APPLICATION ACCEPTED: April 8, 2015
PLANNING COMMISSION: September 29, 2016
BOARD OF SUPERVISORS: November 1, 2016 @ 3:30 p.m.

County of Fairfax, Virginia

October 21, 2016

STAFF REPORT ADDENDUM

APPLICATION RZ 2015-HM-005

HUNTER MILL DISTRICT

APPLICANT:	Pulte Home Corporation
EXISTING ZONING:	I-4 (Medium Intensity Industrial)
PROPOSED ZONING:	R-30 (Residential, 30 du/ac)
PARCEL:	18-3 ((6)) 5
SITE ACREAGE:	1.58 acres
PROPOSED OPEN SPACE:	25%
PLAN MAP:	Residential Mixed Use
15.2-2303.4 STATUS:	Exempt: Reston
PROPOSAL:	To rezone from the I-4 District to the R-30 District to permit a total of 44 multi-family dwelling units at a density of 27.8 dwelling units per acre (du/ac)

STAFF RECOMMENDATIONS:

Staff recommends denial of RZ 2015-HM-005, as proposed. However, if it is the Board's intent to approve RZ 2015-HM-005 and the associated Generalized Development Plan, staff recommends that such approval be subject to the execution of proffers consistent with those contained in Attachment 1.

If it is the Board of Supervisors' intent to approve RZ 2015-HM-005 as proposed, it should be subject to approval of the following waivers and modifications:

Carmen Bishop, AICP

Department of Planning and Zoning
Zoning Evaluation Division
12055 Government Center Parkway, Suite 801
Fairfax, Virginia 22035-5509
Phone 703-324-1290 FAX 703-324-3924
www.fairfaxcounty.gov/dpz

Waiver of the minimum district size of 3 acres, pursuant to Section 3-3006 of the Zoning Ordinance, to permit a district size of 1.58 acres.

Modification of the minimum front yard requirement of 15 feet and 20° angle of bulk plane, pursuant to Section 3-3010 of the Zoning Ordinance, to permit 8 feet and 8° angle of bulk plane.

Modification to permit encroachments into the minimum front yard, pursuant to Paragraph 1C of Section 2-412 of the Zoning Ordinance to be within 2 feet of the property line.

Modification of the minimum open space requirement of 26 percent, pursuant to Section 3-3010 of the Zoning Ordinance, to permit 25 percent open space.

Waiver of the loading requirement of 2 spaces, pursuant to Section 11-203 of the Zoning Ordinance.

Modification of the design standards and guidelines for trash and recycling, pursuant to Sections 10-0303.2 and 10-0306 of the Public Facilities Manual to permit the storage of containers within garages as shown on the Generalized Development Plan.

Deviation from the tree preservation target pursuant to Section 12-0508 of the Public Facilities Manual.

It should be noted that it is not the intent of the staff to recommend that the Board, in adopting any conditions proffered by the owner, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted standards. The approval of this application does not interfere with, abrogate or annul any easements, covenants, or other agreements between parties, as they may apply to the property subject to this application.

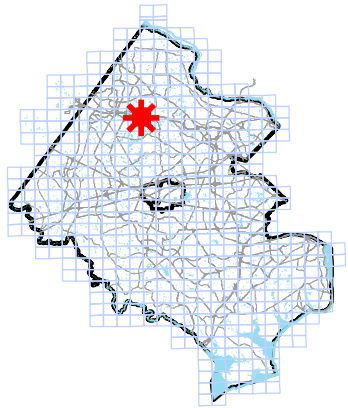
It should be further noted that the content of this report reflects the analysis and recommendation of staff; it does not reflect the position of the Board of Supervisors.

For information, contact the Zoning Evaluation Division, Department of Planning and Zoning, 12055 Government Center Parkway, Suite 801, Fairfax, Virginia 22035-5505, (703) 324-1290.

Americans with Disabilities Act (ADA): Reasonable accommodation is available upon 48 hours advance notice. For additional information on ADA call (703) 324-1334 or TTY 711 (Virginia Relay Center).

Rezoning Application

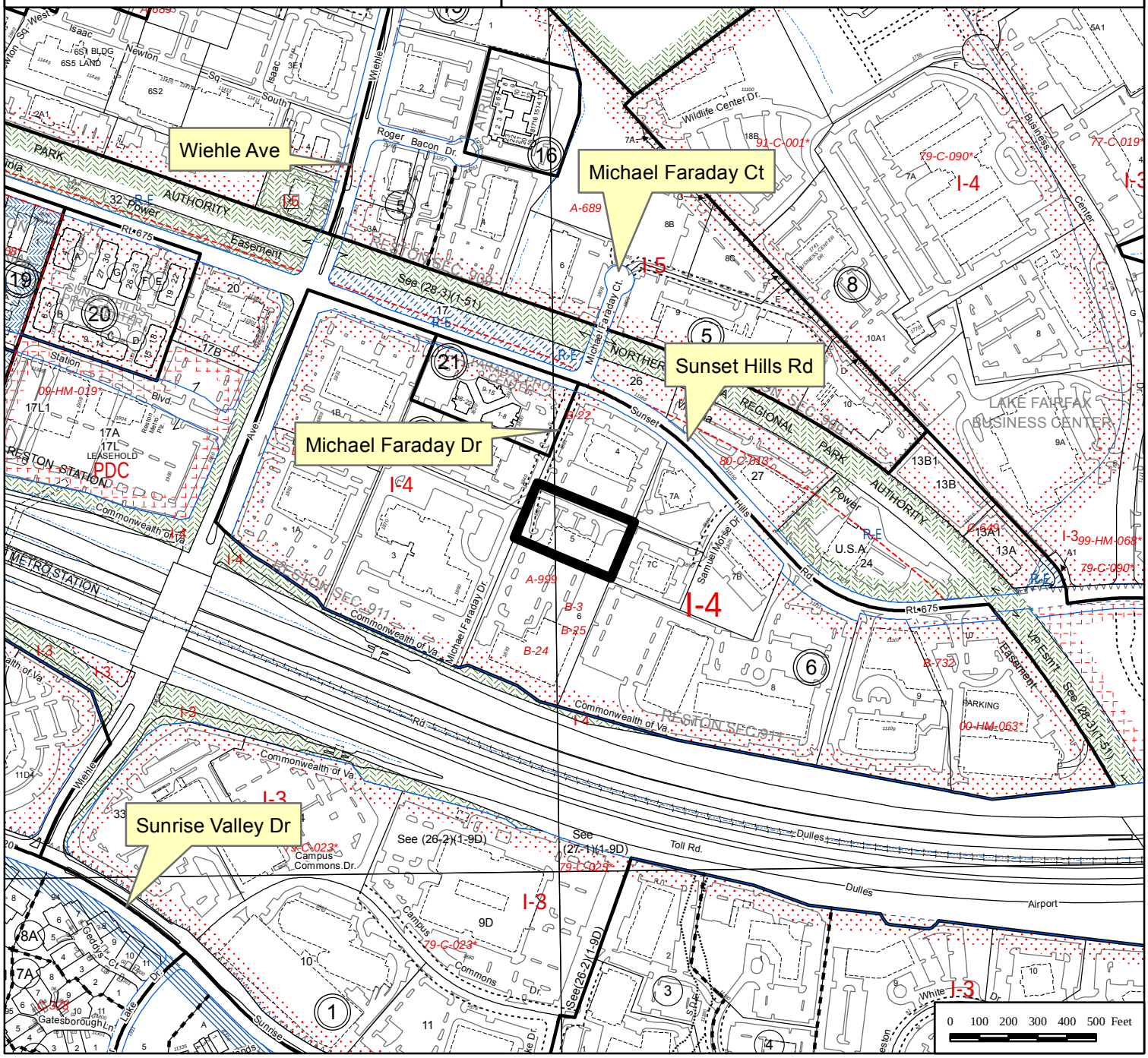
RZ 2015-HM-005



Applicant: PULTE HOME CORPORATION
Accepted: 04/08/2015
Proposed: RESIDENTIAL
Area: 1.58 AC OF LAND; DISTRICT - HUNTER MILL

Zoning Dist Sect:
Located: SOUTH OF SUNSET HILLS ROAD, NORTH OF DULLES TOLL ROAD, AND EAST OF MICHAEL FARADAY DRIVE

Zoning: FROM I- 4 TO R-30
Overlay Dist:
Map Ref Num: 018-3- /06/ /0005

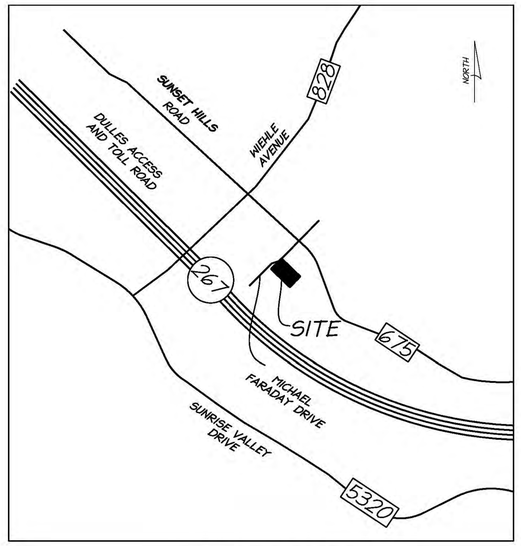


NOTES

1. THE PROPERTY DELINEATED ON THIS PLAT IS LOCATED ON FAIRFAX COUNTY CADASTRAL MAP No. 18-3 ((6)) LOT 5 AND IS CURRENTLY ZONED I-4. THIS IS A REQUEST FOR A REZONING APPLICATION TO THE R-30 ZONING DISTRICT.
2. THE PROPERTY SHOWN HEREON IS CURRENTLY IN THE NAME OF HARDWOOD PLYWOOD MANUFACTURES ASSOCIATION BY DEED BOOK 4402 AT PAGE 21 AMONG THE LAND RECORDS OF FAIRFAX COUNTY. THE APPLICANT IS PULTE HOME CORPORATION.
3. THE BOUNDARY SHOWN HEREON IS FROM A SURVEY BY THIS FIRM PERFORMED IN NOVEMBER, 2014.
4. TITLE REPORT FURNISHED BY COMMONWEALTH LAND TITLE INSURANCE COMPANY, FILE NUMBER IPUL-HARDWOOD, EFFECTIVE DATE OCTOBER 22, 2014.
5. THE TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD SURVEY BY THIS FIRM. THE VERTICAL DATUM IS REFERENCED TO NGVD 29. THE CONTOUR INTERVAL IS TWO (2) FEET.
6. PORTIONS OF THE PROPERTY SHOWN HEREON LIE WITHIN A ZONE "X", AN AREA DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN AS DELINEATED ON FLOOD INSURANCE RATE MAP, COMMUNITY PANEL No. 51059C0130E, DATED SEPTEMBER 17, 2010.
7. ALL CONSTRUCTION SHALL CONFORM TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS OF FAIRFAX COUNTY AND VDOT EXCEPT AS MODIFIED HEREIN. THE APPLICANT RESERVES THE RIGHT TO APPLY FOR ANY FUTURE MODIFICATIONS OF PFM DESIGN CRITERIA AT THE TIME OF SITE PLAN PREPARATION PROVIDED THE MODIFICATIONS ARE IN SUBSTANTIAL CONFORMANCE WITH THIS PLAT/PLAN.
8. EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED PRIOR TO ANY CLEARING, GRADING, OR CONSTRUCTION AS PER REQUIREMENTS OF THE STATE OF VIRGINIA AND THE CODE OF FAIRFAX COUNTY.
9. LAND DESIGN CONSULTANTS, INC. (LDC) IS NOT AWARE OF ANY UTILITY EASEMENTS WHICH EXIST ON THE SUBJECT PROPERTY WITH A WIDTH OF 25 FEET OR MORE.
10. ALL UTILITIES INSTALLED AS PART OF THIS PROJECT SHALL BE PLACED UNDERGROUND. THE UTILITY LOCATIONS SHOWN HEREON ARE FOR ILLUSTRATIVE PURPOSES ONLY AND ARE SUBJECT TO CHANGE WITH FINAL ENGINEERING. LIMITS OF CLEARING AND GRADING SHALL BE IN GENERAL CONFORMANCE WITH THOSE SHOWN HEREON.
11. AIR QUALITY PERMITS SHALL BE OBTAINED, IF REQUIRED, AND PROVIDED PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION.
12. THE SITE WILL BE SERVED BY PUBLIC WATER AND SANITARY SEWER FROM FAIRFAX COUNTY. SANITARY SEWER SERVICE SHALL BE PROVIDED BY INDIVIDUAL LATERAL CONNECTIONS.
13. A RESOURCE PROTECTION AREA (RPA) DOES NOT EXIST ON THE SUBJECT PROPERTY.
14. THE COMPREHENSIVE PLAN'S, BASE PLAN, RECOMMENDS DEVELOPMENT OF THE PROPERTY AT 30 DWELLING UNITS PER ACRE. THE PROPERTY IS LOCATED WITHIN THE WIEHLE STATION T.O.D. DISTRICT AND PLANNED FOR RESIDENTIAL MIXED USE.
15. LDC IS NOT AWARE OF ANY BURIAL SITES LOCATED ON THE SUBJECT PROPERTY.
16. AN ENVIRONMENTAL QUALITY CORRIDOR (EQC) AS DEFINED IN THE ADOPTED COMPREHENSIVE PLAN DOES NOT EXIST ON THE SUBJECT PROPERTY.
17. LDC IS NOT AWARE OF ANY HAZARDOUS OR TOXIC SUBSTANCES HAVING BEEN GENERATED, UTILIZED, STORED, TREATED, AND/OR DISPOSED OF OR HAVING BEEN OBSERVED ON THE SUBJECT PROPERTY.
18. DEVELOPMENT OF THIS PROJECT SHALL COMMENCE AT SUCH TIME AS APPROPRIATE COUNTY APPROVALS HAVE BEEN OBTAINED AND SUBJECT TO THE DISCRETION OF OWNER/DEVELOPER.
19. A GEOTECHNICAL REPORT SHALL BE SUBMITTED FOR REVIEW BY FAIRFAX COUNTY CONCURRENTLY WITH THE SITE PLAN, IF REQUIRED.
20. ALL DIMENSIONS ARE APPROXIMATE AND MAY BE MODIFIED PROVIDED THAT MODIFICATIONS ARE IN SUBSTANTIAL CONFORMANCE WITH THE GDP AND THE MINIMUM YARDS ARE NOTED.
21. THE APPLICATION HAS BEEN DESIGNED WITH THE PRIMARY FOCUS OF CREATING A DEVELOPMENT THAT WORKS WITH THE USES ASSOCIATED WITH THE WIEHLE TRANSIT STATION AREA. ALL PROPOSED DEVELOPMENT SHALL BE IN CONFORMANCE WITH THE URBAN DESIGN GUIDELINES.
22. MINOR ADJUSTMENTS TO THE UTILITY LOCATIONS SHALL BE PERMITTED IN ACCORDANCE WITH THE FINAL GRADING AND UTILITY LAYOUT AND SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THAT PROVIDED HEREIN.
23. THE SUBJECT PROPERTY IS CURRENTLY DEVELOPED AS A COMMERCIAL USE.
24. ALL SITE LIGHTING SHALL CONFORM TO THE REQUIREMENTS SET FORTH IN THE ZONING ORDINANCE.
25. EXISTING BUILDING BUILT IN 1979, TO BE REMOVED.
26. ALL ON-SITE STREETS AND ALLEYWAYS DEPICTED HEREIN SHALL BE PRIVATELY MAINTAINED.
27. ALL 2-OVER-2 UNITS SHALL HAVE INDIVIDUAL RECYCLING AND REFUSE CONTAINERS. THE MID-RISE BUILDING HAS A ROLL OUT DUMPSTER THAT IS LOCATED IN THE GARAGE. DUMPSTER TO BE ROLLED OUT ON TRASH DAYS. TRASH TRUCK NOT TO ENTER GARAGE.

WAIVERS

1. THE APPLICANT RESPECTFULLY REQUESTS A WAIVER OF SECTION 3-3006(1) OF THE ZONING ORDINANCE TO WAIVE THE MINIMUM DISTRICT SIZE.
2. THE APPLICANT RESPECTFULLY REQUESTS A MODIFICATION OF SECTION 3-3010(2)(A)(a) OF THE ZONING ORDINANCE TO REDUCE THE ANGLE OF BULK PLANE REQUIREMENT AND TO REDUCE THE MINIMUM FRONT YARD (15 FEET) WITH AN ANGLE OF BULK PLANE OF ±8 DEGREES (SEE DETAIL ON THIS SHEET) AND A FRONT YARD SETBACK OF 8', FOR BOTH MICHAEL FARADAY DRIVE AND RESTON STATION BOULEVARD.
3. THE APPLICANT RESPECTFULLY REQUESTS A MODIFICATION OF SECTION 2-412(1) (C) TO PERMIT BOTH COVERED AND UNCOVERED STAIRS AND STOOPS WITHIN 2' OF THE PROPERTY LINE.
4. THE APPLICANT RESPECTFULLY REQUESTS A WAIVER OF SECTION 3-3010(5) OF THE ZONING ORDINANCE TO REDUCE THE MINIMUM OPEN SPACE REQUIREMENTS FROM 26% TO 25%. THE WAIVER IS REQUESTED IN ACCORDANCE WITH SECTION 9-612 OF THE ZONING ORDNANCE. THE CONSTRAINTS INHERENT IN A SITE OF THIS SIZE SEVERELY LIMITED THE ABILITY TO PROVIDE OPEN SPACE.
5. THE APPLICANT RESPECTFULLY REQUESTS A WAIVER OF THE REQUIRED OFF-STREET LOADING SPACE REQUIREMENT AS SET FORTH IN SECTION 11-203(4) OF THE ZONING ORDINANCE. THIS REQUEST IS PERMITTED IN ACCORDANCE WITH SECTION 11-102(20). THE FEE SIMPLE RESIDENTIAL UNITS DO NOT REQUIRE LOADING FOR DELIVERIES OR OTHERWISE THAT WOULD NECESSITATE A SEPARATE LOADING AREA. A TEMPORARY LOADING AREA IS PROVIDED AT THE REAR OF THE MULTI-FAMILY BUILDING WHOSE HOURS WILL BE RESTRICTED TO ALLOW DAYTIME DELIVERIES OR MOVING VANS TO USE THIS AREA.
6. THE APPLICANT RESPECTFULLY REQUESTS A WAIVER OF SECTION 10-0303.2 AND 10-0306 OF THE PUBLIC FACILITIES MANUAL. EACH UNIT WILL HAVE SPACE PROVIDED IN THE GARAGE, AS NOTED ON THE DETAIL ON SHEET 11, FOR STORAGE OF CONTAINERS FOR THE COLLECTION OF RECYCLE AND REFUSE MATERIAL. NO CENTRAL DUMPSTER PAD IS PLANNED.

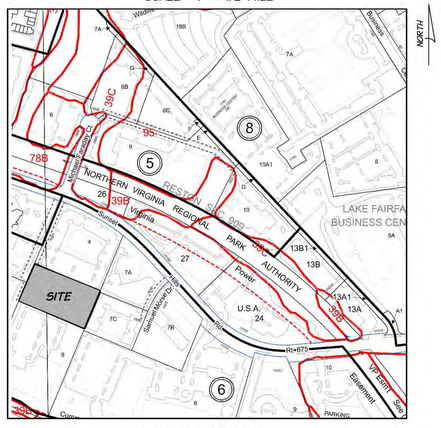


VICINITY MAP

SCALE : 1" = 1000'

METRO EXHIBIT

SCALE : 1" = 1/2 MILE



SOIL MAP

SCALE : 1" = 500'

SOIL INFORMATION

SOIL #	SOIL NAME	PROBLEM CLASS	FOUNDATION SUPPORT	DRAINAGE	EROSION POTENTIAL
~	URBAN FILL	IVA	N/A	N/A	N/A

TABULATIONS

SITE AREA = ±68,978# OR ±1.58 AC.
EXISTING ZONE = I-4
PROPOSED ZONE = R-30
PROPOSED USE = MULTI-FAMILY
MINIMUM DISTRICT SIZE = 3 ACRES (SEE WAIVER REQUEST)
MAXIMUM BUILDING HEIGHT PERMITTED = 150'
PROPOSED BUILDING HEIGHT = 60' MAX.
AVERAGE LOT SIZE REQUIRED = N/A
MINIMUM LOT AREA = N/A
MINIMUM LOT WIDTH = N/A
MINIMUM YARDS:

MINIMUM: FRONT YARD: CONTROLLED BY A 20° ANGLE OF BULK PLANE, WITH A MINIMUM OF 15'
SIDE YARD: CONTROLLED BY A 15° ANGLE OF BULK PLANE, WITH A MINIMUM OF 10'
REAR YARD: CONTROLLED BY A 15° ANGLE OF BULK PLANE, WITH A MINIMUM OF 15'

PROPOSED: FRONT YARD: 8' OR AS NOTED ON GDP (SEE WAIVER REQUEST)
SIDE YARD: 10'
REAR YARD: N/A (CORNER LOT)

OPEN SPACE : SEE SHEET 1A

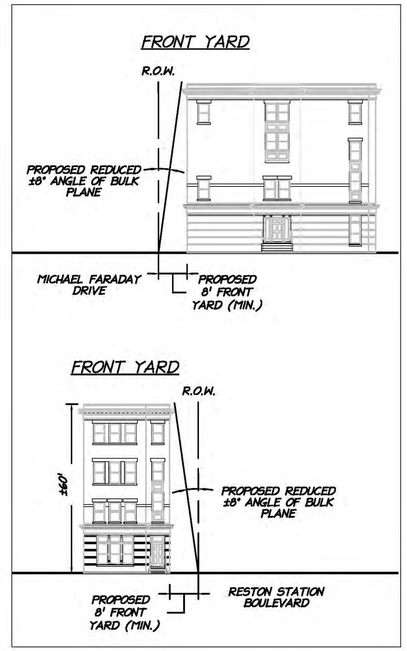
DENSITY:
MAXIMUM PERMITTED = 36 DU/Ac.
PROPOSED = 27.8 DU/Ac. (44 UNITS)
SEE PROFFERS FOR WORKFORCE HOUSING PROVISIONS

PARKING:

TOTAL NUMBER OF RESIDENTIAL UNITS = 44
PARKING REQ'D.= 1.6 SPACES PER UNIT
TOTAL PARKING REQ'D. = 71 SPACES

PARKING PROVIDED =
2-OVER-2 UNITS (12)= 1 GARAGE SPACE PER UNIT = 12 SPACES
MID-RISE UNITS (32) = 33 PARKING GARAGE SPACES (11 TANDEM SPACES NOT INCLUDED IN THIS TABULATION)
SURFACE PARKING = 27 SPACES
TOTAL PARKING PROVIDED = 72 SPACES (NO CREDIT FOR ON-STREET PUBLIC PARKING TAKEN)
MINIMUM ACCESSIBLE PARKING SPACES REQUIRED (3) = 1 VAN ACCESSIBLE + 2 ACCESSIBLE
ACCESSIBLE PARKING SPACES PROVIDED = 1 VAN ACCESSIBLE (GARAGE) + 2 ACCESSIBLE (SURFACE)

LOADING SPACES REQ'D.= 2 SPACES
LOADING SPACES PROVIDED= 0 (SEE WAIVER REQUEST)



ANGLE OF BULK PLANE

NTS

APPLICANT NAME:

PULTE HOME CORPORATION

APPLICATION #:

RZ 2015-HM-005

SHEET INDEX:

1. COVER SHEET
1A. OPEN SPACE CALCULATIONS
2 EXISTING CONDITION PLAN
3. GENERAL DEVELOPMENT PLAN
4 MICHAEL FARADAY DRIVE STREET SECTION
4A. RESTON STATION BOULEVARD STREET SECTION
5. OVERALL CONTEXTUAL PLAN
5A. INTERIM PEDESTRIAN CIRCULATION
5B. ULTIMATE PEDESTRIAN CIRCULATION
6. EXISTING VEGETATION MAP
6A. TREE CONSERVATION PLAN
6B. TREE CONSERVATION NOTES
7. LANDSCAPE PLAN
7A. STREETSCAPE SECTIONS
7B. STREET TREE SOIL AREA
8. BUILDING 1 ELEVATIONS
8A. BUILDING 2 ELEVATIONS
8B. RESTON STATION BLVD. STREETSCAPE
9. PRELIMINARY GRADING
10. VRRM & SWM CHECKLIST
10A. SWM INFORMATION
10B. SWM MAPS & COMPUTATIONS
11. NOTES AND DETAILS
12. AUTOTURN EXHIBIT

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

COVER SHEET

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN	ENGINEER	NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
6/2015	MM	MM	1.	ADDRESS STAFF COMMENTS.			
7/2016	MM	MM	2.	ADDRESS STAFF COMMENTS.			
3/2016	MM	MM	3.	ADDRESS STAFF COMMENTS.			
4/25/16	MM	MM	4.	ADDRESS STAFF COMMENTS.			
6/25/16	MM	MM	5.	ADDRESS STAFF COMMENTS.			
8/25/16	MM	MM	6.	ADDRESS STAFF COMMENTS.			
9/26/16	MM	MM	7.	ADDRESS STAFF COMMENTS.			
10/14/16	MM	MM	8.	ADDRESS STAFF COMMENTS.			

REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW E. MARSHALL
Lic. No. 1935-B
10/14/16
LAND SURVEYOR

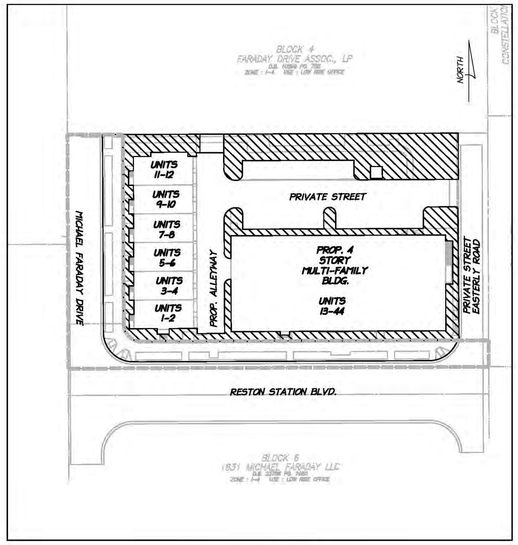
SCALE: N/A

SHEET 1 OF 12

DATE: FEB., 2015

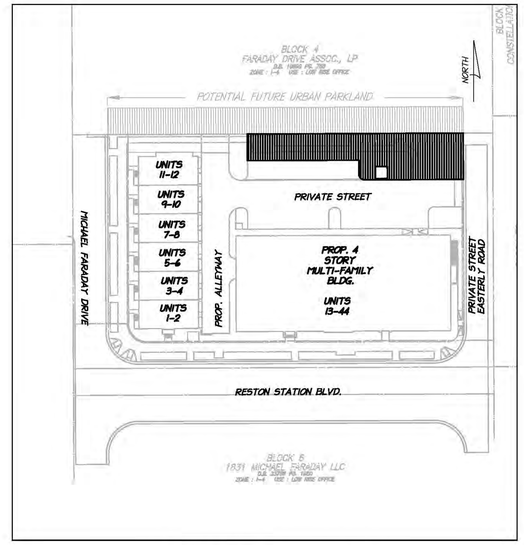
DRAFT: WOR/JMB | CHECK: MTM

FILE NUMBER: 14019-1-1 3B



OPEN SPACE

SCALE : 1" = 60'



URBAN PARK LAND

SCALE : 1" = 60'

OPEN SPACE TABULATIONS

SITE AREA = ±68,978# OR ±1.58 AC.
PROP. FEE SIMPLE RIGHT-OF-WAY DEDICATION = ±15,900#
NET SITE AREA = ±53,078#

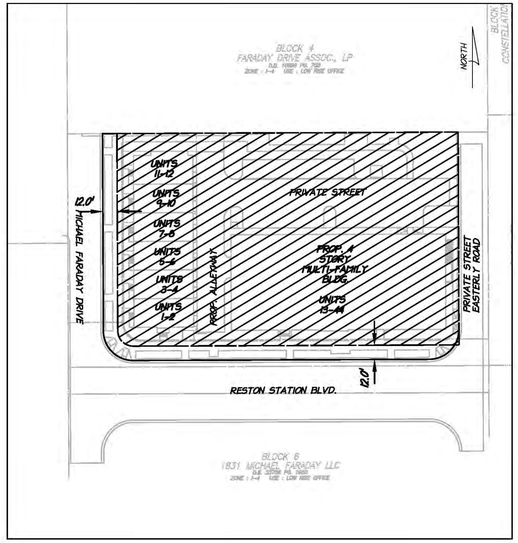
OPEN SPACE REQUIRED: ±13,800# (26% PER Z.O. 3-3010(5))
OPEN SPACE PROVIDED: ±13,260# (25% SEE WAIVER REQUEST ON SHEET 1)

PER COMPREHENSVE PLAN (PAGES 130 & 131)

PUBLICLY ACCESSIBLE OPEN SPACE REQUIRED: ±10,197# (20% OF THE NET LOT AREA (±50,986 SF))
PUBLICLY ACCESSIBLE OPEN SPACE PROVIDED: ±12,328#

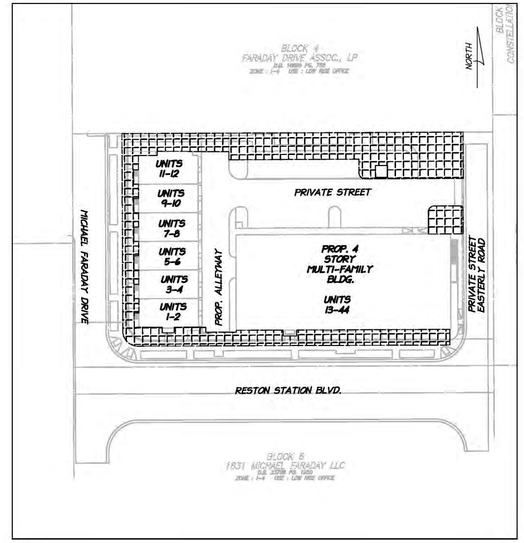
PER URBAN PARK FRAME WORK

URBAN PARKLAND REQUIRED: ±5,227# (1.5 ACRES PER 1,000 RESIDENTS)
URBAN PARKLAND PROVIDED: ±5,375#



NET LOT AREA

SCALE : 1" = 60'



PUBLICLY ACCESSIBLE OPEN SPACE

SCALE : 1" = 60'

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PH: 703-680-4585 FX: 703-680-4775

OPEN SPACE CALCULATIONS

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
9/26/16	MTM	1. ADDRESS STAFF COMMENTS			
10/14/16	MTM	2. REVISE OPEN SPACE PER STAFF			

ENGINEER

REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1825-B
10/14/16
LAND SURVEYOR

SCALE:
AS SHOWN

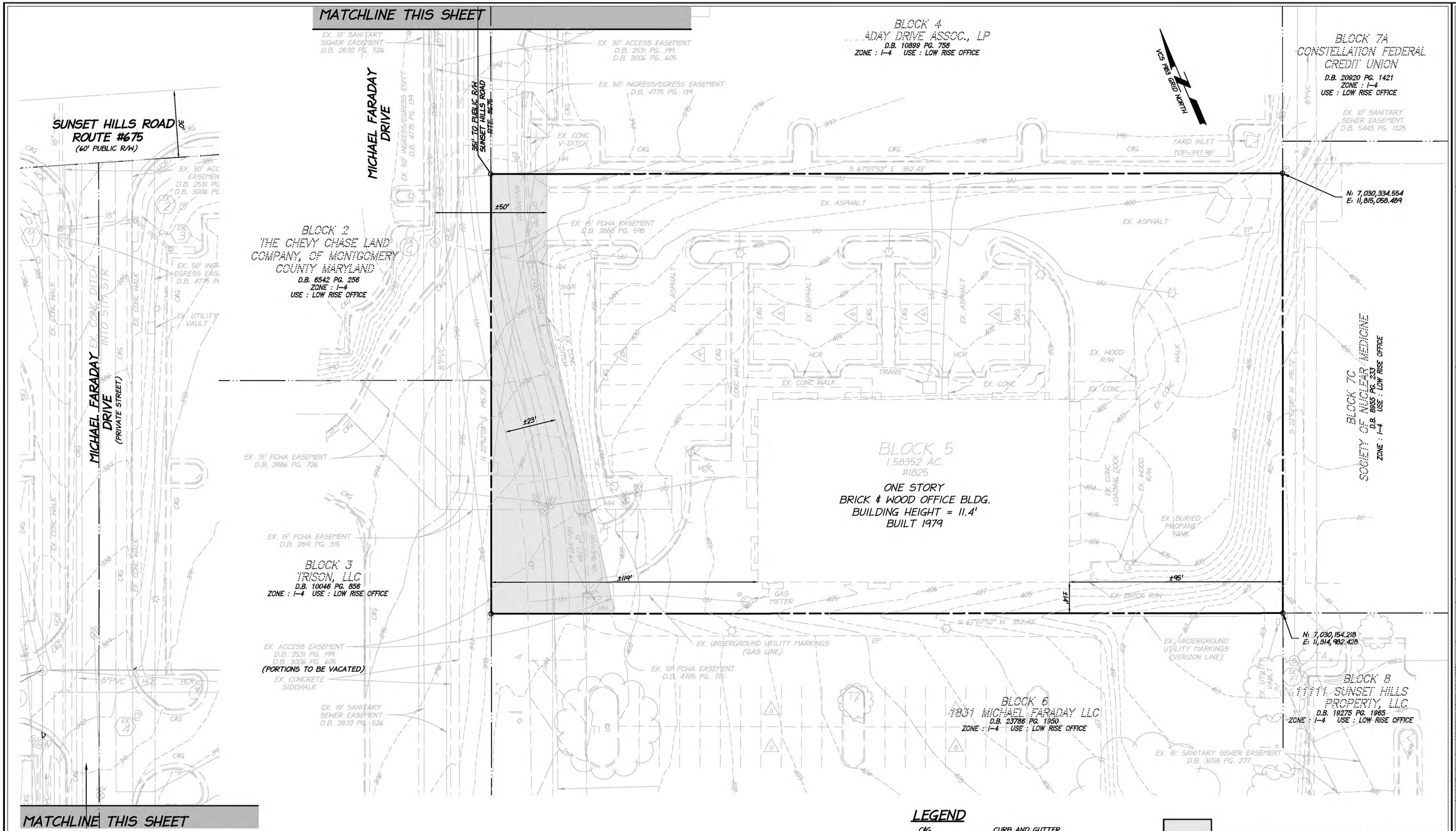
SHEET 1A OF 12

DATE: FEB., 2015

DRAFT: WOR/JMB | CHECK: MTM

FILE NUMBER: 14019-1-1 3B

P:\PY 2014\14019-1-1 Michael Faraday Drive - 1825\ENG\GDP\



LEGEND

C&G	CURB AND GUTTER
CMP	CORRUGATED METAL STORM PIPE
EP	EDGE OF PAVEMENT
HCR	HANDICAP RAMP
HW	HEAD WALL
IPF	IRON PIPE FOUND
IPS	IRON PIPE SET
MNF	MAG NAIL FOUND
	UTILITY POLE
—OHU—	OVERHEAD UTILITY
UU	UNDERGROUND UTILITIES
	BOLLARD
	LIGHT POLE
	WATER VALVE
	SIGN
	FIRE HYDRANT
	TELEPHONE PEDESTAL

DENOTES EX. ACCESS EASEMENT (PORTIONS TO BE VACATED)

GRAPHIC SCALE

20 10 0 20 40

1" = 20'

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-880-4585 FX: 703-880-4775

EXISTING CONDITION PLAN

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN	NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
6/2015	MTT	1	ADDRESS STAFF COMMENTS.			
1/12/16	MTT	2	ADDRESS STAFF COMMENTS.			
2/29/16	MTT	3	ADDRESS STAFF COMMENTS.			
11/08/16	MTT	4	ADDRESS STAFF COMMENTS.			

ENGINEER — REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1835-B
10/14/16
LAND SURVEYOR

SCALE: 1" = 20'

SHEET 2 OF 12

DATE: JUNE, 2015

DRAFT: WOR/JMB CHECK: MTT

FILE NUMBER: 14019-1-1 3B

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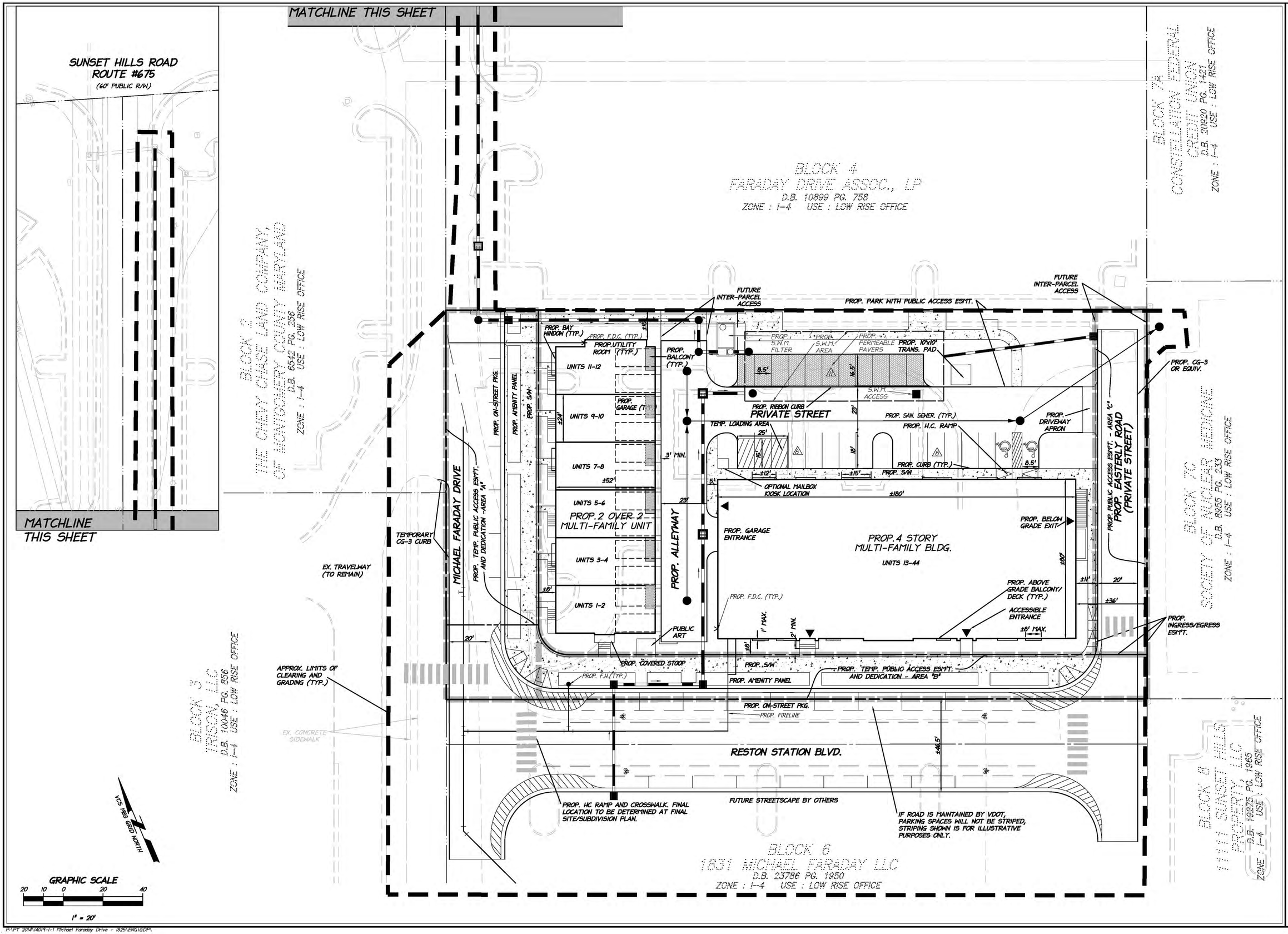

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PH: 703-680-4585 FX: 703-680-4775

GENERAL DEVELOPMENT PLAN

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN	NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
6/2015	MTM	1	ADDRESS STAFF COMMENTS.			
11/2015	MTM	2	ADDRESS STAFF COMMENTS.			
3/2016	MTM	3	ADDRESS STAFF COMMENTS.			
4/25/16	MTM	4	ADDRESS STAFF COMMENTS.			
6/15/16	MTM	5	ADDRESS STAFF COMMENTS.			
10/25/16	MTM	6	ADDRESS STAFF COMMENTS.			
9/06/16	MTM	7	ADDRESS STAFF COMMENTS.			

REVISION APPROVED BY:

ENGINEER

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW C. MARSHALL
Lic. No. 1935-B
10/14/16
LAND SURVEYOR

SCALE:
1"=20'

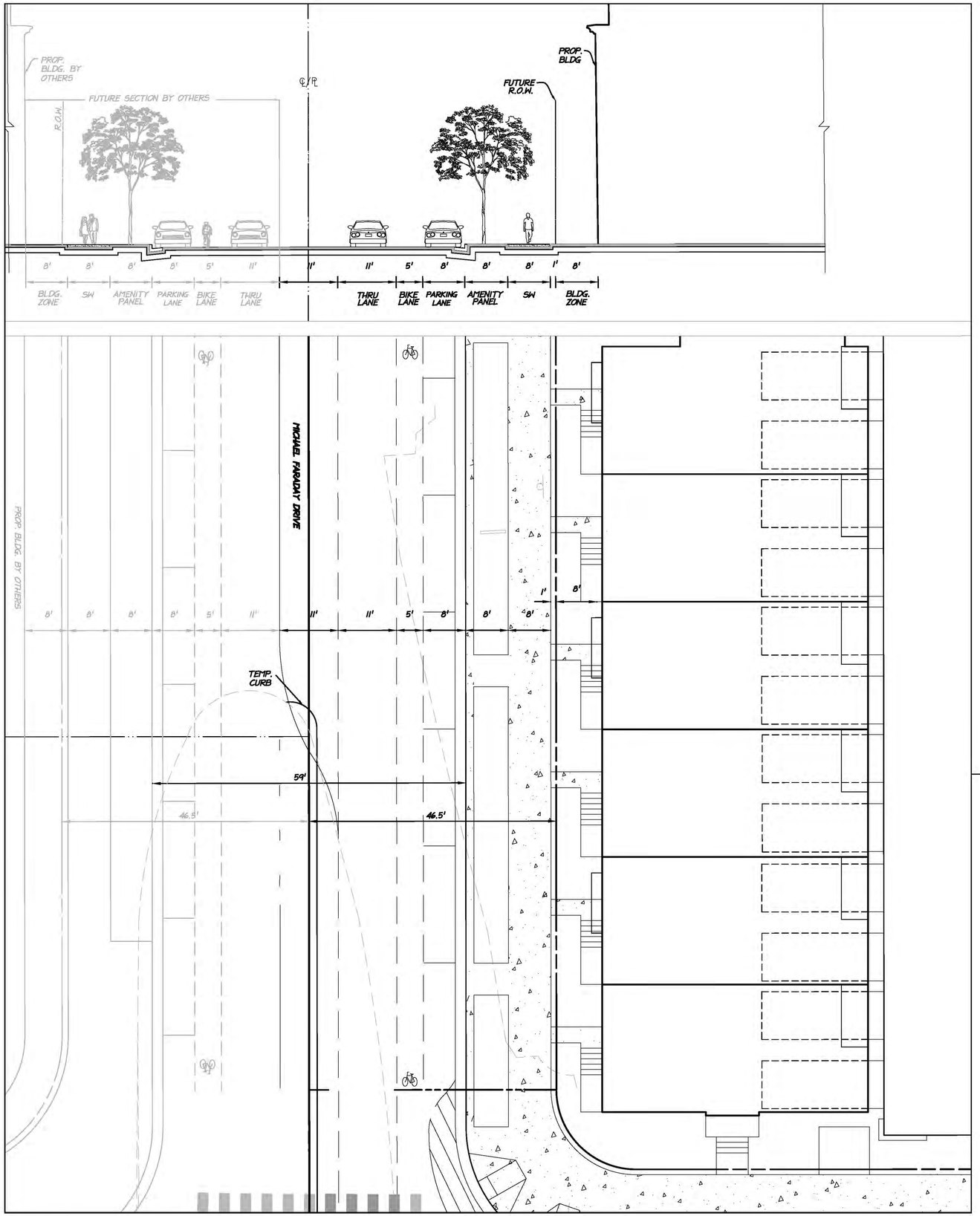
SHEET 3 OF 12

DATE: FEB., 2015

DRAFT: WOR/JMB
CHECK: MTM

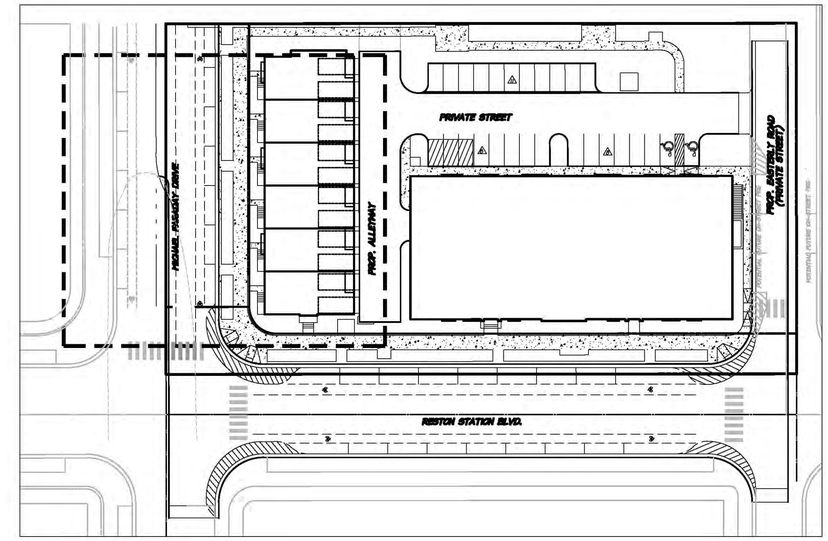
FILE NUMBER: 14019-1-1 3B

P:\PY 2014\14019-1-1 Michael Faraday Drive - 1825\ENG\GDP\



PROPOSED MICHAEL FARADAY DRIVE STREET SECTION

SCALE: 1"=10'



KEY MAP

SCALE: 1"=40'

VCS 1983 GRID NORTH

GRAPHIC SCALE

10 5 0 10 20

1" = 10'

NOTE:
THE DEPICTED AREA SHOWN WEST OF THE MICHAEL FARADAY DRIVE CENTERLINE IS FOR ILLUSTRATIVE PURPOSES ONLY. FINAL WESTERN SECTION TO BE CONSTRUCTED BY OTHERS.

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

MICHAEL FARADAY DRIVE STREET SECTION

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED DATE
6/2015	MTM	1 ADDRESS STAFF COMMENTS.		
1/12/16	MTM	2 ADDRESS STAFF COMMENTS.		
3/29/16	MTM	3 ADDRESS STAFF COMMENTS.		
4/25/16	MTM	4 ADDRESS STAFF COMMENTS.		
7/07/16	MTM	5 ADDRESS STAFF COMMENTS.		
9/06/16	MTM	6 ADDRESS STAFF COMMENTS.		

ENGINEER

REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1935-B
10/14/16
LAND SURVEYOR

SCALE:
AS SHOWN

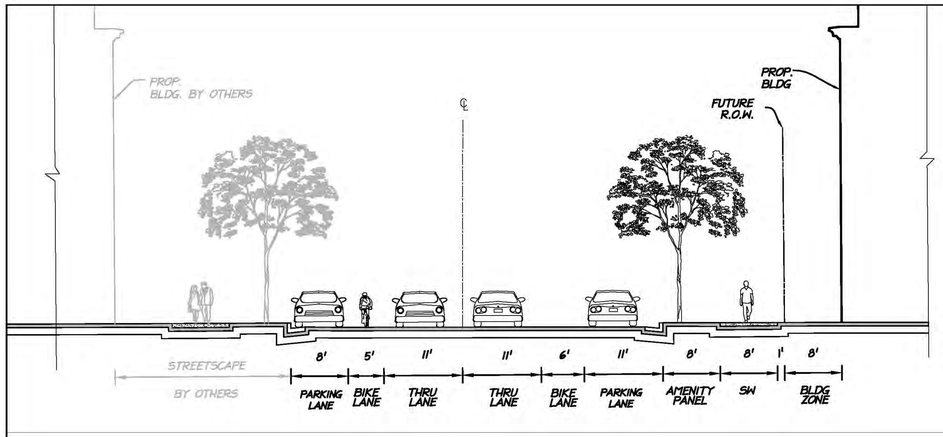
SHEET 4 OF 12

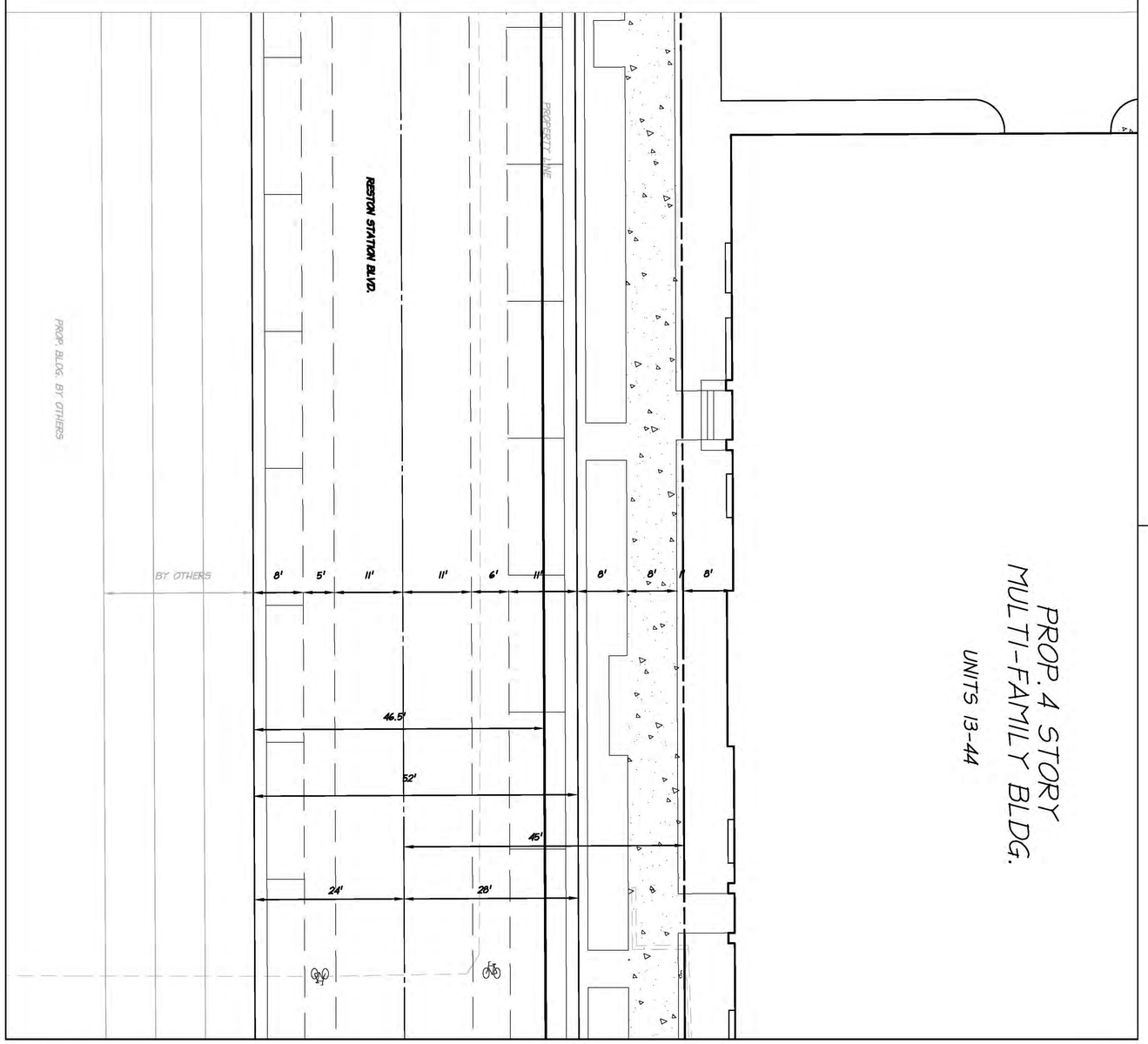
DATE: JUNE, 2016

DRAFT: WOR/JMB
CHECK: MTM

FILE NUMBER: 14019-1-1 3B

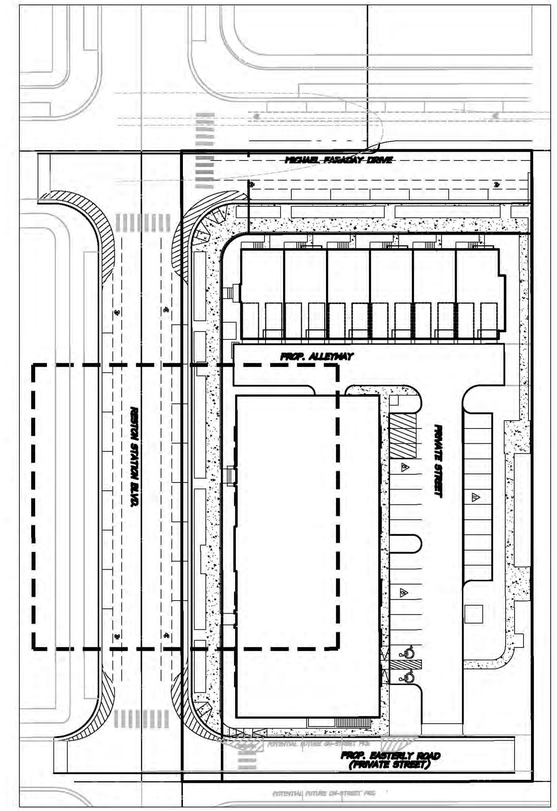
P:\PY 2014\14019-1-1 Michael Faraday Drive - 1625\ENG\GDP\





PROP. 4 STORY
MULTI-FAMILY BLDG.

UNITS 13-44



KEY MAP

SCALE: 1"=40'

PROPOSED RESTON STATION BLVD. STREET SECTION

SCALE: 1"=10'

VCS 1983 GRID NORTH

GRAPHIC SCALE

10 5 0 10 20

1" = 10'

NOTE:
THE DEPICTED AREA SHOWN SOUTH OF THE RESTON STATION BOULEVARD SOUTHERN FACE OF CURB IS FOR ILLUSTRATIVE PURPOSES ONLY. FINAL SOUTHERN STREETSCAPE TO BE CONSTRUCTED BY OTHERS.

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

RESTON STATION BLVD. STREET SECTION

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN	NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
6/2015	MTT	1.	ADDRESS STAFF COMMENTS.			
7/2016	MTT	2.	ADDRESS STAFF COMMENTS.			
3/2016	MTT	3.	ADDRESS STAFF COMMENTS.			
4/25/16	MTT	4.	ADDRESS STAFF COMMENTS.			
9/16/16	MTT	5.	ADDRESS STAFF COMMENTS.			
9/16/16	MTT	6.	ADDRESS STAFF COMMENTS.			

ENGINEER

REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW E. MARSHALL
Lic. No. 1835-B
10/14/16
LAND SURVEYOR

SCALE:
AS SHOWN

SHEET 4A OF 12

DATE: JUNE, 2016

DRAFT: WOR/JMB | CHECK: MTT

FILE NUMBER: 14019-1-1 3B

P:\PY 2014\14019-1-1 Michael Faraday Drive - 1825\ENG\GDP\

NOTE:
1. ALL OFF-SITE TRANSPORTATION AND STREETSCAPE IMPROVEMENTS ARE BASED UPON A STREET GRID EXHIBIT PREPARED BY LAND DESIGN, DATED JUNE 15, 2016.
2. BULBOUTS SHOWN ARE FOR ILLUSTRATIVE PURPOSES ONLY.

FOR ILLUSTRATIVE PURPOSES ONLY!!!

LDC
4856 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4468 FX: 703-680-4775

OVERALL CONTEXTUAL PLAN

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
12/20/15	1	COUNTY COMMENTS			
1/7/2016	2	COUNTY COMMENTS			
4/25/16	3	ADDRESS STAFF COMMENTS			
7/18/16	4	ADDRESS STAFF COMMENTS			
8/26/16	5	ADDRESS STAFF COMMENTS			

ENGINEER

REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEWE MARSHALL
Lic. No. 1505-B
10/14/16
LAND SURVEYOR

SCALE: NTS

SHEET 5 OF 12

DATE: JUNE, 2015

DRAFT: NOR/JMB | CHECK: MTM

FILE NUMBER: 14014-1-1 3B

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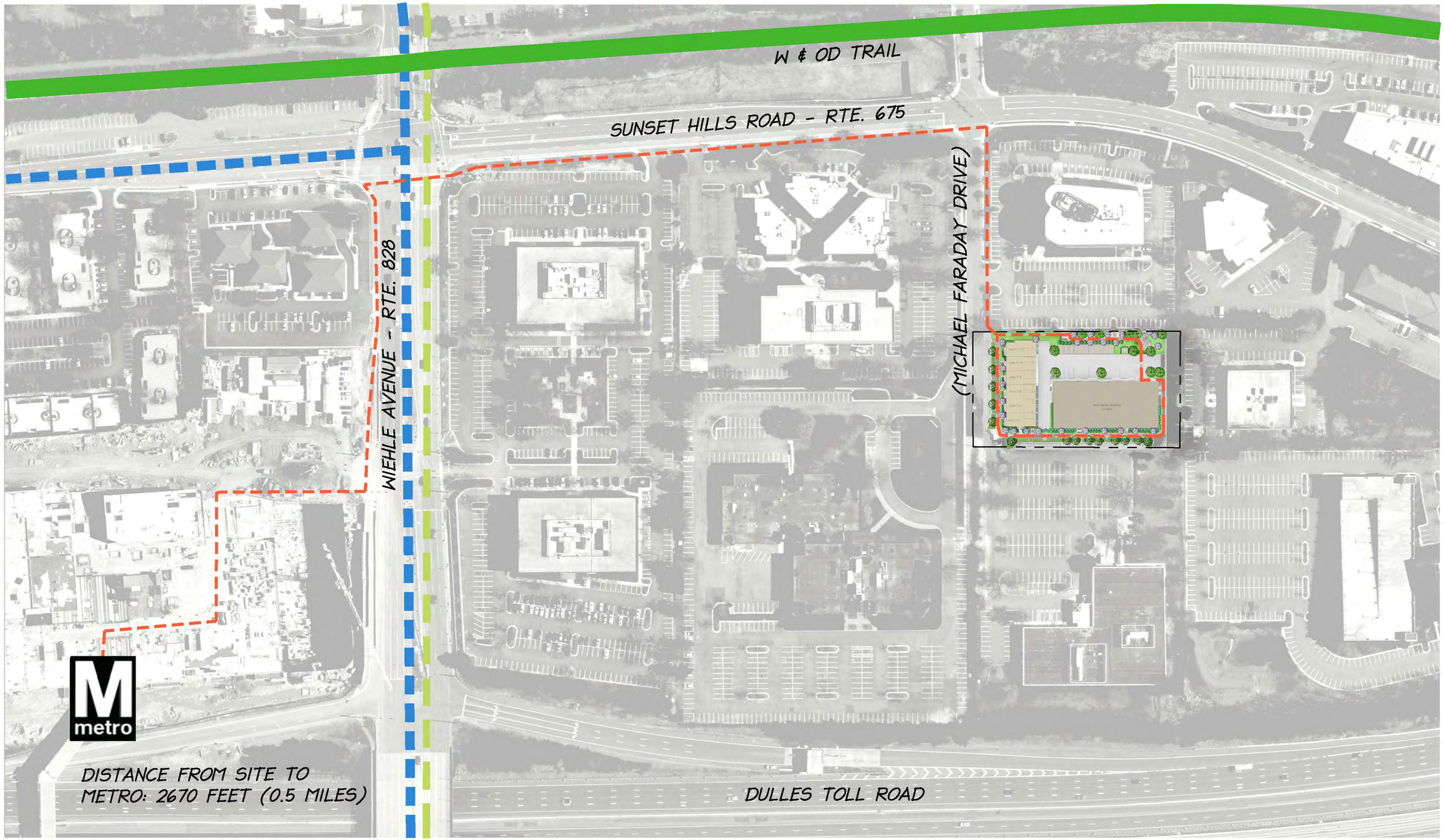


LEGEND:

- PEDESTRIAN METRO ACCESS PATH
- W & OD TRAIL
- COUNTY RECOMMENDED SHARED USE PATH
- COUNTY RECOMMENDED BIKE LANE

VCS 1983 GRID NORTH

FOR ILLUSTRATIVE PURPOSES ONLY!!!

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-880-4585 FX: 703-880-4775

INTERIM PEDESTRIAN CIRCULATION

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVIEW APPROVED	DATE
12/20/15	FFX/VDOT 1	COUNTY COMMENTS		
1/11/2016	FFX/VDOT 2	COUNTY COMMENTS		
4/25/16	FFX 3	ADDRESS STAFF COMMENTS.		
7/28/16	FFX 4	ADDRESS STAFF COMMENTS.		
8/22/16	FFX 5	ADDRESS STAFF COMMENTS.		

REVISION APPROVED BY:

ENGINEER

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW E. MARSHALL
Lic. No. 1635-B
10/14/16
LAND SURVEYOR

SCALE:
NTS

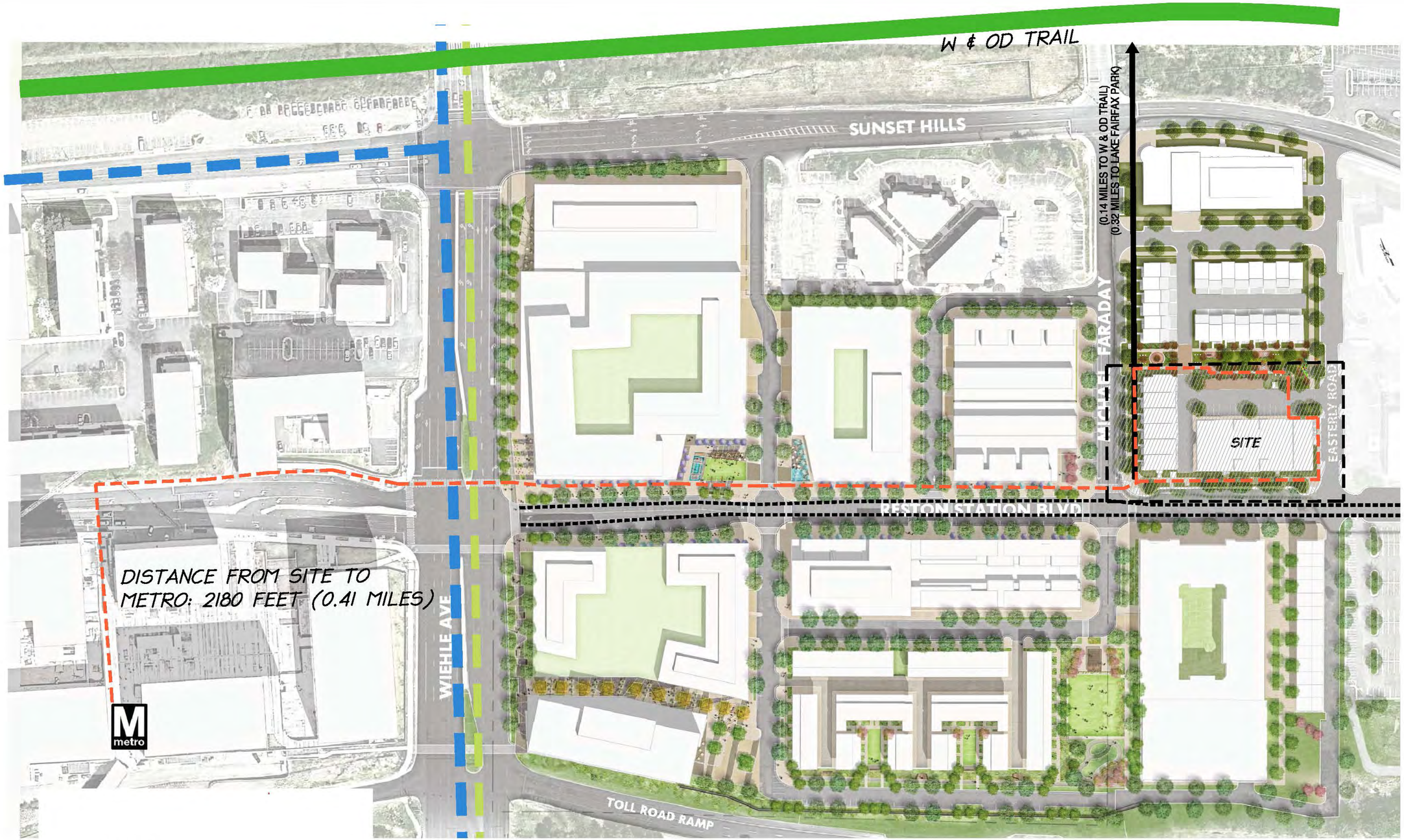
SHEET 5A OF 12

DATE: JUNE, 2015

DRAFT: WOR/JMB | CHECK: MTM

FILE NUMBER: 14019-1-1 3B

P:\PY 2014\14019-1-1 Michael Faraday Drive - 1625\ENG\GDP\



LEGEND:

- PEDESTRIAN METRO ACCESS PATH
- PROPOSED BIKE LANE
- W & OD TRAIL
- COUNTY RECOMMENDED SHARED USE PATH
- COUNTY RECOMMENDED BIKE LANE

NOTE:
ALL OFF-SITE TRANSPORTATION AND STREETSCAPE IMPROVEMENTS ARE BASED UPON A STREET GRID EXHIBIT PREPARED BY LAND DESIGN, DATED JUNE 15, 2016.

VGS 1983 GRID NORTH

FOR ILLUSTRATIVE PURPOSES ONLY!!!

LDC
4695 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-583-4585 FX: 703-680-4775

ULTIMATE PEDESTRIAN CIRCULATION

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
12/28/16	MM	1. ADDRESS STAFF COMMENTS			
8/05/16	MM	2. ADDRESS STAFF COMMENTS			

REVISION APPROVED BY:

ENGINEER

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW C. MARSHALL
Lic. No. 1825-B
10/14/16
LAND SURVEYOR

SCALE:
NTS

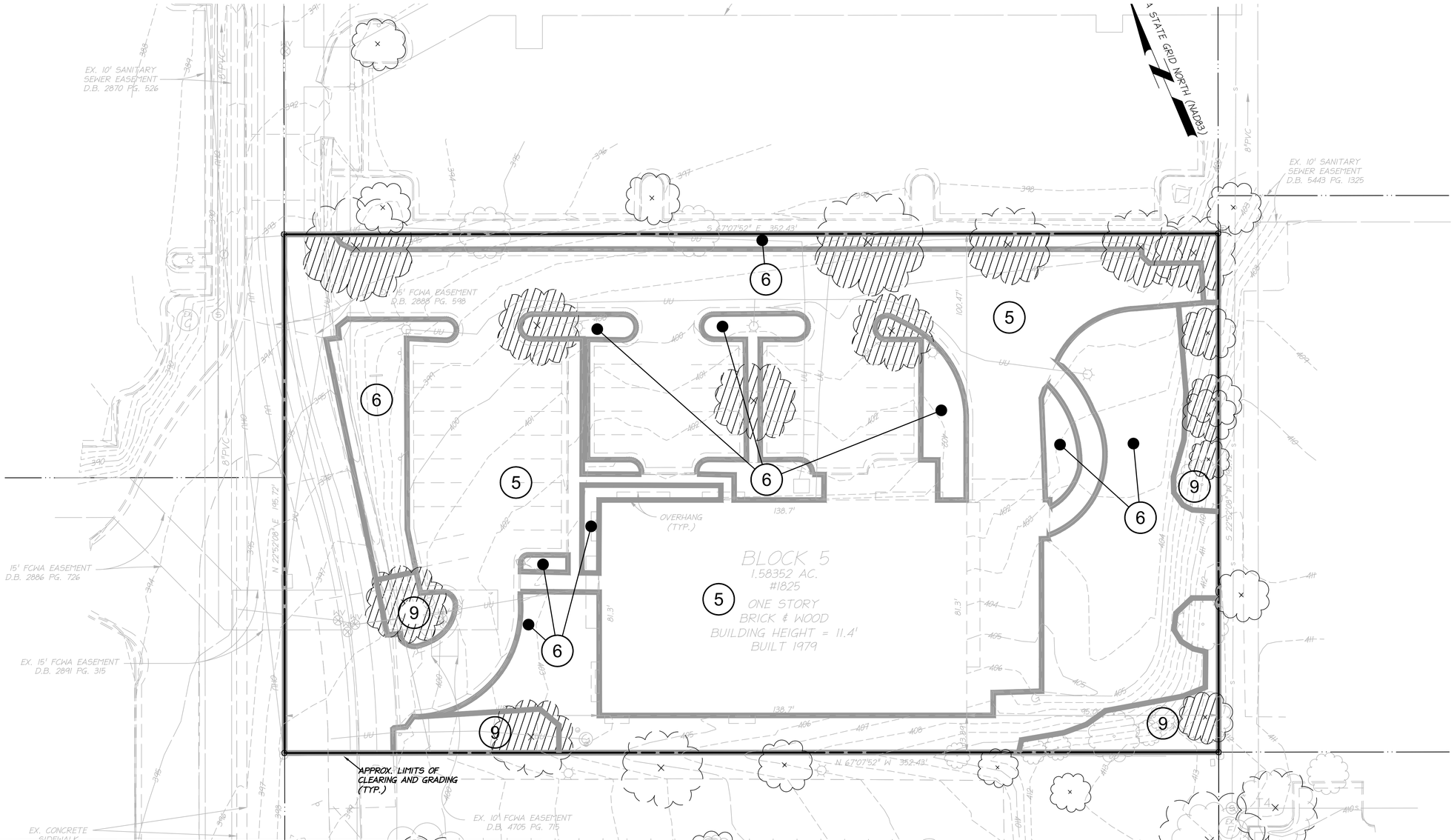
SHEET 5B OF 12

DATE: JUNE, 2015

DRAFT: NOR/JMB
CHECK: MTM

FILE NUMBER: 14019-1-1 3B

P:\PY 2014\14019-1-1 Michael Faraday Drive - 1825\ENG\GDP\



LEGEND:

- EXISTING TREE
- (5) FOREST COVER TYPE
- EXISTING TREE CANOPY

EXISTING VEGETATION MAP

SCALE: 1" = 20'

GRAPHIC SCALE

20 10 0 20 40

1" = 20'

EVM SUMMARY TABLE

	Cover Type	Primary Species	Successional Stage	Condition	Acreage	Comments
5	Developed Land	No trees present; areas of constructed features including buildings, parking and roadways	n.a.	n.a.	1.04 ac.	Predominately building, asphalt paving and concrete sidewalk.
6	Maintained Grasslands	Grassed and landscaped areas, athletic fields or other green areas devoid of natural vegetation	n.a.	n.a.	0.38 ac.	This Cover Type exists as lawn and landscaped areas.
9	Landscaped Tree Canopy	Red Maple, Pine and Spruce primary species.	Mature	Fair-Good	0.16 ac.	This Cover Type contains tree canopy established through the planting of nursery stock trees that is not part of a natural forest community. Turf grass as a groundcover.
				Total acreage	1.58 ac.	

*DBH = Diameter at Breast Height (measured 4.5 feet above the ground)

NOTE: TREE LOCATIONS ARE NOT FIELD LOCATED.

PREPARED BY:
WM. O'KELLY RUSSELL
ISA Certified Arborist, MA-5009A

6/10/15

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

EXISTING VEGETATION MAP

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
6/2015	MTM	ADDRESS STAFF COMMENTS			

ENGINEER

REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW C. MARSHALL
Lic. No. 1355-B
10/14/16
LAND SURVEYOR

SCALE: 1" = 20'

SHEET 6 OF 12

DATE: FEB., 2015

DRAFT: WOR/JMB | CHECK: MTM

FILE NUMBER: 14019-1-1 3B

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12" STANDARD SIGN DETAIL

18" STANDARD SIGN DIMENSION

KEEP OUT

TREE PROTECTION ZONE

CALL: 703-324-1770 TO REPORT VIOLATIONS

PROHIBIDO ENTRAR ZONA DE PROTECTION DEL ARBOL

TEL. 703-324-1770 PARA REPORTAR INFRACCIONES

LDC
Land Design Consultants

August 4, 2016

Mr. Keith W. Cline, Director
Fairfax County Urban Forest Management
12055 Government Center Parkway, 5th Floor
Fairfax, VA 22035

Re: The Lofts at Reston Station
1825 Michael Faraday Drive
Fairfax County Parcel #18-3 ((6)), Parcel 5
Proposed Zoning – R-30, Approximately 1.58 Acres
Plan # RZ 2015-HM-005
LDC Project #14019-1-1

Dear Mr. Cline,

Land Design Consultants, Inc. (LDC) has prepared a Generalized Development Plan (GDP) for the redevelopment of the subject property with forty-two (42) new multi-family dwellings and associated infrastructure. The subject property currently has one (1) commercial building.

LDC has prepared an Existing Vegetation Map, Tree Inventory and Condition Analysis for the above referenced property in accordance with Section 12 of the Public Facilities Manual (PFM). Copies of this information are provided herein.

In accordance with Section 12-0508.3A(1)(2)(3), LDC is respectfully requesting permission to deviate from the Tree Preservation Target requirements. Currently, the subject property is approximately 10.1% covered by existing tree canopy. Upon development, 10% of the subject property shall be required as tree canopy. Of the required 10% tree canopy, 10.1% of this should be provided via preservation. At this time, the Applicant is proposing zero (0) square feet of preservation. The tree preservation target cannot be met on site due to the poor condition and species of existing vegetation and the fact that construction activities could be reasonably expected to impact existing vegetation, as further discussed below. The following serves as our justification for this request:

1. Of the twenty-two (22) trees inventoried in accordance with the PFM, only fifteen (15) are located on the subject property. The existing trees were planted in conjunction with the current office building development and are not part of a natural forest community. All fifteen (15) trees inventoried onsite trees are located inside of the proposed limits of clearing. Two (2) of the twenty-two (22) inventoried onsite trees are in fair to poor condition. In accordance with the PFM (12-0403.2), trees designated for preservation shall be in fair to excellent condition at time of plan submission.

   Further, a few of the trees on site have varying degrees of problems, which will impact their structural integrity and will lead to further decline meeting the definition of "poor condition". In accordance with the PFM (12-0403.2A), trees designated for preservation should have a high degree of structural integrity. In accordance with Section 12-0508.3A(1), deviations from the Tree

   Preservation Target are permitted if meeting the Tree Preservation Target would preclude the development of uses or densities otherwise allowed by the Zoning Ordinance. Further, in accordance with Section 12-0508.3A(2), deviations from the Tree Preservation Target are

   permitted if meeting the tree preservation target would require the preservation of trees that do not meet the standards for health and structural condition. These trees should not be preserved and are recommended for removal. Further, in accordance with Section 12-0508.3A(3), deviations from the Tree Preservation Target are permitted if construction activities could be reasonably expected to impact existing trees or forested areas used to meet the tree preservation target to the extent they would not likely survive in a healthy manner for a minimum of ten (10) years. The proposed construction will negatively impact these fair to poor quality trees.

2. The subject property does not contain any "champion", "heritage", "specimen", "memorial" or "street" trees as designated in Chapter 120 of the County Code.

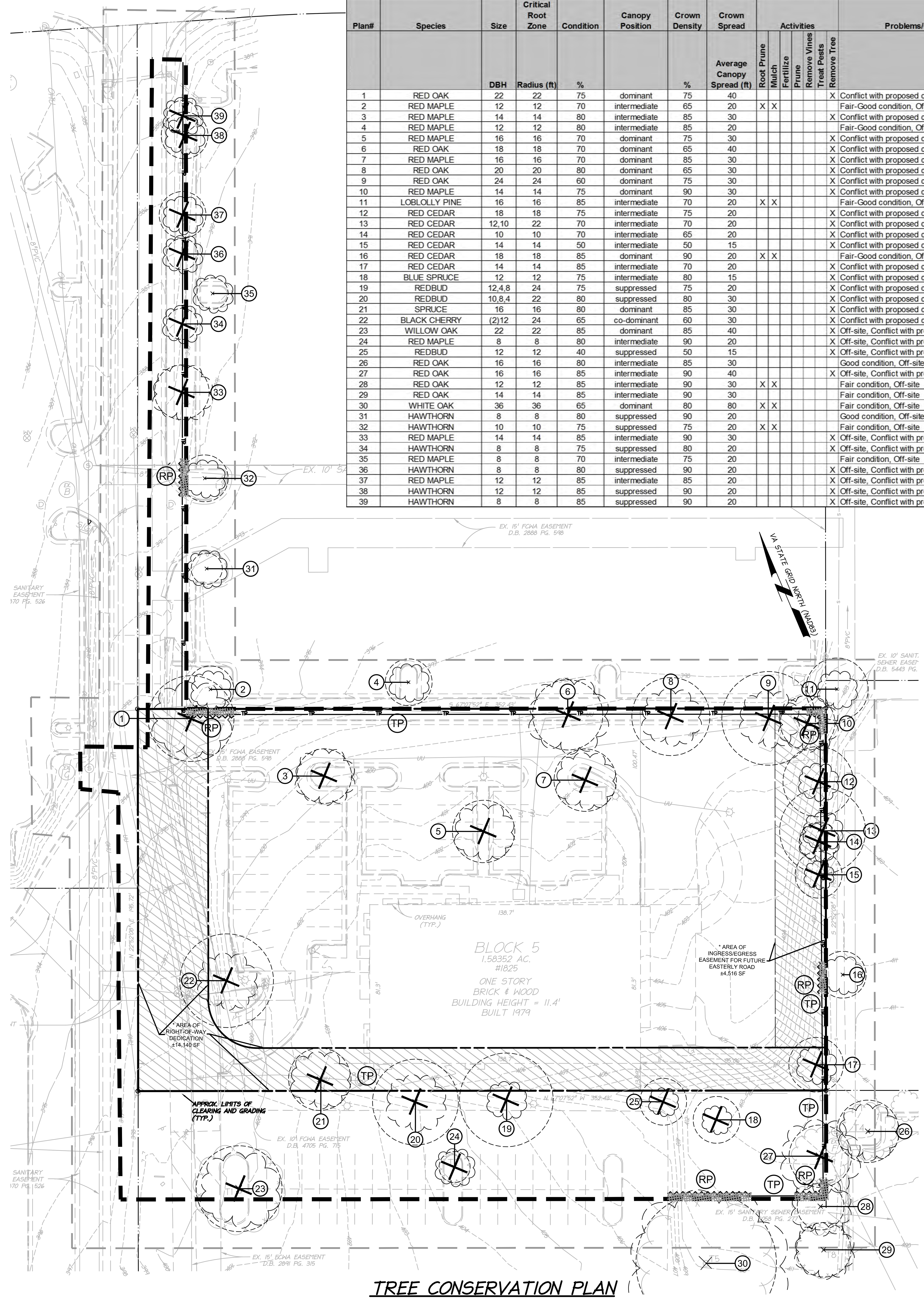
3. In order to meet Tree Canopy requirements, the Applicant will plant quality, native and proven desirable species on site. In total, the Applicant is proposing 6,225 square feet of new vegetation, resulting in a total of 6,225 square feet of tree canopy coverage. This will result in meeting the 10% Tree Canopy Requirements as required by the PFM.

For the reasons stated above, we respectfully request your approval of a deviation from the Tree Preservation Target.

Sincerely,

Wm. O'Kelly Russell
Senior Landscape Architect and Arborist

cc: File



TREE CONSERVATION PLAN

SCALE: 1" = 30'

TREE INVENTORY																
Plan#	Species	Size	Critical Root Zone	Condition	Canopy Position	Crown Density	Crown Spread	Activities							Problems/Comments	Action to be taken
		DBH	Radius (ft)	%		%	Average Canopy Spread (ft)	Root Prune	Mulch	Fertilize	Prune	Remove Vines	Treat Pests	Remove Tree		
1	RED OAK	22	22	75	dominant	75	40							X	Conflict with proposed construction	Remove
2	RED MAPLE	12	12	70	intermediate	65	20	X	X						Fair-Good condition, Off-site	To remain, Root Prune, Mulch
3	RED MAPLE	14	14	80	intermediate	85	30							X	Conflict with proposed construction	Remove
4	RED MAPLE	12	12	80	intermediate	85	20								Fair-Good condition, Off-site	To remain
5	RED MAPLE	16	16	70	dominant	75	30							X	Conflict with proposed construction	Remove
6	RED OAK	18	18	70	dominant	65	40							X	Conflict with proposed construction	Remove
7	RED MAPLE	16	16	70	dominant	85	30							X	Conflict with proposed construction	Remove
8	RED OAK	20	20	80	dominant	65	30							X	Conflict with proposed construction	Remove
9	RED OAK	24	24	60	dominant	75	30							X	Conflict with proposed construction	Remove
10	RED MAPLE	14	14	75	dominant	90	30							X	Conflict with proposed construction	Remove
11	LOBLOLLY PINE	16	16	85	intermediate	70	20	X	X						Fair-Good condition, Off-site	To remain, Root Prune, Mulch
12	RED CEDAR	18	18	75	intermediate	75	20							X	Conflict with proposed construction	Remove
13	RED CEDAR	12,10	22	70	intermediate	70	20							X	Conflict with proposed construction	Remove
14	RED CEDAR	10	10	70	intermediate	65	20							X	Conflict with proposed construction	Remove
15	RED CEDAR	14	14	50	intermediate	50	15							X	Conflict with proposed construction	Remove
16	RED CEDAR	18	18	85	dominant	90	20	X	X						Fair-Good condition, Off-site	To remain, Root Prune, Mulch
17	RED CEDAR	14	14	85	intermediate	70	20							X	Conflict with proposed construction	Remove
18	BLUE SPRUCE	12	12	75	intermediate	80	15							X	Conflict with proposed construction	Remove
19	REDBUD	12,4,8	24	75	suppressed	75	20							X	Conflict with proposed construction	Remove
20	REDBUD	10,8,4	22	80	suppressed	80	30							X	Conflict with proposed construction	Remove
21	SPRUCE	16	16	80	dominant	85	30							X	Conflict with proposed construction	Remove
22	BLACK CHERRY	(2)12	24	65	co-dominant	60	30							X	Conflict with proposed construction	Remove
23	WILLOW OAK	22	22	85	dominant	85	40							X	Off-site, Conflict with proposed construction	Remove*
24	RED MAPLE	8	8	80	intermediate	90	20							X	Off-site, Conflict with proposed construction	Remove*
25	REDBUD	12	12	40	suppressed	50	15							X	Off-site, Conflict with proposed construction	Remove*
26	RED OAK	16	16	80	intermediate	85	30								Good condition, Off-site	To remain
27	RED OAK	16	16	85	intermediate	90	40							X	Off-site, Conflict with proposed construction	Remove*
28	RED OAK	12	12	85	intermediate	90	30	X	X						Fair condition, Off-site	To remain, Root Prune, Mulch
29	RED OAK	14	14	85	intermediate	90	30								Fair condition, Off-site	To remain
30	WHITE OAK	36	36	65	dominant	80	80	X	X						Fair condition, Off-site	To remain, Root Prune, Mulch
31	HAWTHORN	8	8	80	suppressed	90	20								Good condition, Off-site	To remain
32	HAWTHORN	10	10	75	suppressed	75	20	X	X						Fair condition, Off-site	To remain, Root Prune, Mulch
33	RED MAPLE	14	14	85	intermediate	90	30							X	Off-site, Conflict with proposed construction	Remove*
34	HAWTHORN	8	8	75	suppressed	80	20							X	Off-site, Conflict with proposed construction	Remove*
35	RED MAPLE	8	8	70	intermediate	75	20								Fair condition, Off-site	To remain
36	HAWTHORN	8	8	80	suppressed	90	20							X	Off-site, Conflict with proposed construction	Remove*
37	RED MAPLE	12	12	85	intermediate	85	20							X	Off-site, Conflict with proposed construction	Remove*
38	HAWTHORN	12	12	85	suppressed	90	20							X	Off-site, Conflict with proposed construction	Remove*
39	HAWTHORN	8	8	85	suppressed	90	20							X	Off-site, Conflict with proposed construction	Remove*

* NOTE: WRITTEN PERMISSION REQUIRED PRIOR TO REMOVAL OF OFF-SITE TREES.

LEGEND:

- EXISTING TREE
- TREE CANOPY CREDIT
- TREE TO BE REMOVED
- TREE ID
- CRITICAL ROOT ZONE (CRZ)
- 25' BEYOND LCG
- LIMITS OF CLEARING & GRADING
- TREE PROTECTION
- ROOT PRUNING
- AREA TO BE MULCHED
- ITEMIZED AREAS OF DEDUCTION

GROSS SITE AREA	68,978 SF	(1.58 AC)
DEDUCTION OF SWM ESM'T	0 SF	(0.00 AC)
AREA OF INGRESS/EGRESS ESM'T	4,516 SF	(0.10 AC)
AREA OF R.O.W. DEDICATION	15,900 SF	(0.36 AC)
ADJUSTED NET SITE AREA	48,562 SF	(1.11 AC)

CERTIFIED ARBORIST ISA

PREPARED BY:
WM. O'KELLY RUSSELL
ISA Certified Arborist, MA-5009A
2/26/16

GRAPHIC SCALE
30 15 0 30 60
1" = 30'

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

TREE CONSERVATION PLAN

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN	NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
12/2015	MTM/WOR	1	COUNTY COMMENTS			
1/2016	MTM/WOR	2	COUNTY COMMENTS			
2/2016	MTM/WOR	3	COUNTY COMMENTS			
7/8/2016	MTM/WOR	4	COUNTY COMMENTS			
8/5/2016	MTM/WOR	5	COUNTY COMMENTS			
10/14/2016	MTM/WOR	6	COUNTY COMMENTS			

ENGINEER — REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1525-B
10/14/16
LAND SURVEYOR

SCALE: 1" = 30'

SHEET 6A OF 12

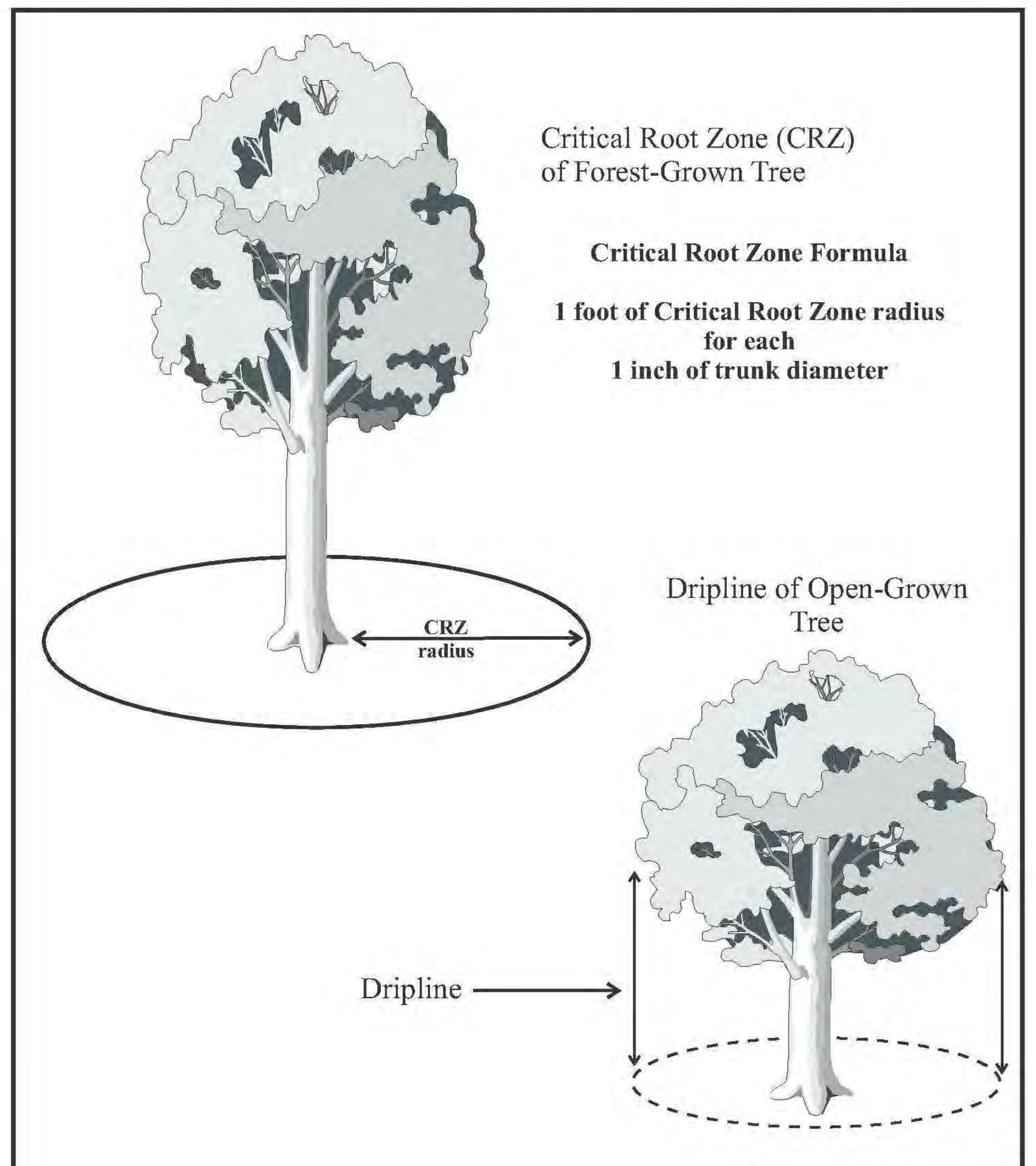
DATE: JUNE, 2015

DRAFT: WOR/JMB CHECK: MTM

FILE NUMBER: 14019-1-1 3B

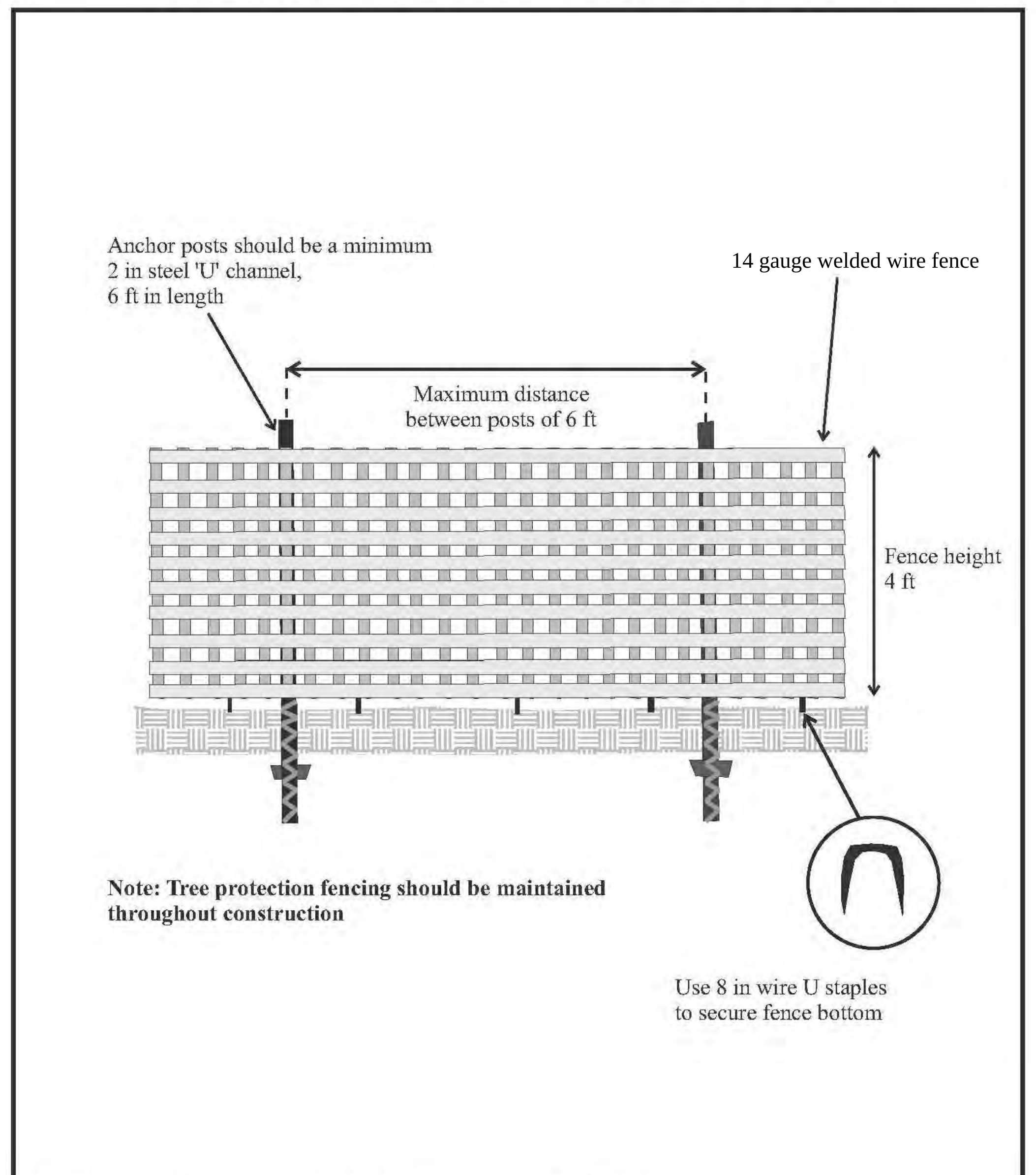
P:\PY 2014\14019-1-1 Michael Faraday Drive - 1825\ENG\GDP\14019_EVM.DWG

FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Ref. Sec. 12-0507.2D Rev. 2-02, 2011 Reprint	CRITICAL ROOT ZONES AND DRIPLINES OF TREES	PLATE NO 2-12	STD NO

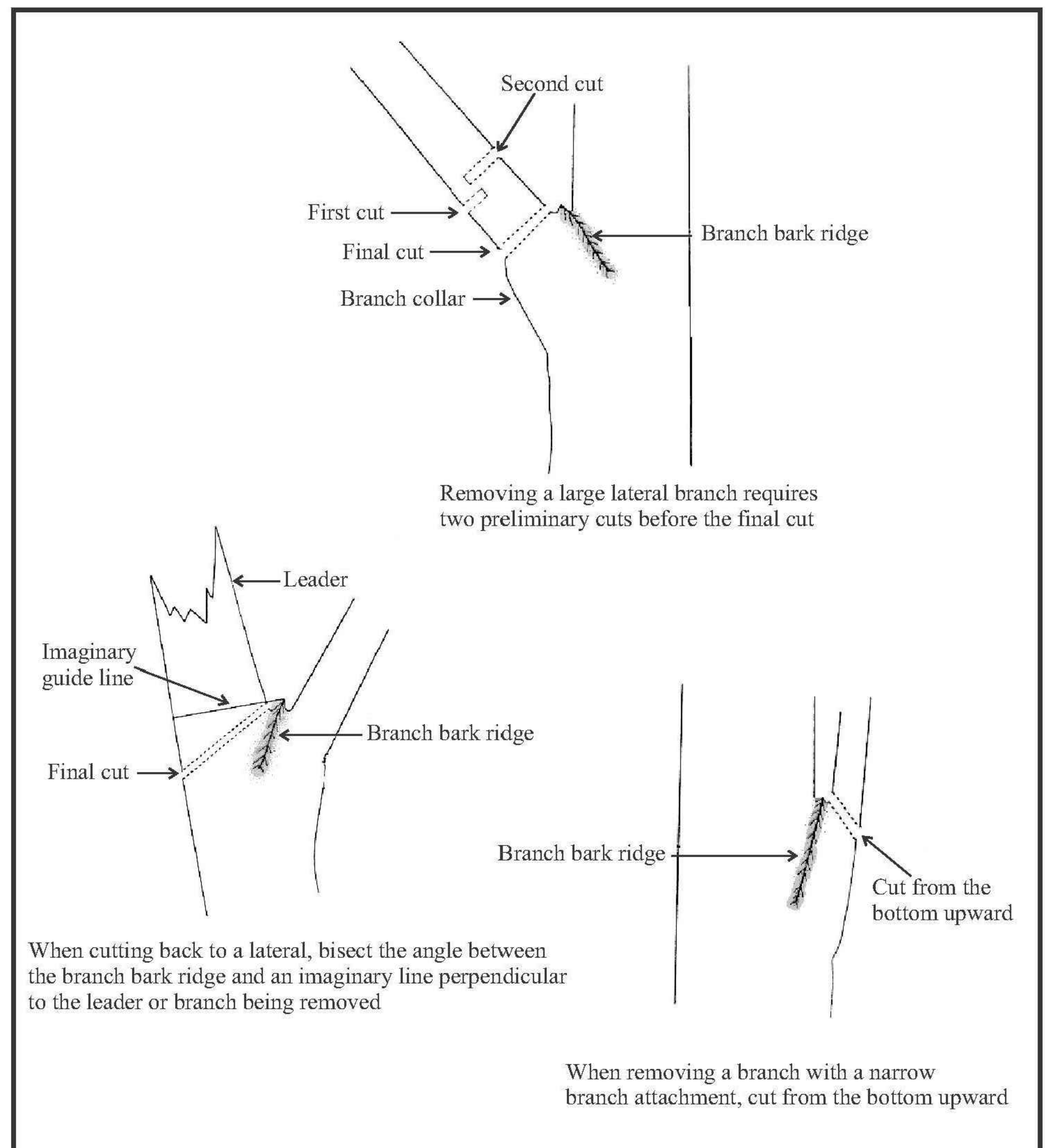
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Adapted from: ***Woodland Conservation Manual***, Prince George County, Maryland

Ref. Sec. 12-0703.1B, 12-0505.1B Rev. 2-02, 2011 Reprint	TREE PROTECTION FENCE INSTALLATION	PLATE NO. 6-12	STD. NO.

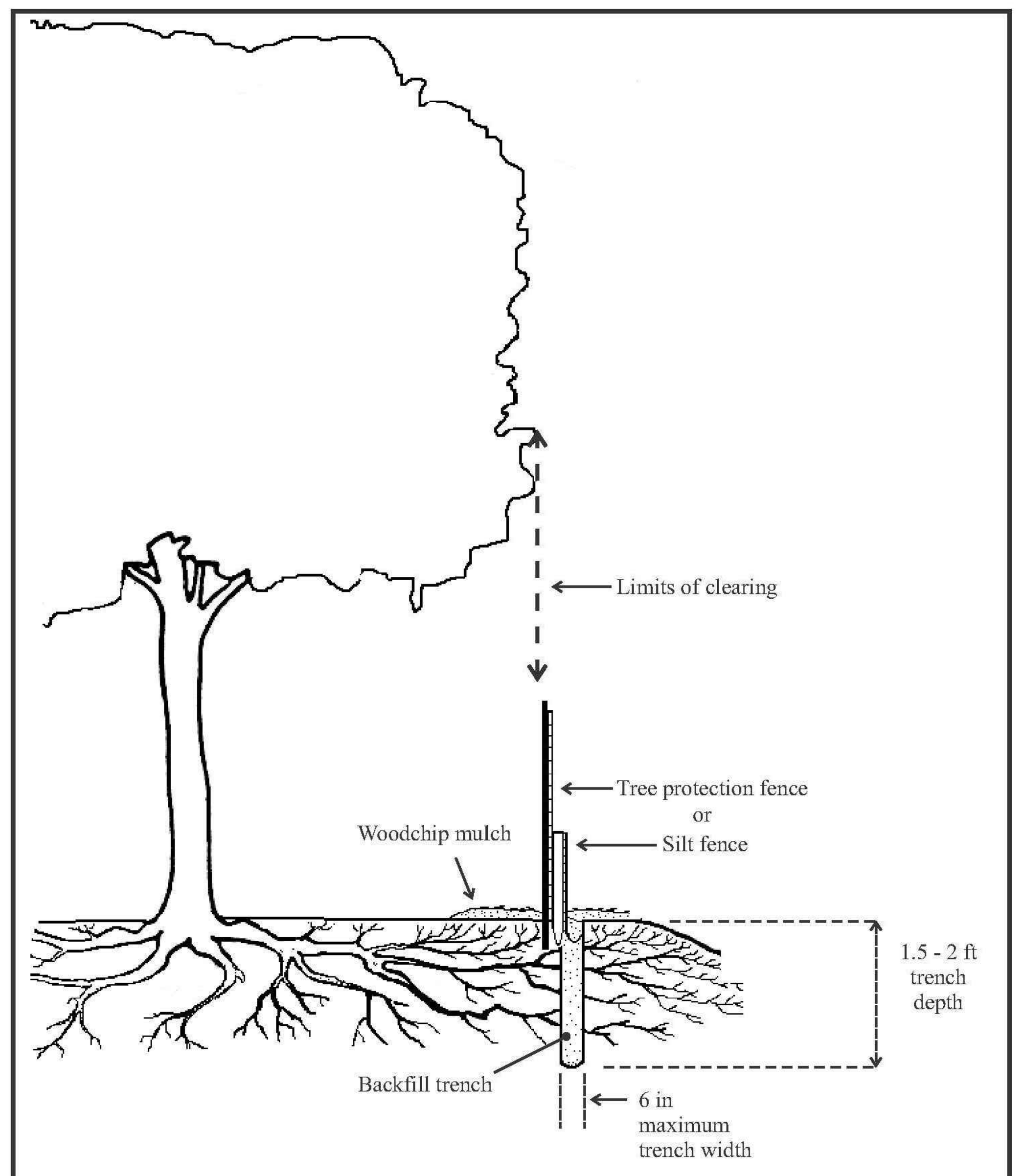
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Adapted from: ***Tree, Shrub and Other Woody Plant Maintenance - Standard Practices - American National Standard for Tree Care Operations***, American National Standards Institute

Ref. Sec. 12-0706.5A Rev. 2-02, 2011 Reprint	PRUNING CUTS	PLATE NO. 9-12	STD. NO.

FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Ref. Sec. 12-0702.1, 12-0704.20 Rev. 2-02, 2011 Reprint	ROOT PRUNING	PLATE NO. 7-12	STD. NO.

TREE PRESERVATION TARGET DEVIATION REQUEST

THE APPLICANT REQUEST A DEVIATION IN WHOLE OF THE SITE'S TREE PRESERVATION TARGET AS PER PFM 12-0508.3. JUSTIFICATION OF THIS REQUEST ARE BASED ON THE FOLLOWING CONDITIONS:

1. MEETING THE TREE PRESERVATION TARGET WOULD PRECLUDE THE DEVELOPMENT OF USES OR DENSITIES OTHERWISE RECOMMENDED BY THE COMPREHENSIVE PLAN(PFM 12-0508.3A(1)).

2. CONSTRUCTION ACTIVITIES COULD BE REASONABLY EXPECTED TO IMPACT EXISTING TREES OR FORESTED AREAS USED TO MEET THE TREE PRESERVATION TARGET TO THE EXTENT THESE WOULD NOT LIKELY SURVIVE IN A HEALTHY AND STRUCTURALLY SOUND MANNER FOR A MINIMUM OF 10-YEARS IN ACCORDANCE WITH THE POST-DEVELOPMENT STANDARDS FOR TREES AND FORESTED AREAS PROVIDED IN §§ 12-0403 AND 12-0404 (PFM 12-0508.3A(3)).

Table 12.3 Tree Preservation Target Calculations and Statement

A	Pre-development area of existing tree canopy (from Existing Vegetation Map) =	0.16 AC (7,000 SF)
B	Percentage of gross site area covered by existing tree canopy =	10.1% (7,000 SF)
C	Percentage of 10-year tree canopy required for site (see Table 12.4) =	10% (6,182 SF)
D	Percentage of the 10-year tree canopy requirement that should be met through tree preservation =	10.1% (624 SF)
E	Proposed percentage of canopy requirement that will be met through tree preservation =	0% (0 SF)
F	Has the Tree Preservation Target minimum been met?	Provide Yes or No
G	If No for line F, then a request to deviate from the Tree Preservation Target shall be provided on the plan that states one or more of the justifications listed in § 12-0508.3 along with a narrative that provides a site-specific explanation of why the Tree Preservation Target cannot be met. Provide sheet number where deviation request is located.	SEE SHEET 6A & 6B OF 12
H	If step G requires a narrative, it shall be prepared in accordance with § 12-0508.4	-
I	Place this information prior to the 10-year Tree Canopy Calculations as per instructions in Table 12.10.	-

12-0000 TREE CONSERVATION

Table 12.10 10-year Tree Canopy Calculation Worksheet

Step		Totals	Reference
A. Tree Preservation Target and Statement			
A 1	Place the Tree Preservation Target calculations and statement here preceding the 10-year tree canopy calculations	SEE TABLE 12.3	see § 12-0508.2 for list of required elements and worksheet
B. Tree Canopy Requirement			
B1	Identify gross site area =	68,978 SF	§ 12-0511.1A
B2	Subtract area dedicated to parks, road frontage, and	20,416 SF	§ 12-0511.1B *SEE SHEET 6A
B3	Subtract area of exemptions =	-	§ 12-0511.1C(1) through § 12-0511.1C(6)
B4	Adjusted gross site area (B1 – B2) =	48,562 SF	
B5	Identify site's zoning and/or use	R-30	
B6	Percentage of 10-year tree canopy required =	10%	§ 12-0510.1 and Table 12.4
B7	Area of 10-year tree canopy required (B4 x B6) =	4,856 SF	
B8	Modification of 10-year Tree Canopy Requirements requested?	NO	Yes or No
B9	If B8 is yes, then list plan sheet where modification request is located	-	Sheet number
C. Tree Preservation			
C1	Tree Preservation Target Area =	618 SF	
C2	Total canopy area meeting standards of § 12-0400 =	0 SF	
C3	C2 x 1.25 =	-	§ 12-0510.3B
C4	Total canopy area provided by unique or valuable forest or woodland communities =	-	
C5	C4 x 1.5 =	-	§ 12-0510.3B(1)
C6	Total of canopy area provided by "Heritage," "Memorial," "Specimen," or "Street" trees =	-	
C7	C6 x 1.5 to 3.0 =	-	§ 12-0510.3B(2)
C8	Canopy area of trees within Resource Protection Areas and 100-year floodplains =	-	
C9	C8 x 1.0 =	-	§ 12-0510.3C(1)
C10	Total of C3, C5, C7 and C9 =	0 SF	If area of C10 is less than B7 then remainder of requirement must be met through tree planting - go to D
D. Tree Planting			
D1	Area of canopy to be met through tree planting (B7-C10) =	4,238 SF	
D2	Area of canopy planted for air quality benefits =	-	
D3	x 1.5 =	-	§ 12-0510.4B(1)
D4	Area of canopy planted for energy conservation =	-	
D5	x 1.5 =		§ 12-0510.4B(2)
D6	Area of canopy planted for water quality benefits =	-	
D7	x 1.25 =	-	§ 12-0510.4B(3)
D8	Area of canopy planted for wildlife benefits =	-	
D9	x 1.5 =	-	§ 12-0510.4B(4)
D10	Area of canopy provided by native trees =	-	
D11	x 1.5 =	-	§ 12-0510.4B(5)
D12	Area of canopy provided by improved cultivars and varieties =		
D13	x 1.25		§ 12-0510.4B(6)
D14	Area of canopy provided through tree seedlings =	-	
	x 1.0		§ 12-0510.4D(1)
D15	Area of canopy provided through native shrubs =	-	
	x1.0	-	§ 12-0510.4D(1)
D16	Percentage of D14 represented by D15=	-	Must not exceed 33% of D14
D17	Total of canopy area provided through tree planting =	6,225 SF	
D18	Is an off-site planting relief requested?	NO	Yes or No
D19	Tree Bank or Tree Fund?	NO	§ 12-0512
D20	Canopy area requested to be provided through off-site banking or tree fund	-	
D21	Amount to be deposited into the Tree Preservation and Planting Fund	-	
E. Total of 10-year Tree Canopy Provided			
E1	Total of canopy area provided through tree preservation (C10) =	0 SF	
E2	Total of canopy area provided through tree planting (D17) =	6,225 SF	
E3	Total of canopy area provided through off-site mechanism (D19) =	-	
E4	Total of 10-year Tree Canopy Provided = (E1+E2+E3)	6,225 SF	Total of E1 through E3. Area should meet or exceed area required by B7

TREE CONSERVATION NOTES

1. THE LIMITS OF CLEARING AND GRADING SHALL BE ACCURATELY FLAGGED PRIOR TO ANY CONSTRUCTION ACTIVITY ON-SITE.

2. ALL INDIVIDUAL TREES TO BE SAVED WILL BE TAGGED APPROPRIATELY WITH BRIGHTLY-COLORED SURVEYOR'S RIBBON AT A HEIGHT OF 5'-6'.

3. TREE PROTECTION FENCE SHALL BE INSTALLED IN THE FIELD IN CONJUNCTION WITH THE COUNTY'S URBAN FORESTER. PROTECTION FENCE IS SUBJECT TO RELOCATION BASED UPON THE URBAN FORESTER'S REVIEW. FINAL APPROVAL BY THE URBAN FORESTER MUST BE OBTAINED PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES.

4. TREE PROTECTION FENCE SHALL BE INSTALLED AT THE DRIPLINE OF THE TREES TO BE PRESERVED, OR AT THE LIMITS OF CLEARING AND GRADING, WHICHEVER IS A GREATER DISTANCEFROM THE TRUNK OF THE TREE TO BE PRESERVED. NOTE THAT THERE MAY BE TREES WHERE THE TREE PROTECTION FENCE MAY BE SLIGHTLY WITHIN THE DRIPLINE LIMITS. SEE THIS SHEET FOR DETAILS OF THE TREE PROTECTION TO BE UTILIZED.

5. VEHICULAR TRAFFIC AND THE STOCKPILING OF ANY CONSTRUCTION MATERIALS, INCLUDING TOPSOIL STOCK PILES, IS PROHIBITED WITHIN THE DRIP LINE OF ANY TREES TO BE SAVED.

6. ROOT PRUNING IS TO BE PERFORMED WHEREVER GRADES WILL BE ALTERED WITHIN THE ROOT ZONE OF A TREE TO BE PRESERVED. THE ENTIRE AREA OF ROOT PRUNING IS TO BE COMPLETED IN ONE OPERATION. ROOT PRUNING MACHINERY SHALL BE USED TO A DEPTH OF 18". IF A TRENCHER IS USED, THE TRENCH SHALL BE BACKFILLED IMMEDIATELY TO PREVENT ROOT DEHYDRATION. WHENEVER POSSIBLE, ROOT PRUNING TRENCHES SHOULD BE MULCHED WITH WOOD CHIPS OR MULCH TO A DEPTH OF FOUR INCHES.

7. 1-2 INCHES OF MULCH SHALL BE SPREAD AT THE LIMITS OF CLEARING AND GRADING.

8. MULCH AS GREAT AN AREA AS POSSIBLE AROUND TREE TO RETAIN MOISTURE, INCREASE FERTILITY OF SOIL, PROTECT ROOTS IN WINDER AND HASTEN ROOT REGENERATION.

9. WATER TREES WELL DURING JUNE, JULY AUGUST, AND SEPTEMBER.

10. A PRIVATE CERTIFIED ARBORIST SHALL BE REQUIRED TO IMPLEMENT, OVERSEE, AND MONITOR SITE WORK AS IT AFFECTS TREES DURING THE LIFE OF THE PROJECT. MONITORING OF THE PRESERVED TREES SHALL BE CONDUCTED ON A WEEKLY BASIS DURING THE INITIAL PHASES OF CONSTRUCTION. THE GENERAL CONTRACTOR SHALL BE SUBJECT TO REQUIREMENTS OF THE COUNTY'S URBAN FORESTER AS IT RELATES TO PRESERVATION MEASURES.

11. TREES BEING REMOVED SHALL NOT BE FELLED, PUSHED OR PULLED INTO TREES BEING RETAINED. WHEN TREES TO BE REMOVED ARE IN VERY CLOSE PROXIMITY TO TREES TO BE PRESERVED, THEY SHALL BE FELLED BY HAND, WITH A CHAIN SAW.

12. EQUIPMENT OPERATORS SHALL NOT CLEAN ANY PART OF THEIR EQUIPMENT BY SLAMMING IT AGAINST THE TRUNKS OF TREES TO BE RETAINED.

13. TRENCHING SHALL BE DONE AS FAR AWAY FROM THE TRUNKS OF TREES AS POSSIBLE.

14. ROOTS EXPOSED BY TRENCHING SHALL NOT BE LEFT EXPOSED TO AIR. THEY SHALL BE COVERED WITH SOIL AS SOON AS POSSIBLE OR PROTECTED AND KEPT MOISTENED WITH WET BURLAP OR PEAT MOSS UNTIL THE TRENCH CAN BE FILLED.

15. THE ENDS OF DAMAGED AND CUT ROOTS SHALL BE CUT OFF SMOOTHLY.

16. ALL WORK SHALL CONFORM TO THE FAIRFAX COUNTY PUBLIC FACILITIES MANUAL AND THE APPROVED TREE PRESERVATION PLAN.

17. SEE EROSION-SILTATION CONTROL PLANS FOR CONSTRUCTION SEQUENCING AND ADDITIONAL CONTROLS.

18. FOR ALL TREES TO BE REMOVED, REMOVAL OF THE TREES SHALL BE DONE BY HAND WITH A CHAIN SAW, AND NO HEAVY MACHINERY SHALL BE LOCATED OUTSIDE OF THE LOD. TREES REMOVED WILL BE CUT TO APPROXIMATELY THE EXISTING GRADE.

19. REMOVAL OF DEBRIS LOCATED OUTSIDE THE LIMITS OF DISTURBANCE (LOD), SHALL BE REMOVED IN A MANNER WHICH DOES NOT REQUIRE THE FOOT PRINT OF ANY MACHINERY USED, TO BE LOCATED OUTSIDE THE LOD. NO MACHINERY SHALL BE ALLOWED INTO TREESAVE AREAS WITHOUT PRIOR WRITTEN APPROVAL FROM THE FAIRFAX COUNTY URBAN FORESTER.

20. ALL TREES TO BE PRESERVED, THAT HAVE CANOPY THAT WILL EXTEND NEAR OR TOWARDS ANY PROPOSED OR EXISTING STRUCTURE, SHALL BE PRUNED TO PROVIDE ADEQUATE CLEARANCE FROM STRUCTURES.

TREE PRESERVATION NARRATIVE

SCOPE OF WORK

ALL TREE PRESERVATION WORK SHALL BE PERFORMED BY A TREE SERVICE CONTRACTOR LICENSED TO DO BUSINESS THAT SPECIALIZES IN TREE PRESERVATION WORK WITH A RECORD OF SATISFACTORY PERFORMANCE ON PROJECTS OF SIMILAR SIZE AND TYPE.

THE TREE SERVICE CONTRACTOR SHALL PROVIDE ALL MATERIALS, LABOR AND EQUIPMENT TO COMPLETE ALL OF THE TREE WORK AS SHOWN ON THE PLANS AND SPECIFICATIONS.

STANDARDS

ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE LATEST ANSI A300 STANDARDS.

THE TREE SERVICE CONTRACTOR MUST COMPLY WITH ALL APPROVED TREE PRESERVATION PLANS AND NOTES.

THE TREE SERVICE CONTRACTOR MUST COMPLY WITH ALL THE GENERAL INDUSTRY OSHA STANDARDS (29 CFR 1910).

METHODOLOGY

1. THE LIMITS OF CLEARING AND GRADING (LCG) SHALL BE ACCURATELY FLAGGED PRIOR TO A PRE-CONSTRUCTION MEETING BETWEEN THE TREE SERVICE CONSULTANT AND THE COUNTY ARBORIST. ALL TREES TO BE REMOVED ARE TO BE FLAGGED WITH RED AND WHITE STRIPED SURVEYOR'S RIBBON AT AN APPROXIMATE HEIGHT OF 5'-6. ANY TREE TO RECEIVE LIMB OR CANOPY PRUNING ARE TO BE FLAGGED WITH BLUE AND WHITE STRIPED SURVEYOR'S TAPE. FINAL PLACEMENT OF LCG AND PROPOSED TREE WORK, SUBJECT TO REVIEW AND APPROVAL OF COUNTY URBAN FORESTER.

2. TREE PROTECTION FENCING TO BE INSTALLED ONCE THE LCG HAS BEEN ESTABLISHED. LOCATION OF TREE PROTECTION FENCING SUBJECT FINAL APPROVAL BY COUNTY URBAN FORESTER.

3. ROOT PRUNING WILL BE DONE IN CONJUNCTION WITH THE INSTALLATION TREE PRESERVATION FENCING. ALL ROOT PRUNING TRENCHES TO BE BACKFILLED IMMEDIATELY IN ONE CONTINUOUS OPERATION. AREAS OF ROOT PRUNING SHOULD BE MULCHED AS SHOWN ON PLAN.

4. PRIOR TO START OF ANY CLEARING OR GRADING, ALL TREE PROTECTION INSTALLED MUST BE APPROVED BY COUNTY URBAN FORESTER.

5. ALL TREE PRESERVATION WORK TO BE SUPERVISED BY A CERTIFIED ARBORIST, WHO WILL PROVIDE WEEKLY WRITTEN PROGRESS REPORTS TO THE COUNTY URBAN FORESTER TILL THE TREE PROTECTION HAS BEEN INSTALLED. ONCE TREE PROTECTION MEASURES HAVE BEEN INSTALLED AND APPROVED, THE CERTIFIED CONSULTING ARBORIST WILL MONITOR AND PROVIDE MONTHLY WRITTEN REPORTS ON THE HEALTH AND STATUS OF THE TREE PROTECTION AREAS TILL COMPETITION OF THE PROJECT.

6. ALL TREE PRESERVATION MEASURES SHALL REMAIN IN PLACE TILL PERMISSION TO REMOVE IS GRANTED BY THE COUNTY URBAN FORESTER.

CERTIFIED ARBORIST ISA

PREPARED BY:
WM. O'KELLY RUSSELL
ISA Certified Arborist, MA-5009A
Wm O'Kelly Russell 1/7/16

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

TREE CONSERVATION NOTES

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN	NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
1/7/2016	MM/WOR	1	COUNTY COMMENTS			
7/8/2016	MM/WOR	2	COUNTY COMMENTS			
8/5/2016	MM/WOR	3	COUNTY COMMENTS			
10/14/2016	MM/WOR	4	COUNTY COMMENTS			

ENGINEER — REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1525-B
10/14/16
LAND SURVEYOR

SCALE: N/A

SHEET 6B OF 12

DATE: JUNE, 2015

DRAFT: WOR/JMB | CHECK: MTM

FILE NUMBER: 14019-1-1 3B

P:\PY 2014\14019-1-1 Michael Faraday Drive - 1825\ENG\GDP\14019_EVM.DWG

PLANTING KEY

- CANOPY TREE (CATEGORY IV)
- PARKING LOT CANOPY TREE (CATEGORY IV)
- STREET TREE (CATEGORY III) (MAINTAINED BY CONDO ASSOC.)
- ORNAMENTAL TREE (CATEGORY II)
- EVERGREEN SHRUB
- DECIDUOUS SHRUB
- ORNAMENTAL GRASS
- GROUNDCOVER

SCHEDULE B - PLANT SCHEDULE

TREES:	QUANTITY	SIZE	COVERAGE	TOTAL
CANOPY (Category IV)	12	2" CAL.	200 SF	2400 SF
CANOPY (Category III) (Improved Cultivar) (Street)	14	2" CAL.	150 SF	2100 SF
ORNAMENTAL (Category II)	23	1" CAL.	75 SF	1725 SF
SHRUBS:			-	-
EVERGREEN	74	-	-	-
DECIDUOUS	103	-	-	-
ORNAMENTAL GRASS	53	-	-	-
			12.37 %	**6,225.00 SF**

SCHEDULE C - INTERIOR PARKING LOT LANDSCAPING

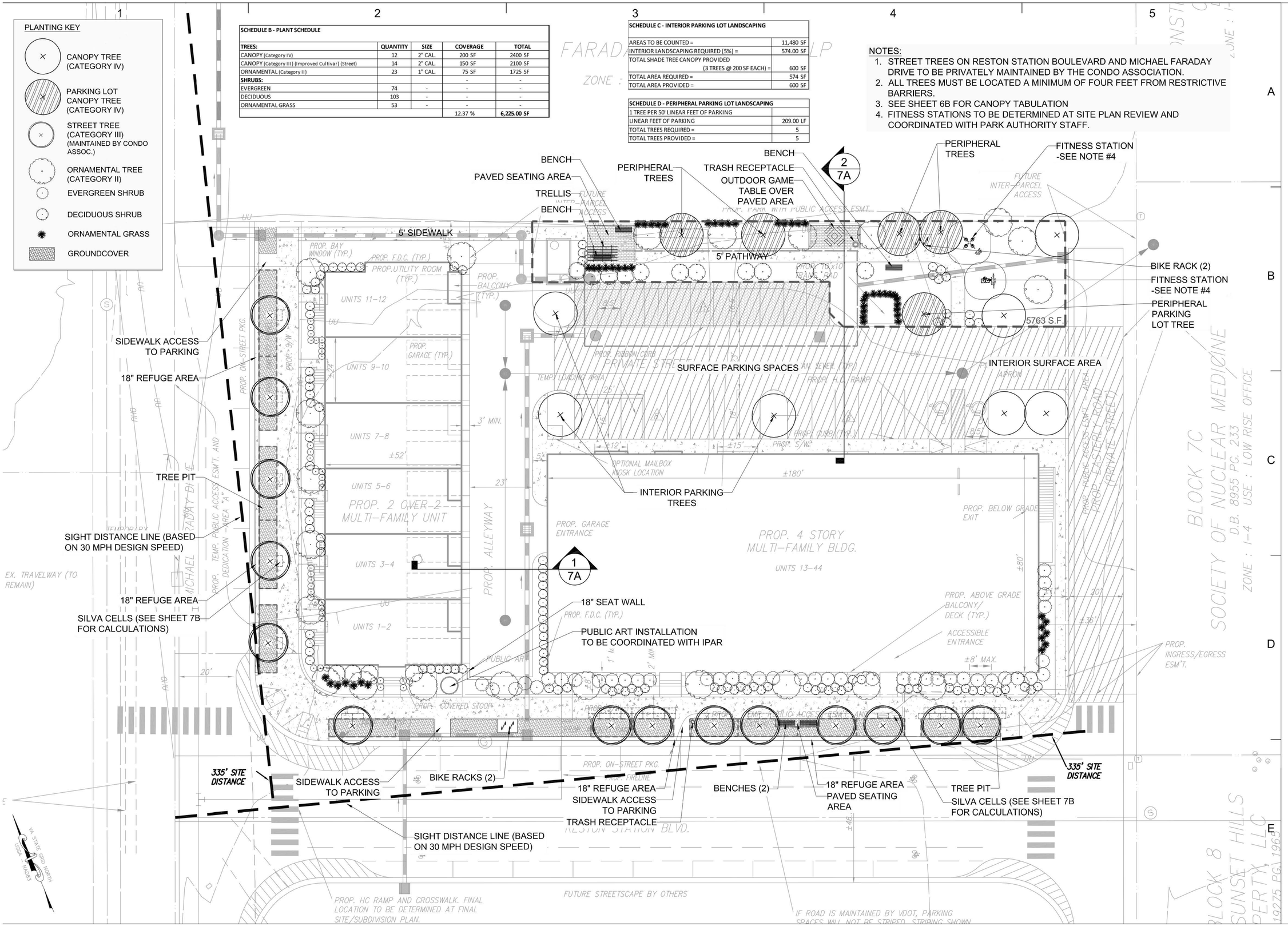
AREAS TO BE COUNTED =	11,480 SF
INTERIOR LANDSCAPING REQUIRED (5%) =	574.00 SF
TOTAL SHADE TREE CANOPY PROVIDED (3 TREES @ 200 SF EACH) =	600 SF
TOTAL AREA REQUIRED =	574 SF
TOTAL AREA PROVIDED =	600 SF

SCHEDULE D - PERIPHERAL PARKING LOT LANDSCAPING

1 TREE PER 50' LINEAR FEET OF PARKING	
LINEAR FEET OF PARKING	209.00 LF
TOTAL TREES REQUIRED =	5
TOTAL TREES PROVIDED =	5

NOTES:

1. STREET TREES ON RESTON STATION BOULEVARD AND MICHAEL FARADAY DRIVE TO BE PRIVATELY MAINTAINED BY THE CONDO ASSOCIATION.
2. ALL TREES MUST BE LOCATED A MINIMUM OF FOUR FEET FROM RESTRICTIVE BARRIERS.
3. SEE SHEET 6B FOR CANOPY TABULATION
4. FITNESS STATIONS TO BE DETERMINED AT SITE PLAN REVIEW AND COORDINATED WITH PARK AUTHORITY STAFF.



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In association with:

Project Owner

PULTE GROUP

Project Title

The Lofts at Reston Station

COMMONWEALTH OF VIRGINIA
ZACHARY LETTE
Cert. No. 001169
09.06.16
LANDSCAPE ARCHITECT

No.	Revision	Date

Drawn by: NT/AE Checked by: ZL/AE
Scale: 1" = 15' Date: September 6, 2016
Issued for

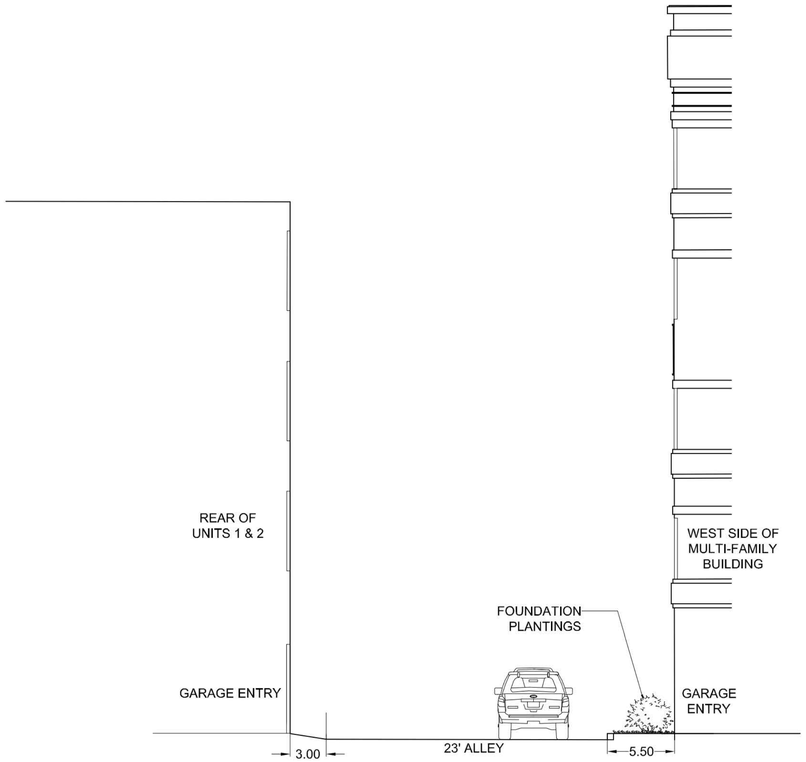
Drawing Title

Landscape Plan

Drawing Number

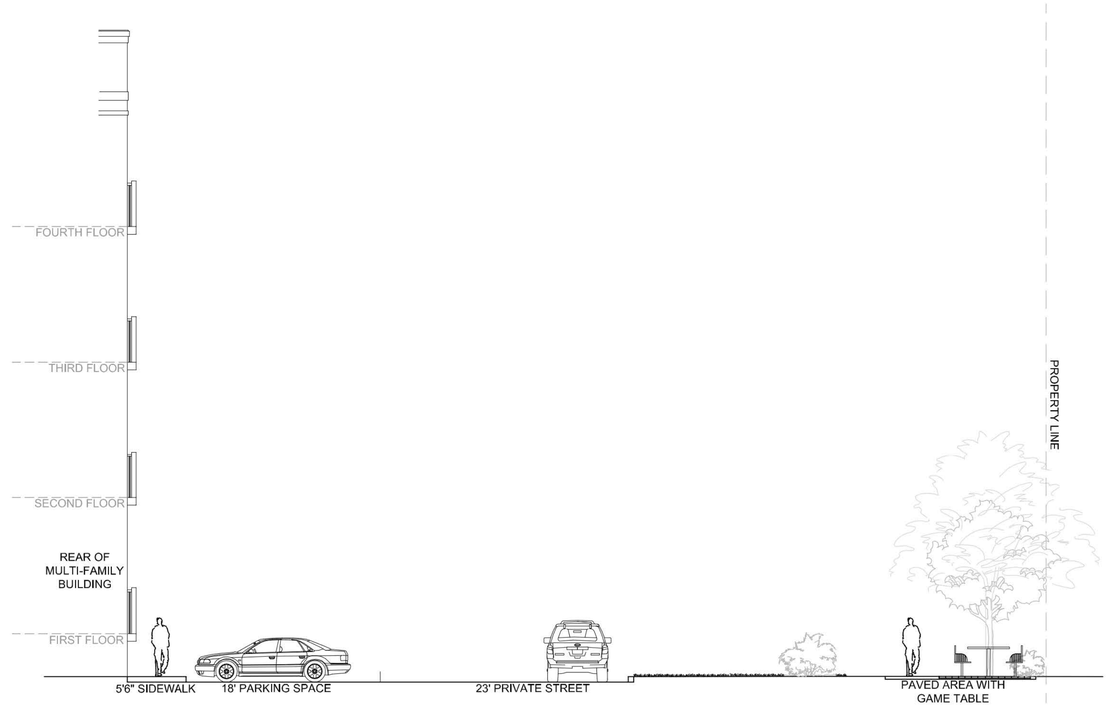
7 of 12

LPDA Project Number
1602-03



2 OVER 2 ALLEY ACCESS SECTION
NO SCALE

1



OPEN SPACE AND PRIVATE STREET SECTION
NO SCALE

2

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No.	Revision	Date

Drawn by: NT/AE Checked by: ZL/AE
Scale: NTS Date: September 6, 2016
Issued for

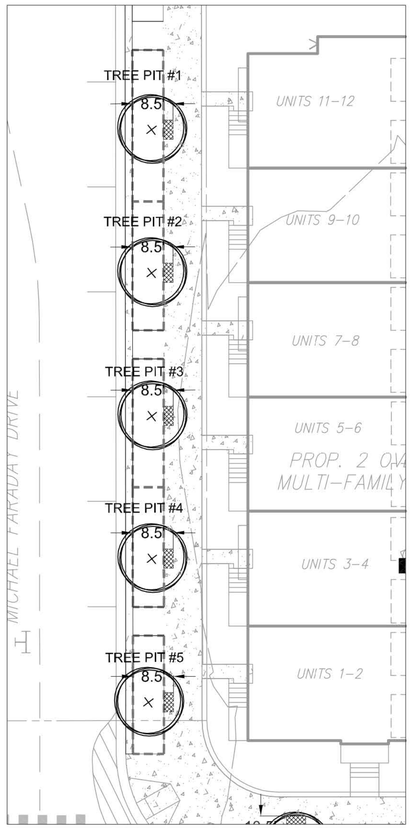
Drawing Title

Streetscape
Sections

Drawing Number

7A of 12

LPDA Project Number
1602-03



MICHAEL FARADAY DRIVE CONTIGUOUS PANEL #1
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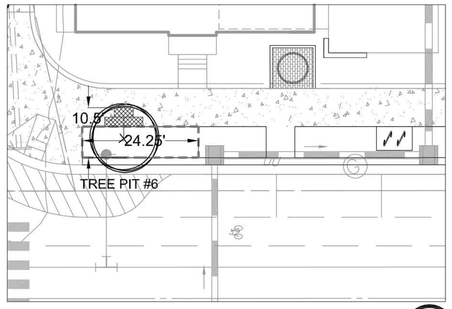
1



RESTON STATION BOULEVARD CONTIGUOUS PANEL #1
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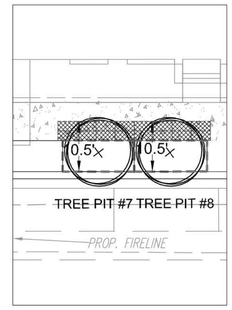

RESTON STATION BOULEVARD CONTIGUOUS PANEL #2
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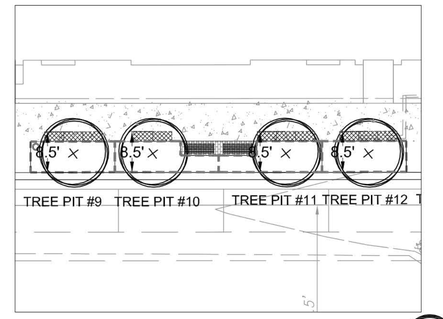

RESTON STATION BOULEVARD CONTIGUOUS PANEL #3
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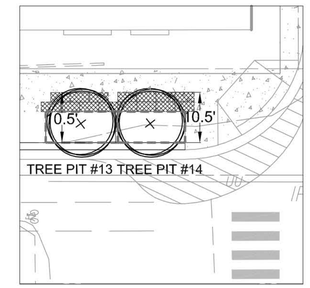

RESTON STATION BOULEVARD CONTIGUOUS PANEL #4
SCALE: 1" = 15'-0"
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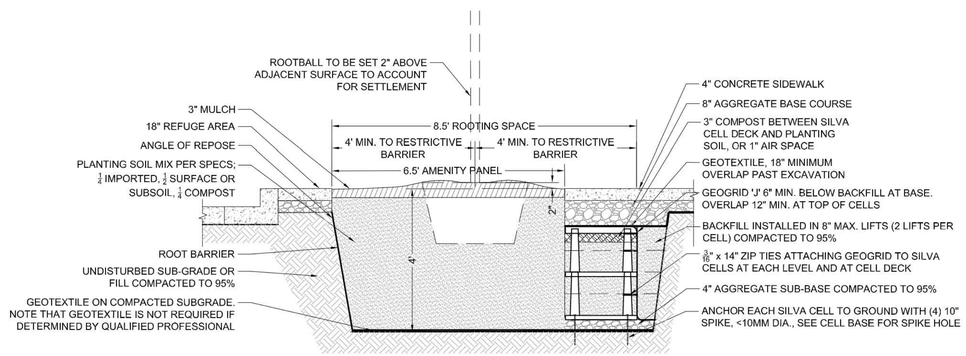
SILVA CELLS TREE PIT



STREETSCAPE TREE PIT DETAIL
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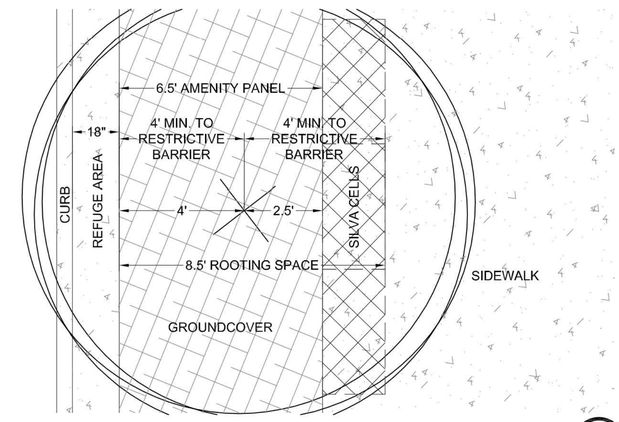

TREE PIT LAYOUT
NO SCALE
7

Schedule E- Ultimate Soil Cell Computations

9/6/2016

Tree Pit	Required Volume (cf)	Pit Area (sf)	Pit Area at 48" depth (cf)	Additional Area Needed (cf)	Number of Cells Required to Reach Area Required	Number of Cells Provided for Area Required	Number of Cells Provided to Reach 8' Root Area Required	Comments
Michael Faraday Drive Contiguous Panel #1								
1	500	198.84	795.36	-295.36	-29.54	0	1 @ 1 cell depth	500 cf. req. if 3+ trees in continuous planting area
2	500	168.35	673.40	-173.40	-17.34	0	1 @ 1 cell depth	500 cf. req. if 3+ trees in continuous planting area
3	500	168.44	673.76	-173.76	-17.38	0	1 @ 1 cell depth	500 cf. req. if 3+ trees in continuous planting area
4	500	155.42	621.68	-121.68	-12.17	0	1 @ 1 cell depth	500 cf. req. if 3+ trees in continuous planting area
5	500	161.30	645.20	-145.20	-14.52	0	1 @ 1 cell depth	500 cf. req. if 3+ trees in continuous planting area
Reston Station Boulevard Contiguous Panel #1								
6	700	158.19	632.76	67.24	6.72	7	No Additional	700 cf. req. if 1 tree in planting area
Reston Station Boulevard Contiguous Panel #2								
7	600	91.04	364.16	235.84	23.58	24	No Additional	600 cf. req. if 2 trees in a continuous planting area
8	600	92.97	371.88	228.12	22.81	24	No Additional	600 cf. req. if 2 trees in a continuous planting area
Reston Station Boulevard Contiguous Panel #3								
9	500	107.62	430.48	69.52	6.95	7	No Additional	500 cf. req. if 3+ trees in continuous planting area
10	500	110.25	441.00	59.00	5.90	6	No Additional	500 cf. req. if 3+ trees in continuous planting area
11	500	109.66	438.64	61.36	6.14	7	No Additional	500 cf. req. if 3+ trees in continuous planting area
12	500	107.67	430.68	69.32	6.93	7	No Additional	500 cf. req. if 3+ trees in continuous planting area
Reston Station Boulevard Contiguous Panel #4								
13	600	98.39	393.56	206.44	20.64	21	No Additional	600 cf. req. if 2 trees in a continuous planting area
14	600	91.32	365.28	234.72	23.47	24	No Additional	600 cf. req. if 2 trees in a continuous planting area
					Total Cells Provided	127	5	

*Silva cells to be placed at a minimum depth of 36"-48" unless otherwise noted.

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09.06.16
LANDSCAPE ARCHITECT

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Scale: AS SHOWN Date: September 6, 2016
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Drawing Title
Street Tree Soil Area

Drawing Number
7B of 12

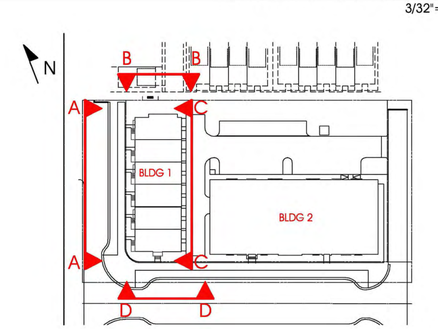
LPDA Project Number
1602-03

D BUILDING 1 RIGHT SIDE ELEVATION
3/32"=1'-0"

C BUILDING 1 REAR ELEVATION
3/32"=1'-0"

B BUILDING 1 LEFT SIDE ELEVATION
3/32"=1'-0"

A BUILDING 1 FRONT ELEVATION
3/32"=1'-0"



KEY PLAN

COMMONWEALTH OF VIRGINIA
JOHN W. RUST
Lic. No. 003940
07/08/16
ARCHITECT

RUST | ORLING
ARCHITECTURE

1215 CAMERON STREET
ALEXANDRIA, VA
22314

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admin@rustorling.com
www.rustorling.com

THE LOFTS AT RESTON STATION

1825 Michael Faraday Drive, Fairfax, VIRGINIA

15.003

REVISIONS

DATE	DESCRIPTION

GDP
07.08.16

BUILDING 1
ELEVATIONS

SHEET NO.

8 of 12

D

BUILDING 2 RIGHT SIDE ELEVATION
3/32"=1'-0"

C

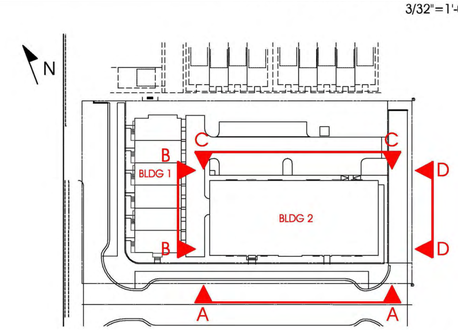
BUILDING 2 REAR ELEVATION
3/32"=1'-0"

B

BUILDING 2 LEFT SIDE ELEVATION
3/32"=1'-0"

A

BUILDING 2 FRONT ELEVATION
3/32"=1'-0"



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THE LOFTS AT RESTON STATION

1825 Michael Faraday Drive, Fairfax, VIRGINIA

15.003

REVISIONS

DATE	DESCRIPTION

GDP
07.08.16

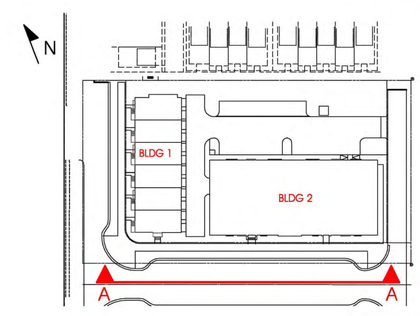
BUILDING 2
ELEVATIONS

SHEET NO.

8A of 12

A

RESTON STATION BLVD STREETSCAPE
3/32"=1'-0"



KEY PLAN

COMMONWEALTH OF VIRGINIA
JOHN W. RUST
Lic. No. 003940
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ARCHITECT

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THE LOFTS AT RESTON STATION

1825 Michael Faraday Drive, Fairfax, VIRGINIA

15.003

REVISIONS

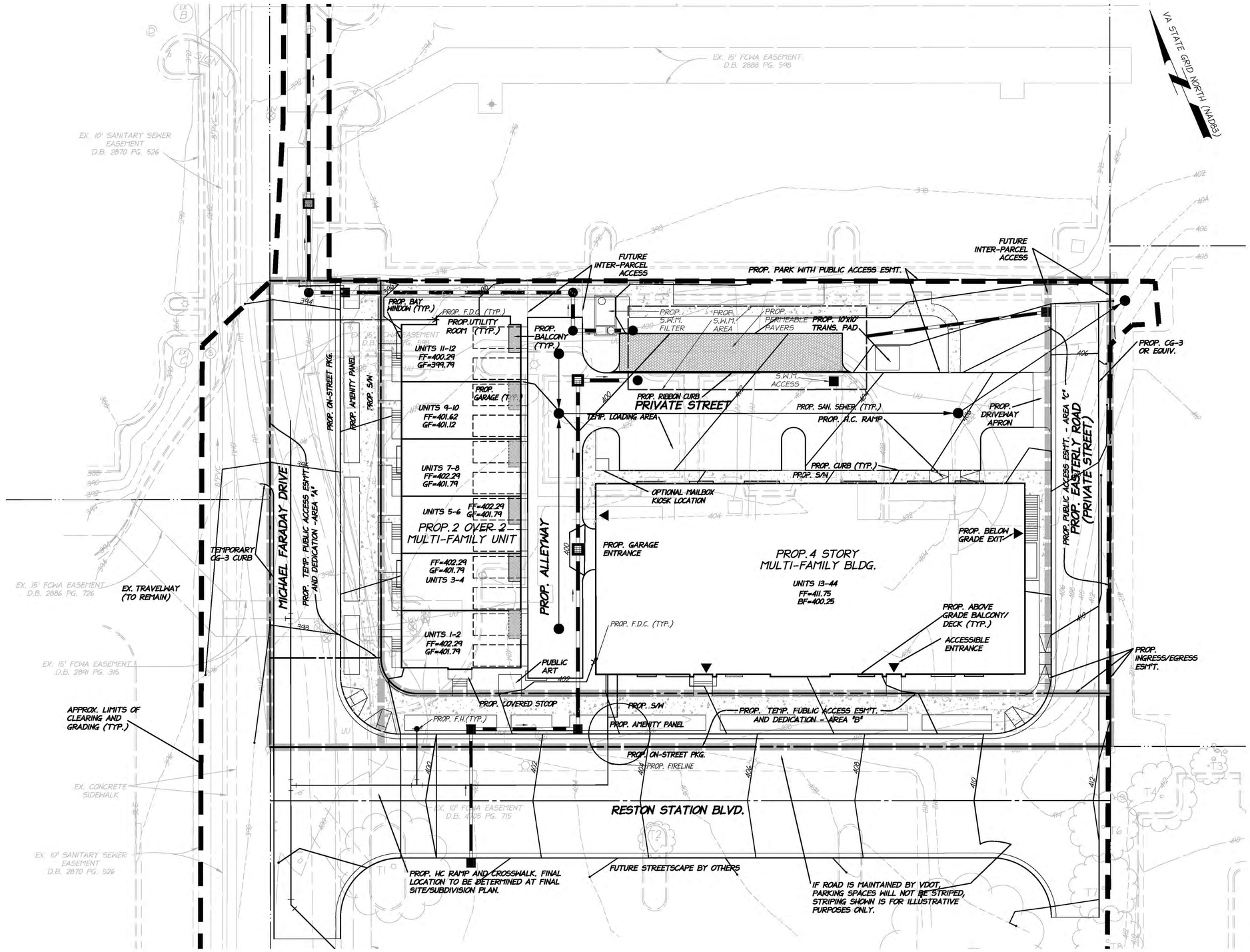
DATE	DESCRIPTION

GDP
07.08.16

RESTON STATION
BLVD STREETSCAPE

SHEET NO.

8B of 12



FOR ILLUSTRATIVE PURPOSES ONLY!

GRAPHIC SCALE

20 10 0 20 40

1" = 20'

LDC

4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

PRELIMINARY GRADING

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
6/2015	MTM 1	ADDRESS STAFF COMMENTS.			
1/7/2016	MTM 2	ADDRESS STAFF COMMENTS.			
2/2016	MTM 3	ADDRESS STAFF COMMENTS.			
4/22/16	MTM 4	ADDRESS STAFF COMMENTS.			
7/28/16	MTM 5	ADDRESS STAFF COMMENTS.			

REVISION APPROVED BY:

ENGINEER

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW E. MARSHALL
Lic. No. 1835-B
10/14/16
LAND SURVEYOR

SCALE:
1" = 20'

SHEET 9 OF 12

DATE: JUNE, 2015

DRAFT: WOR/JMB
CHECK: MTM

FILE NUMBER: 14019-1-1 3B

P:\PY 2014\14019-1-1 Michael Faraday Drive - 1825\ENG\GDP\14019_GDP.DWG

Drainage Area A

CLEAR BMP AREAS

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.16	0.16	0.25
Impervious Cover (acres)				0.90	0.90	0.95
				Total	1.06	

Total Phosphorus Available for Removal in D.A. A (lb/yr)	2.04
Post Development Treatment Volume in D.A. A (ft^3)	3,249

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

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
3. Permeable Pavement (RR)													
3.a. Permeable Pavement #1 (Spec #7)	45		0.03	0	47	57	103	25	0.00	0.06	0.04	0.03	14.b. MTD - Filtering
3.b. Permeable Pavement #2 (Spec #7)	75				0	0	0	25		0.00	0.00	0.00	
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	
14.b. Manufactured Treatment Device-Filtering	0	0.16	0.87	57	0	3,202	3,202	50	0.03	1.97	1.00	1.00	
14.c. Manufactured Treatment Device-Generic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	

TOTAL IMPERVIOUS COVER TREATED (ac)	0.90	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.16	AREA CHECK: OK.

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	0.86
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)	2.04
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	1.00
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.04
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)	1.04
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)	1.00

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

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)					0.00	0.00
Managed Turf (acres)				0.20	0.20	0.25
Impervious Cover (acres)				0.32	0.32	0.95
				Total	0.52	

Runoff Volume and Curve Number Calculations

Enter design storm rainfall depths (in):

1-year storm	2-year storm	10-year storm
2.62	3.17	4.87

Use NOAA Atlas 14 (http://hdsc.nws.noaa.gov/hdsc/pfds/)

***Notes (see below):**

[1] The curve numbers and runoff volumes computed in this spreadsheet for each drainage area are limited in their applicability for determining and demonstrating compliance with water quantity requirements. See VRRM User's Guide and Documentation for additional information.

[2] Runoff Volume (RV) for pre- and post-development drainage areas must be in volumetric units (e.g., acre-feet or cubic feet) when using the Energy Balance Equation. Runoff measured in watershed-inches and shown in the spreadsheet as RV(watershed-inch) can only be used in the Energy Balance Equation when the pre- and post-development drainage areas are equal. Otherwise RV(watershed-inch) must be multiplied by the drainage area.

[3] Adjusted CNs are based on runoff reduction volumes as calculated in D.A. tabs. An alternative CN adjustment calculation for Vegetated Roofs is included in BMP specification No. 5.

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 forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.16
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.90
	CN	98	98	98	98
					$CN_{(D.A. A)}$ 95

Total Area (acres):	1.06
Runoff Reduction Volume (ft^3):	47

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	2.08	2.62	4.29
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	2.07	2.60	4.28
Adjusted CN*	95	95	95

**See Notes above*

Drainage Area B		A Soils	B Soils	C Soils	D Soils
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	0.00	0.20
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	0.00	0.32
	CN	98	98	98	98
					$CN_{(D.A. B)}$ 91

Total Area (acres):	0.52
Runoff Reduction Volume (ft^3):	0

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	1.72	2.23	3.86
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	1.72	2.23	3.86
Adjusted CN*	91	91	91

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

BMP Design Specifications List: **2013 Draft Stds & Specs**

Update Summary Sheet

Print Preview | Print

Site Summary

Total Rainfall (in):	43
Total Disturbed Acreage:	2.70

Site Land Cover Summary

Pre-ReDevelopment Land Cover (acres)

	A soils	B Soils	C Soils	D Soils	Totals	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.58	0.58	37
Impervious Cover (acres)	0.00	0.00	0.00	1.00	1.00	63
					1.58	100

Post-ReDevelopment Land Cover (acres)

	A soils	B Soils	C Soils	D Soils	Totals	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.36	0.36	23
Impervious Cover (acres)	0.00	0.00	0.00	1.22	1.22	77
					1.58	100

Site Tv and Land Cover Nutrient Loads

	Final Post-Development (Post-ReDevelopment & New Impervious)	Post-ReDevelopment	Post-Development (New Impervious)	Adjusted Pre-ReDevelopment
Site Rv	0.79	0.76	0.95	0.76
Treatment Volume (ft^3)	4,534	3,775	759	3,775
TP Load (lb/yr)	2.85	2.37	0.48	2.37

Pre-ReDevelopment TP Load per acre (lb/acre/yr)	Final Post-Development TP Load per acre (lb/acre/yr)	Post-ReDevelopment TP Load per acre (lb/acre/yr)
1.74	1.80	1.74

Total TP Load Reduction Required (lb/yr)	0.86	0.47	0.39

Drainage Area A Summary

Land Cover Summary

	A Soils	B Soils	C Soils	D Soils	Total	% of Total
Forest/Open (acres)	0.00	0.00	0.00	0.00	0.00	0
Managed Turf (acres)	0.00	0.00	0.00	0.16	0.16	15
Impervious Cover (acres)	0.00	0.00	0.00	0.90	0.90	85
					1.06	

BMP Selections

Practice	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	BMP Treatment Volume (ft^3)	TP Load from Upstream Practices (lbs)	Untreated TP Load to Practice (lbs)	TP Removed (lb/yr)	TP Remaining (lb/yr)	Downstream Treatment to be Employed
3.a. Permeable Pavement #1 (Spec #7)		0.03	103.46	0.00	0.06	0.04	0.03	14.b. MTD - Filtering
14.b. Manufactured Treatment Device-Filtering	0.16	0.87	3,202.30	0.03	1.97	1.00	1.00	

Total Impervious Cover Treated (acres)	0.90
Total Turf Area Treated (acres)	0.16
Total TP Load Reduction Achieved in D.A. (lb/yr)	1.04
Total TN Load Reduction Achieved in D.A. (lb/yr)	0.27

FOR INFORMATIONAL PURPOSES ONLY!

THE INFORMATION PROVIDED ON THIS SHEET IS FOR INFORMATION PURPOSES ONLY. THE FINAL DESIGN OF THE STORMWATER MANAGEMENT/BEST MANAGEMENT PRACTICES FACILITY WILL OCCUR AT TIME OF FINAL SUBDIVISION/SITE PLAN. THE INFORMATION SHOWN HEREON IS APPROXIMATE. THE APPLICANT RESERVES THE RIGHT TO MAKE ADJUSTMENTS TO THIS INFORMATION AND THE DESIGN WITHOUT THE NEED FOR A PROFFER CONDITION AMENDMENT OR PROFFER INTERPRETATION, PROVIDED IT IS IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL.

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

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

Project Name:	The Lofts at Reston Station
Date:	29-Jul-16
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)* → 2.70

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0.22*
Post-Development TP Load Reduction for Site (lb/yr):	*0.86*

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, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.58	0.58
Impervious Cover (acres)				1.00	1.00
					1.58

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					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.36	0.36
Impervious Cover (acres)				1.22	1.22
Area Check	OK.	OK.	OK.	OK.	1.58

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)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.58	0.36
Weighted Rv(turf)	0.25	0.25
% Managed Turf	37%	26%
Impervious Cover (acres)	1.00	1.00
Rv(impervious)	0.95	0.95
% Impervious	63%	74%
Total Site Area (acres)	**1.58**	**1.36**
Site Rv	**0.69**	**0.76**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0913	0.0867
Pre-ReDevelopment Treatment Volume (cubic feet)	3,975	3,775
Pre-ReDevelopment TP Load (lb/yr)	**2.50**	**2.37**
Pre-reDevelopment TP Load per acre (lb/acre/yr)	1.58	1.74
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding previous land proposed for new impervious cover)		0.56

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

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

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

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)	
Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.36
Weighted Rv (turf)	0.25
% Managed Turf	23%
Impervious Cover (acres)	1.22
Rv(impervious)	0.95
% Impervious	77%
Final Site Area (acres)	**1.58**
Final Post Dev Site Rv	**0.79**

Land Cover Summary-Post	
Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.36
Weighted Rv (turf)	0.25
% Managed Turf	26%
ReDev. Impervious Cover (acres)	1.00
Rv(impervious)	0.95
% Impervious	74%
Total ReDev. Site Area (acres)	**1.36**
ReDev Site Rv	**0.76**

Land Cover Summary-Post	
Post-Development New Impervious	
New Impervious Cover (acres)	0.22
Rv(impervious)	0.95

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.1041	
Final Post-Development Treatment Volume (cubic feet)	4,534	
Final Post-Development TP Load (lb/yr)	**2.85**	
Final Post-Development TP Load per acre (lb/acre/yr)	1.80	

Post-ReDevelopment Treatment Volume (acre-ft)	0.0867	
Post-ReDevelopment Treatment Volume (cubic feet)	3,775	
Post-ReDevelopment Load (TP) (lb/yr)*	**2.37**	
Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.74	
Max. Reduction Required (Below Pre-ReDevelopment Load)	20%	
TP Load Reduction Required for Redeveloped Area (lb/yr)	**0.47**	

Post-Development Treatment Volume (acre-ft)	0.0174	
Post-Development Treatment Volume (cubic feet)	759	
Post-Development TP Load (lb/yr)	**0.48**	
TP Load Reduction Required for New Impervious Area (lb/yr)	**0.39**	

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	0.86

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)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.90	0.32	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.90	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.16	0.20	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.16	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3) 4,534

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)	47	0	0	0	0	47
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	2.04	0.81	0.00	0.00	0.00	2.85
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.04	0.00	0.00	0.00	0.00	1.04
TP LOAD REMAINING (lb/yr)	1.00	0.81	0.00	0.00	0.00	1.81
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.27	0.00	0.00	0.00	0.00	0.27

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	2.85
TP LOAD REDUCTION REQUIRED (lb/yr)	0.86
TP LOAD REDUCTION ACHIEVED (lb/yr)	1.04
TP LOAD REMAINING (lb/yr)	1.81
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

** TARGET TP REDUCTION EXCEEDED BY 0.18 LB/YEAR **

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

VRRM & STORMWATER MANAGEMENT CHECKLIST

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

NO.	DATE	DESCRIPTION	REVISION BY	APPROVED	DATE
1	6/22/15	ADDRESS STAFF COMMENTS.			
2	11/12/15	COUNTY COMMENTS			
3	3/28/16	COUNTY COMMENTS			
4	7/29/16	ADDRESS STAFF COMMENTS.			

ENGINEER

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW C. MARSHALL
Lic. No. 1535-B
10/14/16
LAND SURVEYOR

SCALE: N/A

SHEET 10 OF 12

DATE:

DRAFT: WOR/JMB | CHECK: MTM

FILE NUMBER: 14019-1-1 3B

OUTFALL NARRATIVE

THE SUBJECT PROPERTY IS LOCATED WITHIN THE DIFFICULT RUN WATERSHED. THE SUBJECT PROPERTY MAINTAINS ONE STORM DRAINAGE OUTFALL. THERE ARE NO EXISTING FLOODPLAIN OR RPA AREAS ON THE SUBJECT PROPERTY. AS A RESULT OF THE DEVELOPMENT OF THE SUBJECT PROPERTY AN INCREASE IN RUNOFF WILL BE EXPERIENCED. AN UNDERGROUND STORM WATER MANAGEMENT (SWM) SYSTEM IS PROPOSED TO MEET DETENTION REQUIREMENTS AND THE POST DEVELOPED DISCHARGE FROM THE SITE SHALL BE LESS THAN THE PRE-DEVELOPED DISCHARGE. CHANNEL & FLOOD PROTECTION REQUIREMENTS SHALL BE MET AS OUTLINED IN FAIRFAX COUNTY CODE SECTION 124-4-4(b)(3)a & (c)(4). THE LAYOUT OF THE SITE HAS BEEN DESIGNED TO MINIMIZE THE IMPACTS TO DOWNSTREAM PROPERTIES. AS STATED ABOVE, THE POST DEVELOPED DISCHARGES FROM THE SITE SHALL BE LESS THAN THE PRE-DEVELOPED DISCHARGES AND THE INTENT SHALL BE TO MAINTAIN THE EXISTING DRAINAGE PATTERNS AND TO NOT HAVE A NEGATIVE IMPACT ON ADJACENT PROPERTIES. NO DOWNSTREAM WATER IMPOUNDMENTS ARE WITHIN THE INFLUENCE AREA OF THE PROPOSED PROJECT AND NO BATHYMETRIC NOTIFICATIONS OR SURVEYS ARE REQUIRED.

OUTFALL #1
THE UNDERGROUND SWM SYSTEM DISCHARGES INTO A PROPOSED STORM SEWER SYSTEM AND THEN INTO AN EXISTING STORM SEWER SYSTEM NEAR THE INTERSECTION OF MICHAEL FARADAY DRIVE AND SUNSET HILL ROAD. STORMWATER MANAGEMENT AND BEST MANAGEMENT PRACTICES FOR THE SITE ARE PROVIDED BY THE UNDERGROUND SWM SYSTEM AND WATER QUALITY FACILITIES (SEE "STORMWATER MANAGEMENT INFORMATION" ON THIS SHEET FOR SWM SYSTEM AND WATER QUALITY FACILITY INFORMATION). THE DOWNSTREAM RECEIVING CHANNEL IS THE EXISTING STORM SEWER SYSTEM NEAR THE INTERSECTION OF MICHAEL FARADAY DRIVE AND SUNSET HILLS ROAD. THE PROPOSED AND EXISTING STORM SEWER SYSTEMS ACT AS A DEFINED CHANNEL FROM THE PROPERTY THROUGH THE EXTENT OF REVIEW PER CODE SECTIONS 124-4-4(b)(4) & (6)a.

THIS OUTFALL CONVEYS 1.58 ACRES OF DRAINAGE FROM THE SUBJECT PROPERTY IN THE PRE-DEVELOPED CONDITION. AS A RESULT OF THE CONSTRUCTION OF THE PROPOSED UNDERGROUND SWM SYSTEM WITHIN THIS DRAINAGE SHED, DETENTION OF THE 1, 2 & 10 YEAR STORM EVENT WILL BE PROVIDED. ADEQUATE OUTFALL, CHANNEL & FLOOD PROTECTION REQUIREMENTS FOR THIS OUTFALL ARE PROPOSED TO BE MET AS OUTLINED IN FAIRFAX COUNTY CODE SECTION 124-4-4(b)(3)a & (c)(4). STORAGE OF THE APPROPRIATE 1, 2, & 10 YEAR 24 HOUR STORM VOLUMES WILL BE PROVIDED IN THE PROPOSED UNDERGROUND SWM SYSTEM AND THE DISCHARGE FROM THE SITE SHALL BE REDUCED BY THE REQUIRED PROPORTIONAL IMPROVEMENT AMOUNT OUTLINED IN THE CODE SECTIONS. THE SITE AREA AT THE POINT WHERE THE PROPOSED STORM SEWER SYSTEM DISCHARGES FROM THE PROPERTY IS 1.58 ACRES AND THE FIRST AREA FOR OUTFALL ANALYSIS IS 2.3 ACRES. AT THE POINT WHERE THE EXISTING STORM SEWER SYSTEM JOINS WITH ANOTHER STORM SEWER SYSTEM TO CROSS SUNSET HILLS ROAD A POINT OF CONFLUENCE IS REACHED AS OUTLINED IN FAIRFAX COUNTY CODE SECTIONS 124-4-4(b)(6)c & (c)(6)d AS THE OTHER EXISTING STORM SEWER SYSTEM HAS A DRAINAGE AREA GREATER THAN 90% OF THE FIRST DRAINAGE AREA FOR THE OUTFALL. THIS IS THE EXTENT OF REVIEW FOR THE OUTFALL AND A DEFINED CHANNEL EXISTS THROUGHOUT THE EXTENT OF REVIEW. ADEQUATE OUTFALL, CHANNEL & FLOOD PROTECTION REQUIREMENTS FOR THIS OUTFALL HAVE BEEN MET IN ACCORDANCE WITH CODE SECTIONS 124-4-4(b)(3)a & (c)(4) AND 124-4-4(b)(6)c & (c)(6)d.

THE PROPOSED AND EXISTING STORM SEWER SYSTEMS SHALL ACT AS THE OUTFALL FOR OUTFALL #1. THE EXISTING STORM SEWER SYSTEM DISCHARGES ACROSS SUNSET HILLS ROAD AND THEN CONTINUES WITHIN AN EXISTING DRAINAGE SYSTEM ±400 DOWNSTREAM TO A NATURAL CHANNEL, THEN CONTINUES TOWARD THE NORTH WHERE THE NATURAL CHANNEL JOINS WITH COLVIN RUN. AT THE POINT WHERE THE NATURAL CHANNEL JOINS WITH COLVIN RUN THE TOTAL DRAINAGE AREA IS 750 ACRES WHICH IS GREATER THAN 100 TIMES THE SITE AREA DISCHARGING TOWARD OUTFALL #1 (1.58 AC.).

IT IS OUR PROFESSIONAL OPINION THAT ALL ADEQUATE OUTFALL REQUIREMENTS HAVE BEEN MET IN ACCORDANCE WITH THE PFM & COUNTY CODE.

DRAINAGE DIVIDE DIVERSION STATEMENT:

THE PROJECT IS LOCATED WITHIN THE DIFFICULT RUN WATERSHED. MINOR CHANGES IN THE NATURAL DRAINAGE PATTERNS ARE PROPOSED AS A PART OF THIS PROJECT. THE CHANGES ARE INTENDED TO ASSIST IN COLLECTING STORMWATER DISCHARGE IN ORDER TO MEET DETENTION, BMP & ADEQUATE OUTFALL REQUIREMENTS AS OUTLINED IN THE PFM. DETENTION RELEASE RATE COMPUTATIONS SHALL BE PROVIDED ON THE SUBDIVISION PLAN THAT DEMONSTRATE THAT THE POST DEVELOPED FLOW FROM THE PROPERTY IS LESS THAN THE PREDEVELOPED AND NO ADVERSE IMPACTS WILL BE EXPERIENCED BY ANY DOWNSTREAM PROPERTIES. NO CHANGES ARE PROPOSED TO ANY MAJOR DRAINAGE SHED DIVIDES. THESE MINOR DIVERSIONS WITHIN AN INDIVIDUAL MAJOR WATERSHED AREA ARE ALLOWED PER PFM SECTION 6-0202.2A.

PRE-DEVELOPMENT SUBJECT PROPERTY

Q_1 = 1.24 CFS (TR-55)

Q_2 = 1.86 CFS (TR-55)

Q_{10} = 4.01 CFS (TR-55)

POST-DEVELOPMENT SUBJECT PROPERTY

Q_1 = ±0.51 CFS AFTER ATTENUATION (±60% REDUCTION PROVIDED)

Q_2 = ±0.88 CFS AFTER ATTENUATION (±50% REDUCTION PROVIDED)

Q_{10} = ±2.41 CFS AFTER ATTENUATION (±40% REDUCTION PROVIDED)

STORMWATER MANAGEMENT NARRATIVE

THE STORM WATER MANAGEMENT REQUIREMENTS FOR THE SUBJECT PROPERTY SHALL BE SATISFIED VIA THE CONSTRUCTION OF AN UNDERGROUND DETENTION FACILITY AND WATER QUALITY FACILITIES. THESE FACILITIES SHALL BE DESIGNED IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL (PFM) AND SHALL PROVIDE STORAGE IN STONE, PLASTIC CHAMBER, MODULAR CONCRETE UNITS AND/OR EQUIVALENT BELOW GROUND. THE QUALITY FACILITIES ARE PROPOSED TO BE A MANUFACTURED FILTERING DEVICE AND PERMEABLE PAVERS AS APPROVED BY DEQ. THE APPLICANT RESERVES THE RIGHT TO INCORPORATE INFILTRATION PRACTICES SUBJECT TO APPROVAL BY THE COUNTY.

THE DETENTION FACILITY HAS BEEN DESIGNED FOR THE 10 YEAR 24 HOUR STORM IN ORDER TO PROVIDE DETENTION FOR THE 1, 2 & 10 YEAR STORM EVENTS AND TO PROVIDE THE REQUIRED REDUCTIONS IN RUNOFF. THE SITE CURRENTLY HAS AN EXISTING BUILDING, PAVED SURFACES, GRASS, AND A FEW TREES. CURRENTLY, APPROXIMATELY 4.0 CFS OF RUNOFF IS LEAVING THE SUBJECT PROPERTY UNCONTROLLED AND UNTREATED DURING THE 10 YEAR 24 HOUR STORM. CHANNEL AND FLOOD PROTECTION REQUIREMENTS WILL BE MET BY THE APPLICATION OF FAIRFAX COUNTY CODE SECTIONS 124-4-4(b)(3)a & 124-4-4(c)(4) WHICH WILL INCLUDE REDUCTIONS IN RUNOFF FROM THE DEVELOPMENT AREA (SEE OUTFALL ANALYSIS, THIS SHEET). WITH THE PROPOSED ATTENUATION, THE POST DEVELOPMENT RUNOFF WILL NOT EXCEED THE REDUCED PRE-DEVELOPMENT RUNOFF. THEREFORE, THERE WILL BE NO ADVERSE IMPACTS TO DOWNSTREAM PROPERTIES AS A RESULT OF THE PROPOSAL. THE DETENTION FACILITY HAS BEEN SIZED TO PROVIDE WATER QUANTITY CONTROL FOR THE SUBJECT PROPERTY.

THE WATER QUALITY FACILITIES HAVE BEEN DESIGNED TO MEET THE PHOSPHORUS REMOVAL REQUIREMENTS FOR THE SUBJECT PROPERTY AS OUTLINED IN THE PFM AND FAIRFAX COUNTY CODE 124-4-3.. THE WATER QUALITY FACILITIES ARE PROPOSED TO BE A MANUFACTURED FILTERING DEVICE AND PERMEABLE PAVERS AS APPROVED BY DEQ.

THE ENVIRONMENTAL STEWARDSHIP GOALS OF THE RESTON COMPREHENSIVE PLAN HAVE BEEN ADDRESSED BY REDUCING THE 2 YEAR 24 HOUR PEAK RUNOFF RATE BY 50%, WHICH IS GREATER THAN THE 25% GOAL OF THE PLAN. ALSO, LID TECHNIQUES HAVE BEEN INCORPORATED BY THE INCLUSION OF THE PERMEABLE PAVERS, WHICH HELP THE PROJECT EXCEED THE PHOSPHORUS REMOVAL TARGET BY 0.18 LBS. ADDITIONALLY, THE NATURE OF THE DETENTION SYSTEM WILL DELAY THE ENTRY OF THE RUNOFF INTO THE DOWNSTREAM STORM DRAINAGE SYSTEM WHICH WILL HELP LESSEN THE STRESS ON THE DOWNSTREAM SYSTEM.

A VRRM SPREADSHEET IS PROVIDED ON SHEET 10 TO DEMONSTRATE THAT THE PROPOSED WATER QUALITY FACILITIES PROVIDE WATER QUALITY CONTROL FOR THE PROJECT.

THE FINAL DESIGN OF THE DETENTION AND WATER QUALITY FACILITIES IS SUBJECT TO FURTHER REVIEW AND FINAL ENGINEERING. ALL MAINTENANCE SHALL BE CONDUCTED IN ACCORDANCE WITH THE PFM AND MANUFACTURER'S RECOMMENDATIONS.

THE FACILITIES SHALL BE MAINTAINED BY THE CONDOMINIUM ASSOCIATION AND THE MAINTENANCE SHALL BE PERFORMED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS.

THE FACILITIES SHALL COMPLY WITH ALL QUALITY AND QUANTITY REQUIREMENTS AS SET FORTH IN THE PFM AND OTHER APPLICABLE REGULATIONS.

STORMWATER MANAGEMENT CHECKLIST

MINIMUM STORMWATER INFORMATION FOR REZONING, SPECIAL EXCEPTION, SPECIAL PERMIT AND DEVELOPMENT PLAN APPLICATIONS

The following information is required to be shown or provided in all zoning applications, or a waiver request of the submission requirement with justification shall be attached. Note: Waivers will be acted upon separately. Failure to adequately address the required submission information may result in a delay in processing this application.

This information is required under the following Zoning Ordinance Sections:

Special Permits (Sect. 8-011 2J & 2L)	Special Exceptions (Sect. 9-011 2J & 2L)
Cluster Subdivision (Sect. 9-615 1G & 1N)	Commercial Revitalization Districts (Sect. 9-622 2A (12) & (14))
Development Plans PRC District (Sect. 16-302 3 & 4L)	PRC Plan (Sect. 16-303 1E & 1 O)
FDP P Districts (Sect. 16-502 1A (6) & (17))	Amendments (Sect. 18-202 10F & 10I)

☒ 1. Plat is at a minimum scale of 1"=50' (Unless it is depicted on one sheet with a minimum scale of 1"=100')

☒ 2. A graphic depicting the stormwater management facility(ies) and limits of clearing and grading accommodate the stormwater management facility(ies), storm drainage pipe systems and outlet protection, pond spillways, access roads, site outfalls, energy dissipation devices, and stream stabilization measures as shown on Sheet(s) 3.
If infiltration is proposed the soils should be tested for suitability prior to submission of the development plan and results of the infiltration test provided as part of the description of the facility.

☒ 3. Provide:

Facility Name/ Type & No. (E.g. dry pond, infiltration trench, underground vault, etc...)	On-site area served (acres)	Off-site area served (acres)	Drainage area (acres)	Footprint area (sf)	Storage volume (cf)	If pond, dam height (ft.)
UG SWM	±1.06	±0.40	±1.46	±3,500 SF	±12,000 CF	
STORMFILTER	±1.06	N/A	±1.06	±50 SF	N/A	
PERM. PAVERS	±0.03	N/A	±0.03	±1,500 SF	±100 CF	
Totals:	±1.06	±0.40	±1.46	N/A	±12,100 CF	

☒ 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet(s) 2 and 3. Pond inlet and outlet pipe systems are shown on Sheet(s) N/A.

☒ 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet(s) 3.
Type of maintenance access road surface noted on the plat is ASPHALT (asphalt, geoblock, gravel, etc.)

☒ 6. Landscaping and tree preservation in and near the stormwater management facility is shown on Sheet(s) 6A & 7.

☒ 7. Stormwater management and BMP narratives including Virginia Runoff Reduction Spreadsheet and descriptions of how detention and best management practices requirements will be met are provided on Sheet(s) 10-10B.

☒ 8. A description of existing conditions of each numbered site outfall extended downstream from the site to a point which is at least 100 times the site area or which has a drainage area of at least one square mile (640 acres) is provided on Sheet(s) 10A. If the outfall is proposed to be improved off-site it should be specifically noted.

☒ 9. A detailed description and analysis of how the channel protection requirements and flood protection requirements of each numbered outfall will be satisfied per Stormwater Management Ordinance and Public Facilities Manual are provided on Sheet(s) 10-10A.

☒ 10. Existing topography with maximum contour intervals of two (2) feet and a note as to whether it is an air survey or field run is provided on Sheet(s) 2, 3.

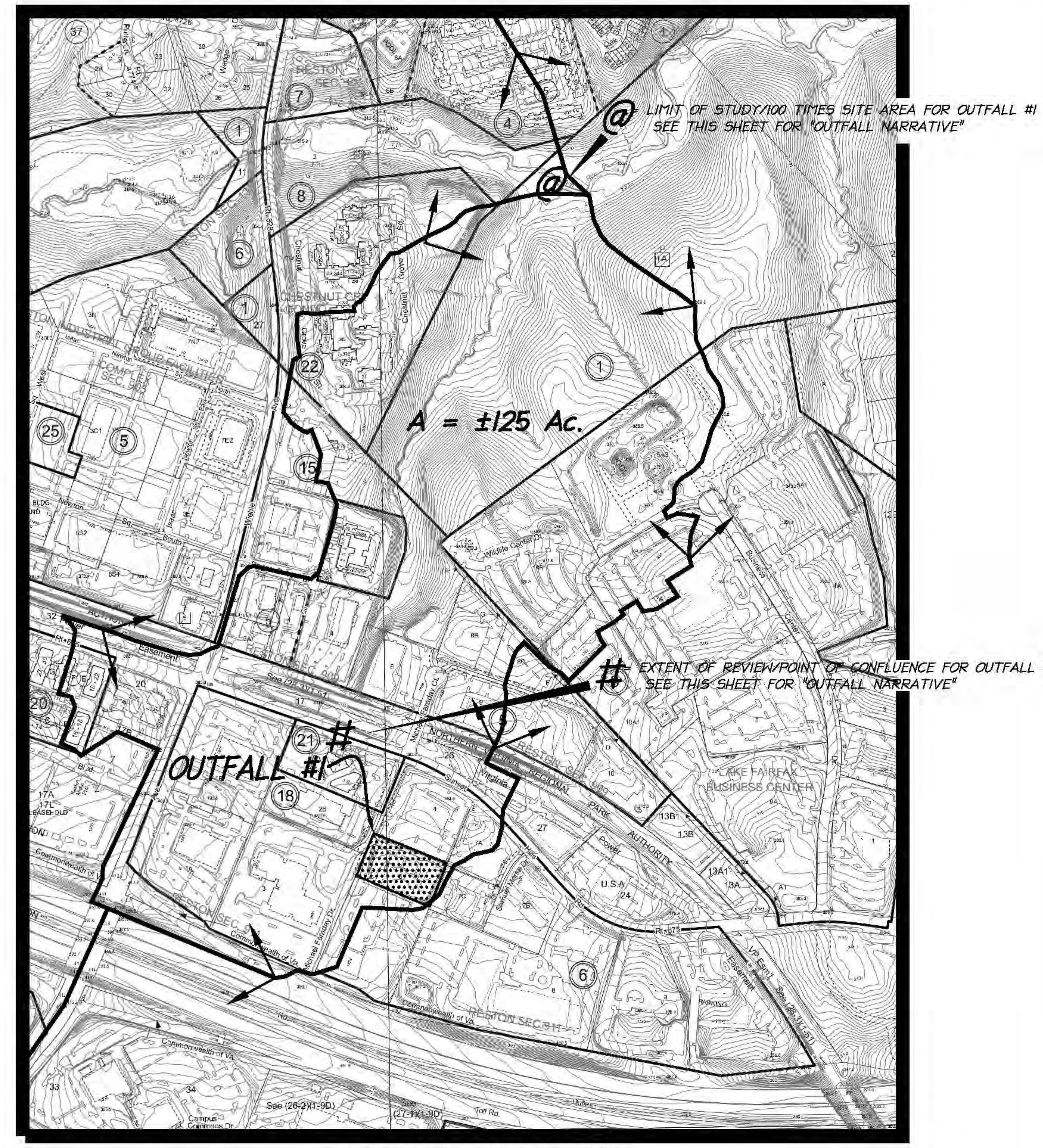
☐ 11. A submission waiver is required for N/A.

☒ 12. Stormwater management is not required because N/A.

Revised: 8/4/2015

FOR INFORMATIONAL PURPOSES ONLY!

THE INFORMATION PROVIDED ON THIS SHEET IS FOR INFORMATION PURPOSES ONLY. THE FINAL DESIGN OF THE STORMWATER MANAGEMENT/BEST MANAGEMENT PRACTICES FACILITY WILL OCCUR AT TIME OF FINAL SUBDIVISION/SITE PLAN. THE INFORMATION SHOWN HEREON IS APPROXIMATE. THE APPLICANT RESERVES THE RIGHT TO MAKE ADJUSTMENTS TO THIS INFORMATION AND THE DESIGN WITHOUT THE NEED FOR A PROFFER CONDITION AMENDMENT OR PROFFER INTERPRETATION, PROVIDED IT IS IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL.



DRAINAGE AREA MAP

SCALE : 1" = 400'

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

SWM INFORMATION

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN	NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
6/2015	MM	1	ADDRESS STAFF COMMENTS.			
1/7/2016	MM/WOR	2	COUNTY COMMENTS			
3/2016	MM/WOR	3	COUNTY COMMENTS			
7/08/16	MM	4	ADDRESS STAFF COMMENTS.			

ENGINEER REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1525-B
10/14/16
LAND SURVEYOR

SCALE:

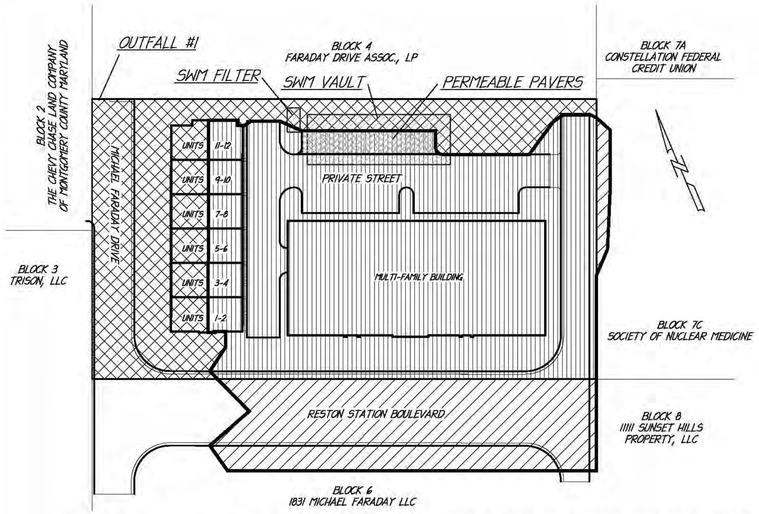
SHEET 10A OF 12

DATE:

DRAFT: WOR/JMB CHECK: MTM

FILE NUMBER: 14019-1-1 3B

P:\PY 2014\14019-1-1 Michael Faraday Drive - 1825\ENG\GDP\14019_SWM.dwg

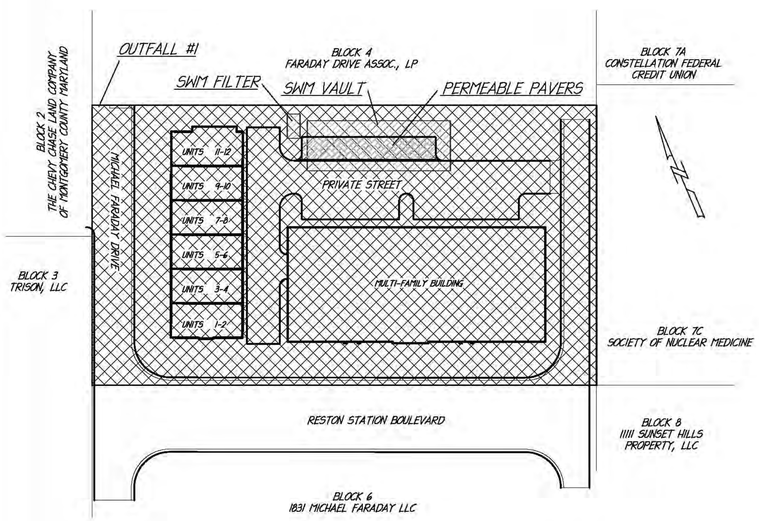


BMP & POST DEVELOPED AREA MAP 1"=50'

WATER QUALITY/BMP & POST DEVELOPED AREAS

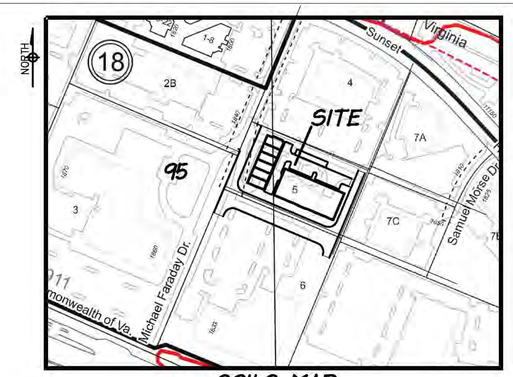
WATERSHED INFORMATION:

SUBAREA DESIGNATION AND DESCRIPTION	CN	ACRES	BMP MAP HATCH
D.A. "A" - DEVELOPED W/ CONTROLS (SWM VAULT/FILTER, & PER. PAVERS TO OUTFALL #1)	95	1.06	
D.A. "B" - DEVELOPED W/OUT CONTROLS (OUTFALL #1)	91	0.52	
OFFSITE AREA DRAINING TO SWM VAULT (OUTFALL #1)	92	0.40	



AREA DESCRIPTION	ACRES	CN	MAP HATCH
PREDEVELOPED SITE AREA TO OUTFALL #1 (EX. FORESTED CONDITION)	1.58	77	

PREDEVELOPED DRAINAGE AREA MAP 1"=50'



SOILS MAP

SCALE : 1" = 200'

SOIL INFORMATION

SOIL #	SOIL NAME	PROBLEM CLASS	FOUNDATION SUPPORT	DRAINAGE	EROSION POTENTIAL	HYDROLOGIC SOIL GROUP
95	URBAN LAND	IVB	N/A	N/A	N/A	D

1, 2, & 10 YR. RUNOFF VOLUME COMP. (EX. FORESTED CONDITION)

PER CHAPTER 5 - VIRGINIA SWM HANDBOOK VOLUME II
1. RAINFALL DEPTH (P) FOR FAIRFAX COUNTY = 2.62 IN (1 YR), 3.17 IN (2 YR), 4.87 IN (10 YR)
2. SOILS DRAINING TO OUTFALL ARE HYDROLOGIC SOIL GROUP "D"
(SEE THIS SHEET FOR SOILS MAP)
3. WEIGHTED CN FOR GOOD FORESTED CONDITION FOR SOIL GROUP "D" = 77
4. TOTAL AREA DRAINING TO OUTFALL #1 IN EXISTING CONDITION = 1.58 ACRES
5. S = (1000/CN) -10 = (1000/77) - 10 = 2.99

1 YEAR:
6. RUNOFF Q = ((P-.2S)^2)/(P + .8S) = ((2.62 - .2(2.99))^2)/(2.62 + .8(2.99)) = 0.82 IN
7. RUNOFF VOLUME = RVf = AREA*RUNOFF Q = 1.58 AC * (0.82 IN/(1 FT/12 IN)) = 0.108 AC-FT

2 YEAR:
6. RUNOFF Q = ((P-.2S)^2)/(P + .8S) = ((3.17 - .2(2.99))^2)/(3.17 + .8(2.99)) = 1.19 IN
7. RUNOFF VOLUME = RVf = AREA*RUNOFF Q = 1.58 AC * (1.19 IN/(1 FT/12 IN)) = 0.157 AC-FT

10 YEAR:
6. RUNOFF Q = ((P-.2S)^2)/(P + .8S) = ((4.87 - .2(2.99))^2)/(4.87 + .8(2.99)) = 2.51 IN
7. RUNOFF VOLUME = RVf = AREA*RUNOFF Q = 1.58 AC * (2.51 IN/(1 FT/12 IN)) = 0.331 AC-FT

1, 2, & 10 YR. RUNOFF VOLUME COMP. (DEVELOPED)

PER CHAPTER 5 - VIRGINIA SWM HANDBOOK VOLUME II
1. RAINFALL DEPTH (P) FOR FAIRFAX COUNTY = 2.62 IN (1 YR), 3.17 IN (2 YR), 4.87 IN (10 YR)
2. SOILS DRAINING TO OUTFALL ARE HYDROLOGIC SOIL GROUP "D"
(SEE THIS SHEET FOR SOILS MAP)

1 YEAR:
3. ADJUSTED CN FOR SITE FOR SOIL GROUP "D" = 94
(SEE VRRM SPREADSHEET)
4. TOTAL DEVELOPMENT AREA DRAINING TO OUTFALL #1 = 1.58 ACRES
5. S = (1000/CN) - 10 = (1000/94) - 10 = 0.64
6. RUNOFF Q = ((P-.2S)^2)/(P + .8S) = ((2.62 - .2(0.64))^2)/(2.62 + .8(0.64)) = 1.98 IN
7. RUNOFF VOLUME = RVd = AREA*RUNOFF Q = 1.58 AC * (1.98 IN/(1 FT/12 IN)) = 0.261 AC-FT

2 YEAR:
3. ADJUSTED CN FOR SITE FOR SOIL GROUP "D" = 94
(SEE VRRM SPREADSHEET)
4. TOTAL DEVELOPMENT AREA DRAINING TO OUTFALL #1 = 1.58 ACRES
5. S = (1000/CN) - 10 = (1000/94) - 10 = 0.64
6. RUNOFF Q = ((P-.2S)^2)/(P + .8S) = ((3.17 - .2(0.64))^2)/(3.17 + .8(0.64)) = 2.51 IN
7. RUNOFF VOLUME = RVd = AREA*RUNOFF Q = 1.58 AC * (2.51 IN/(1 FT/12 IN)) = 0.331 AC-FT

10 YEAR:
3. ADJUSTED CN FOR SITE FOR SOIL GROUP "D" = 94
(SEE VRRM SPREADSHEET)
4. TOTAL DEVELOPMENT AREA DRAINING TO OUTFALL #1 = 1.58 ACRES
5. S = (1000/CN) - 10 = (1000/94) - 10 = 0.64
6. RUNOFF Q = ((P-.2S)^2)/(P + .8S) = ((4.87 - .2(0.64))^2)/(4.87 + .8(0.64)) = 4.18 IN
7. RUNOFF VOLUME = RVd = AREA*RUNOFF Q = 1.58 AC * (4.18 IN/(1 FT/12 IN)) = 0.550 AC-FT

REDUCTION REQUIRED FOR CHANNEL & FLOOD PROTECTION PER CODE SECTION 124-4-4(b)(3)a & (c)(4):
Qallow = Qexforest * (RVf/RVd)
SEE DETENTION RELEASE RATE COMPUTATIONS ON THIS SHEET FOR REDUCTIONS.

DETENTION RELEASE RATES:

PREDEVELOPMENT SITE CONDITIONS - DEVELOPMENT AREA:

EXISTING ONSITE DEVELOPMENT AREA
##SEE PREDEVELOPMENT DRAINAGE AREA MAP(THIS SHEET)##

FOR 1-YEAR CHANNEL PROTECTION PER 124-4-4(b)(3)a USE:
AREA= 1.58 AC., Tc = 0.24 HR, CN= 77 (EXISTING FORESTED)

1 YEAR STORM (59% REDUCTION REQUIRED, SEE VOL. COMP. THIS SHEET)
CN= 77, Tc= 0.24 HR, A= 1.58 AC (FROM TR-55 RESULTS)
Qexforest= 1.24 CFS, Qallow = 1.24*(.108/.261) = 0.51 CFS

FOR 2 & 10-YEAR FLOOD PROTECTION PER 124-4-4(b)(4) USE:
AREA= 1.58 AC., Tc = 0.24 HR, CN= 77 (EXISTING FORESTED)

2 YEAR STORM (53% REDUCTION REQUIRED, SEE VOL. COMP. THIS SHEET)
CN= 77, Tc= 0.24 HR, A= 1.58 AC (FROM TR-55 RESULTS)
Qexforest= 1.86 CFS, Qallow = 1.86*(.157/.331) = 0.88 CFS

10 YEAR STORM (40% REDUCTION REQUIRED, SEE VOL. COMP. THIS SHEET)
CN= 77, Tc= 0.24 HR, A= 1.58 AC (FROM TR-55 RESULTS)
Qexforest= 4.01 CFS, Qallow = 4.01*(.331/.550) = 2.41 CFS

POST DEVELOPMENT SITE CONDITIONS - DEVELOPMENT AREA:

ONSITE DEVELOPMENT AREA DRAINING OFF UNCONTROLLED.
SWM SYSTEM (1.06 AC ON-SITE) PROVIDES DETENTION FOR
THE 1, 2, & 10 YEAR STORM EVENTS FOR THE CONTROLLED AREA.
TOTAL POST DRAINAGE ON-SITE AREA = 1.58 AC
##SEE POST DEVELOPMENT DRAINAGE AREA MAP(THIS SHEET)##
UNCONTROLLED AREA = 0.52 AC, CN= 91, Tc = 0.10 MIN.

1 YEAR STORM
CN= 91, Tc= 0.10 HR, A= 0.52 AC (FROM TR-55 RESULTS)
Q= 1.17 CFS

2 YEAR STORM
CN= 91, Tc= 0.10 HR, A= 0.52 AC (FROM TR-55 RESULTS)
Q= 1.50 CFS

10 YEAR STORM
CN= 91, Tc= 0.10 HR, A= 0.52 AC (FROM TR-55 RESULTS)
Q= 2.50 CFS

OFFSITE CONTROLLED BY SWM SYSTEM:

!!THIS AREA IS BEING CONTROLLED TO OFFSET THE ON-SITE UNCONTROLLED AREA!!
##SEE POST DELEVOPED DRAINAGE AREA MAP(THIS SHEET) FOR AREA DESCRIPTIONS##
1, 2, & 10 YEAR CONTROLLED AREA = 0.40 AC, CN= 92, Tc = 0.14 MIN.

1 YEAR STORM
CN= 92, Tc= 0.14 HR, A= 0.40 AC (FROM TR-55 RESULTS) Q=0.88 CFS

2 YEAR STORM
CN= 92, Tc= 0.14 HR, A= 0.40 AC (FROM TR-55 RESULTS) Q=1.11 CFS

10 YEAR STORM
CN= 92, Tc= 0.14 HR, A= 0.40 AC (FROM TR-55 RESULTS) Q=1.84 CFS

TOTAL ALLOWED RELEASE FROM SWM SYSTEM:

ALLOWABLE DISCHARGE TO OUTFALL - POST DEVELOPMENT UNCONTROLLED +
OFFSITE CONTROLLED BY SWM SYSTEM = ALLOWABLE RELEASE RATE FROM SWM SYSTEM

1 YEAR STORM
Q= 0.51 - 1.17 + 0.88 = 0.22 CFS ALLOWABLE RELEASE RATE FROM SWM SYSTEM
##1 YEAR RELEASE RATE FROM SWM SYSTEM SHALL BE LESS THAN 0.22 CFS ALLOWABLE##
RESULT:
##CHANNEL PROTECTION REDUCTION PROVIDED PER CODE SECTION 124-4-4(b)(3)a##

2 YEAR STORM
Q= 0.88 - 1.50 + 1.11 = 0.49 CFS ALLOWABLE RELEASE RATE FROM SWM SYSTEM
##2 YEAR RELEASE RATE FROM SWM SYSTEM SHALL BE LESS THAN 0.49 CFS ALLOWABLE##
RESULT:
##FLOOD PROTECTION REDUCTION PROVIDED PER CODE SECTION 124-4-4(c)(4)##

10 YEAR STORM
Q= 2.41 - 2.50 + 1.84 = 1.75 CFS ALLOWABLE RELEASE RATE FROM SWM SYSTEM
##10 YEAR RELEASE RATE FROM SWM SYSTEM SHALL BE LESS THAN 1.75 CFS ALLOWABLE##
RESULT:
##FLOOD PROTECTION REDUCTION PROVIDED PER CODE SECTION 124-4-4(c)(4)##

ESTIMATED VOLUME REQUIRED TO DETAIN 10 YEAR STORM = 12,000 CF
DETAILED SWM SYSTEM COMPUTATIONS WILL BE PROVIDED WITH THE SITE PLAN.

SEE SHEET 10 FOR VRRM SPREADSHEET
SEE SHEETS 10A & 10B FOR DRAINAGE AREA MAPS & SWM COMPUTATIONS

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-880-4585 FX: 703-880-4775

SWM MAPS & COMPUTATIONS

THE LOFTS AT RESTON STATION
HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

REV.	DATE	DESIGN	NO.	DESCRIPTION	REVIEW	APPROVED	DATE

ENGINEER
REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1885-B
10/14/16
LAND SURVEYOR

SCALE:
AS SHOWN

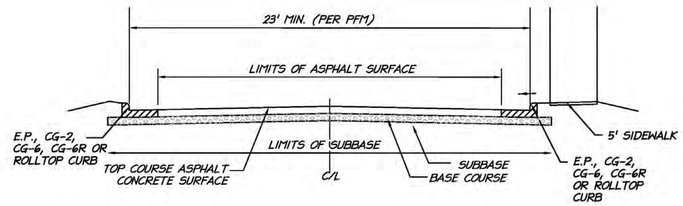
SHEET 10B OF 12

DATE:

DRAFT: WOR/JMB
CHECK: MTM

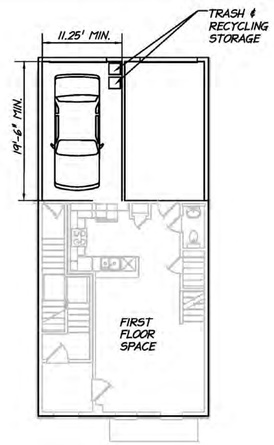
FILE NUMBER: 14019-1-1 3B

P:\PY 2014\14019-1-1 Michael Faraday Drive - 1825\ENG\GDP\14019_SWM.dwg



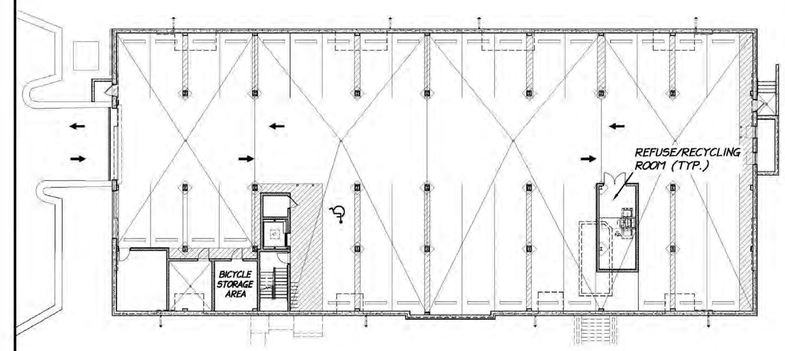
TYPICAL ALLEYWAY AND PRIVATE STREET SECTIONS

N.T.S.



TYPICAL 2-OVER-2 GARAGE PLAN

N.T.S.



TYPICAL MULTI-FAMILY GARAGE PLAN

N.T.S.

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

NOTES AND DETAILS

THE LOFTS AT RESTON STATION

HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
12.2015	CTV/JDR	1. COUNTY COMMENTS			
11.2016	CTV/JDR	2. COUNTY COMMENTS			
4.2016	MTM	3. ADDRESS STAFF COMMENTS			
7.2016	MTM	4. ADDRESS STAFF COMMENTS			
10.2016	MTM	5. ADDRESS STAFF COMMENTS			

REVISION APPROVED BY:

ENGINEER

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1325-B
10/14/16
LAND SURVEYOR

SCALE:
AS SHOWN

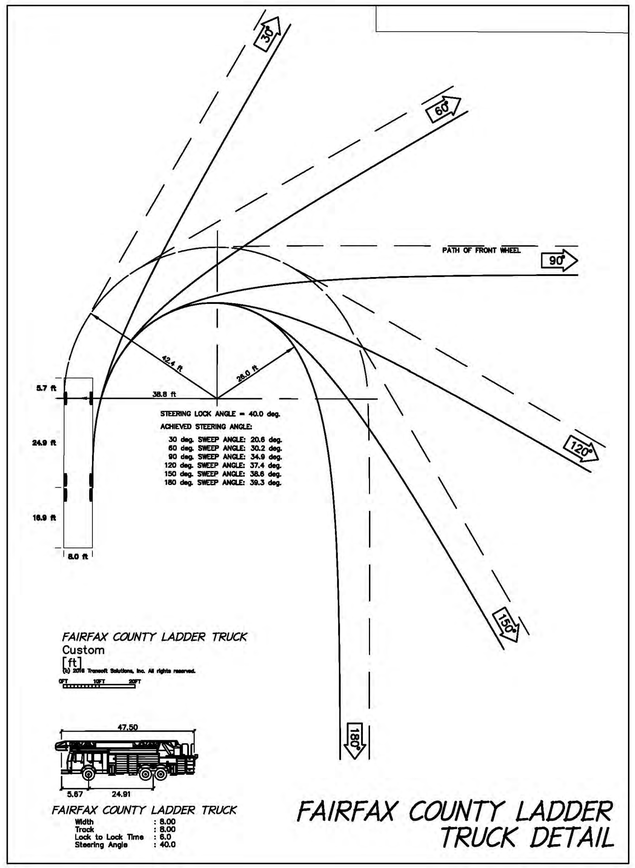
SHEET 11 OF 12

DATE: JUNE, 2015

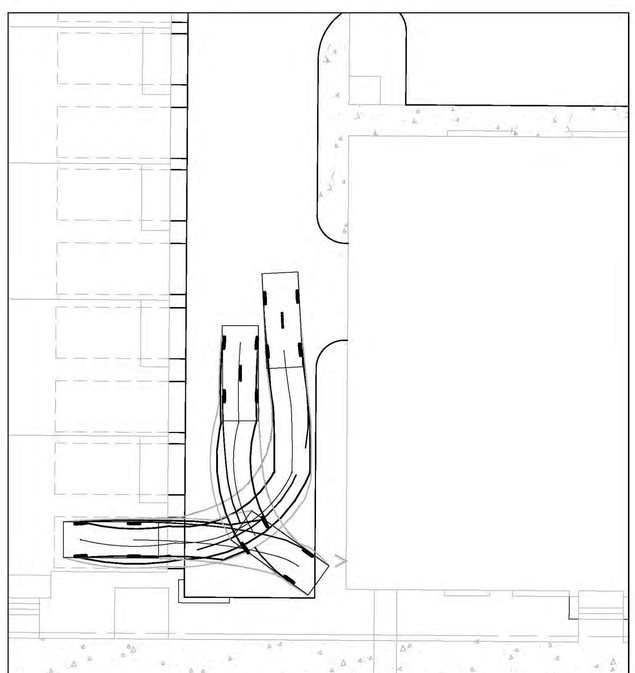
DRAFT: WOR/JMB
CHECK: MTM

FILE NUMBER: 14019-1-1 3B

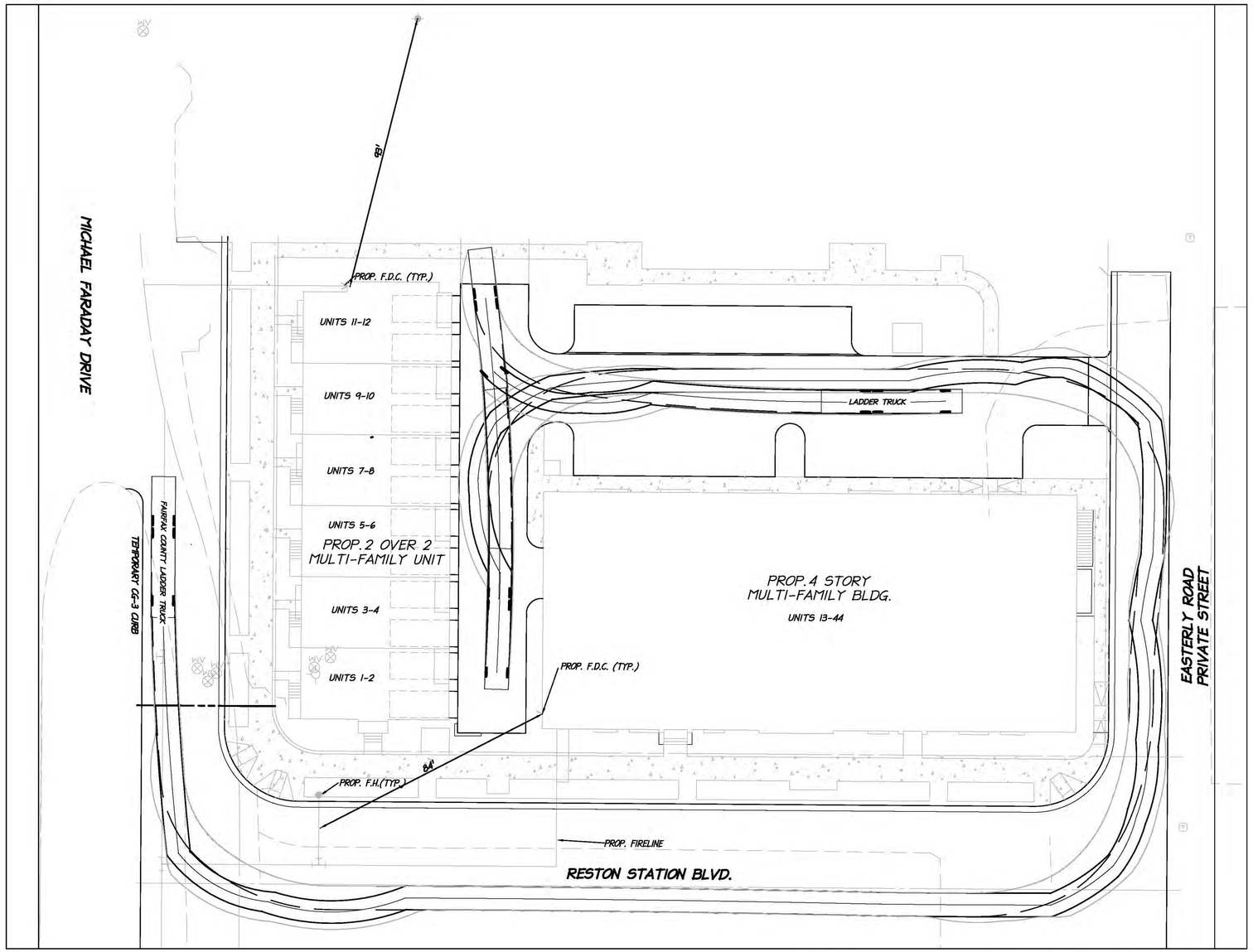
P:\PY 2014\14019-1-1 Michael Faraday Drive - 1825\ENG\GDP\



FAIRFAX COUNTY LADDER TRUCK DETAIL



DRIVEWAY VEHICLE MOVEMENT



FAIRFAX COUNTY LADDER TRUCK MOVEMENT

NOTE:
ALL AREAS IDENTIFIED AS FIRE LANES, FIRE DEPARTMENT TURNAROUNDS, FIRE DEPARTMENT ACCESS AREAS OR OTHER RESTRICTED AREAS WILL HAVE BOLLARDS, PAINT, SIGNAGE AND OTHER REQUIRED IDENTIFICATION INSTALLED AS REQUIRED PRIOR TO STRUCTURE OCCUPANCY.

GRAPHIC SCALE
20 10 0 20 40
1" = 20'

LDC
4585 DAISY REID AVENUE, SUITE 201 WOODBRIDGE, VIRGINIA 22192
PH: 703-680-4585 FX: 703-680-4775

AUTOTURN EXHIBIT

THE LOFTS AT RESTON STATION
HUNTER MILL DISTRICT
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED	DATE
7/08/16	MTM	1 ADDRESS STAFF COMMENTS.			

ENGINEER REVISION APPROVED BY:

I HEREBY CERTIFY THAT OTHER THAN THE REVISIONS SHOWN HEREON, NO OTHER CHANGES HAVE BEEN MADE.

COMMONWEALTH OF VIRGINIA
MATTHEW T. MARSHALL
Lic. No. 1935-B
10/14/16
LAND SURVEYOR

SCALE:
1" = 20'

SHEET 12 OF 12

DATE: JUNE, 2015

DRAFT: WOR/JMB | CHECK: MTM

FILE NUMBER: 14019-1-1 3B

P:\PY 2014\14019-1-1 Michael Faraday Drive - 1625\ENG\GDP\

REASON FOR THE ADDENDUM

The applicant, Pulte Home Corporation, continues to request rezoning of approximately 1.58 acres from the I-4 (Medium Intensity Industrial) District to the R-30 (Residential, 30 dwelling units/acre) District to permit the development of 44 multi-family dwelling units at a density of 27.8 dwelling units per acre (du/ac). Twelve of the units will be in a stacked townhouse (2-over-2) format and 32 units will be in a multi-family building.

Subsequent to the Planning Commission public hearing on September 29, 2016 and decision on October 5, 2016, the applicant has revised the open space tabulations on Sheet 1A to indicate that the application provides 25 percent open space, where previously the tabulation indicated that 19 percent would be provided. No modifications have been made to the layout; rather the calculations have been revised based on the gross site area after the proposed right-of-way dedication. The Generalized Development Plan (GDP) titled, "The Lofts at Reston Station" was prepared by LDC, and consists of 24 sheets dated February 2015, as revised through October 14, 2016, a reduced copy of which is included at the front of this report.

Revisions to the Proffers (Attachment 1)

The applicant has submitted proffers dated October 17, 2016, with the following revisions as compared to the proffers dated September 13, 2016 which were included in the Staff Report:

- Proffer 1 – The date of the GDP has been updated.
- Proffer 9B – The provision regarding the vacation of existing easements has been revised to add a timing of prior to final bond release. The statement that the applicant shall have no obligation to get Michael Faraday Drive accepted as a public street has been modified to state that the applicant shall cooperate in such efforts.
- Proffer 10B – The same revisions as stated above for Proffer 9B regarding Michael Faraday Drive have been made to this proffer regarding Reston Station Boulevard.
- Proffer 13 – The contribution amount for the Reston Road Fund has been inserted as not to exceed $2,288 per dwelling unit.

ANALYSIS

<u>Open Space</u>

The minimum open space standard for the R-30 District is 40 percent, or 26 percent for developments under the affordable dwelling unit standards, which includes the provision of Workforce Dwelling Units. The Zoning Administration Division has interpreted that the gross area for the purpose of calculating open space is based on the total area of the

application property after deduction of the area to be dedicated for public right-of-way. Par. 6 of Sect. 2-309 states that no open space credit shall be given for lands which are included in or reserved for the right-of-way of any street. Therefore, while no credit would be given for the area to be dedicated, including the landscape amenity panel, neither would it be included in the site area for the purpose of calculating the minimum required open space. The applicant has revised the open space calculations based on this interpretation to indicate that the application provides 25 percent open space. The applicant has stated that the gross area of the site after right-of-way dedication for Reston Station Boulevard and Michael Faraday Drive would be 53,078 square feet, resulting in a requirement for 13,800 square feet of open space. The applicant proposes to provide 13,260 square feet of open space. Staff acknowledges that the reduction of 540 square feet is not a substantial amount; however, as the layout has not been modified, our concern regarding the quality of site design as it relates to the location and configuration of the open space remains outstanding.

The Comprehensive Plan stresses the importance of urban parks in the Reston area. The Wiehle Station Transit Oriented Development District recommendations state that "*redevelopment should integrate urban parks that are linked by the new street grid to provide places for people of all ages to walk and enjoy outdoor spaces*."[1] The Transit-Oriented Development guideline for open space states that development should "*provide publicly-accessible, high-quality, usable open space. Urban parks and open space contribute to a development's sense of place and are integral amenities offered to residents, workers and shoppers. Transit-oriented development plans should provide amenities such as public gathering spaces, civic focal points, plazas and open green space and offer a variety of activities such as dining, casual games and recreation, performances, visual arts and special events. These spaces should be accessible to the larger community as well as the immediate transit-oriented development area*."[2] In staff's opinion, the open space is poorly located and not inviting from the public street system and would therefore not serve its intended function as publicly-accessible open space, and does not fulfill the objectives of the Comprehensive Plan.

<u>Proffers</u>

The proposed minor revisions to Proffers 9B and 10B are in response to staff suggestions. Proposed Proffer 13 for the Reston Road Fund is consistent with the language recently reviewed by the Planning Commission for other applications in the vicinity and $2,288 represents the highest contribution amount currently under consideration.

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[1] Fairfax County Comprehensive Plan, Area III, Reston, 2013 Edition, as amended through October 20, 2015, pages 153 – 154.

[2] Fairfax County Comprehensive Plan, Policy Plan, Land Use Appendix 11, Guidelines for Transit-Oriented Development, as amended through April 29, 2014, page 38.

Trash and Recycling System

The applicant provided a letter and an exhibit on October 5, 2016 which clarified the trash and recycling collection procedure. The exhibit shows that a garbage truck could park without blocking the entrance to the multi-family building or impeding circulation on the alleyway. The applicant has indicated that collection would occur twice weekly and would likely take 15 to 20 minutes. The additional information presented is helpful to illustrate the extent to which trash and recycling collection would impact on-site circulation. Based on this information, it appears that vehicles would not be able to enter or exit units 7 and 8 for up to 20 minutes, twice weekly.

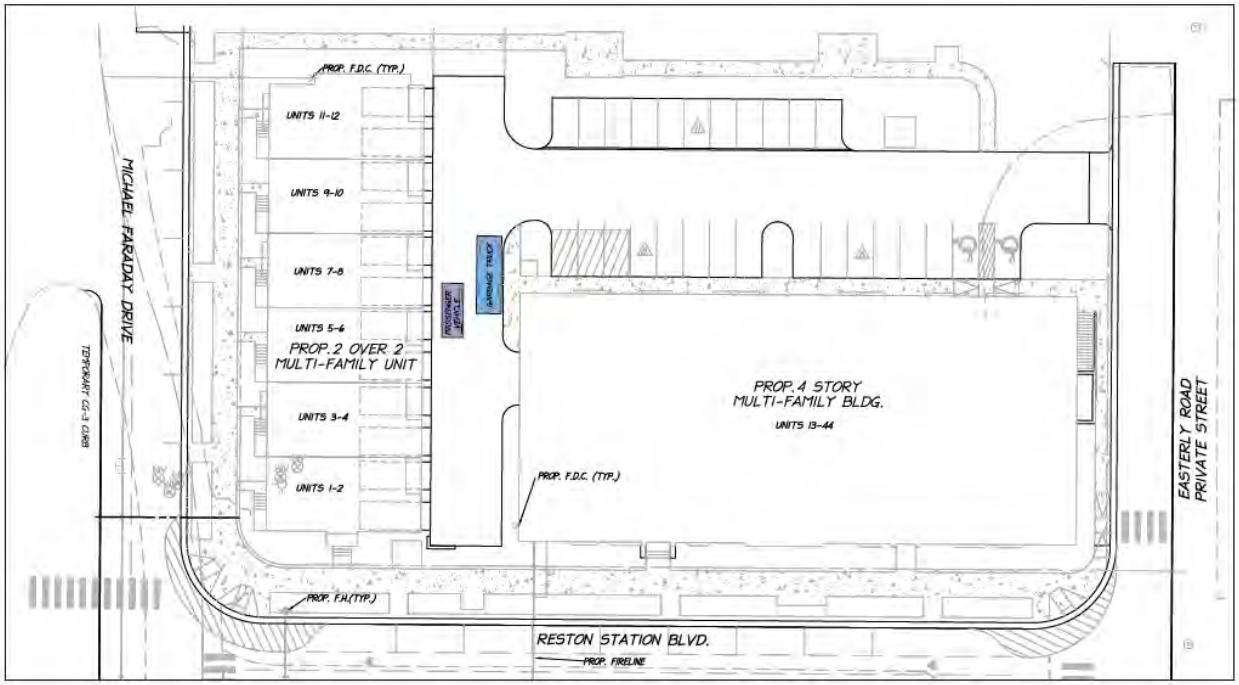

Figure 1 – Vehicle Access Exhibit

In lieu of a central dumpster, the applicant has requested a modification of Sects. 10-0303.2 and 10-0306 of the Public Facilities Manual regarding the provision of a recycling system for their residents as well as the design standards and guidelines for trash and recycling. Staff recognizes that the impacts to site circulation are limited to units 7 and 8; however, we continue to recommend that the applicant reconsider the layout to provide for a trash and recycling collection procedure that would not result in adverse impacts to circulation.

CONCLUSIONS AND RECOMMENDATIONS

Staff Conclusions

Although the revised open space tabulations and information regarding trash and recycling collection are helpful, the applicant has not revised the site design and staff's concerns remain outstanding. The layout could be revised in various ways to provide for

publicly-accessible, high-quality, usable open space and a convenient trash and recycling system. Staff concludes that the application as proposed is not in conformance with the Comprehensive Plan and all applicable Zoning Ordinance provisions. As discussed in the Staff Report dated September 13, 2016, staff does not support the requested waivers of the minimum district size and open space requirements of the Zoning Ordinance, nor the modification of the trash and recycling system standards of the Public Facilities Manual.

Recommendations

Staff recommends denial of RZ 2015-HM-005, as proposed. However, if it is the Board's intent to approve RZ 2015-HM-005, staff recommends that such approval be subject to the execution of proffers consistent with those contained in Attachment 1.

If it is the Board of Supervisors' intent to approve RZ 2015-HM-005 as proposed, it should be subject to approval of the following waivers and modifications:

- Waiver of the minimum district size of 3 acres, pursuant to Section 3-3006 of the Zoning Ordinance, to permit a district size of 1.58 acres.

- Modification of the minimum front yard requirement of 15 feet and 20° angle of bulk plane, pursuant to Section 3-3010 of the Zoning Ordinance, to permit 8 feet and 8° angle of bulk plane.

- Modification to permit encroachments into the minimum front yard, pursuant to Paragraph 1C of Section 2-412 of the Zoning Ordinance to within 2 feet of the property line.

- Modification of the minimum open space requirement of 26 percent, pursuant to Section 3-3010 of the Zoning Ordinance, to permit 19 percent open space.

- Waiver of the loading requirement of 2 spaces, pursuant to Section 11-202 of the Zoning Ordinance.

- Modification of the design standards and guidelines for trash and recycling, pursuant to Sections 10-0303.2 and 10-0306 of the Public Facilities Manual to permit the storage of containers within garages as shown on the Generalized Development Plan.

- Deviation from the tree preservation target pursuant to Section 12-0508 of the Public Facilities Manual.

It should be noted that it is not the intent of the staff to recommend that the Board, in adopting any conditions proffered by the owner, relieve the applicant/owner from compliance with the provisions of any applicable ordinances, regulations, or adopted

standards. The approval of this application does not interfere with, abrogate or annul any easements, covenants, or other agreements between parties, as they may apply to the property subject to this application.

It should be further noted that the content of this report reflects the analysis and recommendation of staff; it does not reflect the position of the Board of Supervisors.

ATTACHMENT: Proffers dated July 7, 2015, revised October 17, 2016

LOFTS AT RESTON STATION
PROFFER STATEMENT
RZ 2015-HM-005

July 7, 2015
Revised October 17, 2016

Pursuant to Section 15.2-2303 (A) of the Code of Virginia (1950, as amended) and Sect. 18-204 of the Zoning Ordinance of Fairfax County (1978, as amended) (the "Zoning Ordinance"), the property owner and applicant, for themselves and their successors and assigns (the "Applicant"), in this rezoning application proffer that the development of the parcel under consideration and shown on the Fairfax County Tax Map as 18-3 ((6)) 5 (the "Property") shall be in accordance with the following conditions ("Proffers") if, and only if, RZ 2015-HM-005 (the "Application") for the R-30 District is granted. In the event that this Application is denied, these Proffers shall be immediately null and void and of no further force or effect.

GENERAL

1. General Development Plan. The Property shall be developed in substantial conformance with the General Development Plan ("GDP") dated February, 2015, and revised through October 14, 2016, prepared by Land Design Consultants, and consisting of 24 sheets. Notwithstanding the foregoing, there are several sheets in the GDP that are noted as "Illustrative" and development according to those sheets shall be in general conformance with those sheets and not need to meet the Zoning Ordinance definition of "Substantial Conformance".

2. Minor Modifications. Minor modifications to the GDP may be permitted pursuant to Section 18-204 of the Zoning Ordinance as determined by the Zoning Administrator.

PROPOSED DEVELOPMENT

3. Proposed Development. The development proposed with this Application shall include up to 44 multi-family dwelling units (the "Proposed Development").

4. Building Height. The building height for the Proposed Development shall not exceed the maximum building height of 60 feet as shown on Sheet 1 of the GDP. Notwithstanding the foregoing, however, nothing shall preclude the Applicant from constructing the Proposed Development to a lesser building height than that which is represented on the GDP, provided the configuration of the building footprints, and the urban character of the buildings, remain in substantial conformance with those shown on the GDP.

5. Declarations and Owners' Associations. The Applicant may record a declaration and/or establish owners' associations for all or any portion of the Property as follows:

   A. Umbrella Owners' Association. At any time, the Applicant may record a declaration and/or establish an Umbrella Owners' Association (the "UOA") for the Property to address the general maintenance and other obligations (including

stormwater management, roads, parking, and landscaping) of the owner(s) (and their successors and assigns), including the fulfillment of these Proffers. If recorded or established, the declaration and/or UOA documents shall identify the maintenance or proffer obligations that will or are expected to fall principally on the owners or residents of any residential units. Such obligations shall be disclosed to the owners/residents in accordance with the terms of this proffer.

B. Homeowner and Condominium Owners' Association. In the event any of the residential units are held for sale, the Applicant shall cause either a homeowners association and/or a condominium owners association ("HOA/COA") to be formed for the residential units. If a declaration is recorded and/or a UOA is established for the Property, the HOA/COA shall be a member of the declaration and/or UOA.

C. Disclosures. The declaration establishing any UOA/HOA/COA on the Property (including budgets provided in any offering or sale materials) shall specify the proffer and maintenance conditions and obligations set forth in these Proffers. Purchasers shall be advised in writing of these proffer conditions and obligations prior to entering into a contract of sale.

D. Additional Associations. In addition to the UOA/HOA/COAs described above, the Applicant may join any existing associations, record any additional declarations, and/or establish any additional associations as may be deemed necessary or desirable by the Applicant.

NOISE ATTENUATION

6. Noise Attenuation. The Applicant shall provide an acoustical analysis at the time of site plan submission that evaluates existing and future traffic and noise sources at least twenty-five (25) years into the future. Phasing of the Proposed Development and the proposed final site topography and conditions as shown on the site plan (rather than existing topography and conditions) should be a factor included in the acoustical analysis. The acoustical analysis shall be submitted to the Environment and Development Review Branch ("EDRB") of the Department of Planning & Zoning ("DPZ") and to the Department of Public Works & Environmental Services ("DPWES") for review. If the acoustical analysis concludes that new residential units will be affected by noise levels that require mitigation as described below, then the noise contours shall be shown on the site plan to ensure that the appropriate noise mitigation is provided for the affected residential units, and the affected units and appropriate mitigation measures shall be identified on the building plans.

i. In order to reduce interior noise to a level of approximately 45 dBA Ldn, residential units anticipated by the acoustical analysis to be impacted by highway related noise having levels projected to be between 65 and 70 dBA Ldn, shall be constructed with the following acoustical measures:

a. Exterior walls shall have a laboratory sound transmission class ("STC") rating of at least 39;

b. Doors and glazing shall have a laboratory STC rating of at least 28 unless glazing constitutes more than 20% of any façade exposed to noise levels of 65 to 70 dBA Ldn;

c. If glazing constitutes more than 20% of an exposed façade, then the glazing shall have a laboratory STC rating of up to 39 as dictated by the percentage of glazing; and

d. All surfaces should be sealed and caulked in accordance with methods approved by the American Society for Testing and Materials ("ASTM") to minimize sound transmission.

ii. In order to reduce interior noise to a level of approximately 45 dBA Ldn, residential units anticipated by the acoustical analysis to be impacted by highway related noise having levels projected to be greater than 70 dBA Ldn, shall be constructed with the following acoustical measures:

a. Exterior walls shall have a laboratory STC rating of at least 45;

b. Doors and glazing shall have a laboratory STC rating of at least 37 unless glazing constitutes more than 20% of any façade exposed to noise levels above 70 dBA Ldn;

c. If glazing constitutes more than 20% of an exposed façade, then the glazing shall have a laboratory STC rating of up to 45 as dictated by the percentage of glazing; and

d. All surfaces shall be sealed and caulked in accordance with methods approved by the ASTM to minimize sound transmission.

iii. The Applicant shall provide noise attention measures as determined necessary based on the acoustical analysis to ensure that highway related noise shall not exceed 65 dBA Ldn in the outdoor recreation areas within the Property.

PARKING

7. Zoning Ordinance Parking and Loading Requirements. Parking shall be provided in accordance with the parking requirements of Article 11 of the Fairfax County Zoning Ordinance, as determined by DPWES, for the uses within the Proposed Development or as modified by the Board of Supervisors.

8. Future Parking Reductions. The Applicant may pursue a parking reduction for the Proposed Development, as may be permitted by Article 11 of the Fairfax County Zoning Ordinance and approved by the Board of Supervisors.

TRANSPORTATION

9. Michael Faraday Drive.

A. Temporary Public Access Easement. As part of the first site plan approval for the Proposed Development, the Applicant shall grant to the Board of Supervisors a temporary public access easement, in a form acceptable to the County Attorney, in the location shown as "Prop. Temp. Public Access Esm't. and Dedication – Area A" on Sheet 3 of the GDP, provided the Applicant has not already dedicated such area to the Board of Supervisors in fee simple in accordance with Proffer 9.B below. Such temporary public access easement shall terminate automatically upon the dedication of the area of such easement to the Board of Supervisors in fee simple in accordance with Proffer 9.B below.

B. Right-of-Way Dedication. Upon the written request of the County, the Applicant shall dedicate the right-of-way shown as "Prop. Temp. Public Access Esm't. and Dedication – Area A" on Sheet 3 of the GDP in fee simple to the Board of Supervisors for public street purposes. The Applicant shall use good faith efforts to pursue the vacation of the existing private ingress-egress easements recorded in Deed Book 2531, at Page 199, Deed Book 3006, at Page 605, and Deed Book 4775, at Page 139, prior to such right-of-way dedication to the Board of Supervisors and final bond release for the Proposed Development. The Applicant shall maintain such dedicated right-of-way area up to and until the time such portion of Michael Faraday Drive is accepted by VDOT as a public street. The Applicant shall cooperate in efforts by others to obtain VDOT acceptance of such portion of Michael Faraday Drive as a public street, provided that the Applicant shall not have the obligation to obtain acceptance by VDOT.

C. Construction of Half-Section of Michael Faraday Drive. The Applicant shall construct a one-half section of Michael Faraday Drive and the associated streetscape elements as shown on Sheet 3 of the GDP prior to the issuance of the first Residential Use Permit ("RUP") for the Proposed Development. Such one-half section shall consist of the pavement (but not any striping) for one-half of a center turn lane (5.5 feet), one travel lane (11 feet), one bike lane (5 feet), and one on-street parking lane (8 feet) for a total of 29.5 feet from the centerline of Michael Faraday Drive to the curb as shown on Sheet 4 of the GDP. Such streetscape elements shall consist of a landscape amenity panel (8 feet), a concrete sidewalk (8 feet), and a building zone (8 feet) for a total of 24 feet from the edge of pavement to the face of the adjacent residential building as shown on Sheet 4 of the GDP.

10. Reston Station Boulevard.

A. Temporary Public Access Easement. As part of the first site plan approval for the Proposed Development, the Applicant shall grant to the Board of Supervisors a temporary public access easement in the location shown as "Prop. Temp. Public Access Esm't. and Dedication – Area B" on Sheet 3 of the GDP, provided the

Applicant has not already dedicated such area to the Board of Supervisors in fee simple in accordance with Proffer 10.B below. Such temporary public access easement shall terminate automatically upon the dedication of the area of such easement to the Board of Supervisors in fee simple in accordance with Proffer 10.B below.

B. Right-of-Way Dedication. Upon the written request of the County, the Applicant shall dedicate the right-of-way shown as "Prop. Temp. Public Access Esm't. and Dedication – Area B" on Sheet 3 of the GDP in fee simple to the Board of Supervisors for public street purposes. The Applicant shall use good faith efforts to pursue the vacation of the existing private ingress-egress easements recorded in Deed Book 2531, at Page 199, Deed Book 3006, at Page 605, and Deed Book 4775, at Page 139, prior to such right-of-way dedication to the Board of Supervisors and final bond release for the Proposed Development. The Applicant shall maintain such dedicated right-of-way area up to and until the time such portion of Reston Station Boulevard is accepted by VDOT as a public street. The Applicant shall cooperate in efforts by others to obtain VDOT acceptance of such portion of Reston Station Boulevard as a public street, provided that the Applicant shall not have the obligation to obtain acceptance by VDOT.

C. Construction of Reston Station Boulevard. The Applicant shall obtain an agreement with the owner of Tax Map 18-3 ((6)) 6, and subject to such agreement the Applicant shall construct the full section of Reston Station Boulevard and the associated streetscape elements as shown on Sheet 3 of the GDP prior to the issuance of the first Residential Use Permit ("RUP") for the Proposed Development. Such full section shall consist of the pavement and striping for one on-street parking lane (11 feet), one bike lane (6 feet), two travel lanes (11 feet each), one bike lane (5 feet), and one on-street parking lane (8 feet) for a total of 52 feet from curb to curb as shown on Sheet 4 of the GDP. Such streetscape elements shall consist of a landscape amenity panel (8 feet), a concrete sidewalk (8 feet), and a building zone (8 feet) for a total of 24 feet from the edge of pavement to the face of the adjacent residential building along the north side of Reston Station Boulevard as shown on Sheet 4 of the GDP. The landscape amenity panel, sidewalk, and building zone along the south side of Reston Station Boulevard shall be provided by others.

11. Easterly Road.

A. Private Street with Public Access Easement. As part of the first site plan approval for the Proposed Development, the Applicant shall grant to the Board of Supervisors a public access easement in the location shown as "Prop. Public Access Esm't – Area C" as shown on Sheet 3 of the GDP.

B. Construction of Easterly Road. The Applicant shall construct the road along the eastern frontage of the Property and the associated streetscape as shown on Sheet 3 of the GDP prior to the issuance of the first RUP for the Proposed Development. Such road section shall consist of one travel lane (10 feet) in each direction for a

total of 20 feet as shown on Sheet 3 of the GDP. Prior to the issuance of the first RUP for the Proposed Development, the Applicant shall install signs at both the northern and southern ends of the Easterly Road indicating that the road will connect in the future.

C. Easement for Future Construction. Upon the written request of the County, the Applicant shall grant to the Board of Supervisors a temporary construction easement in the location shown as "Prop. Public Access Esm't – Area C" on Sheet 3 of the GDP for the purpose of allowing the future construction of improvements to the road along the eastern frontage of the Property by others.

12. Interparcel Access Easements. As part of the first site plan approval for the Proposed Development, the Applicant shall grant interparcel access easements, including ancillary grading and temporary construction easements, to the owner of the property identified on the Fairfax County Tax Map as 18-3 ((6)) 4 for a connection to the road along the eastern frontage of the Property and a connection to the internal driveway within the interior of the Property as shown on Sheet 3 of the GDP.

13. Reston Road Fund Contribution. The Applicant shall provide a contribution not to exceed $2,288 for each residential unit constructed on the Property based on the contribution rates established by the Board of Supervisors for the Reston Transportation Fund. The contribution shall be paid prior to the issuance of the first RUP for each residential building based on the actual number of residential units in each building. Should the Board of Supervisors approve a lesser per unit transportation contribution then that listed in this proffer, the Applicant shall be permitted to reduce its contribution to match the rate approved by the Board. The Applicant shall receive and deduct such credits against the contributions that would otherwise be due to the Reston Transportation Fund in keeping with the Guidelines for the Reston Transportation Fund to be approved by the Board of Supervisors.

14. Traffic Signal Contribution. Prior to the issuance of the first RUP for the Proposed Development, the Applicant shall contribute $44,478 to Fairfax County toward the anticipated costs ($300,000) associated with the future installation by others of a traffic signal at the intersection of Reston Station Boulevard and Michael Faraday Drive.

15. Streetscapes. Streetscaping shall be installed as conceptually illustrated on Sheets 3 and 7 of the GDP. Streetscape elements shall include: a landscape amenity panel located immediately behind the face of curb; a pedestrian sidewalk adjacent to the landscape amenity panel; and a building zone between the pedestrian sidewalk and the face of the building(s) that is designed to allow access to the building, steps, stoops, and/or additional landscaping. Streetscape elements may be adjusted at the time of site plan approval provided the quality of the streetscape and minimum sidewalks are consistent with that shown on Sheets 3 and 7 of the GDP.

A. Street Trees. Tree planting sites are set forth on Sheet 7 of the GDP, subject to revisions as may be approved at site plan review by the UFMD or necessitated by providing bus stop shelters, clear zone requirements, etc. The Applicant shall retain the services of a certified landscape architect, certified arborist or Registered Consulting Arborist to monitor the design and inspect the planting of

the street trees and shall notify UFMD in writing or by electronic mail no later than three business days prior to tree pit construction to allow for County inspection.

B. Utility Locations. Utilities, including, but not limited to water, sanitary sewer and storm sewer utility lines shall, to the maximum extent feasible, be installed in locations that do not conflict with the landscaped open space areas and streetscape elements shown on the GDP as determined by UFMD. If there is no other option, utilities may be placed within open space or streetscape areas provided that the long-term health of trees and other plantings is ensured by the provision of sufficient soil volume as determined by the UFMD.

C. Sight Distance Considerations. Sight distance requirements have been provided on the GDP so as to identify and avoid conflicts with street tree locations. If determined at the time of site plan review that street tree locations conflict with sight distance requirements, the Applicant shall investigate whether limited pruning or minor adjustments to the locations of street trees will alleviate sight distance concerns. In the event the Virginia Department of Transportation ("VDOT") does not approve the tree locations even after the changes anticipated above, the Applicant shall be permitted to relocate the affected street tree without the need for confirmation from DPZ, subject to approval by UFMD.

D. Maintenance. The Applicant, or any successor associations or equivalent once established, shall maintain and replace in kind all pedestrian realm elements within the Property. The pedestrian realm includes all areas between the back of curb and the back of the building zone whether located within the public right-of-way or on private land with public access easements. The Applicant shall enter into the appropriate agreement, in a form approved by the Office of the County Attorney, with the County (or other public entity, as needed) to permit the Applicant to perform such maintenance. Neither the Applicant nor any successor associations or equivalent shall be required to repair or restore any elements of the pedestrian realm within publicly-owned areas that are damaged by public contractors, or permittees that are not acting under the direct authority of the Applicant.

16. Bus Shelter Location. A bus stop/shelter location shall be evaluated for feasibility at the time of site plan approval in consultation with FCDOT along either the Michael Faraday Drive or Reston Station Boulevard frontage of the Property. The bus stop/shelter location may necessitate adjustments to street tree locations and other street furnishings from that shown on the GDP which shall be accommodated without the requirement for a PCA or an amendment to the GDP.

17. Bicycle Parking. As part of the first site plan approval for the Proposed Development, the Applicant shall designate on the site plan and install secure bicycle storage in locations convenient to the residential units. Such bicycle parking shall consist of one (1) long-term bicycle parking space for every three (3) residential units, or portion thereof, and one (1) short-term bicycle parking space for every 25 residential units, or portion thereof. Short-term bicycle

parking shall be located at a convenient location for visitors. Long-term bicycle parking shall be in a secure location such as a bicycle room, cage, locker, or other secure parking facility approved by FCDOT.

18. Transportation Demand Management Association. For the purpose of promoting alternatives to single-occupant vehicle ("SOV") travel, if a future transportation demand management association ("TDMA") is established for the properties accessing Reston Station Boulevard and Michael Faraday Drive, the Applicant and/or the successor HOA shall reasonably participate in or otherwise become associated with such TDMA. This obligation is subject to the applicable costs related to participation in the TDMA being allocated on a per unit pro-rated basis for residential units and being no greater than that imposed on similar ownership based HOAs that are also part of the same TDMA and subject to a further showing that the costs associated with the TDMA do not unreasonably limit the HOA's ability to perform its obligations as defined by these proffers or the applicable law. The Applicant and/or successor HOA's participation in the TDMA is anticipated to enhance the TDMA's efforts to reduce SOV travel within the TDMA area. The Applicant and/or successor HOA shall participate in TDMA efforts to identify and implement SOV trip reduction initiatives inclusive of the Application property. Should a TDMA be formed, they will be encouraged to join the Dulles Area Transportation Association (DATA) to further assist with and enhance SOV trip reduction efforts. The Applicant and/or successor HOA shall include these membership costs in the cost of the TDMA, subject to the cost allocation provisions discussed above. Participation in a future TDMA shall not subject the HOA or its individual members/owners to monetary penalties, if any, for non-compliance with the requirements of the TDMA.

PUBLIC ART

19. Public Art. The Applicant shall provide public art within the Property as part of the Proposed Development in consultation with the Initiative for Public Art – Reston ("IPAR"). The Applicant shall coordinate with IPAR to obtain its recommendations regarding the options for the Applicant's provision of public art, the type of public art to be provided, and the location of the public art within the Property. Following such consultation, the Applicant shall make the final determination regarding any public art to be provided within the Property. The Applicant shall provide the public art prior to the issuance of the first RUP for the second residential building for which the Applicant requests RUPs.

LANDSCAPING

20. Landscape Plan. The Applicant shall implement the landscape design for the Proposed Development shown on Sheet 7 of the GDP (the "Overall Landscape Plan"), which illustrates the plantings and other features to be provided with the Proposed Development. The Overall Landscape Plan is conceptual in nature and may be modified by the Applicant as part of final engineering and building design, provided that such modifications provide a similar quality of landscaping as that shown on the Overall Landscape Plan and the GDP, as determined by the Urban Forest Management Division of DPWES ("UFMD").

A. Native Species. The Applicant shall use native species to the extent practicable throughout the Proposed Development, provided that the Applicant reserves the

right, in consultation with and approval by UFMD, to modify as part of site plan approval for each building the exact species to be used, such as where some plant materials are not available or have been deemed by UFMD to no longer be appropriate.

B. Site Plan(s). As part of the initial site plan submission for the Proposed Development, the Applicant shall submit to UFMD for review and approval a detailed landscape and tree cover plan (the "Landscape Plan"), which shall include, among other things:

i. Irrigation information, if provided;

ii. Design details for tree wells or grates and other similar planting areas above structures and along streets;

iii. Composition of the planting materials used for street trees or where plantings are to be located within or on top of structures and other methods to be used to ensure the viability of the proposed plantings; and

iv. Information demonstrating that the Landscape Plan is consistent with the SWM Plan defined in Proffer 21.

C. Planting Quality. The Landscape Plan shall be consistent with the quality and quantity of plantings and materials shown on the Overall Landscape Plan of the GDP and may include the use of additional shade trees and other plant materials as determined by the Applicant. Where groundcover is shown to be planted in the landscape amenity panels along Michael Faraday Drive and Reston Station Boulevard, this shall include vegetation of varying heights and species including low shrubs of 18 inches to 24 inches, ornamental grasses, and herbaceous perennials. The Applicant may adjust the type and location of vegetation and the design of the open spaces, courtyard areas and streetscape improvements and plantings as approved by UFMD, provided such adjustments otherwise are in substantial conformance with the GDP.

D. Planting Strips. The Applicant shall install street trees consistent with the Streetscape plans included on Sheet 8 of the GDP. For trees not planted within an 8-foot wide minimum planting area, or that do not meet the minimum planting area required by the PFM, the Applicant shall provide details for alternative designs showing how the proposed planting spaces will provide for normal tree growth and performance by installing an equivalent solution acceptable to UFMD to meet the following specifications:

i. A minimum of 6 feet open surface width and 48 square feet open surface area.

ii. Rooting area a minimum of 8 feet wide, which can be achieved in instances where open surface area width is less than 8 feet by providing

suitable rooting area below paved surfaces using methods that do not require soil compaction for structural purposes such as structural cells.

iii. Soil volume for Category III or IV trees (as indicated in Table 12.17 of the Public Facilities Manual) shall be a minimum of 700 cubic feet per tree for single trees. For two trees planted in a contiguous planting area, a total soil volume of at least 1,200 cubic feet shall be provided. For three trees or more planted in a contiguous area, the soil volume shall equal at least 500 cubic feet per tree.

iv. Planting spaces shall provide 36-48 inches of soil depth. The specified minimum soil depth shall be 36-48 inches within a 4-foot radius from the base of the tree. Beyond four feet from the base of the tree, the soil depth may be less, provided soil volume requirements are met.

v. Planting spaces shall be interconnected to the furthest extent feasible.

vi. Soil in planting sites shall be as specified in planting notes to be included in site plans reviewed and approved by Urban Forest Management.

The Applicant shall provide notice to UFMD not less than five (5) business days prior to the Applicant's implementation of the tree planting spaces to permit UFMD to verify the proper installation and planting of trees in conformance with the approved site plan. At such time, the Applicant also shall provide UFMD written documentation demonstrating that the materials and methods used satisfy the requirements of the plan and verifying that the contractors performing the work are licensed as may be required by the manufacturer. Following installation and no later than final bond release for the site plan for which this proffer is applicable, the Applicant shall provide written confirmation from a certified arborist and/or landscape architect verifying installation of trees by a licensed contractor consistent with the requirements of this proffer.

E. Open Space Designs. As part of final engineering and design, and subject to review and approval by UFMD, the Applicant may elect to modify the designs of the various open space areas from the designs shown on Sheet 7 of the GDP, provided that such modifications offer a similar quality of design and quantity of plantings and materials as those shown on the GDP and are in accordance with Section 18-204 of the Zoning Ordinance.

F. Fire Marshal Review. If it is determined during site plan review that elements of the streetscape improvements and plantings, as well as any elements of the open space designs, conflict with subsequent comments from the Fire Marshal, the Applicant shall first make efforts to obtain the Fire Marshal's approval by making minor adjustments to such elements. If the Fire Marshal does not approve such adjustments, the Applicant may be permitted to make minor modifications to relocate, remove, or modify the conflicting elements of the streetscape improvements, plantings, and/or the open space designs, subject to approval by

the Zoning Administrator in accordance with Section 18-204 of the Zoning Ordinance.

G. Landscape Planting Pre-Installation Meeting. Prior to the installation of any plants to meet the requirements of the approved landscape plan, the Applicant shall coordinate a pre-installation meeting on the Property with the landscape contractor and UFMD staff. Any proposed changes to the planting locations, tree/shrub planting sizes, and species substitutions shown on the approved landscape plan shall be reviewed and must be approved by UFMD prior to planting. The installation of plants not approved by UFMD staff may require the submission of a revision to the landscape plan or removal and replacement with approved trees/shrubs prior to bond release.

H. Mitigation of Soil Compaction. Soil in planting areas that have been previously compacted shall be properly prepared (tilled and amended as needed based on soil samples) to a depth of one foot prior to installation of landscape material. Specifications for alleviating soil compaction in planting areas shall be provided on the landscape plan.

STORMWATER MANAGEMENT

21. Stormwater Management. As part of site plan approval for the Proposed Development, the Applicant shall demonstrate that the Proposed Development will meet applicable Fairfax County Public Facilities Manual ("PFM") requirements for stormwater quantity and stormwater quality in effect at the time of the approval of this Application. The site plan shall include strategies for addressing both water quantity and water quality management issues, including detailed mitigation measures to be implemented as part of construction. The Applicant shall construct stormwater quantity and quality measures in accordance with the site plan (and each subsequent revision thereto) with the Proposed Development, such that the runoff reductions outlined below shall be achieved.

A. Stormwater Management Goals. Using a series of infiltration facilities and/or structural and non-structural stormwater management and/or Best Management Practices ("BMP") facilities, the Applicant shall demonstrate the Proposed Development's conformance with applicable PFM requirements for stormwater quantity and stormwater quality in effect at the time of the approval of this Application.

B. Maintenance Responsibility. Prior to site plan approval for the Proposed Development, the Applicant shall execute an agreement with the County in a form satisfactory to the County Attorney (the "SWM Agreement") providing for the perpetual maintenance of all stormwater management facilities that are part of the Proposed Development ("SWM Facilities"). The SWM Agreement shall require the Applicant (or its successor UOA/HOA/COA) to perform regular routine maintenance of the SWM Facilities and to provide a maintenance report annually to the Fairfax County Maintenance and Stormwater Management Division of DPWES, provided DPWES requests such a maintenance report. The SWM

Agreement also shall address easements for County inspection and emergency maintenance of the SWM Facilities to ensure that the facilities are maintained by the Applicant in good working order.

C. SWM Maintenance Fund. Prior to site plan approval for the Proposed Development, the Applicant shall establish an account (the "SWM Maintenance Account") to be used for the ongoing maintenance of the SWM Facilities located on or serving the Property. The SWM Maintenance Account shall be an interest bearing account held by a financial institution authorized to do business in the Commonwealth of Virginia. As applicable, a line item for ongoing maintenance of the SWM Facilities shall be included in the budget of any UOA/HOA/COA established for the Proposed Development, and the fees collected for such purposes by the UOA/HOA/COA shall be deposited in the SWM Maintenance Account annually. The association documents that establish and control the UOA/HOA/COA shall provide that the SWM Maintenance Account shall not be eliminated as a line item in the UOA/HOA/COA budget, and that funds in the SWM Maintenance Account shall not be utilized for purposes other than to fund the maintenance of the SWM Facilities. Prior to issuance of first RUP for the Proposed Development, the Applicant shall make an initial contribution to the SWM Maintenance Account in an amount equal to the estimated cost for the residential units' maintenance responsibility for the first 20 years of the facilities, based on cost data for the facilities, as established by the UOA/HOA/COA budget and approved by DPWES using the U.S. Environmental Protection Agency's Urban Stormwater Data Summary. Thereafter, the SWM Maintenance Account shall be funded through pro-rata assessments of the owners of the Proposed Development as set forth in the UOA/HOA/COA documents, as applicable.

D. SWM Replacement Fund. Prior to site plan approval for the Proposed Development, the Applicant shall establish an account (the "SWM Replacement Account") to be used as an escrow account for the eventual replacement of the SWM Facilities serving the Property. The SWM Replacement Account shall be an interest bearing account held by a financial institution authorized to do business in the Commonwealth of Virginia. As applicable, a line item for future replacement of the SWM Facilities shall be included in the budget of any UOA/HOA/COA(s) established for the Proposed Development, and the fees collected for such purposes by the UOA/HOA/COA shall be deposited in the SWM Replacement Account annually. The association documents that establish and control the UOA/HOA/COA shall provide that the SWM Replacement Account shall not be eliminated as a line item in the UOA/HOA/COA budget, and that funds in the SWM Replacement Account shall not be utilized for purposes other than to fund the replacement of the SWM Facilities. Prior to issuance of first RUP for the Proposed Development, the Applicant shall make an initial contribution to the SWM Replacement Account in an amount equal to forty percent (40%) of the estimated replacement cost for the facilities, based on cost data for the facilities, as established by the UOA/HOA/COA budget and approved by DPWES using the U.S. Environmental Protection Agency's Urban Stormwater Data Summary. Thereafter, the SWM Replacement Account shall be funded

through pro-rata assessments of the owners of the Proposed Development as set forth in the UOA/HOA/COA documents, as applicable.

PUBLIC SCHOOLS CONTRIBUTION

22. Public Schools Contribution. Per the Residential Development Criteria Implementation Motion adopted by the Board of Supervisors on January 7, 2003, prior to the issuance of the first RUP for each residential building within the Proposed Development, the Applicant shall contribute $3,818.43 per dwelling unit in such building (based on an assumed rate of 0.325 students per unit multiplied by $11,749 per new student generated) to the Board of Supervisors for transfer to the Fairfax County School Board to be utilized for capital improvements and capacity enhancements to schools in the Reston area that serve the Property. Such contribution shall escalate in accordance with Proffer 38 below. Prior to the commencement of construction for the Proposed Development, the Applicant shall notify the Fairfax County Public Schools of the intended construction and anticipated completion date for the Proposed Development.

ARCHITECTURE

23. Architectural Design and Building Materials. The character of the architectural design and building materials for the Proposed Development shall be in general conformance with the elevations shown on Sheets 8 and 8A of the GDP. The Applicant reserves the right to adjust the average grade elevation and the architectural design details of the residential buildings, including, but not limited to, the building materials, articulation, and fenestration, as part of final architectural design and engineering without requiring approval of a PCA or GDP, provided (a) the maximum building height is not increased, (b) the minimum open space is not decreased, and (c) the quality of the architectural design and the quality of the building materials remain in general conformance with that shown on the GDP, as determined by the Zoning Administrator.

PARKS AND RECREATION

24. On-Site Park. Prior to the issuance of the first RUP for the Proposed Development, the Applicant shall install an on-site park area for the use of residents (the "Pocket Park"). The Pocket Park shall include landscaping, two (2) hardscape seating areas, a shade trellis, an outdoor game table, fitness stations, a bike rack, and a minimum of three (3) benches as shown on Sheet 7 of the GDP. As part of site plan approval for the Proposed Development, the Applicant shall grant a public access easement for the Pocket Park to Fairfax County as shown on Sheet 7 of the GDP. The public access easement shall provide that the Pocket Park shall, at a minimum, be open to the general public from sunrise to sunset, provided that the Applicant reserves the right to: (i) establish reasonable rules and regulations governing the use of the Pocket Park, and (ii) temporarily limit access to the Pocket Park for reasonable periods of time for purposes of construction and/or maintenance.

25. Athletic Field Contribution. To address the Comprehensive Plan's recommendations regarding the provision of public facilities and athletic fields in the Transit Station Areas, the Applicant shall contribute $143,448.16 to the Fairfax County Park Authority for the development of athletic fields in the Reston area. This contribution shall be made prior to issuance of the first RUP for the Proposed Development.

GREEN BUILDING

26. Green Building. In order to promote energy conservation and green building techniques, the Applicant shall select one of the following programs to be implemented and will inform the Environment and Development Review Branch of DPZ which program the Applicant has chosen as part of the first site plan submission for the Proposed Development.

A. National Green Building Standard. If the Applicant selects the Home Innovations Research Lab's 2012 National Green Building Standard ("NGBS"), then the Applicant shall seek certification in accordance with the NGBS rating system using the Energy Star Qualified Homes path for energy performance, as demonstrated through documentation submitted to the Environment and Development Review Branch of DPZ from a home energy rater certified through the Home Innovations Research Lab that demonstrates each residential unit has attained certification.

B. LEED for Homes. If the Applicant selects the U.S. Green Building Council ("USGBC") Leadership in Energy and Environmental Design ("LEED") for Homes ("LEED for Homes") rating system, then the Applicant shall pursue LEED certification under the most recent version of the LEED for Homes rating system, or other applicable LEED rating system as determined in consultation with the EDRB, in effect at the time the Applicant registers the project with the USGBC.

i. Project Checklist. The Applicant will include, as part of the site plan submission and building plan submission, a list of specific credits that the Applicant anticipates attaining for the Proposed Development (or portion thereof) under the applicable LEED for Homes rating system. A professional engineer or licensed architect will provide certification statements at both the time of building plan review for the building(s) for which certification is sought confirming that the items on the list will meet at least the minimum number of credits necessary to attain LEED certification of the project.

ii. LEED-AP. The Applicant will include a LEED accredited professional ("LEED-AP") as a member of the design team. The LEED-AP shall also be a professional engineer or licensed architect, and will work with the design team to incorporate sustainable design elements and innovative technologies into the project with a goal of having the project attain LEED certification. At the time of site plan submission, the Applicant will provide documentation to the EDRB demonstrating compliance with the commitment to engage such a professional.

iii. Green Building Escrow. Prior to building plan approval, the Applicant shall post, for the applicable building(s), a "Green Building Escrow" in the form of cash or a letter of credit from a financial institution acceptable to DPWES as defined in the Public Facilities Manual, in the amount of one

hundred percent (100%) of the gross square footage for each such residential building multiplied by $2 per square foot. This escrow will be in addition to, and separate from, other bond requirements and will be released upon demonstration of attainment of LEED certification by the USGBC under the applicable version of the LEED for Homes rating system. The provision to the EDRB of documentation from the USGBC that such building has attained LEED certification will be sufficient to satisfy this commitment. If the Applicant fails to provide documentation to the EDRB demonstrating attainment of LEED certification within three (3) years of issuance of the final RUP for such building, the Green Building Escrow will be released to Fairfax County and will be posted to a fund within the County budget supporting implement of County environmental initiatives.

iv. Release of Green Building Escrow. The Green Building Escrow for each building, as applicable, shall be released in accordance with the following:

a. If the Applicant provides to the EDRB, within three (3) years of the issuance of the final RUP for the applicable residential building(s), documentation demonstrating that LEED certification has been attained, the entirety of the Green Building Escrow for such building(s) shall be released to the Applicant.

b. If the Applicant provides to the EDRB, within three (3) years of the issuance of the final RUP for the applicable residential building(s), documentation demonstrating that LEED certification has not been attained for such building(s) but that the USGBC has determined that such building(s) fall(s) within three points of attainment of LEED certification, then fifty percent (50%) of the Green Building Escrow for such building(s) will be released to the Applicant and the other fifty percent (50%) will be released to Fairfax County to be posted to a fund within the County budget supporting the implementation of County environmental initiatives.

c. If the Applicant fails to provide to the EDRB, within three (3) years of the issuance of the final RUP for the applicable residential building(s), documentation demonstrating that such building(s) has/have fallen short of LEED certification by three or fewer points, the entirety of the Green Building Escrow for such building(s) will be released to Fairfax County and will be posted to a fund within the County budget supporting the implementation of County environmental initiatives.

v. Extension of Time. If the Applicant provides documentation from the USGBC demonstrating, to the satisfaction of the EDRB, that USGBC

completion of the review of the LEED certification application has been delayed through no fault of the Applicant, the Applicant's contractors or subcontractors, the proffered time frame shall until such time as evidence is obtained, and no release of escrowed funds shall be made to the Applicant or to the County during the extension.

C. EarthCraft. If the Applicant selects EarthCraft, then the Applicant shall provide documentation to DPZ that the residential building has been awarded certification in accordance with the EarthCraft House Program.

AFFORDABLE/WORKFORCE HOUSING

27. Affordable Dwelling Units. Unless otherwise exempt pursuant to Section 803 of Part 8 of Article 2 of the Zoning Ordinance in effect as of the approval date of this Application (the "ADU Ordinance"), the Applicant shall provide Affordable Dwelling Units ("ADUs") pursuant to the ADU Ordinance.

28. Workforce Dwelling Units. The Applicant shall provide Workforce Dwelling Units ("WDUs") consisting of a total of three (3) dwelling units each containing three (3) bedrooms to be administered generally as set forth in the "Board of Supervisors' Workforce Dwelling Unit Administrative Policy Guidelines" adopted October 15, 2007 (the "Policy Guidelines"), except as modified by these Proffers. Where this proffer conflicts with the Policy Guidelines, this proffer shall control the administration of the WDUs.

A. Any ADUs provided pursuant to the ADU Ordinance shall qualify as WDUs for the purpose of satisfying the requirement to provide WDUs under this proffer.

B. The Applicant reserves the right to relocate, at its sole discretion, all or any number of the WDUs required by the number of dwelling units which may be developed in a particular building to the other building on the Property, as long as the requirements of the Policy Guidelines and these Proffers are otherwise satisfied.

C. Notwithstanding the foregoing, if the Board of Supervisors amends the Policy Guidelines, the Applicant reserves the right, in its sole discretion, to opt into such new policies, in whole or in part, without the need for a PCA and, if the Applicant elects to opt into any such new policies, the provisions of this Proffer which relate to such new policies shall no longer have any force or effect.

D. The Applicant reserves the right to enter into a separate binding written agreement with the appropriate Fairfax County agency as to the terms and conditions of the administration of the WDUs following approval of this Application. Such an agreement shall be on terms mutually acceptable to both the Applicant and Fairfax County and may occur after the approval of this Application. Neither the Board of Supervisors nor Fairfax County shall be obligated to execute such an agreement. If such an agreement is executed by all applicable parties, then the WDUs shall be administered solely in accordance with such agreement and the

provisions of this proffer shall become null and void. Such an agreement and any modifications thereto shall be recorded in the land records of Fairfax County.

MISCELLANEOUS PROFFERS

29. Phase I Dulles Rail Tax District Buyout. The approval of this Application will change the use of the Property from one that is subject to an annual special improvement tax payable to the Phase I Dulles Rail Transportation Improvement District (the "District") to one that is not subject to payment of that tax. Pursuant to Virginia Code Ann. §33.2-2107 (2016), the Applicant must pay to the County $20,898.87, which is the amount representing the County's estimate of the present value of special improvement taxes that would have been payable to the District had the Subject Property continued as a use subject to payment of that tax. This payment is due to the County from the Applicant within 60 days of the date of this approval. If that payment is not made, then the approval of this Application shall be null and void and of no effect, without further action by the Board of Supervisors. If at some future time, the Property again becomes subject to payment of the special improvement tax to the District, then a portion of the lump sum payment may be credited towards the payment of subsequent special improvement taxes for the Property in an amount as reasonably determined by the County on a pro rata basis, considering the lapse of time that the Property was not so subject to payment of the special improvement tax.

30. Traffic Signal Preemption. Prior to site plan approval for the Proposed Development, the Applicant shall contribute $10,000 to the Capital Project titled Traffic Light Signals – FRD Proffers in Fund 300-C30070, Public Safety Construction, for use in the installation of preemptive traffic signal devices on traffic signals within the Hunter Mill District, as determined by the Fire and Rescue Department and reviewed for approval by VDOT.

31. Garage Conversion. Any conversion of the two-over-two garages or the use of two-over–two garages that precludes the parking of vehicles and the storage of trash and recycling containers within the two-over-two garages is prohibited. Owners of these units shall be required to store trash and recycling containers inside their garages, except on collection days. A covenant setting forth these restrictions shall be recorded among the land records of Fairfax County in a form approved by the County Attorney prior to the sale of any units and shall run to the benefit of the HOA/COA and the Board of Supervisors. The covenant shall include the following statement: "Please note that for the units subject to this covenant, one of the required parking spaces is provided within the garage. Purchasers of these units are advised to review the interior dimensions of the garage to determine what size vehicles can be accommodated." These restrictions shall be included in the marketing materials for the initial sales of units and disclosed in the HOA/COA documents. Prospective purchasers shall be advised of these restrictions, including the dimensions of the garage, in writing, prior to entering into a contract of sale for any two-over-two unit.

32. Transformer Location. The Applicant shall provide a transformer to serve the Proposed Development in the general location shown on Sheet 3 of the GDP, provided, however, that the Applicant may adjust the final location of the transformer as part of site plan approval for the Proposed Development in consultation with DPWES. The ultimate location of the transformer shall not impede pedestrian facilities.

33. Universal Design. The Applicant shall provide universal design features for a minimum of two (2) residential units constructed on the Property, inclusive of any code-required units, which shall be provided in the multi-family building. The universal design features shall include, but not be limited to, the following:

i. Front entrance doors that are a minimum of thirty-six (36) inches wide;

ii. Lever door handles instead of knobs;

iii. Light switches that are forty-four (44) to forty-right (48) inches high;

iv. Thermostats a maximum of forty-eight (48) inches high;

v. Electrical outlets a minimum of eighteen (18) inches high;

vi. A curb-less shower, or a shower with a curb of less than four and one-half (4.5) inches high; and/or,

vii. Grab bars in the bathrooms that are ADA compliant.

34. Reston Association. The Applicant shall petition the Reston Association for the joinder of the individual residential units within the Proposed Development into the Reston Association with respect to the use of Reston Association amenities and the payment of appropriate annual dues for such use consistent with those dues paid by existing members of the Reston Association.

35. Advance Density Credit. The Applicant reserves density credit as may be permitted by the provisions of Paragraph 4 of Section 2-308 of the Zoning Ordinance for all eligible dedications described herein.

36. Successors and Assigns. These proffers will bind and inure to the benefit of the Applicant and its successors and assigns. Each reference to "Applicant" in this proffer statement shall include within its meaning and shall be binding upon Applicant's successor(s) in interest and/or developer(s) of the site or any portion of the site.

37. Counterparts. These proffers may be executed in one or more counterparts, each of which when so executed and delivered shall be deemed an original, and all of which taken together shall constitute but one and the same instrument.

38. Annual Escalation Clause. For all proffers in this document specifying monetary contributions, unless otherwise indicated, the contribution and/or budget amount shall escalate or de-escalate, as applicable, on a yearly basis from the base year of 2017 and change effective each January 1 thereafter, as permitted by Section 15.2-2303.3 of the Code of Virginia, as amended.

[Signature pages follow]

HARDWOOD PLYWOOD AND VENEER ASSOCIATION,
an Illinois corporation

By: C. T. "Kip" Howlett
Name: C.T. 'Kip' Howlett Jr.
Title: President

PULTE HOME CORPORATION,
a Michigan corporation

By: _____
Name: Gary J Heygreaf
Title: VP Land Development