS SURVEY. ALL KNOWN PLOTTABLE EASEMENTS OF RECORD ARE SHOWN HEREON. THE SUBJECT PROPERTY IS LOCATED IN A HISTORIC DISTRICT PER ARLINGTON COUNTY HISTORIC SITES AND DISTRICTS MAP ACCESSED SEPTEMBER 14, 2022 ACCESSED SEPTEMBER 14, 2022.

AREA TABULATION:

BALCONY ENCROACHMENT - B2-1 (9 SF)

BUILDING OVERHANG

BUILDING OVERHANG

4" WATER

4" WATER

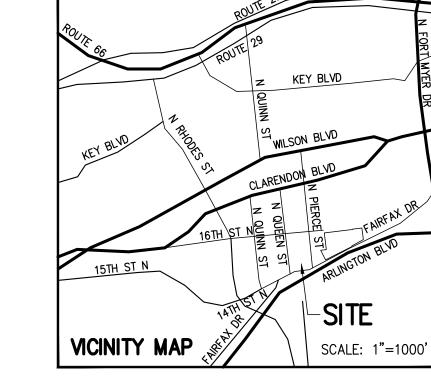
(15' X 20'

(273 SF) METER (15' X 20NE)

(273 SF)

RPC NO. 17-027-008 PORTION OF FAIRFAX DRIVE TO BE VACATED 20,050 SF OR 0.46028 AC 595 SF OR 0.01366 AC

20,645 SF OR 0.47394 AC



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PLAN STATUS	, DATE
1st 4.1 SUBMISSION	10/19/2022
2nd 4.1 SUBMISSION	01/13/2023
POST-APPROVAL SHEET STATUS	DATE

PROFESSIONAL SEAL

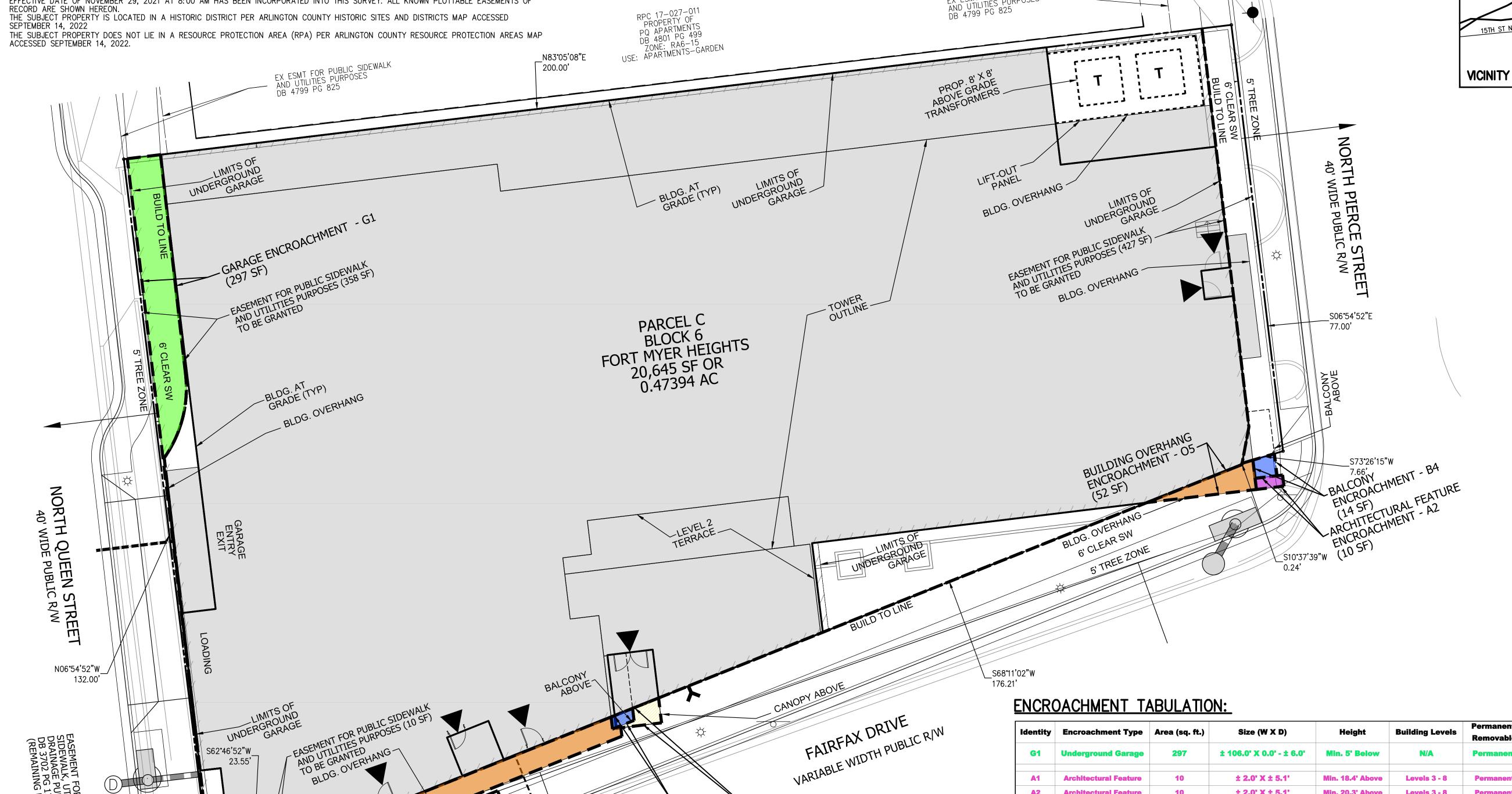
1601 FAIRFAX DRIVE

ARLINGTON COUNTY, VIRGINIA

4.1 SITE PLAN

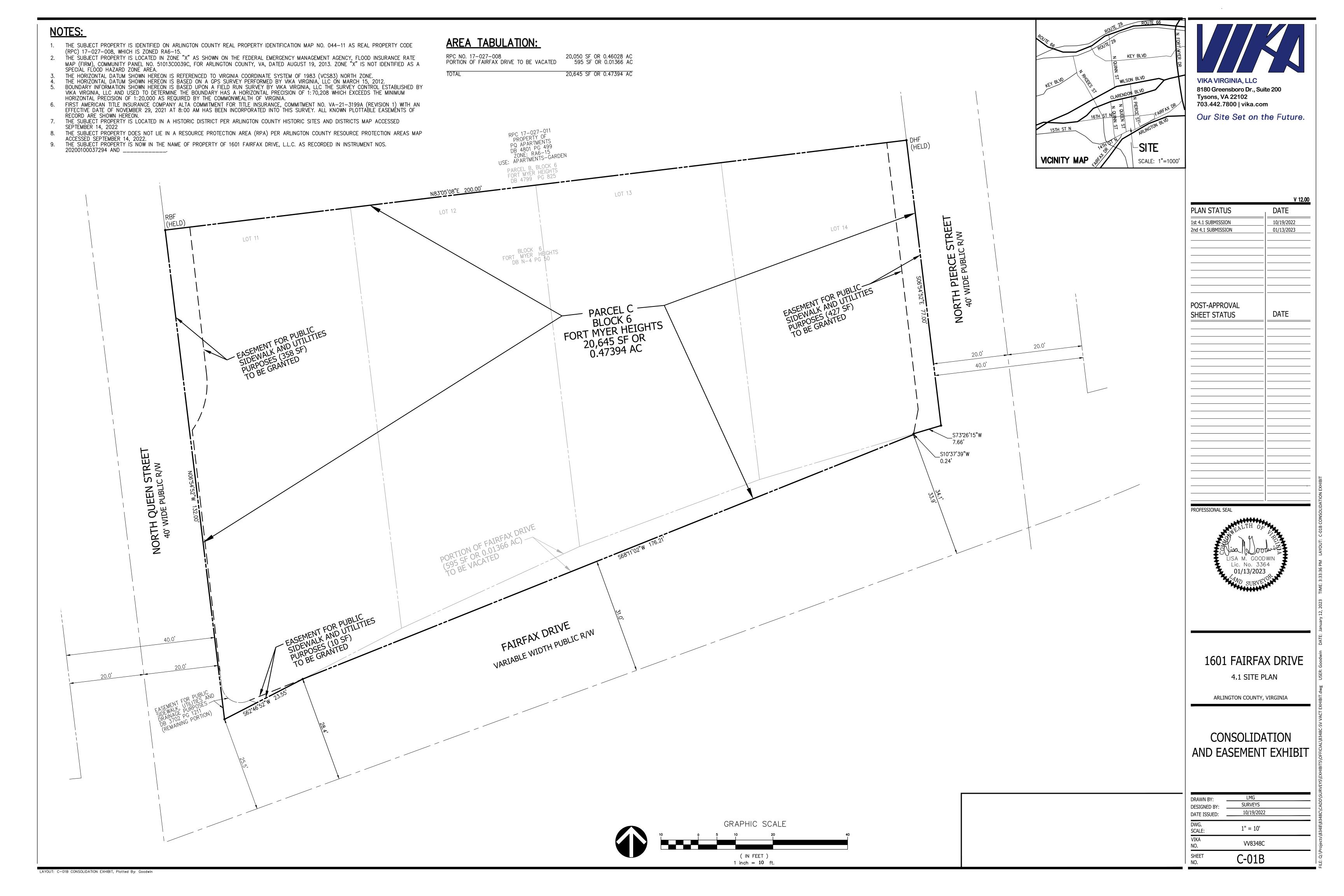
ENCROACHMENT EXHIBIT

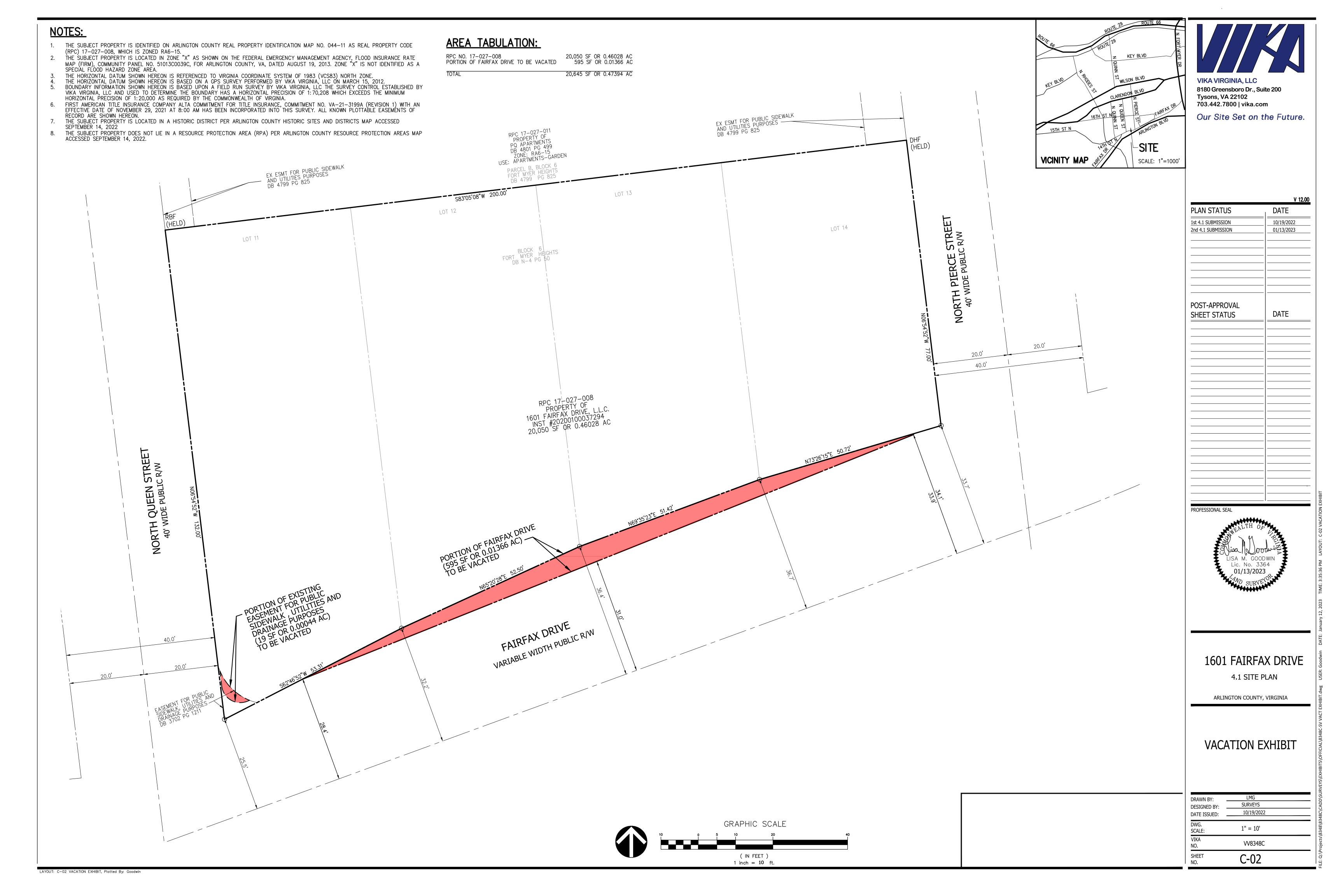
DRAWN BY: DESIGNED BY: DATE ISSUED:	LMG SURVEYS 10/19/2022	
DWG. SCALE:	1" = 10'	
VIKA NO.	VV8348C	
SHEET NO.	C-01A	

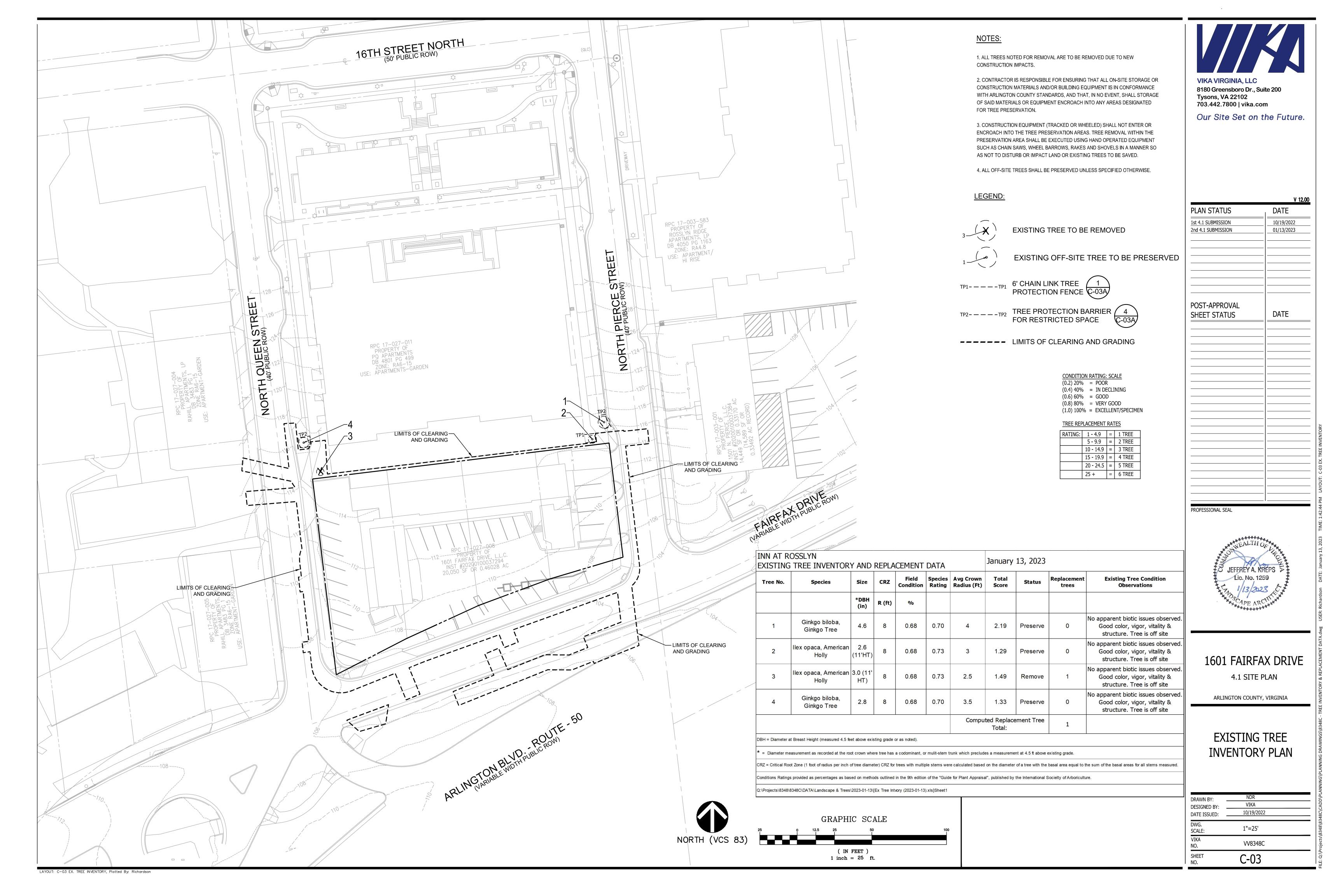


Identity	Encroachment Type	Area (sq. ft.)	Size (W X D)	Height	Building Levels	Permanent/ Removable	Easement Type
G1	Underground Garage	297	± 106.0' X 0.0' - ± 6.0'	Min. 5' Below	N/A	Permanent	Proposed Easement for Public Sidewalk & Utilities Purposes
A1	Architectural Feature	10	± 2.0' X ± 5.1'	Min. 18.4' Above	Levels 3 - 8	Permanent	Existing Fee Right of Way
A2	Architectural Feature	10	± 2.0' X ± 5.1'	Min. 20.3' Above	Levels 3 - 8	Permanent	Existing Fee Right of Way
B2	Balcony	9	± 4.1' X ± 2.2'	Min. 20.7' Above	Levels 3 - 8	Permanent	Existing Fee Right of Way
B4	Balcony	14	± 4.0' X ± 4.0'	Min. 19.5' Above	Levels 3 - 8	Permanent	Existing Fee Right of Way
C1	Canopy	28	± 8.5' X ± 2.3' - ± 4.5'	Min. 10.3' Above	N/A	Removable	Existing Fee Right of Way
03	Building Overhang	273	± 75.0 X ± 2.1' - ± 4.0'	Min. 19.3' Above	Levels 3 - 8	Permanent	Existing Fee Right of Way
05	Building Overhang	52	± 19.8' X 0.0' - ± 5.3'	Min. 20.3' Above	Levels 3 - 8	Permanent	Existing Fee Right of Way

(IN FEET) 1 inch = 10 ft.

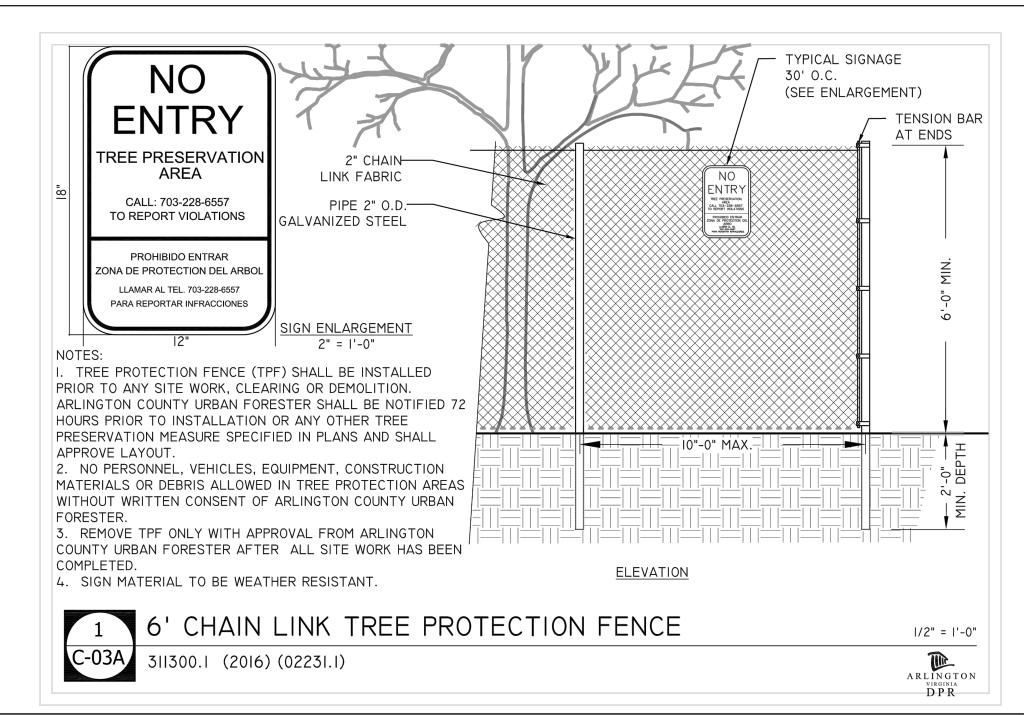


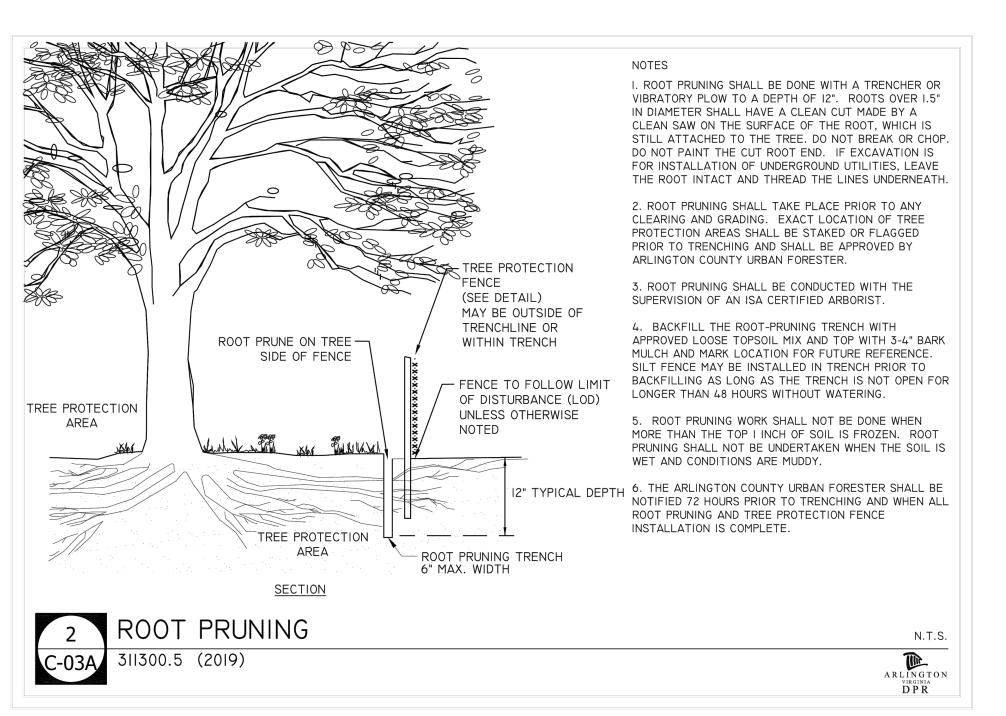


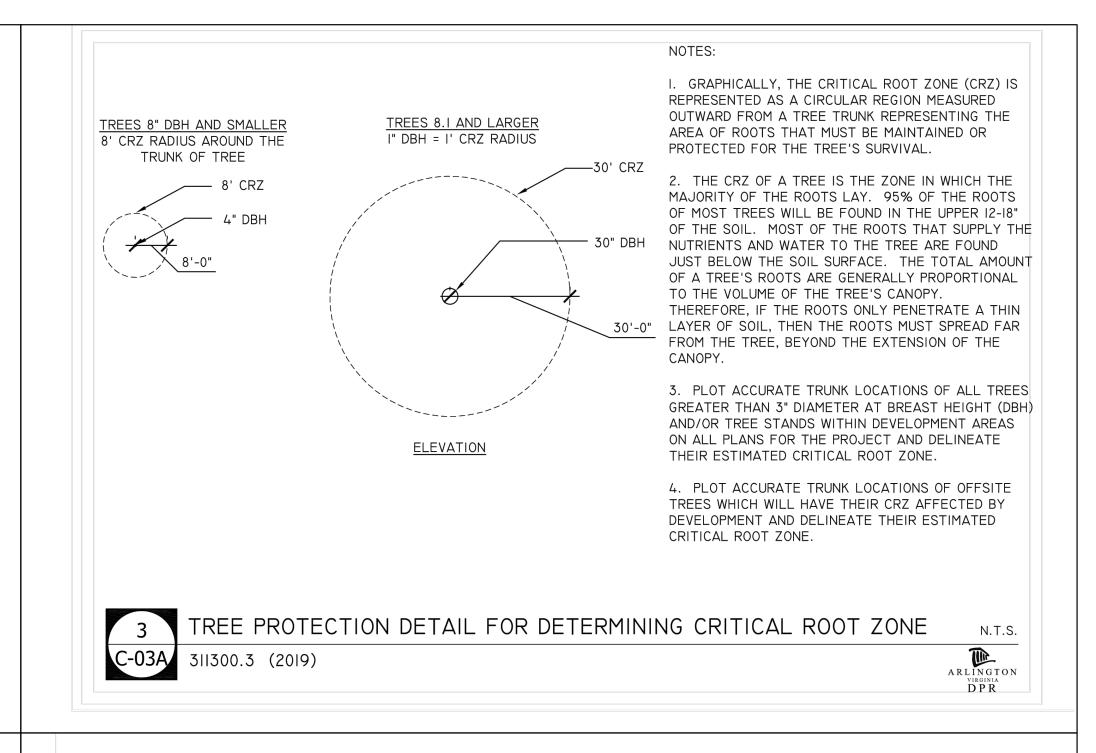


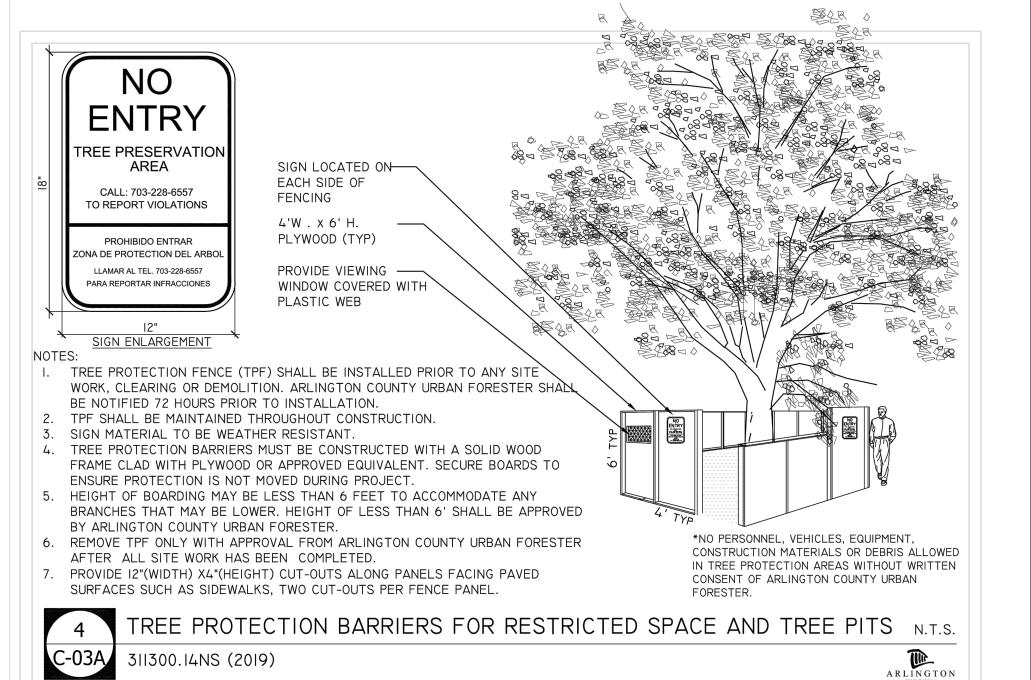
EXISTING TREE PRESERVATION NOTES

- BEFORE ANY GRADING, DEMOLITION OR OTHER DISTURBANCE, TREE PROTECTION NEEDS TO BE INSTALLED PER PLAN AND INSPECTED BY AN ARLINGTON COUNTY PARLS AND RECREATION URBAN FORESTER. EROSION AND SEDIMENT CONTROLS ARE BY THE DEPARTMENT OF ENVIRONMENTAL SERVICES. PROPERTY OWNER SHALL SUBMIT A TREE INVENTORY DRAWING INDICATING.
- PROPERTY OWNER SHALL SUBMIT A TREE INVENTORY DRAWING INDICATING DIAMETER BREAST HEIGHT (DBH), SPECIES AND LOCATION FOR ALL TREES OVER 3" IN DIAMETER ON THE PROPERTY TO BE DEVELOPED AND ANY TREES ON ADJACENT PROPERTY WHOSE CRITICAL ROOT ZONES EXTEND ONTO THE PROPERTY TO BE DEVELOPED.
- PROPERTY OWNER SHALL SUBMIT TREE PROTECTION PLAN DESIGNATING TREES TO BE PRESERVED AND TREES TO BE REMOVED ON SUBJECT AND ADJACENT PROPERTY AND REPLACEMENT TREES FOR THOSE REMOVED IN ACCORDANCE WITH MANDATORY ARLINGTON COUNTY TREE REPLACEMENT GUIDELINES. RESULTS OF TREE REPLACEMENTS GUIDELINES MUST BE SHOWN IN TABULAR FORM AS ILLUSTRATED IN SAID GUIDELINES.
- 4. THE TREE PROTECTION PLAN MUST BE APPROVED BY ARLINGTON COUNTY PRIOR TO ISSUANCE OF A CLEARING AND **GRADING PERMIT.**
- USE CRITICAL ROOT ZONE DETAIL AS A MINIMUM REQUIREMENT FOR THE AREA TO BE PROTECTED. SPECIMEN TREES WILL BE DESIGNATED BY THE URBAN FORESTER AND PROTECTED ACCORDING TO DETAIL R-7.7.
- TREE PROTECTION FENCING SHALL BE ERECTED AT THE CRITICAL ROOT ZONE OR BEYOND PRIOR TO START OF ANY CLEARING, GRADING OR OTHER CONSTRUCTION ACTIVITY. SIGNS STATING "NO ENTRY, TREE PROTECTION AREA, CALL 703-228-6557 TO REPORT VIOLATIONS" ARE TO BE POSTED IN BOTH ENGLISH AND SPANISH. SEE DETAIL II.A.5.
- 7. TREE PROTECTION SHALL BE A MINIMUM OF 6' HIGH CHAIN LINK FENCE MOUNTED ON VERTICAL PIPES DRIVEN 2' INTO THE GROUND WITH NO GATES.
- 8. SUBMIT PHOTOGRAPHIC RECORD (2 PICTURES) OF ALL TREES TO BE PRESERVED OVER 3" DBH AFTER FENCE IS INSTALLED.
- 9. NO PERSON, MATERIALS OR EQUIPMENT SHALL BE PERMITTED WITHIN THE TREE PROTECTION AREA. ANY VIOLATION OF THIS REQUIREMENT MAY RESULT IN A FINE OF \$500 PER DAY OF VIOLATION.
- 10. ANY DAMAGE TO A TREE BEING PRESERVED SHALL RESULT IN A PAYMENT BY THE OWNER/DEVELOPER TO THE COUNTY FOR THE AMOUNT OF DAMAGE BASED ON THE LATEST EDITION OF "THE COUNCIL OF TREE AND LANDSCAPE APPRAISERS GUIDE FOR PLANT APPRAISALS" PUBLISHED BY THE INTERNATIONAL SOCIETY OF ARBORICULTURE (ISA). ALL TREES ARE TO BE VALUED AS LANDSCAPE TREES. FOR FURTHER GUIDANCE, SEE ARLINGTON COUNTY TREE APPRAISAL POLICY, ADOPTED BY THE ARLINGTON COUNTY BOARD OCTOBER 2004.
- 11. TREE PROTECTION SHALL NOT BE REMOVED UNTIL COMPLETION OF ALL CONSTRUCTION ACTIVITY.
- 12. WHEN EXCAVATION IS TO TAKE PLACE WITHIN THE CRITICAL ROOT ZONE, THE DEVELOPER SHALL EMPLOY A PROFESSIONAL ARBORIST TO ROOT PRUNE IMMEDIATELY BEYOND THE LIMITS OF EXCAVATION TO A DEPTH OF 18 INCHES, PRIOR TO EXCAVATION.
- 13. ANY EXCEPTIONS TO THE ABOVE REQUIREMENTS, SUCH AS CONSTRUCTION WITHIN THE CRITICAL ROOT ZONE, MUST BE APPROVED IN ADVANCE BY ARLINGTON COUNTY BY WAY OF THE TREE PRESERVATION PLAN.
- 14. ADDITIONAL REQUIREMENTS MAY BE NECESSARY ON A CASE-BY-CASE BASIS.









TREE CONSERVATION

- 1. 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
- 2. 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.
- 3. 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.
- 4. NO CHANGES SHALL BE MADE TO TREE CONSERVATION OR PROPOSED LANDSCAPE UNLESS DIRECTED OR APPROVED BY AN ARLINGTON COUNTY URBAN FORESTER.
- 5. FOLLOW ANSI STANDARDS WHEN PRUNING TREES. ANY PRUNING BEYOND 5% OF THE CANOPY SHALL BE COMMUNICATED AND APPROVED TO THE URBAN FORESTER
- 6. DO NOT REMOVE TREES ON OTHER PROPERTIES, OR RIGHTS-OF-WAY, WITHOUT WRITTEN PERMISSION OF THE OWNER.
- 7. 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
- 8. AT THE END OF THE PROJECT, CONSERVED AND PLANTED TREES MUST BE INSPECTED AND APPROVED BY AN ARLINGTON COUNTY URBAN FORESTER.

TREE PLANTING

- 1. PLANTS SHALL BE FURNISHED AND INSTALLED AS INDICATED ON THE LANDSCAPE PLAN.
- 2. PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY, AND COMPLY WITH MOST RECENT ANSI Z60.1 STANDARDS.
- 3. PLANTS SHALL BE PLANTED ON THE DAY OF DELIVERY. IF THIS IS 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.
- 4. NO STAKES SHALL BE USED TO STABILIZE TREES, UNLESS DIRECTED BY THE ARLINGTON COUNTY URBAN FORESTER.
- 5. 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.
- 6. 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.
- 7. 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.
- 8. 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.
- 9. TREES AND SHRUBS SHALL BE PLANTED IN HOLES TWO TO THREE TIMES AS WIDE AND TO THE DEPTH OF THE ROOT BALL.
- 10. PLANTS SHALL BE PLANTED IN HEALTHY, UNCOMPACTED SOIL. SEE THE PLANTING DETAIL FOR SOIL SPECIFICATIONS.
- 11. 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. 12. INJURED ROOTS SHALL BE PRUNED TO CLEAN ENDS BEFORE PLANTING WITH CLEAN, SHARP TOOLS. THE LEADER OF TREES
- SHALL NOT BE CUT BACK. 13. AT THE END OF THE PROJECT, CONSERVED AND PLANTED TREES MUST BE INSPECTED AND APPROVED BY AN ARLINGTON COUNTY URBAN FORESTER.



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PLAN STATUS	_I DATE
1st 4.1 SUBMISSION 2nd 4.1 SUBMISSION	10/19/2022 01/13/2023
POST-APPROVAL SHEET STATUS	DATE

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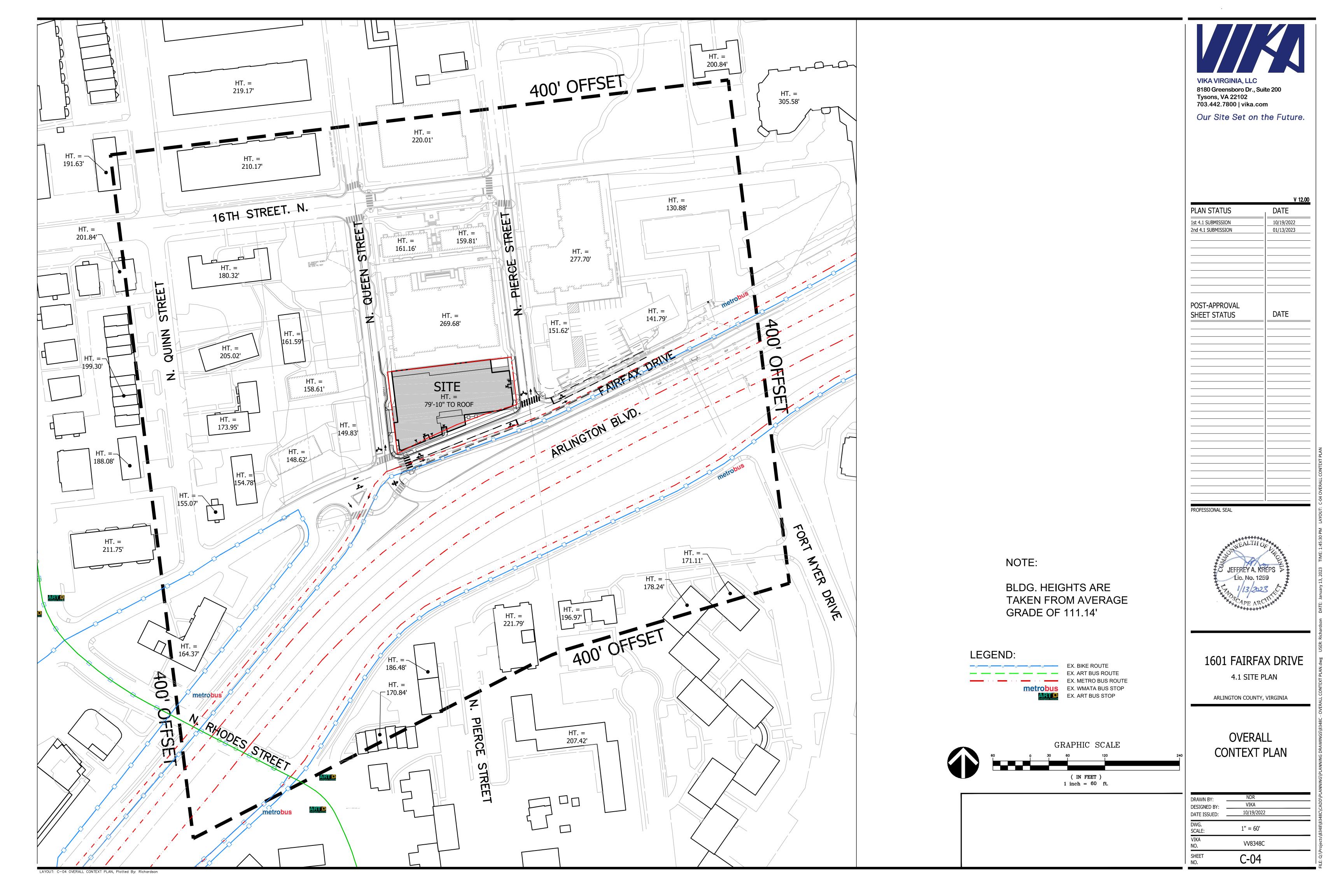
1601 FAIRFAX DRIVE

4.1 SITE PLAN

ARLINGTON COUNTY, VIRGINIA

EXISTING TREE **INVENTORY NOTES AND DETAILS**

NDR DRAWN BY: VIKA **DESIGNED BY** 10/19/2022 DATE ISSUED: 1"=25' SCALE: VIKA VV8348C SHEET C-03A





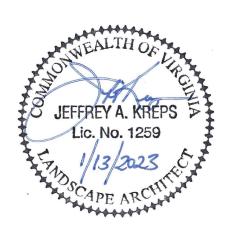


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PLAN STATUS 1st 4.1 SUBMISSION 2nd 4.1 SUBMISSION POST-APPROVAL SHEET STATUS DATE 10/19/2022 01/13/2023 DATE DATE		V 12.00
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PROFESSIONAL SEAL



1601 FAIRFAX DRIVE

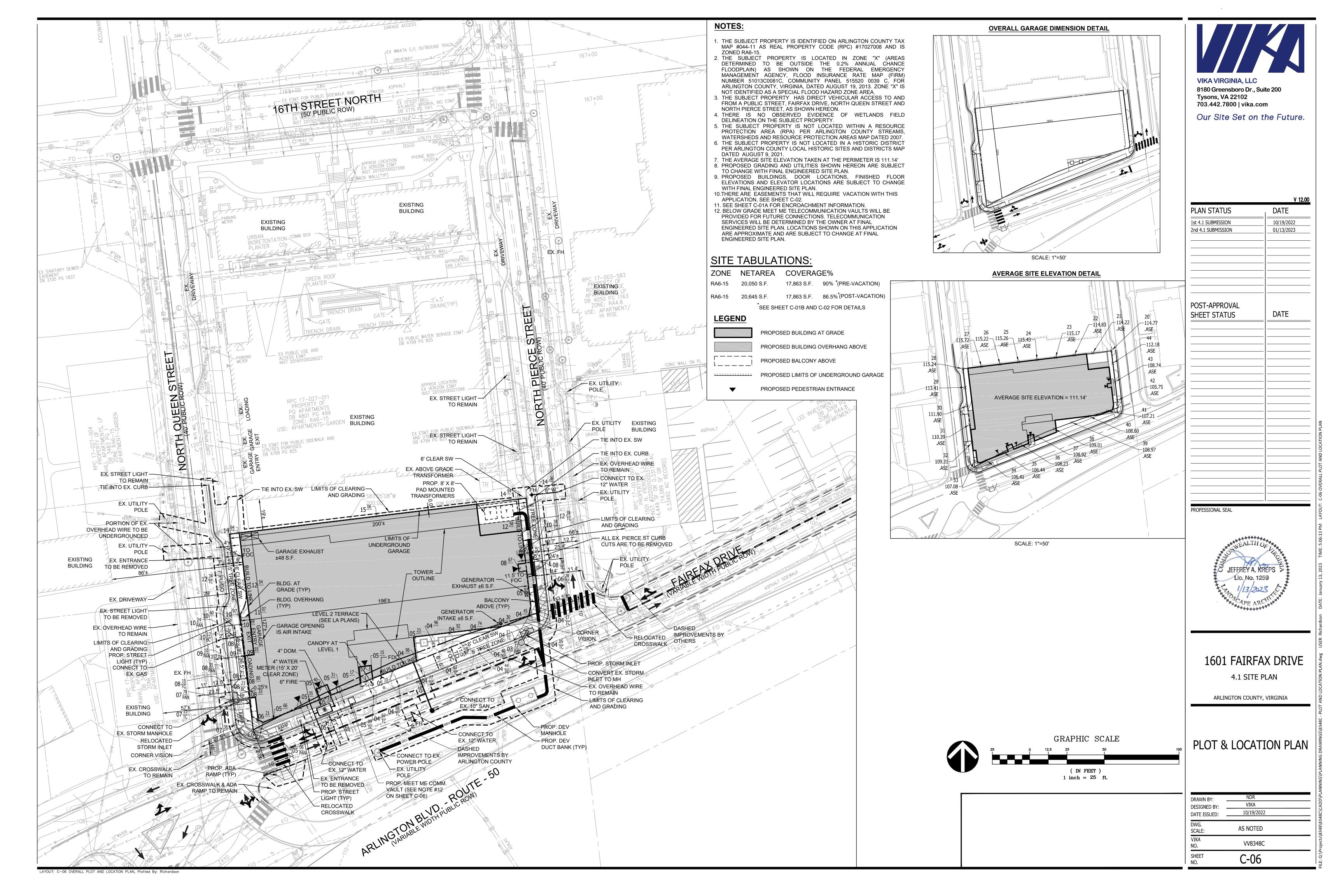
4.1 SITE PLAN

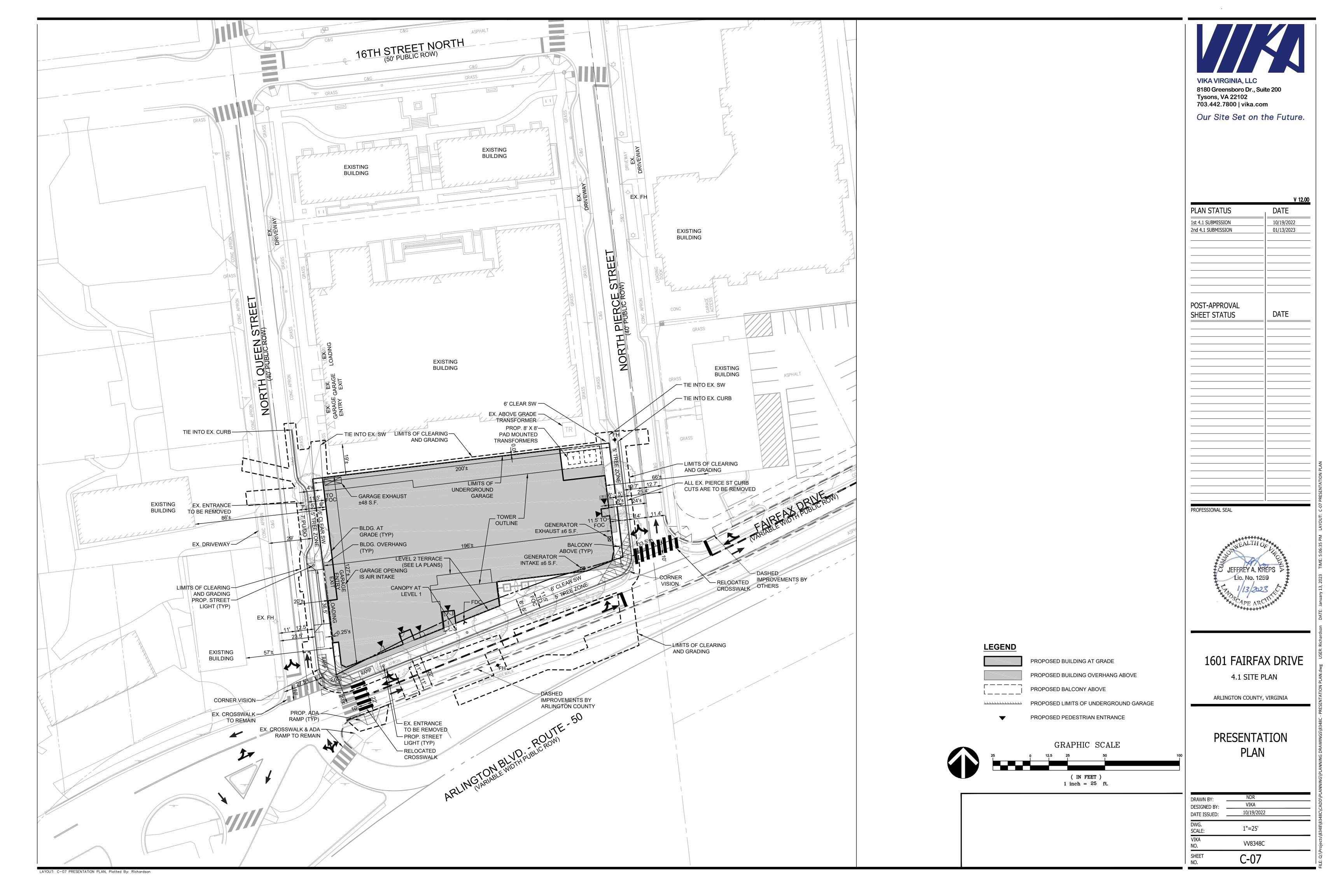
ARLINGTON COUNTY, VIRGINIA

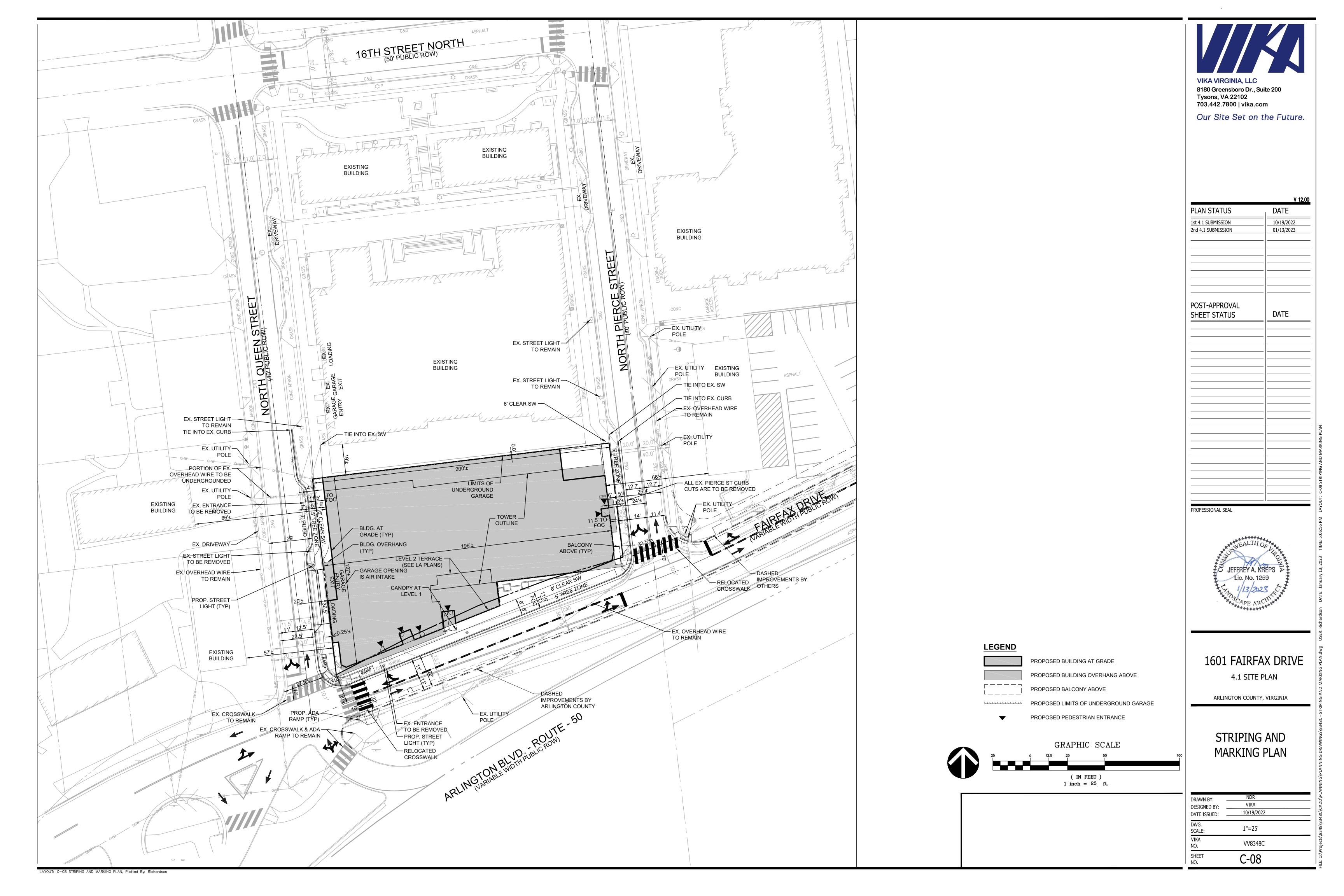
AERIAL CONTEXT PLAN

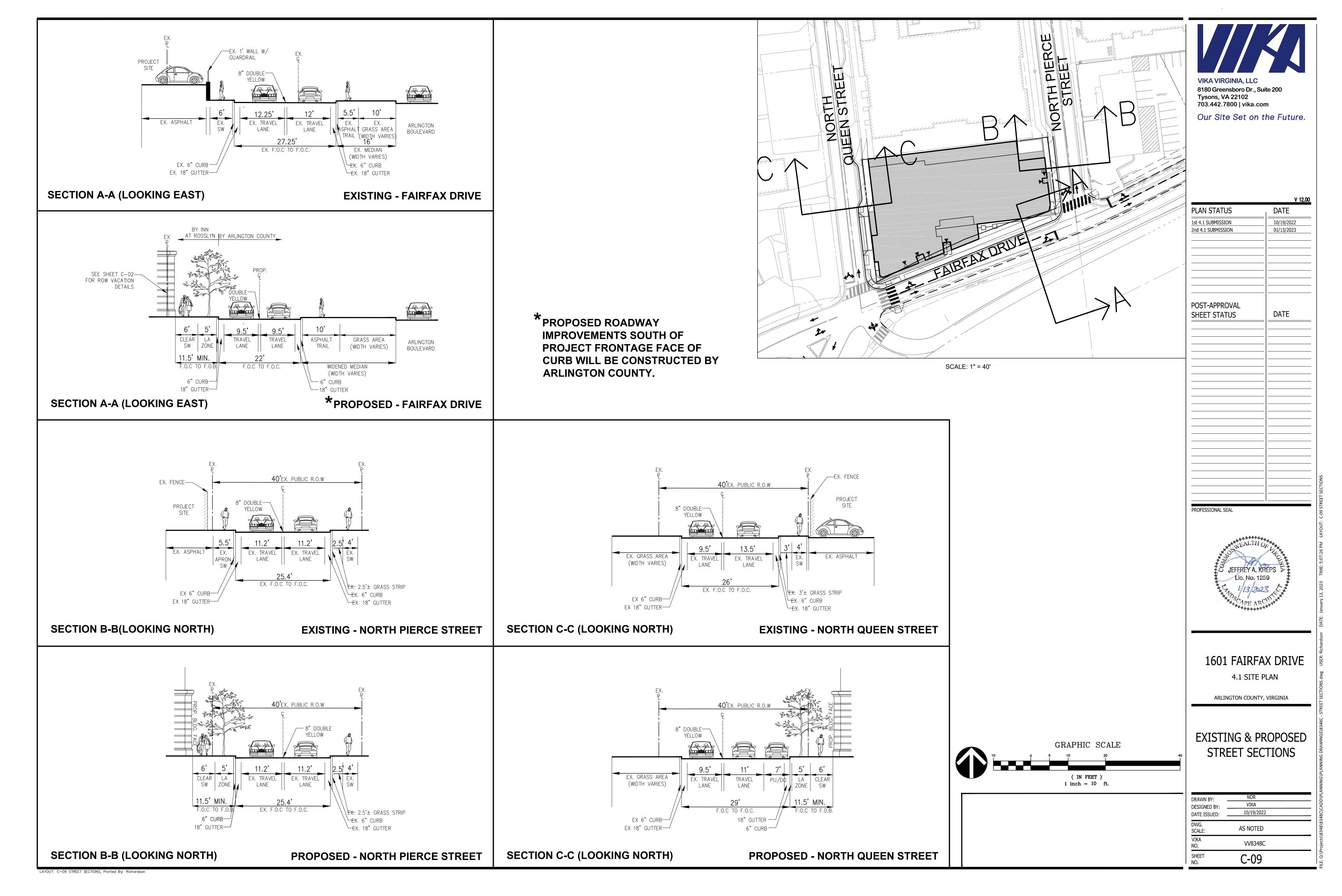
DRAWN BY:	NDR	
DESIGNED BY: _	VIKA	
DATE ISSUED: _	10/19/2022	
DWG.		
SCALE:	1" = 60'	
VIKA	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
NO.	VV8348C	
SHEET	$C \cap E$	
NO.	C-05	

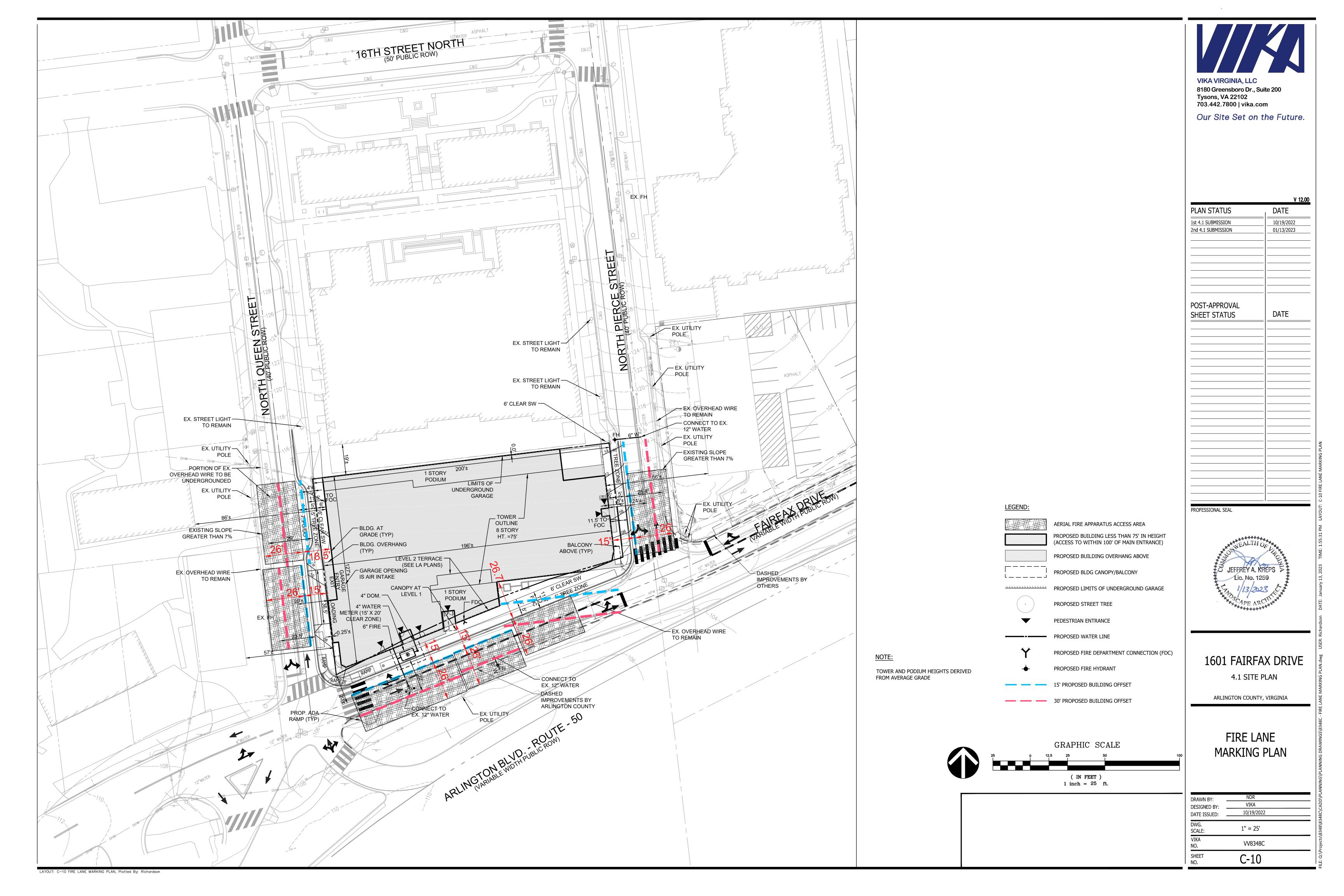
(IN FEET) 1 inch = 60 ft.













EXISTING CONDITIONS LAND USE MAP

EXISTING CONDITIONS LEGEND:

SWM BOUNDARY= 0.75 ACRES

EXISTING IMPERVIOUS AREA = 0.66 ACRES



EXISTING PERVIOUS AREA (MANAGED TURF) = 0.09 ACRES

GRAPHIC SCALE

(IN FEET) 1 inch = 25 ft. VIKA VIRGINIA, LLC 8180 Greensboro Dr., Suite 200 Tysons, VA 22102 703.442.7800 | vika.com

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PLAN STATUS	DATE
st 4.1 SUBMISSION	10/19/2022
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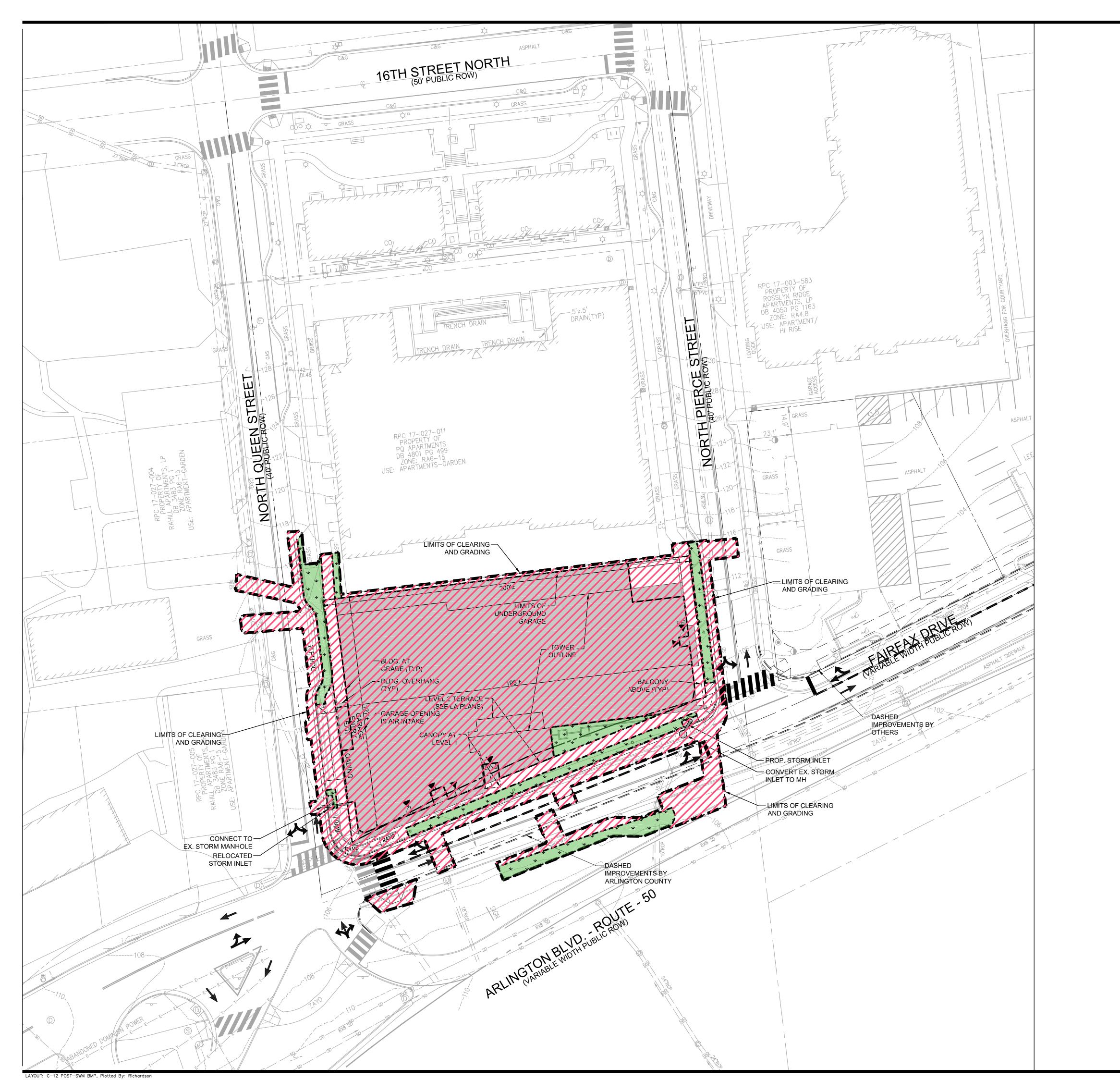
1601 FAIRFAX DRIVE

4.1 SITE PLAN

ARLINGTON COUNTY, VIRGINIA

PRE-SWM BMP MAP

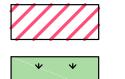
DRAWN BY: DESIGNED BY:	NDR VIKA 10/19/2022	
DATE ISSUED: DWG. SCALE:	1"=25'	
VIKA NO.	VV8348C	
SHEET NO.	C-11	



PROPOSED CONDITIONS LAND USE MAP

PROPOSED CONDITIONS LEGEND:

SWM BOUNDARY= 0.75 ACRES



PROPOSED IMPERVIOUS AREA = 0.68 ACRES

PROPOSED PERVIOUS AREA (MANAGED TURF) = 0.07 ACRES

GRAPHIC SCALE

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	V 12.00
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1601 FAIRFAX DRIVE

4.1 SITE PLAN

ARLINGTON COUNTY, VIRGINIA

POST-SWM BMP MAP

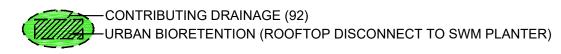
DRAWN BY:	NDR	
DESIGNED BY: _	VIKA	
DATE ISSUED: _	10/19/2022	
DWG. SCALE:	1" = 25'	
VIKA NO.	VV8348C	
SHEET NO.	C-12	



PROPOSED SWM/BMP MAP

DEVICE DCR STD./SPEC (COMMON NAME)

VEGETATED ROOF 1 (43) (EXTENSIVE GREEN ROOF)



STORMWATER MANAGEMENT NARRATIVE

THE SUBJECT SITE IS APPROXIMATELY 0.46 ACRES AND IS LOCATED BETWEEN FAIRFAX DRIVE, NORTH QUEEN STREET AND NORTH PIERCE STREET. THE APPROXIMATE LIMITS OF LAND DISTURBANCE OF THE SUBJECT APPLICATION IS 0.75 ACRES AND INCLUDES DISTURBANCE IN THE ROADWAYS. THE EXISTING SITE CURRENTLY CONSISTS OF A 3 STORY MOTEL WITH SURFACE PARKING. THE RUNOFF FROM THE PARKING LOT IS DIRECTED TO THE EXISTING STORM INLETS AT THE CORNERS OF FAIRFAX DRIVE AND NORTH PIERCE/NORTH QUEEN STREET.

THE PROPOSED DEVELOPMENT CONSISTS OF A TWO STORY UNDERGROUND PARKING STRUCTURE, A 2 STORY PODIUM AND ONE MULTI-STORY RESIDENTIAL TOWER. THE REQUIRED PHOSPHOROUS REMOVAL REDUCTION IS 10% IN ACCORDANCE WITH THE CURRENT VIRGINIA STATE REGULATIONS AND ARLINGTON COUNTY ORDINANCE REQUIREMENTS FOR REDEVELOPMENT OF AREAS LESS THAN ONE ACRE. AS SHOWN ON SHEET C-14, THE REQUIRED PHOSPHOROUS REDUCTION IS 0.1813 LB./YEAR. PHOSPHOROUS REDUCTION WILL BE ACHIEVED THROUGH A COMBINATION OF RUNOFF REDUCTION STRATEGIES INCLUDING BUT NOT LIMITED TO STORMWATER PLANTERS (ROOFTOP DISCONNECT) AND VEGETATED ROOFS. AS SHOWN ON SHEET C-15, ADDITIONAL DETENTION IS REQUIRED TO COMPLY WITH CHANNEL PROTECTION AND FLOOD PROTECTION REQUIREMENTS PER THE ENERGY BALANCE EQUATION.

IF NEEDED, ADDITIONAL STRUCTURAL BMPS MAY BE UTILIZED TO COMPLY WITH STATE AND COUNTY REGULATIONS.

THE FINAL SIZES, LOCATIONS AND TYPES OF THE PROPOSED SWM/BMP FACILITIES MAY BE ADJUSTED WITH THE FINAL CIVIL ENGINEERING PLAN (CEP). THE VRRM SPREADSHEET AND OTHER APPLICABLE COMPUTATIONS WILL ALSO BE FINALIZED WITH THE CEP BASED ON THE FINAL LIMITS OF DISTURBANCE. ADDITIONAL SWM/BMP FACILITIES WILL BE PROVIDED WITH THE CEP AS REQUIRED TO COMPLY WITH CURRENT SWM/BMP REGULATIONS.

GRAPHIC SCALE

(IN FEET) 1 inch = 25 ft.



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PROFESSIONAL SEAL



1601 FAIRFAX DRIVE

4.1 SITE PLAN

ARLINGTON COUNTY, VIRGINIA

STORMWATER
MANAGEMENT PLAN

DRAWN BY: DESIGNED BY: DATE ISSUED:	NDR VIKA 10/19/2022	
DWG. SCALE:	1" = 25'	
VIKA NO.	VV8348C	
SHEET NO.	C-13	

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) \rightarrow	0.7500
Maximum reduction required:	10%
net increase in impervious cover (acres) is:	0.0200

Post-Development TP Load Reduction for Site (lb/yr): 0.1813

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,					0.0000
protected forest/open space or reforested					0.0000
Managed Turf (acres) disturbed, graded					0.0950
for yards or other turf to be				0.0950	0.0950
Impervious Cover (acres)				0.6550	0.6550
					0.7500

	71 00115		2	Iotals
orest/Open Space (acres) undisturbed,				0.0000
rotected forest/open space or reforested				0.0000
lanaged Turf (acres) disturbed, graded				0.0950
or yards or other turf to be			0.0950	0.0950
npervious Cover (acres)			0.6550	0.6550
				0.7500
			•	

Post-Development Land Cover (acr	es)				
	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) undisturbed,					0.0000
protected forest/open space or reforested					0.0000
Managed Turf (acres) disturbed, graded					0.0750
for yards or other turf to be				0.0750	0.0750
Impervious Cover (acres)				0.6750	0.6750

OK.

OK.

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

Area Check OK.

Runoff Coefficier	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

0.7500

OK.

Land Cover Sum	mary-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)	0.0950	0.0750
Weighted Rv(turf)	0.2500	0.2500
% Managed Turf	13%	10%
Impervious Cover (acres)	0.6550	0.6550
Rv(impervious)	0.9500	0.9500
% Impervious	87%	90%
Total Site Area (acres)	0.7500	0.7300

Site RV	0.8613	0.8781				
Treatment Volume and Nutrient Load						
Pre-ReDevelopment Treatment Volume (acre-ft)	0.0538	0.0534				
Pre-ReDevelopment Treatment Volume (cubic feet)	2,344.9800	2,326.8300				
Pre-ReDevelopment TP Load (lb/yr)	1.4733	1.4619				
Pre-ReDevelopment TP Load per acre (Ib/acre/yr)	1.9600	2.0000				
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopmen pervious land proposed for new impervio	Control May Market Control Inter-	0.2993				

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

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

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

Land Cover Summa	y-Post (Final)	Land Cover Sumn	nary-Post	Land Cover Summo	ary-Post
Post ReDev. & Nev	/ Impervious	Post-ReDevelo	Post-ReDevelopment		v Impervious
Forest/Open Space Cover (acres)	0.0000	Forest/Open Space Cover (acres)	0.0000		
Veighted Rv(forest)	0.0000	Weighted Rv(forest)	0.0000		
% Forest	0%	% Forest	0%		
Managed Turf Cover (acres)	0.0750	Managed Turf Cover (acres)	0.0750		
Weighted Rv (turf)	0.2500	Weighted Rv (turf)	0.2500		
% Managed Turf	10%	% Managed Turf	10%		
Impervious Cover (acres)	0.6750	ReDev. Impervious Cover (acres)	0.6550	New Impervious Cover (acres)	0.0200
Rv(impervious)	0.9500	Rv(impervious)	0.9500	Rv(impervious)	0.9500
% Impervious	90%	% Impervious	90%		
nal Site Area (acres)	0.7500	Total ReDev. Site Area (acres)	0.7300		
nal Post Dev Site Rv	0.8800	ReDev Site Rv	0.8781		
,		Treatment Volume and	Nivitain and I am	4	

Final Site Area (acres)	0.7500		(acres)	0.7300			
Final Post Dev Site Rv	0.8800		ReDev Site Rv	0.8781			
		Treatr	nent Volume and	d Nutrient Lo	pad		
Final Post- Development Treatment Volume (acre-ft)	0.0550		Post-ReDevelopment Treatment Volume (acre-ft)	0.0534		Post-Development Treatment Volume (acre-ft)	0.0016
Final Post- Development Treatment Volume (cubic feet)	2,395.8000		Post-ReDevelopment Treatment Volume (cubic feet)	2,326.8300		Post-Development Treatment Volume (cubic feet)	68.9700
Final Post- Development TP Load (lb/yr)	1.5053		Post-ReDevelopment Load (TP) (lb/yr)*	1.4619		Post-Development TP Load (lb/yr)	0.0433
Final Post-Development TP Load per acre (lb/acre/yr)	2.0100		Post-ReDevelopment TP Load per acre (lb/acre/yr)	2.0000			
		-	Max. Reduction Required	0.1000			

TP Load Reduction Required for Redeveloped Area (lb/yr)	0.1462	

TP Load Reduction Required for New Impervious Area (lb/yr)	0.0351
---	--------

Post-Development Requirement for Site Are	Area	or Site	ement f	Require	lopment	Deve	Post-l	
---	------	---------	---------	---------	---------	------	--------	--

TP Load Reduction Required (lb/yr)

0.1813

Drainage Area A

2. Rooftop Disconnection (RR)

2.i. To Stormwater Planter,

Urban Bioretention (Spec #9, Appendix A)

ainage 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)				0.0500	0.0500	0.2500
Impervious Cover (acres)				0.6500	0.6500	0.9500
				Total	0.7000	

0.2500 0.0000

Area Checks

AREA CHECK

Site Treatment Volume (ft³) 2,395.8000

FOREST/OPEN SPACE (ac

MANAGED TURF AREA (ad

IMPERVIOUS COVER TREATED (ac

MANAGED TURF AREA TREATED (ac

RUNOFF REDUCTION VOLUME ACHIEVED (ft³

TP LOAD AVAILABLE FOR REMOVAL (lb/y)

NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)

FINAL POST-DEVELOPMENT TP LOAD (lb/yr

REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):

Total Nitrogen (For Information Purposes)

NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)

REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr) 8.0126

TP LOAD REDUCTION REQUIRED (lb/yr)

TP LOAD REDUCTION ACHIEVED (lb/yr)

TP LOAD REDUCTION ACHIEVED (lb/y)

TP LOAD REMAINING (lb/yr)

Total Phosphorus

TP LOAD REMAINING (lb/yr):

POST-DEVELOPMENT LOAD (lb/yr)

Runoff Reduction Volume and TP By Drainage Area

IMPERVIOUS COVER (ac

344.8500

D.A. A

0.0000

0.6500

0.2900

0.0500

0.0000

OK.

D.A. A

406.9230

1.4369

0.3365

1.1003

2.7559

1.5053

0.1813

0.3365

1.1687

0.0000

10.7685

2.7559

** TARGET TP REDUCTION EXCEEDED BY 0.1552 LB/YEAR **

CLEAR BMP AREAS

0.0000

D.A. D

0.0000

0.0000

0.0000

0.0000

0.0000

OK.

D.A. D

0.0000

0.0000

0.0000

0.0000

0.0000

Total Phosphorus Available for Removal in D.A. A (lb/yr) 1.4369 Post Development Treatment Volume in D.A. A (ft³) 2,286.9000

0.5411

D.A. E

0.0000

0.0000

0.0000

0.0000

0.0000

OK.

D.A. E

0.0000

0.0000

0.0000

0.0000

0.0000

0.2976

0.2435

AREA CHECK

OK.

OK.

OK.

OK.

OK.

TOTAL

406.9230

1.4369

0.3365

1.1003

2.7559

Stormwater Best Managem	ent Practio	ces (RR = R	unoff Redu	ction)									Select from dropdown lists-
Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft³)	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
1. Vegetated Roof (RR)													
1.a. Vegetated Roof #1 (Spec #5)	45		0.0400		62.0730	75.8670	137.9400	0		0.0866	0.0390	0.0476	
1.b. Vegetated Roof #2 (Spec #5)	60				0.0000	0.0000	0.0000	0		0.0000	0.0000	0.0000	

517.2750 862.1250

Site Results (Water Quality Compliance)

D.A. B

0.0000

0.0000

0.0000

0.0000

0.0000

OK.

D.A. B

0.0000

0.0000

0.0000

0.0000

0.0000

D.A. C

0.0000

0.0000

0.0000

0.0000

0.0000

OK.

D.A. C

0.0000

0.0000

0.0000

0.0000

0.0000

VIKA VIRGINIA, LLC 8180 Greensboro Dr., Suite 200 **Tysons, VA 22102** 703.442.7800 | vika.com Our Site Set on the Future.

PLAN STATUS	_I DATE
1st 4.1 SUBMISSION	
2nd 4.1 SUBMISSION	01/13/2023
POST-APPROVAL	DATE
SHEET STATUS	= DATE
	_
	_



PROFESSIONAL SEAL

1601 FAIRFAX DRIVE 4.1 SITE PLAN

ARLINGTON COUNTY, VIRGINIA

STORMWATER MANAGEMENT COMPUTATIONS

DRAWN BY: DESIGNED BY: DATE ISSUED:	NDR VIKA 10/19/2022	EII F. O.\Projects\\8348\\8348\\CADD\\PI A
DWG. SCALE:	N/A	8348\834
VIKA NO.	VV8348C	rojects
SHEET NO.	C-14	

INN AT ROSSLYN

PRE-DEVELOP

Fairfax NOAA-C County, Virginia

Sub-Area Land Use and Curve Number Details

	A		Hydrologic	Sub-Area	Curve
Identifie	er Land Use		Soil	Area	Number
			Group	(ac)	
PRE	Open space; grass cover > 75%	(good)) D	.095	80
	Paved parking lots, roofs, drivewa	ıys	D	.655	98
	Total Area / Weighted Curve Number			.75	96
				===	==
	oh Peak/Peak Time Table Peak Flow and Peak Time (hr)	by Rain:	fall Return 1	Period or Re	each
		by Rain:	fall Return I	Period or Re	each
	Peak Flow and Peak Time (hr) 10-Yr 1-Yr	by Rain:	fall Return I	Period or Re	each
Sub-Area	Peak Flow and Peak Time (hr) 10-Yr 1-Yr	by Rain:	fall Return I	Period or Re	each
Sub-Area	Peak Flow and Peak Time (hr) 10-Yr 1-Yr (cfs) (cfs)	by Rain:	fall Return I	Period or Re	each

12.12 12.12

/M Water Quantity Energy Balance \	Norksheet			
SITE AREA (acre)	0.75			
		1-year	10-year	
	PRE	POST (adjusted)	PRE	POST (adjusted)
Р	2.69	2.69	4.84	4.84
CN	97	95	97	95
S=1000/CN-10	0.31	0.53	0.31	0.53
0.2S	0.06	0.11	0.06	0.11
RV=(P-0.2S) ² /(P-0.2S)+S	2.35	2.15	4.49	4.26
I.F	0.9			
CHANNEL PROTECT	ION		FLOOD CONTR	OL
CHANNEL PROTECT Qpre-development	7ION 2.01	From TR55	Qpre-development	OL 3.88
		From TR55 From TR55		
Qpre-development	2.01		Qpre-development	3.88
Qpre-development QPost Development	2.01		Qpre-development QPost Development	3.88
Qpre-development QPost Development RVPost Development (with	2.01 1.95	From TR55	Qpre-development QPost Development RVPost Development (with	3.88 3.84
Qpre-development QPost Development RVPost Development (with runoff reduction) Qallowable	2.01 1.95 2.1857 1.95	From TR55	Qpre-development QPost Development RVPost Development (with runoff reduction) Qallowable	3.88 3.84 4.3219 4.03
Qpre-development QPost Development RVPost Development (with runoff reduction) Qallowable allowable/QPost Development	2.01 1.95 2.1857	From TR55 From RRM	Qpre-development QPost Development RVPost Development (with runoff reduction) Qallowable Qallowable/QPost Development	3.88 3.84 4.3219
Qpre-development QPost Development RVPost Development (with runoff reduction)	2.01 1.95 2.1857 1.95	From TR55	Qpre-development QPost Development RVPost Development (with runoff reduction) Qallowable	3.88 3.84 4.3219 4.03

NOTE:

A DETENTION VAULT (APPROXIMATELY 700 CUBIC FEET) WILL BE LOCATED IN THE PROPOSED GARAGE. FINAL LOCATION AND SIZE IS SUBJECT TO CHANGE AND WILL BE FINALIZED WITH THE CEP.

EJI INN AT ROSSLYN

POST DEVELOPED

Fairfax NOAA-C County, Virginia

Sub-Area Land Use and Curve Number Details

Sub-Area		Hydrologic	Sub-Area	Curve
Identifie	r Land Use	Soil	Area	Number
		Group	(ac)	
POST	User defined urban (Click button or	D	.75	95
	Total Area / Weighted Curve Number		.75	95
			===	==
	Hydrograph Peak/Peak Time Ta	able		
Sub-Area	Peak Flow and Peak Time (hr) by Ras	infall Return	Period or	Reach
	10-Yr 1-Yr			
Identifie	r (cfs) (cfs)			
	(hr) (hr)			
SUBAREAS				
POST	3.84 1.95			
	12.12 12.12			

Drainage Area Curve Numbers and Runoff Depths*

Curve numbers (CN, CNadj) and runoff depths (RV Developed) are computed with and without reduction practices.

Drainage Area A		A Soils	B Soils	C Soils	D Soils
Forest/Open Space undisturbed, protected	Area (acres)	0.0000	0.0000	0.0000	0.0000
forest/open space or reforested land	CN	30	55	70	77
Managed Turf disturbed, graded for yards or other	Area (acres)	0.0000	0.0000	0.0000	0.0500
turf to be mowed/managed	CN	39	61	74	80
Importágue Cover	Area (acres)	0.0000	0.0000	0.0000	0.6500
Impervious Cover	CN	98	98	98	98

Runoff Reduction
Volume (ft ³): 406.9230

CN_(D.A. A)

	1-year storm	2-year storm	10-year storm
RV _{Developed} (watershed-inch) with no Runoff Reduction*	2.3514	2.8566	4.4877
RV _{Developed} (watershed-inch) with Runoff Reduction*	2.1913	2.6965	4.3275
Adjusted CN*	95	95	95



PLAN STATUS

1st 4.1 SUBMISSION
2nd 4.1 SUBMISSION

POST-APPROVAL
SHEET STATUS

DATE

10/19/2022
01/13/2023

DATE

DATE

PROFESSIONAL SEAL

1601 FAIRFAX DRIVE

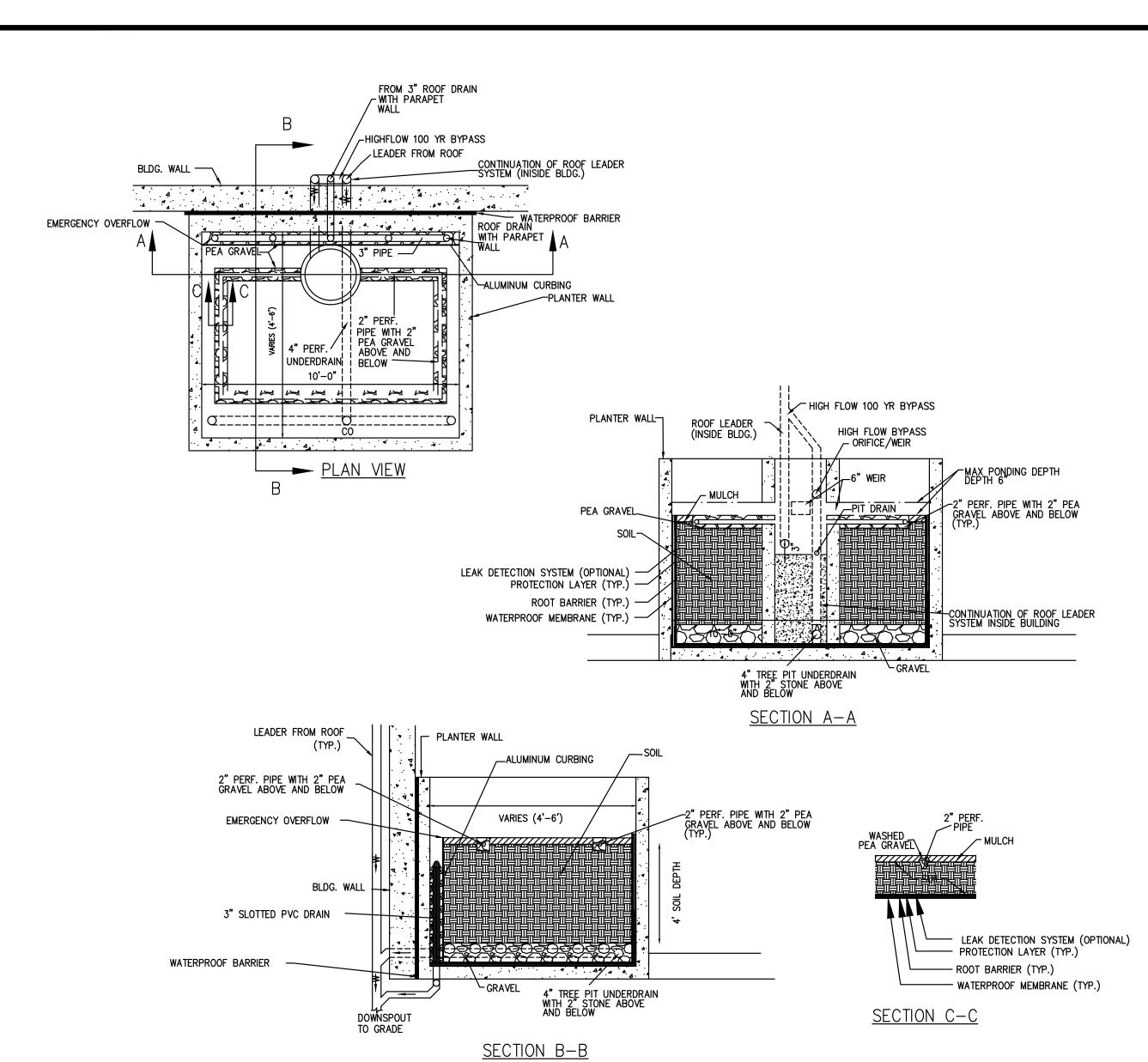
4.1 SITE PLAN

01/13/2023

ARLINGTON COUNTY, VIRGINIA

STORMWATER MANAGEMENT COMPUTATIONS

DRAWN BY: DESIGNED BY:	NDR VIKA	
DATE ISSUED: _	10/19/2022	
DWG. SCALE:	N/A	
VIKA NO.	VV8348C	
SHEET NO.	C-15	

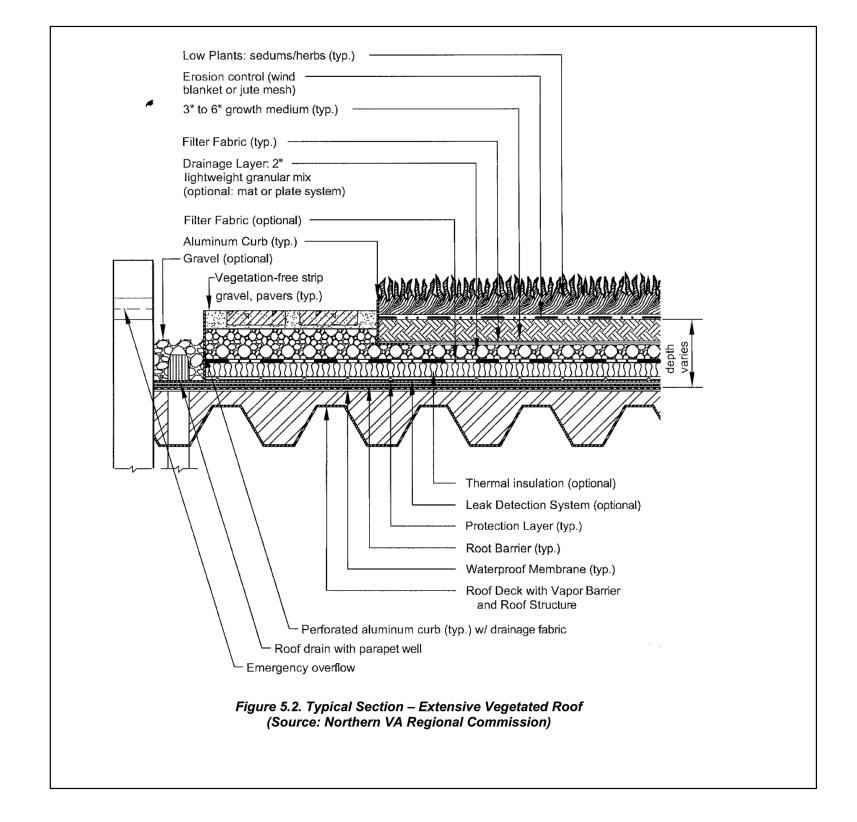


NOTE: PER CLEARINGHOUSE SPEC
NO. 9A SECTION 9-A-5 IF THE
2500 SF CONTRIBUTING DRAINAGE
AREA IS EXCEED, THE DESIGN SHALL
BE IN ACCORDANCE WITH LEVEL 1
BIORETENTION.

STORMWATER PLANTER DETAIL

NOT TO SCALE

NOTE: SWM PLANTER DETAILS ARE CONCEPTUAL AND SUBJECT TO CHANGE WITH FINAL ENGINEERING.





PLAN STATUS	_I DATE
Lst 4.1 SUBMISSION	
2nd 4.1 SUBMISSION	01/13/2023
POST-APPROVAL SHEET STATUS	DATE

PROFESSIONAL SEAL



1601 FAIRFAX DRIVE

4.1 SITE PLAN

ARLINGTON COUNTY, VIRGINIA

STORMWATER
MANAGEMENT DETAILS

DRAWN BY: DESIGNED BY: DATE ISSUED:	NDR VIKA 10/19/2022	
DWG. SCALE:	N/A	
VIKA NO.	VV8348C	
SHEET NO.	C-16	