



**APPLICATION ACCEPTED:** June 27, 2013  
**PLANNING COMMISSION:** December 5, 2013  
**BOARD OF SUPERVISORS:** Not yet scheduled

# County of Fairfax, Virginia

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**November 21, 2013**

## **STAFF REPORT**

### **APPLICATION RZ/FDP 2013-HM-012**

#### **HUNTER MILL DISTRICT**

**APPLICANT:** Sekas Homes, Ltd.

**EXISTING ZONING:** R-1 (Residential, 1 du/ac)

**PROPOSED ZONING:** PDH-2 (Planned Development Housing, 2 du/ac)

**PARCELS:** 28-4 ((8)) 3 – 7; 28-4 ((9)) A

**SITE ACREAGE:** 5.43 acres

**PLAN MAP:** Residential, 1 – 2 du/ac

**PROPOSAL:** To rezone from the R-1 District to the PDH-2 District to construct nine single-family detached dwellings at a density of 1.66 dwelling units per acre (du/ac)

#### **STAFF RECOMMENDATIONS:**

Staff recommends approval of RZ 2013-HM-012 and the associated conceptual development plan, subject to the execution of proffers consistent with the draft proffers contained in Appendix 1.

Staff recommends approval of FDP 2013-HM-012 subject to the development conditions contained in Appendix 2 and subject to the Board's approval of the associated rezoning and conceptual development plan.

Staff recommends approval of a waiver of Section 8-0201.3 of the Public Facilities Manual (PFM) requiring a trail along Tetterton Avenue in favor of the construction of the sidewalk shown on the CDP/FDP.

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**Megan Duca**

Staff recommends approval of a waiver of Sections 8-0101.1 and 8-0102 of the Public Facilities Manual requiring a sidewalk along Besley Road and both sides of the private street in favor of the sidewalks depicted on the CDP/FDP.

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. 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.

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.

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.

O:\mbrad9\RZ\RZ-FDP 2013-HM-012 Sekas Homes\Staff Report\Staff Report Assembly\00\_Sekas Staff Report Cover.pdf



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 2013-HM-012

Applicant: SEKAS HOMES, LTD.  
Accepted: 06/27/2013  
Proposed: RESIDENTIAL  
Area: 5.43 AC OF LAND; DISTRICT - HUNTER MILL

Zoning Dist Sect:  
Located: APPROXIMATELY 400 FEET NORTH OF THE INTERSECTION OF OLD COURTHOUSE ROAD AND BESLEY ROAD

Zoning: FROM R- 1 TO PDH- 2  
Overlay Dist:  
Map Ref Num: 028-4- /08/ /0003 /08/ /0004  
/08/ /0005 /08/ /0006 /08/  
/0007 /09/ / A

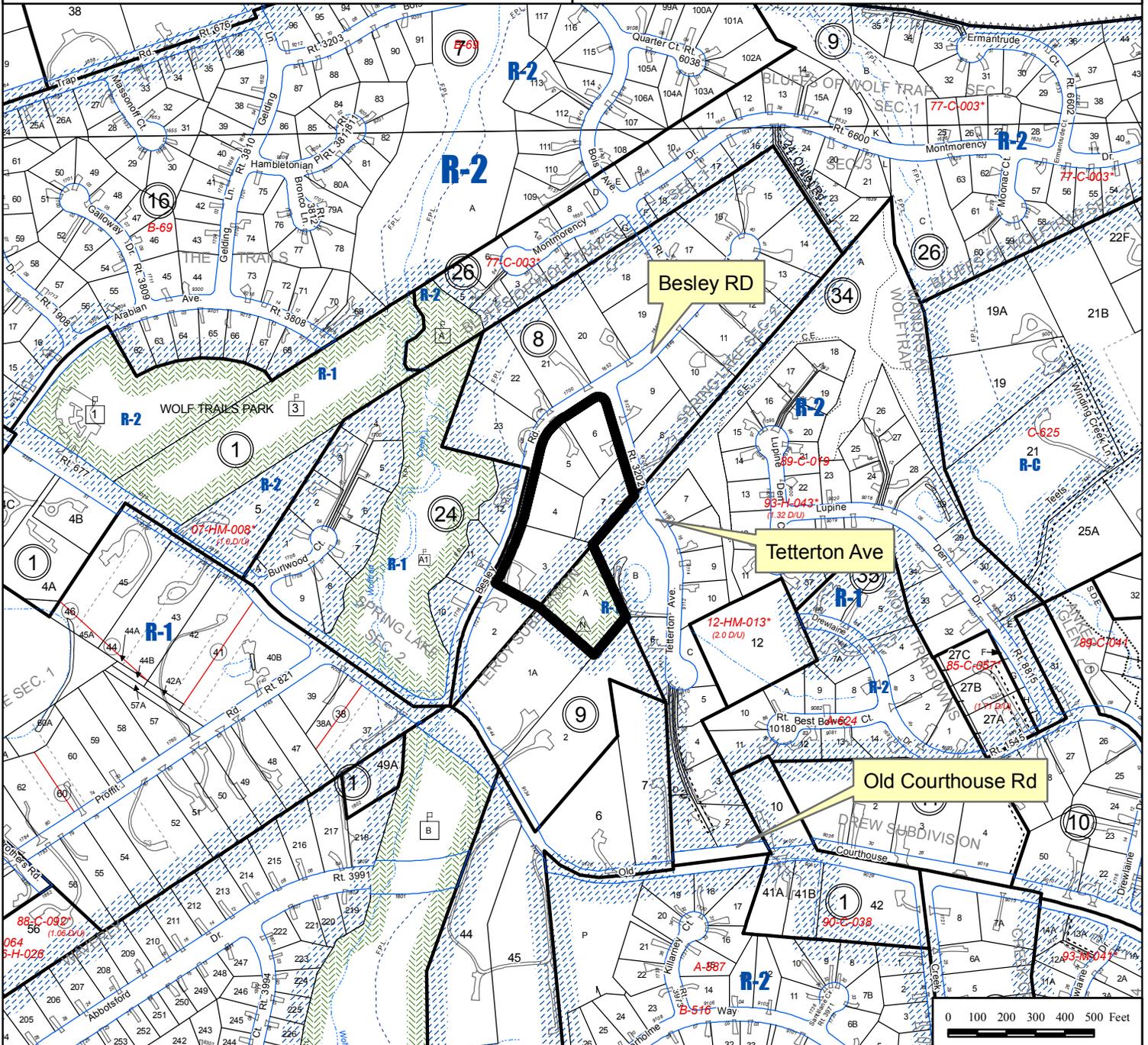
# Final Development Plan

FDP 2013-HM-012

Applicant: SEKAS HOMES, LTD.  
Accepted: 06/27/2013  
Proposed: RESIDENTIAL  
Area: 5.43 AC OF LAND; DISTRICT - HUNTER MILL

Zoning Dist Sect:  
Located: APPROXIMATELY 400 FEET NORTH OF THE INTERSECTION OF OLD COURTHOUSE ROAD AND BESLEY ROAD

Zoning: PDH- 2  
Overlay Dist:  
Map Ref Num: 028-4- /08/ /0003 /08/ /0004  
/08/ /0005 /08/ /0006 /08/  
/0007 /09/ / A



**NOTES**

1. THE PROPERTY DELINEATED ON THIS PLAT IS LOCATED ON FAIRFAX COUNTY CADASTRAL MAP No. 28-4 ((8)) PARCELS 3-7 AND 28-4 ((9)) A AND CURRENTLY ZONED R-1.
2. THE PROPERTY SHOWN HEREON IS CURRENTLY IN THE NAME OF THE FOLLOWING ALL AMONG THE LAND RECORDS OF FAIRFAX COUNTY:  
 LOT 3 - OAKCREST FARMS, L.C. BY DEED RECORDED IN DEED BOOK 22957 AT PAGE 332  
 LOTS 4,5 - OAKCREST FARMS, L.C. BY DEED RECORDED IN DEED BOOK 22876 AT PAGE 1590  
 LOT 6 - OAKCREST FARMS, L.C. BY DEED RECORDED IN DEED BOOK 22956 AT PAGE 2191  
 LOT 7 - OAKCREST FARMS, L.C. BY DEED RECORDED IN DEED BOOK 22957 AT PAGE 681  
 PARCEL A - OAKCREST FARMS, L.C. BY DEED RECORDED IN DEED BOOK 22876 AT PAGE 1595.

THE APPLICANT IS SEKAS HOMES, LTD.

3. THE BOUNDARY SHOWN HEREON IS BASED ON A FIELD SURVEY BY THIS FIRM PERFORMED ON NOVEMBER 28, 2012. TITLE REPORT FURNISHED BY STEWART TITLE GUARANTY COMPANY, FILE NUMBER 12V-1103, WITH AN EFFECTIVE DATE OF SEPTEMBER 12, 2-12 (LOT 3), FILE NUMBER 12V-1097, WITH AN EFFECTIVE DATE OF SEPTEMBER 25, 2012 (LOT 4), FILE NUMBER 12V-1099, WITH AN EFFECTIVE DATE OF SEPTEMBER 25, 2012 (LOT 5), FILE NUMBER 12-V-1113, WITH AN EFFECTIVE DATE OF NOVEMBER 1, 2012 (LOT 6) AND FILE NUMBER 12V-1085, WITH AN EFFECTIVE DATE OF SEPTEMBER 5, 2012 (LOT 7).
4. THE TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD SURVEY BY THIS FIRM PERFORMED ON NOVEMBER 28, 2012. THE VERTICAL DATUM IS REFERENCED TO NGVD 29. THE CONTOUR INTERVAL IS TWO (2) FEET.
5. THE PROPERTY SHOWN HEREON LIES 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. 51059C0145E, DATED SEPTEMBER 17, 2010.
6. ALL CONSTRUCTION SHALL CONFORM TO THE PROVISIONS OF ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS OF FAIRFAX COUNTY AND VDOT EXCEPT AS REQUESTED HEREIN. THE APPLICANT RESERVES THE RIGHT TO APPLY FOR ANY FUTURE MODIFICATIONS OF PFM DESIGN CRITERIA AT THE TIME OF SUBDIVISION PREPARATION PROVIDED THE MODIFICATIONS ARE IN SUBSTANTIAL CONFORMANCE WITH THE C/FDP.
7. 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.
8. LAND DESIGN CONSULTANTS, INC. IS NOT AWARE OF ANY UTILITY EASEMENTS WHICH EXIST ON THE SUBJECT PROPERTY WITH A WIDTH OF 25 FEET OR MORE.
9. 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.
10. AIR QUALITY PERMITS SHALL BE OBTAINED, IF REQUIRED, AND PROVIDED PRIOR TO ANY CLEARING, GRADING OR CONSTRUCTION.
11. THE SITE WILL BE SERVED BY PUBLIC WATER AND SANITARY SEWER.
12. A RESOURCE PROTECTION AREA (RPA) IS NOT LOCATED ON THE SUBJECT PROPERTY. A RESOURCE MANAGEMENT AREA (RMA) IS LOCATED ON THE SUBJECT PROPERTY.
13. THE COMPREHENSIVE PLAN RECOMMENDS DEVELOPMENT OF THE PROPERTY AS RESIDENTIAL AT A DENSITY OF 1-2 DWELLING UNITS PER ACRE. THE PROPOSED DENSITY OF 1.66 DU/ACRE MEETS THE INTENT OF THE COMPREHENSIVE PLAN. THE SITE DESIGN, DENSITY, ADJOINING USES AND PROPOSED PRESERVATION AND PLANTINGS WILL ENHANCE THIS PROPERTY AND WILL MEET THE APPLICABLE CRITERIA FOR STAFF REVIEW.
14. IN ACCORDANCE WITH THE FAIRFAX COUNTY TRAILS PLAN, A TRAIL IS REQUIRED ON THE SUBJECT PROPERTY. THE APPLICANT REQUESTS A WAIVER, AS NOTED BELOW.
15. LDC IS NOT AWARE OF ANY BURIAL SITES LOCATED ON THE SUBJECT PROPERTY.
16. BESLEY ROAD AND TETTERTON AVENUE ARE NOT SHOWN ON THE COUNTY'S TRANSPORTATION PLAN OR VDOT 6 YEAR PLAN TO BE WIDENED OR IMPROVED. NO ADDITIONAL DEDICATION IS PROPOSED. THE PROPOSED PRIVATE STREET WILL BE PRIVATELY MAINTAINED.
17. AN ENVIRONMENTAL QUALITY CORRIDOR (EQC) AS DEFINED IN THE ADOPTED COMPREHENSIVE PLAN DOES EXIST ON THE SUBJECT PROPERTY. THE COMPONENTS OF A MAXIMUM DENSITY REDUCTION DO NOT EXIST ON SITE.
18. LDC DOES NOT BELIEVE ANY HAZARDOUS OR TOXIC SUBSTANCES HAVE BEEN GENERATED, UTILIZED, STORED, TREATED, AND/OR DISPOSED OF OR HAVE BEEN OBSERVED ON THE SUBJECT PROPERTY.
19. DEVELOPMENT OF THIS PROJECT SHALL COMMENCE AT SUCH TIME AS APPROPRIATE COUNTY APPROVALS HAVE BEEN OBTAINED AND SUBJECT TO THE DISCRETION OF OWNER/DEVELOPER.
20. A GEOTECHNICAL REPORT SHALL BE SUBMITTED FOR REVIEW BY FAIRFAX COUNTY CONCURRENTLY WITH THE FINAL SUBDIVISION PLAN.
21. THE SUBJECT PROPERTY WILL MEET SWM/BMP REQUIREMENTS THROUGH USE OF AN ONSITE INFILTRATION TRENCH, BIO-RETENTION FILTER AND CONSERVATION AREA. PLEASE SEE SHEETS 2 & 7 FOR ADDITIONAL INFORMATION. THESE FACILITIES WILL BE PRIVATELY MAINTAINED.

22. ALL DIMENSIONS ARE APPROXIMATE AND TYPICAL HOUSE FOOTPRINTS AND ELEVATIONS SHOWN ON THESE LOTS MAY BE MODIFIED PROVIDED THAT MODIFICATIONS ARE IN SUBSTANTIAL CONFORMANCE WITH THE C/FDP AND THE MINIMUM YARDS ARE PROVIDED.
23. THE APPLICATION HAS BEEN DESIGNED WITH THE PRIMARY FOCUS OF CREATING A DEVELOPMENT THAT IS SIMILAR TO ADJACENT DEVELOPMENTS AND WILL MINIMIZE ADVERSE EFFECTS TO ADJACENT PROPERTY OWNERS. THE APPLICANT WILL BE PRESERVING NATURAL FEATURES ON SITE AS SHOWN ON SHEETS 2 & 5. ADDITIONAL PLANTING AROUND THE PROPOSED STREET WILL BE PROVIDED. THE APPLICANT WILL ENSURE THAT THE POST DEVELOPMENT RUNOFF IS LESS THAN THE PRE DEVELOPMENT RUNOFF.
24. ADDITIONAL TREE PLANTINGS AND PRESERVATION, AS SHOWN ON THE C/FDP, WILL PROVIDE SCREENING AND AN AMENITY TO THIS COMMUNITY.
25. MINOR ADJUSTMENTS TO THE LOT LINES AND UTILITY LOCATIONS SHALL BE PERMITTED IN ACCORDANCE WITH THE FINAL GRADING AND UTILITY LAYOUT AND SHALL BE IN SUBSTANTIAL CONFORMANCE WITH THAT PROVIDED HEREIN.
26. EXISTING STRUCTURES CONSTRUCTED IN 1960, 1963 AND 1975 AND SHALL BE REMOVED. THE APPROXIMATE HEIGHT OF THE EXISTING STRUCTURES IS 30 FEET. A CONSERVATION PLAN HAS BEEN APPROVED TO REMOVE THE DWELLING ON LOT 3 AND LOT 7 PRIOR TO REZONING APPROVAL (6447-CON-002-1 AND 6447-CON-001-1).
27. LOCATION OF EXISTING STRUCTURES ON OFFSITE PROPERTIES ARE APPROXIMATE AND FROM INFORMATION OF RECORD.
28. THE APPLICANT IS PROPOSING OPEN SPACE AND TREE PRESERVATION ABOVE THE MINIMUM REQUIRED, PRESERVATION OF AN ONSITE INTERMITTENT STREAM AND ADJACENT BUFFER, AND PRESERVATION OF STEEP TOPOGRAPHY AS AN AMENITY WITH THIS PLANNED COMMUNITY.
29. THE SUBJECT PROPERTY IS CURRENTLY SERVED BY ONSITE SEPTIC AND PRIVATE WELLS. THE SEPTIC TANKS, SEPTIC FIELDS AND WELLS WILL BE PROPERLY ABANDONED PRIOR TO APPROVAL OF ANY DEMOLITION PERMITS BEING RELEASED.

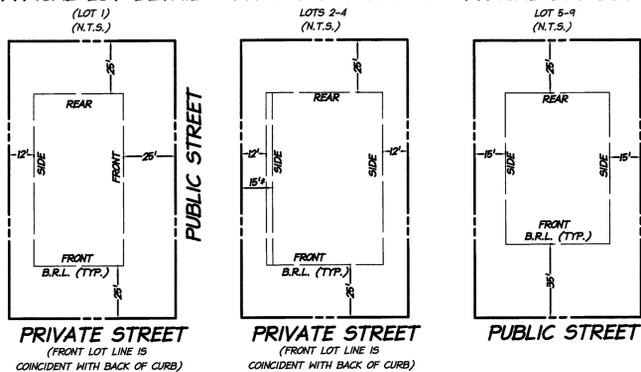
**WAIVERS AND MODIFICATIONS**

1. THE APPLICANT RESPECTFULLY REQUESTS A WAIVER OF THE TRAIL REQUIREMENT AS NOTED IN SECTION 8-0201.3 OF THE PUBLIC FACILITIES MANUAL AND SECTION 101-2-2(10) OF THE COUNTY CODE AND AS SHOWN ON THE COUNTYWIDE TRAILS MAP IN LIEU OF THE PROPOSED SIDEWALK ALONG TETTERTON AVENUE, WHICH WILL PROVIDE A PEDESTRIAN ACCOMMODATION. AN ADDITIONAL CONNECTION, PARALLEL TO THE SIDEWALK, WILL BE AN UNNECESSARY MAINTENANCE BURDEN FOR THE COUNTY SINCE THE FACILITY WILL HAVE LIMITED EFFECTIVENESS, BUT STILL REQUIRE ROUTINE MAINTENANCE.
2. THE APPLICANT RESPECTFULLY REQUESTS A WAIVER OF THE SIDEWALK REQUIREMENTS ALONG ONE SIDE OF THE PROPOSED PRIVATE STREET AND BESLEY ROAD AS NOTED IN SECTION 8-0101.1 AND 8-0102 OF THE PUBLIC FACILITIES MANUAL AND SECTION 101-2-2(10) OF THE COUNTY CODE. THE APPLICANT RESPECTFULLY REQUESTS THIS WAIVER TO PRESERVE EXISTING TREES, THE EXISTING SEVERE SLOPED TOPOGRAPHY, AND PRESERVE THE RURAL CHARACTER OF THE NEIGHBORHOOD. THERE IS NO EXISTING SIDEWALK LOCATED ALONG BESLEY ROAD. AS THERE IS SIDEWALK ON TETTERTON AVENUE, ACROSS THE STREET FROM THE SUBJECT PROPERTY IN THE MANORS AT WOLFTRAP SUBDIVISION, THE APPLICANT WILL PROVIDE A SIDEWALK ALONG THE TETTERTON AVENUE FRONTAGE TO PROVIDE A CONTINUOUS PEDESTRIAN CONNECTION TO BESLEY ROAD.
3. THE APPLICANT RESPECTFULLY REQUESTS A WAIVER OF THE STREETLIGHT REQUIREMENT AT THE PROPOSED PRIVATE STREET ENTRANCE AS NOTED IN SECTION 7-1002.1B(2) OF THE PUBLIC FACILITIES MANUAL AND SECTION 101-2-2(20) OF THE COUNTY CODE IN ORDER TO PRESERVE THE RURAL CHARACTER OF THE NEIGHBORHOOD AND PRESERVE THE DARK SKY.

**TABULATIONS**

SITE AREA = 236,431 # OR 5.43 ACRES  
 EXISTING ZONING = R-1  
 PROPOSED ZONING = PDH-2  
 PROPOSED USE = SINGLE FAMILY DETACHED  
 MAXIMUM BUILDING HEIGHT REQUIRED/PROVIDED. = 35 FEET  
 MINIMUM DISTRICT SIZE REQUIRED = 2 ACRES  
 AVERAGE LOT SIZE REQUIRED = NONE REQUIRED  
 AVERAGE LOT SIZE PROVIDED = ±18,000 #  
 MINIMUM LOT SIZE REQUIRED = NONE  
 MINIMUM LOT SIZE PROVIDED = ±14,100 #  
 MINIMUM LOT WIDTH REQUIRED = NONE REQUIRED  
 MINIMUM YARDS:  
 REQUIRED: NONE  
 PROVIDED: SEE BELOW  
 OPEN SPACE REQUIRED: 20% OR 47,286 SF  
 OPEN SPACE PROVIDED: ±30% OR ±73,000 SF  
 ENVIRONMENTAL QUALITY CORRIDOR: ±12% OR ±29,000 SF  
 CONSERVATION EASEMENT: ±14% OR ±35,000 SF  
 PARKING:  
 REQUIRED (2 SPACES/UNIT FOR LOTS WITH FRONTAGE ON PUBLIC STREET) = 10 SPACES  
 REQUIRED (3 SPACES/UNIT FOR LOTS WITH FRONTAGE ON PRIVATE STREET) = 12 SPACES  
 PROVIDED (4 SPACES/UNIT) = 36 SPACES (MIN. 18' DRIVEWAY WITH 2 SPACES IN DRIVEWAY # 2 SPACES IN GARAGE)  
 DENSITY:  
 PERMITTED = 2.00 DU/AC  
 PROPOSED = 1.66 DU/AC

**TYPICAL LOT DETAIL**



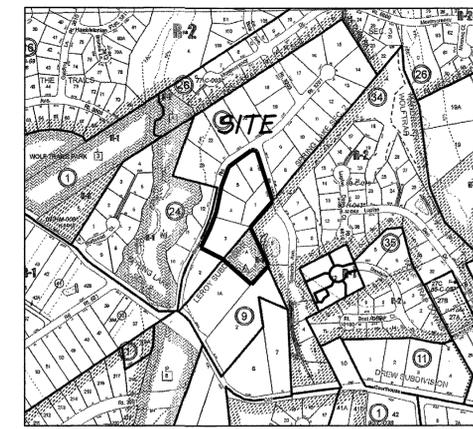
**LOT 4 EASTERLY PERIPHERAL SIDE YARD SETBACK**

IN ACCORDANCE WITH SECTION 2-412 OF THE ZONING ORDINANCE, ANY OPEN DECK WITH NO PART OF ITS FLOOR HIGHER THAN 4' ABOVE FINISHED GROUND LEVEL MAY EXTEND INTO THE SIDE YARD 5' BUT NOT CLOSER THAN 5' TO ANY SIDE LOT LINE AND INTO THE REAR YARD 20' BUT NOT CLOSER THAN 5' TO ANY SIDE OR REAR LOT LINE.

IN ACCORDANCE WITH SECTION 2-412 OF THE ZONING ORDINANCE, ANY OPEN DECK WITH ANY PART OF ITS FLOOR HIGHER THAN 4' ABOVE FINISHED GROUND LEVEL MAY NOT EXTEND INTO A SIDE YARD AND MAY EXTEND 12' INTO A REAR YARD, BUT NOT CLOSER THAN 5' TO ANY REAR LOT LINE AND NOT CLOSER THAN A DISTANCE EQUAL TO THE MINIMUM REQUIRED SIDE YARD TO THE SIDE LOT LINE.

**SHEET INDEX**

1. COVER SHEET
2. CONCEPTUAL/FINAL DEVELOPMENT PLAN
3. LANDSCAPE PLAN
4. EXISTING CONDITIONS PLAN
5. EXISTING VEGETATION MAP
- 5A. TREE PRESERVATION AND PROTECTION PLAN
- 5B. TREE PRESERVATION NARRATIVES
6. ELEVATIONS
7. STORMWATER MANAGEMENT INFORMATION



**VICINITY MAP**  
SCALE: 1" = 500'



**SOILS MAP**  
SCALE: 1" = 500'

**SOIL INFORMATION**

SOIL #	SOIL NAME	PROBLEM CLASS	FOUNDATION SUPPORT	DRAINAGE	EROSION POTENTIAL
30	CODORUS - HATBORO	III	POOR	POOR	LOW
39	GLENELG SILT LOAM	I	GOOD	GOOD	HIGH
105	WHEATON-GLENELG COMPLEX	IVB	GOOD	GOOD	HIGH

**RESIDUE PARENT SUBDIVISION DENSITY**

**EXISTING SPRING LAKE, SECTION 2 (BEFORE REZONING)**  
 THE PARCELS LOCATED ON TAX MAP 28-4 ((8)) 3-7 ARE CURRENTLY PART OF THE SPRING LAKE, SECTION 2 SUBDIVISION. THIS SUBDIVISION WAS CREATED IN DEED BOOK 1734, PAGE 22. PER THIS DEED, PLEASE NOTE THE FOLLOWING:

TOTAL AREA SUBJECT TO SUBDIVISION AFTER RIGHT-OF-WAY DEDICATION: 28.4 ACRES (PLEASE NOTE PARCEL A, WHICH IS 5.5 ACRES, IS NOT INCLUDED)  
 NUMBER OF LOTS: 24  
 DENSITY: .85 DU/ACRE

SUBSEQUENT TO THIS DEED, THE AFOREMENTIONED PARCEL A (5.5 ACRES) AND LOTS 1 AND 24 (8.1 ACRES) OF SPRING LAKE, SECTION 2 WERE RE-SUBDIVIDED IN DEED BOOK 5040, PAGE 368 AND INCLUDED IN SPRING LAKE, SECTION 2. PLEASE NOTE THE FOLLOWING:

TOTAL AREA SUBJECT TO SUBDIVISION AFTER RIGHT-OF-WAY DEDICATION: 13.15 ACRES  
 NUMBER OF NEW LOTS: 10 (PLEASE NOTE THAT WHILE THIS RE-SUBDIVISION ULTIMATELY CREATED 12 LOTS, LOTS 1 AND 24 IN THE ORIGINAL SPRING LAKE, SECTION 2 WERE INCLUDED IN THIS RE-SUBDIVISION SO THERE IS A NET INCREASE OF 10 LOTS).  
 DENSITY: .91 DU/ACRE

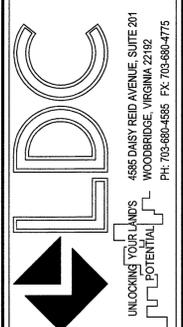
FINAL ACREAGE OF SPRING LAKE, SECTION 2 AFTER RE-SUBDIVISION AND RIGHT-OF-WAY DEDICATION: 33.45 ACRES  
 FINAL NUMBER OF LOTS IN SPRING LAKE, SECTION 2 AFTER RE-SUBDIVISION: 34  
 FINAL DENSITY OF SPRING LAKE, SECTION 2: 1.01 DU/ACRE

**PROPOSED SPRING LAKE, SECTION 2 (AFTER REZONING AND REMOVAL OF LOTS 3-7 FROM SUBDIVISION = 4.13 ACRES)**  
 ACREAGE OF SPRING LAKE, SECTION 2: 29.32 ACRES  
 NUMBER OF LOTS: 29  
**DENSITY: .91 DU/ACRE, WHICH IS BELOW THE MAXIMUM OF 1 DU/ACRE**

**EXISTING LEROY SUBDIVISION (BEFORE REZONING)**  
 THE PARCEL LOCATED ON TAX MAP 28-4 ((9)) A IS CURRENTLY PART OF THE LEROY SUBDIVISION. THIS SUBDIVISION WAS CREATED IN DEED BOOK 1716, PAGE 73. PER THIS DEED, PLEASE NOTE THE FOLLOWING:

TOTAL AREA SUBJECT TO SUBDIVISION AFTER RIGHT-OF-WAY DEDICATION: 7.14 ACRES  
 NUMBER OF LOTS: 2  
 DENSITY: .28 DU/ACRE

**PROPOSED LEROY SUBDIVISION (AFTER REZONING AND REMOVAL OF PARCEL A FROM SUBDIVISION = 1.29 ACRES)**  
 ACREAGE OF LEROY SUBDIVISION: 5.85 ACRES  
 NUMBER OF LOTS: 2  
**DENSITY: .34 DU/ACRE, WHICH IS BELOW THE MAXIMUM OF 1 DU/ACRE**



**COVER SHEET**

**SPRING LAKE SECTION 3**

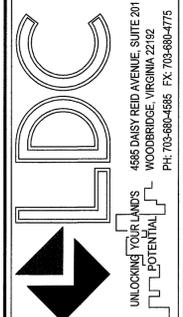
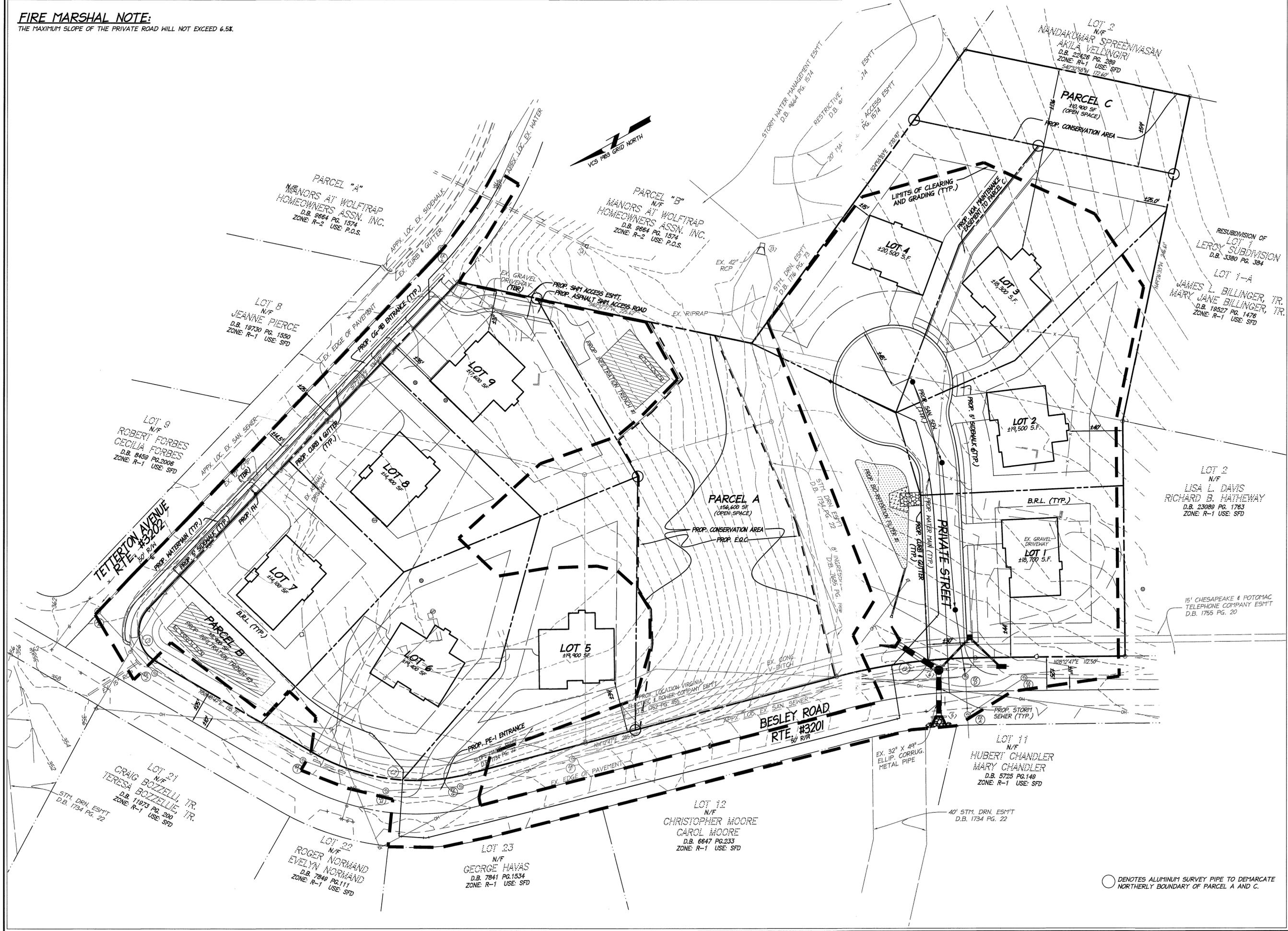
REVISION	DATE	DESCRIPTION	BY	APPROVED	DATE
1	8/13/13	REVISE NOTE 26 & 29	KMA		
2	10/23/13	UPDATE TYPICAL LOT DETAILS	KMA		
3	11/13/13	UPDATE WAIVERS & MODIFICATIONS	KMA		
4	11/13/13	UPDATE TITLE & SHEET NUMBER	KMA		
5	11/13/13	UPDATE NOTES 16 AND 17	KMA		
6	11/13/13	UPDATE SHEET INDEX	KMA		

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



SCALE: N/A  
 SHEET 1 OF 7  
 DATE: MARCH, 2013  
 DRAFT: KMA CHECK: MTT  
 FILE NUMBER: 12265-1-0 3.CB

**FIRE MARSHAL NOTE:**  
THE MAXIMUM SLOPE OF THE PRIVATE ROAD WILL NOT EXCEED 6.5%.



UNLOCKING YOUR LANDS  
POTENTIAL  
4885 DASY REID AVENUE, SUITE 201  
WOODBRIDGE, VIRGINIA 22192  
PH: 703-880-4585 FX: 703-880-4775

CONCEPTUAL/FINAL  
DEVELOPMENT  
PLAN

SPRING LAKE  
SECTION 3

HUNTER HILL DISTRICT  
FAIRFAX COUNTY, VIRGINIA

DATE	DESIGN NO.	DESCRIPTION	REVIEW BY	APPROVED DATE
10/13/13	KYA	REVISE LAYOUT & SHEET NUMBER		
11/13/13	VMA	REVISE LAYOUT AND UTILITIES		
		REVISE L.O.C.		

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



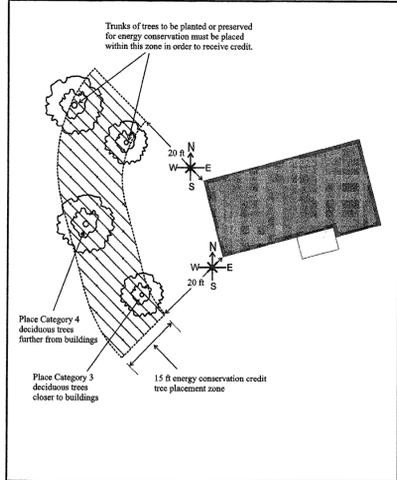
SCALE:  
1" = 30'

SHEET 2 OF 7

DATE: MARCH, 2013

DRAFT: KYA CHECK: MTM

FILE NUMBER: 12265-1-0 3.0B



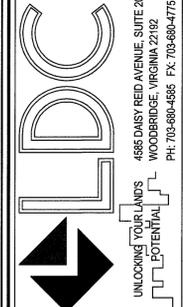
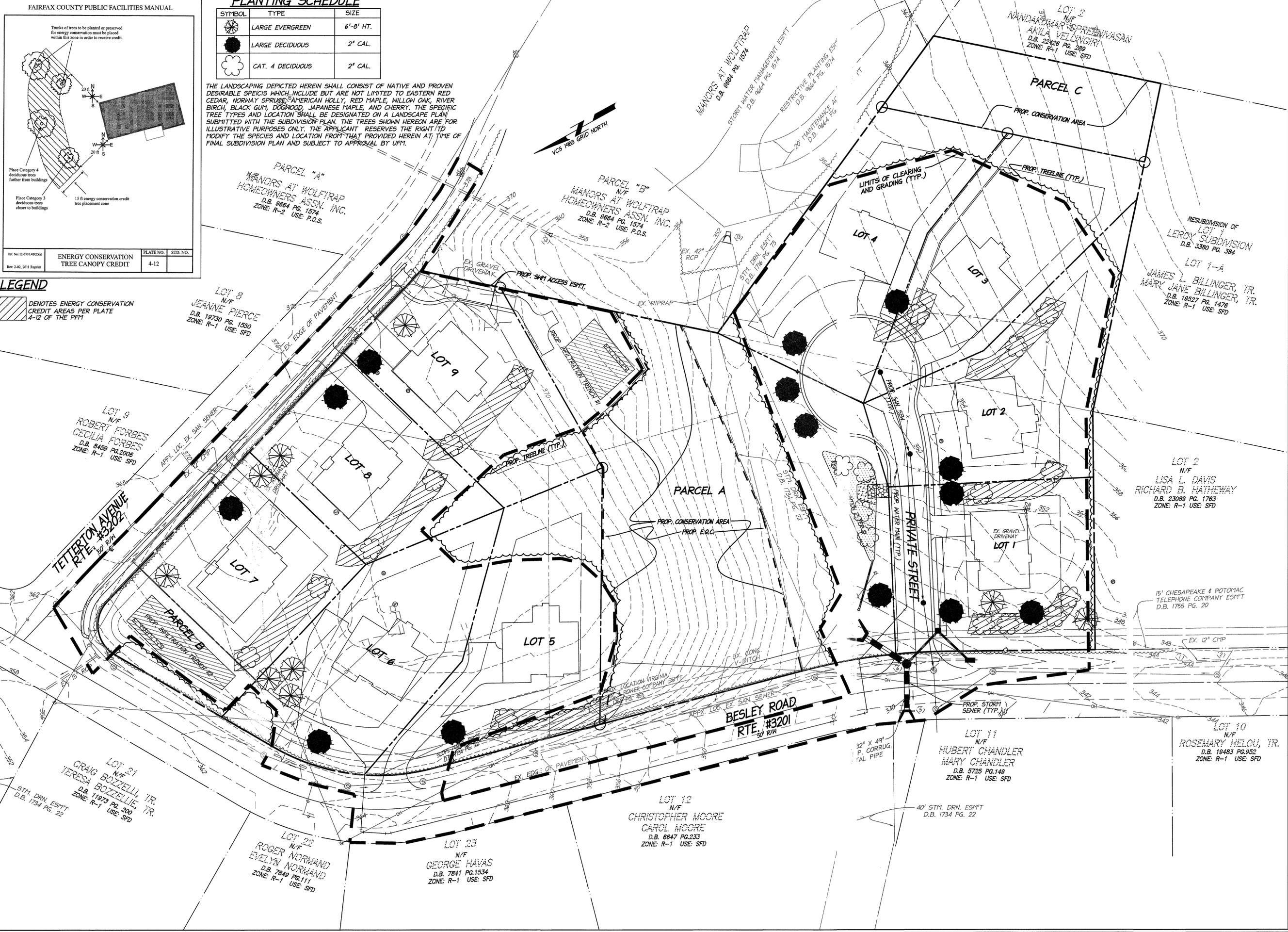
**PLANTING SCHEDULE**

SYMBOL	TYPE	SIZE
	LARGE EVERGREEN	6'-8' HT.
	LARGE DECIDUOUS	2' CAL.
	CAT. 4 DECIDUOUS	2' CAL.

THE LANDSCAPING DEPICTED HEREIN SHALL CONSIST OF NATIVE AND PROVEN DESIRABLE SPECIES WHICH INCLUDE BUT ARE NOT LIMITED TO EASTERN RED CEDAR, NORWAY SPRUCE, AMERICAN HOLLY, RED MAPLE, WILLOW OAK, RIVER BIRCH, BLACK GUM, DOGWOOD, JAPANESE MAPLE, AND CHERRY. THE SPECIFIC TREE TYPES AND LOCATION SHALL BE DESIGNATED ON A LANDSCAPE PLAN SUBMITTED WITH THE SUBDIVISION PLAN. THE TREES SHOWN HEREON ARE FOR ILLUSTRATIVE PURPOSES ONLY. THE APPLICANT RESERVES THE RIGHT TO MODIFY THE SPECIES AND LOCATION FROM THAT PROVIDED HEREIN AT TIME OF FINAL SUBDIVISION PLAN AND SUBJECT TO APPROVAL BY UFM.

Ref. Sec. 12-610-402(2)	ENERGY CONSERVATION TREE CANOPY CREDIT	PLATE NO.	STD. NO.
Rev. 2-03, 2011 Reprint		4-12	

**LEGEND**  
 DENOTES ENERGY CONSERVATION CREDIT AREAS PER PLATE 4-12 OF THE PFM



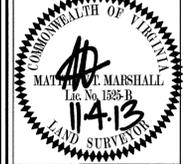
LANDSCAPE PLAN

SPRING LAKE SECTION 3

HUNTER HILL DISTRICT  
 FAIRFAX COUNTY, VIRGINIA

DATE	DESCRIPTION	REVISION APPROVED BY:
8/2/13	1 REVISE LAYOUT	
8/2/13	2 REVISE LAYOUT	
10/13	3 REVISE LAYOUT	
11/13	4 REVISE LAYOUT	
11/13	5 REVISE LAYOUT	
11/13	6 REVISE LAYOUT	
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11/13	32 REVISE LAYOUT	
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11/13	34 REVISE LAYOUT	
11/13	35 REVISE LAYOUT	
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11/13	100 REVISE LAYOUT	

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



SCALE:  
 1" = 30'

SHEET 3 OF 7

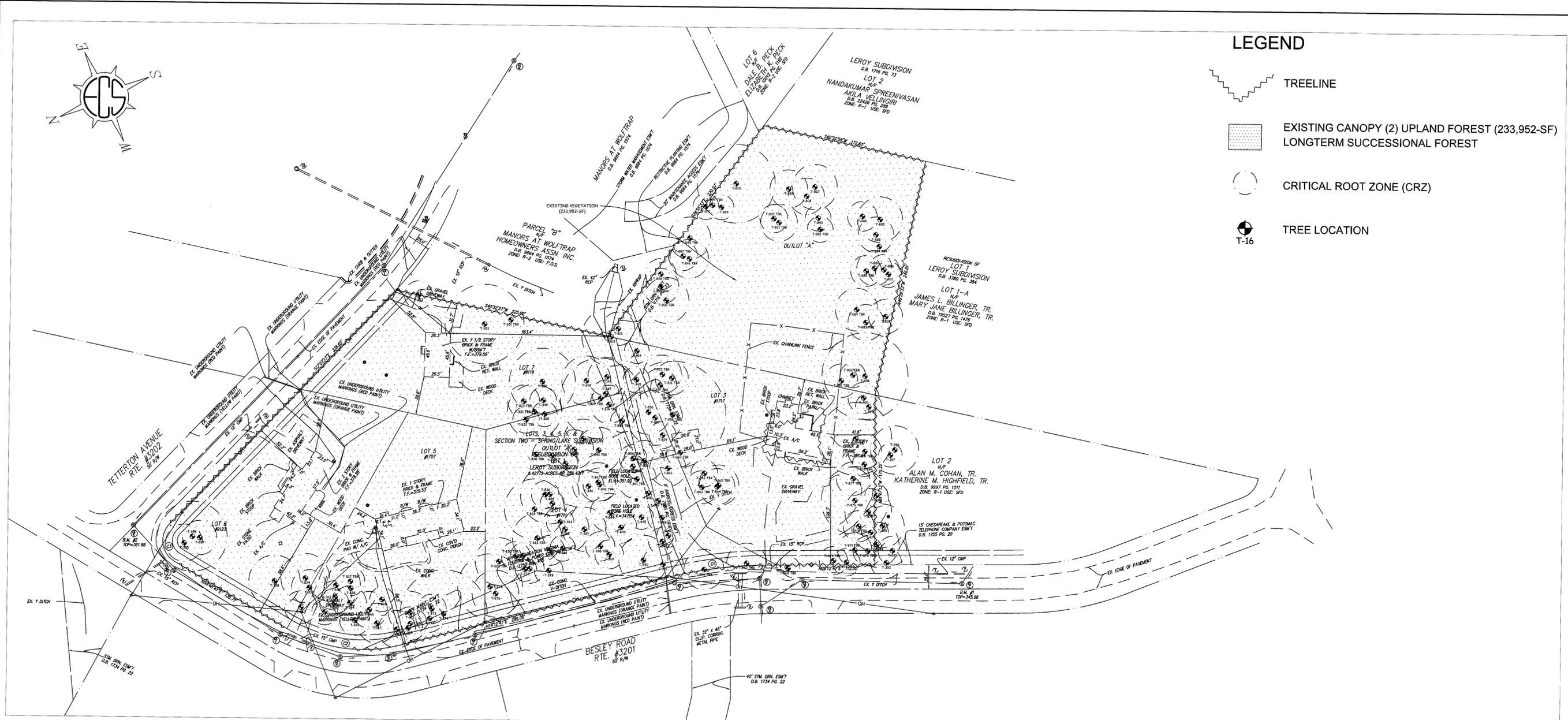
DATE: MARCH, 2013  
 DRAFT: KMA CHECK: MTT  
 FILE NUMBER: 12265-1-0 3.0B





**LEGEND**

-  TREELINE
-  EXISTING CANOPY (2) UPLAND FOREST (233,952-SF)  
LONGTERM SUCCESSIONAL FOREST
-  CRITICAL ROOT ZONE (CRZ)
-  TREE LOCATION

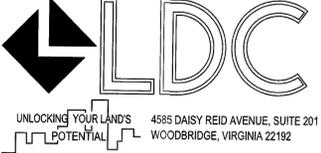
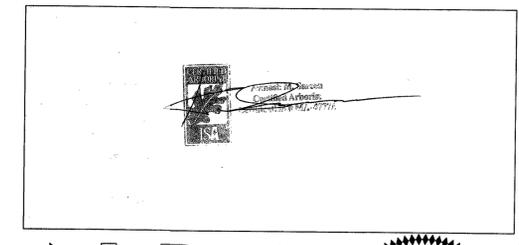


Tree Number	Common Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Notes
345	Red Maple	13.6	13.6	59%		Girdling, cavity near base, large dead limbs
346	Tulip Poplar	19.9	19.9	86%		Slight lean, small dead limbs
347	Northern Red Oak	14.2	14.2	70%		Some dead limbs
348	Northern Red Oak	25.5	25.5	84%		Some dead limbs
349	Chestnut Oak	13.8	13.8	84%		Some dead limbs
350	Chestnut Oak	34.3	34.3	78%		Double trunk, some large dead limbs
351	Dead				X	
352	White Oak	41.1	41.1	72%		Double trunk, slight lean, trunk damage, dead limbs
353	Red Maple	14.6	14.6	69%		Dead limbs, pruned for power lines
354	Black Oak	22.2	22.2	89%		One-sided, small dead limbs
355	Chestnut Oak	19.3	19.3	84%		One-sided, small dead limbs
356	White Oak	36.2	36.2	69%		Triple trunk, one-sided, trunk damage
357	Northern Red Oak	17.8	17.8	66%		Lean, trunk growths
358	Chestnut Oak	26.7	26.7	69%		Girdling, dead limbs
359	Chestnut Oak	18.4	18.4	63%		Cavity at base, trunk disease, dead limbs
360	Chestnut Oak	16.8	16.8	81%		Some dead limbs
361	White Oak	13.5	13.5	72%		Trunk disease, one-sided, small dead limbs
362	Chestnut Oak	15.1	15.1	69%		Small dead limbs
363	Chestnut Oak	17.0	17.0	78%		Root growths, lean, small dead limbs
364	Chestnut Oak	17.4	17.4	72%		Trunk crooked, lean, small dead limbs
365	Chestnut Oak	15.6	15.6	69%		Dead limbs
366	Chestnut Oak	18.9	18.9	78%		Large dead limbs
367	Chestnut Oak	20.6	20.6	69%		Small dead limbs, double trunk
368	Chestnut Oak	19.4	19.4	78%		One-sided, top crooked, dead limbs
369	Chestnut Oak	15.0	15.0	78%		Root growths, large dead limbs
370	Northern Red Oak	17.3	17.3	66%		Lean, trunk growths
371	Chestnut Oak	22.2	22.2	63%		Lean, trunk growths, small dead limbs, girdling roots
372	Chestnut Oak	14.3	14.3	72%		One-sided, small dead limbs
373	White Oak	15.2	15.2	61%		Double trunk, large dead limbs
374	Chestnut Oak	45.4	45.4	72%		Double trunk, large dead limbs
375	Chestnut Oak	33.7	33.7	66%		Double trunk, large dead limbs, trunk crooked, girdling roots
376	Chestnut Oak	24.3	24.3	78%		Small dead limbs
377	Chestnut Oak	12.4	12.4	75%		Small dead limbs
378	Chestnut Oak	15.1	15.1	75%		Dead limbs
379	Northern Red Oak	14.9	14.9	69%		Dead limbs
380	Chestnut Oak	15.5	15.5	75%		Large dead limbs
381	Chestnut Oak	13.3	13.3	81%		Dead limbs
382	Chestnut Oak	25.0	25.0	79%		Double trunk, small dead limbs
383	Chestnut Oak	14.3	14.3	78%		Dead limbs
384	Chestnut Oak	12.8	12.8	75%		Large dead limbs
385	Chestnut Oak	20.2	20.2	69%		Double trunk, weak crotch, small dead limbs
386	Northern Red Oak	16.3	16.3	78%		Large dead limbs
387	Chestnut Oak	22.8	22.8	81%		Dead limbs
388	Northern Red Oak	15.2	15.2	84%	X	Half dead, severe lean, roots exposed
389	Northern Red Oak	14.9	14.9	76%		Small dead limbs
390	White Oak	25.5	25.5	89%		Root growths, large dead limbs
391	White Oak	21.1	21.1	69%		One-sided, dead limbs
392	Chestnut Oak	16.0	16.0	81%		Offsite, dead limbs
393	White Oak	23.3	23.3	79%		Offsite, root growths, dead limbs
394	Chestnut Oak	23.3	23.3	79%		Shared, double trunk, slight lean, small dead limbs
395	Chestnut Oak	22.7	22.7	75%		Offsite, double trunk, one-sided, small dead limbs
396	Northern Red Oak	12.0	12.0	88%		Shared, top broken, root growth

397	White Oak	12.3	12.3	75%		Offsite, one-sided, small dead limbs, root growths
398	Northern Red Oak	25.0	25.0	86%		Offsite
399	Chestnut Oak	13.8	13.8	91%		Offsite
400	Chestnut Oak	16.1	16.1	75%		Root growth, small dead limbs
401	Chestnut Oak	44.8	44.8	75%		Triple trunk, small dead limbs
402	Chestnut Oak	17.7	17.7	68%		Trunk growths, small dead limbs
403	Chestnut Oak	13.6	13.6	75%		Small dead limbs
404	Chestnut Oak	15.9	15.9	75%		Dead limbs
405	White Oak	23.5	23.5	89%		Large dead limbs
406	Northern Red Oak	15.4	15.4	82%		Small dead limbs
407	Chestnut Oak	23.3	23.3	81%		Dead limbs
408	Northern Red Oak	18.7	18.7	75%		Dead limbs
409	White Oak	19.7	19.7	69%		Small dead limbs
410	Chestnut Oak	40.6	40.6	72%		Root growths, dead limbs
411	Tulip Poplar	13.4	13.4	75%		Double trunk, small dead limbs
412	White Oak	17.3	17.3	81%		Vines, small dead limbs
413	White Oak	20.3	20.3	72%		Dead leader, cavity
414	Tulip Poplar	12.9	12.9	91%		Dead leader, cavity
415	Tulip Poplar	19.9	19.9	100%	X	
416	Red Maple	17.3	17.3	72%	X	Trunk growths, slight lean
417	Tulip Poplar	17.3	17.3	69%	X	Lean, dead limbs
418	Northern Red Oak	19.7	19.7	66%	X	Lean, dead limbs
419	Northern Red Oak	41.7	41.7	63%	X	Double trunk, crotch cavity, large dead limbs
420	Chestnut Oak	13.0	13.0	75%		Double trunk
421	Chestnut Oak	28.2	28.2	69%	X	Double trunk
422	Chestnut Oak	13.8	13.8	66%	X	Dead limbs, root growths, lean
423	Chestnut Oak	16.6	16.6	69%	X	Large dead limbs, one-sided, root growths
424	Chestnut Oak	25.3	25.3	69%	X	Double trunk, dead limbs
425	Chestnut Oak	25.7	25.7	75%		Large cavity at base, large dead limbs, girdling roots
426	Chestnut Oak	27.8	27.8	72%		Double trunk, dead limbs
427	Chestnut Oak	15.0	15.0	69%	X	Small dead limbs
428	Chestnut Oak	12.7	12.7	75%	X	One-sided, slight lean
429	Chestnut Oak	24.5	24.5	81%	X	Dead limbs
430	Chestnut Oak	15.0	15.0	69%	X	Cavity at base
431	Chestnut Oak	13.0	13.0	72%		Double trunk, cavity between trunks, dead limbs
432	Chestnut Oak	25.8	25.8	63%	X	Multi-trunk, massive disease at base
433	Chestnut Oak	31.1	31.1	56%	X	Dead limbs
434	Chestnut Oak	12.5	12.5	78%		Dead limbs
435	Chestnut Oak	30.5	30.5	75%	X	Dead limbs
436	Chestnut Oak	14.3	14.3	75%		Dead limbs
437	White Oak	20.2	20.2	78%		Large dead limbs
438	Dead					
439	Chestnut Oak	20.1	20.1	72%	X	Dead limbs, small cavity in roots
440	Northern Red Oak	23.5	23.5	75%	X	Large dead limbs
441	Chestnut Oak	20.3	20.3	75%	X	Dead limbs
442	Chestnut Oak	17.1	17.1	72%	X	Dead limbs
443	Chestnut Oak	20.1	20.1	84%		Small dead limbs
444	Chestnut Oak	16.4	16.4	69%		Large dead limbs
445	Red Maple	12.5	12.5	89%		Large dead limbs
446	Chestnut Oak	14.3	14.3	81%		Small dead limbs
447	Chestnut Oak	12.0	12.0	72%		Root growths
448	White Oak	15.0	15.0	75%		Small dead limbs
449	Dead					
450	Tulip Poplar	20.6	20.6	84%	X	Large dead limbs

451	White Oak	20.3	20.3	84%	X	Dead limbs
452	White Oak	12.3	12.3	69%	X	Root growths, dead limbs
453	White Oak	21.1	21.1	63%	X	Cavity at base, large dead limbs
454	Tulip Poplar	14.3	14.3	61%	X	Root growths, small dead limbs
455	Tulip Poplar	12.0	12.0	81%	X	Small dead limbs
456	Tulip Poplar	23.0	23.0	81%	X	Small dead limbs
457	Red Maple	28.5	28.5	72%	X	Double trunk, small dead limbs
458	Tulip Poplar	55.5	55.5	89%	X	Double trunk
459	Red Maple	14.0	14.0	66%	X	Dead leader, dead limbs
460	White Oak	14.7	14.7	75%	X	Small dead limbs, growing against shed
461	White Oak	18.9	18.9	69%	X	Girdling roots, dead limbs
462	White Oak	13.9	13.9	66%	X	Root growths, dead limbs
463	Chestnut Oak	17.0	17.0	59%	X	One-sided, dead trunk
464	Chestnut Oak	18.7	18.7	75%	X	Crooked at top, trunk damage
465	Northern Red Oak	21.0	21.0	72%	X	Large dead limbs
466	White Oak	20.8	20.8	72%	X	Large dead limbs
467	White Oak	20.8	20.8	63%	X	Dead limbs
468	Tulip Poplar	12.5	12.5	61%	X	Small dead limbs
469	White Oak	14.7	14.7	78%	X	Small dead limbs
470	Chestnut Oak	14.2	14.2	75%	X	Large dead limbs
471	Black Oak	17.8	17.8	59%	X	Root growths, large dead limbs
472	Northern Red Oak	15.3	15.3	66%	X	Dead trunk, dead limbs
473	Northern Red Oak	18.2	18.2	56%	X	Large root disease, lean, dead limbs
474	Northern Red Oak	16.1	16.1	72%	X	Root growths
475	Chestnut Oak	24.4	24.4	72%	X	Double trunk, dead limbs, weak crotch
476	Northern Red Oak	35.0	35.0	72%	X	Triple trunk, broken trunk
477	Chestnut Oak	17.3	17.3	75%	X	Dead limbs
478	Chestnut Oak	12.5	12.5	84%	X	Small dead limbs
479	Black Oak	17.4	17.4	61%	X	Large dead limbs
480	Chestnut Oak	37.5	37.5	66%	X	Double trunk, small dead limbs
481	White Oak	17.3	17.3	72%	X	Large dead limbs
482	Chestnut Oak	13.1	13.1	86%	X	Small cavity at base
483	Black Oak	18.6	18.6	34%	X	Large dead limbs
484	Chestnut Oak	22.0	22.0	72%	X	Crooked trunk, small dead limbs
485	Chestnut Oak	16.0	16.0	84%	X	Double trunk, weak crotch
486	Chestnut Oak	18.2	18.2	62%	X	Double trunk, weak crotch
487	Dead					
488	Chestnut Oak	18.5	18.5	75%	X	Large dead limbs
489	Black Oak	13.4	13.4	75%	X	Small dead limbs
490	Black Oak	13.4	13.4	75%	X	Large dead limbs
491	Chestnut Oak	19.2	19.2	78%	X	Dead limbs
492	White Oak	14.6	14.6	69%	X	Root growth, one-sided, small dead limbs
493	Chestnut Oak	12.9	12.9	75%	X	Dead limbs
494	Dead					
495	Chestnut Oak	21.8	21.8	78%	X	One-sided, dead limbs
496	Tulip Poplar	20.2	20.2	78%	X	Dead limbs
497	Chestnut Oak	15.1	15.1	81%	X	One-sided, small dead limbs
498	Tulip Poplar	16.0	16.0	78%	X	One-sided
499	Tulip Poplar	18.7	18.7	38%	X	Leaning
500	Tulip Poplar	23.7	23.7	75%	X	Supporting fallen tree

NOTE: SHARED TREES SHALL NOT BE REMOVED WITHOUT WRITTEN PERMISSION FROM AFFECTED ADJACENT PROPERTY OWNERS.



CELEBRATING 25 YEARS OF EXCELLENCE

ECS - MID-ATLANTIC LLC  
14025 THUNDERBOLT PLACE  
CHANTILLY, VA 20151  
1-800-823-3489  
703-871-8400  
CFAD703104-0507

SETTING THE STANDARD FOR SERVICE

SUMMER HILL ESTATES  
VIENNA, VIRGINIA  
FAIRFAX COUNTY

EXISTING VEGETATION  
MAPPING  
SEKAS HOMES, LTD

ECS REVISIONS

ENGINEER: IMR  
DRAFTING: IMR

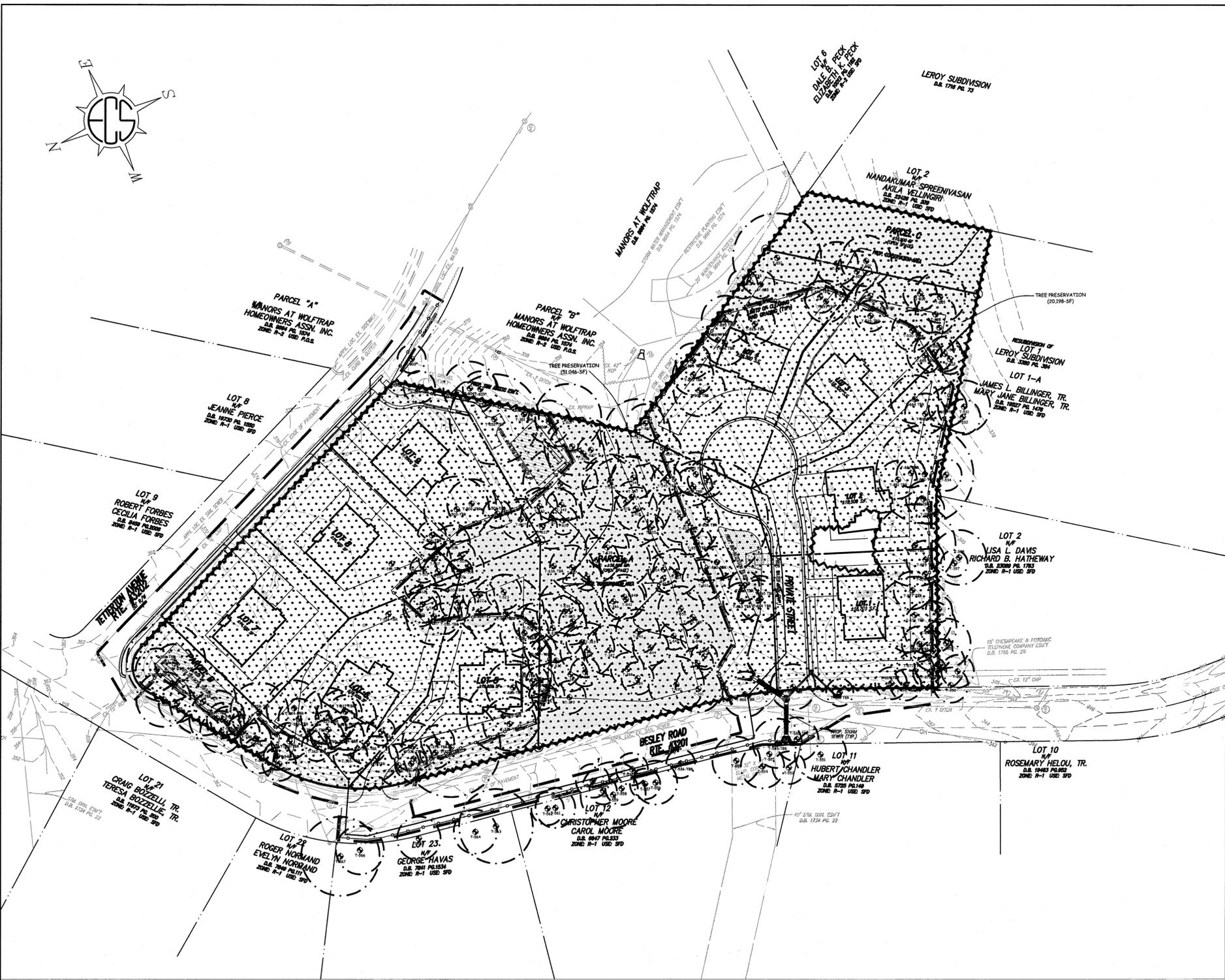
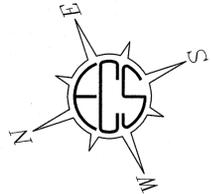
PROJECT NO. 01:20820

SHEET 5 of 7

DATE 03/07/13

1" = 50'

#10265-1-0



**LEGEND**



EXISTING CANOPY (2) UPLAND FOREST (233,952-SF)  
LONGTERM SUCCESSIONAL FOREST



TREE PRESERVATION AREA (2) UPLAND FOREST (71,244-SF)  
LONGTERM SUCCESSIONAL FOREST



CRITICAL ROOT ZONE (CRZ)



TREE LOCATION



TREE PROTECTION FENCING & ROOT PRUNING

**Table 12.10 - 10-Year Tree Canopy Calculation Worksheet**

Step	Totals
<b>A. Tree Preservation Target &amp; Statement</b>	
A1	Tree Preservation Target calculations and statement
<b>B. Tree Canopy Requirement</b>	
B1	Gross Site Area = 236,460.0
B2	Subtract area dedicated to parks, road frontage = 0.0
B3	Subtract area of exemptions (wetlands/stream and drainfields) = 0.0
B4	Adjusted gross site area = 236,460.0
B5	Identify site's zoning and/or use = R-2
B6	Percentage of 10-year canopy required = 30%
B7	Area of 10-year canopy required = 70,938
B8	Modification of 10-year Tree Canopy Requirement Requested? No
B9	If B8 is yes, list plan sheet where modification is located N/A
<b>C. Tree Preservation</b>	
C1	Tree Preservation Target Area = 70,185.6
C2	Total canopy area meeting standards of § 12-0400 = 71,244.0
C3	C2 x 1.25 = 89,055.0
C4	Total canopy area provided by unique or valuable forest/woodland communities = 0.0
C5	C4 x 1.5 = 0.0
C6	Total of canopy area provide by Heritage, Memorial, or Street Trees = 0.0
C7	C6 x 1.5 to 3.0 = 0.0
C8	Canopy area of trees within Resource Protection Areas and 100-year floodplains = 0.0
C9	C8 x 1.0 = 0.0
C10	Total of C3, C5, C7, and C9 = 89,055
<b>D. Tree Planting</b>	
D1	Area of canopy to be met through tree planting = 0.0
D2	Area of canopy planted for air quality benefits = 0.0
D3	D2 x 1.5 = 0.0
D4	Area of canopy planted for energy conservation = 0.0
D5	D4 x 1.5 = 0.0
D6	Area of canopy planted for water quality benefits = 0.0
D7	D6 x 1.25 = 0.0
D8	Area of canopy planted for wildlife benefits = 0.0
D9	D8 x 1.5 = 0.0
D10	Area of canopy provided by native trees = 0.0
D11	D10 x 1.5 = 0.0
D12	Area of canopy provided by improved cultivars and varieties = 0.0
D13	D12 x 1.5 = 0.0
D14	Area of canopy provided through tree seedlings = 0.0
D15	Area of canopy provided through native shrubs or woody seed mix = 0.0
D16	Percentage of 14 represented by D15 (must be less than 33%) = 0.0%
D17	Total of canopy area provided through tree planting = 0
D18	Is an offsite planting relief requested? No
D19	Tree Bank or Tree Fund? No
D20	Canopy area requested to be provided through offsite banking or tree fund? No
D21	Amount to be deposited into the Tree Preservation and Planting Fund = \$0.0
<b>E. Total of 10-year Tree Canopy Provided</b>	
E1	Total of canopy area provided through tree preservation = 89,055
E2	Total of canopy area provided through tree planting = 0
E3	Total of canopy area provided through offsite mechanism = 0
E4	Total of 10-year Tree Canopy Provided = 89,055

**INVASIVE SPECIES CONTROL NARRATIVE:**

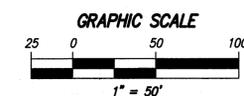
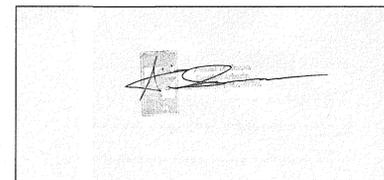
1. ANY APPLICATION OF ENVIRONMENTALLY SENSITIVE HERBICIDES SHALL BE APPLIED BY A VIRGINIA CERTIFIED APPLICATOR OR REGISTERED TECHNICIAN.
2. ENGLISH IVY: REMOVE FROM TREES BY CUTTING ALL VINES AT GROUND LEVEL. VINES SHOULD BE CUT AGAIN SEVERAL FEET UP THE TRUNK. PEEL THE CUT SECTION OF IVY OFF BUT CARE SHOULD BE TAKEN NOT TO STRIP THE BARK OF THE TREE. PULL GROUND IVY BACK A FEW FEET FROM THE BASE OF THE TREE TO SLOW REGROWTH UP THE TREE TRUNK. REMOVE GROUND IVY BY HAND PULLING, CUTTING AND MULCHING OVER TOP, AND/OR APPLYING A SYSTEMIC HERBICIDE LIKE TRICLOPYR TO LEAVES OR FRESHLY CUT LARGE STEMS. RETREATMENT MAY BE NECESSARY FOR COMPLETE ERADICATION. THE ENGLISH IVY REMNANTS SHALL BE BAGGED AND REMOVED FROM THE PROJECT SITE.
3. JAPANESE HONEYSUCKLE: SHALL BE REMOVED BY HAND TO MINIMIZE SITE DISTURBANCE. IN THE GROWING SEASON, AN APPLICATION OF AN ENVIRONMENTALLY SENSITIVE APPROVED HERBICIDE MAY BE APPLIED BY A VIRGINIA CERTIFIED APPLICATOR. TO REDUCE DAMAGE TO NON-TARGET PLANTS, HERBICIDES SUCH AS GLYPHOSATE AND TRICLOPYR MAY BE APPLIED TO FOLIAGE BY A CERTIFIED APPLICATOR IN AUTUMN, SINCE JAPANESE HONEYSUCKLE CONTINUES TO PHOTOSYNTHESIZE AFTER MANY OTHER SPECIES LOSE THEIR LEAVES.
4. INVASIVE SPECIES CONTROL SHALL BE CONDUCTED UNTIL THE PLANTS NOTED ABOVE ARE NO LONGER IN ABUNDANCE OR UNTIL BOND RELEASE, WHICHEVER IS LATER.

**TREE PRESERVATION & CANOPY CALCULATIONS**

GROSS SITE AREA	5.43 - AC	236,431 SF
ADJUSTED SITE AREA		236,431 SF
MULTIPLY PERCENT REQUIRED (ZONED PDH-2)		30%
EQUALS TREE COVER TO BE PROVIDED		70,929 SF
EXISTING TREES TO BE PRESERVED		71,244 SF
PROPOSED CREDIT REQUIRED BY PLANTING		0 SF
HAS THE TREE PRESERVATION TARGET BEEN MET?		YES
ADJUSTED CANOPY COVER PER SECTION 12-0404.4		89,055 SF
TOTAL TREE COVER PROVIDED	37.7%	89,055 SF

**Table 12.3 - Tree Preservation Target Calculations & Statement**

A	Pre-development area (sf) of existing tree canopy (From Existing Vegetation Map) =	233,952.0
B	Percentage of gross site area covered by existing tree canopy =	98.9%
C	Percentage of 10-year tree canopy required for site per zoning =	30%
D	Percentage of the 10-year tree canopy requirement that should be met through preservation =	98.9%
E	Proposed percentage of canopy requirement that will be met through tree preservation =	126.9%
F	Has the Tree Preservation Target minimum been met?	YES
G	If no for line F, provide sheet number where deviation request is located	N/A
H	If step G requires a narrative it shall be prepared and attached	N/A



**SPRING LAKE SECTION 3  
VIENNA, VIRGINIA  
FAIRFAX COUNTY**

**TREE PRESERVATION  
& PROTECTION PLAN  
SEKAS HOMES, LTD**

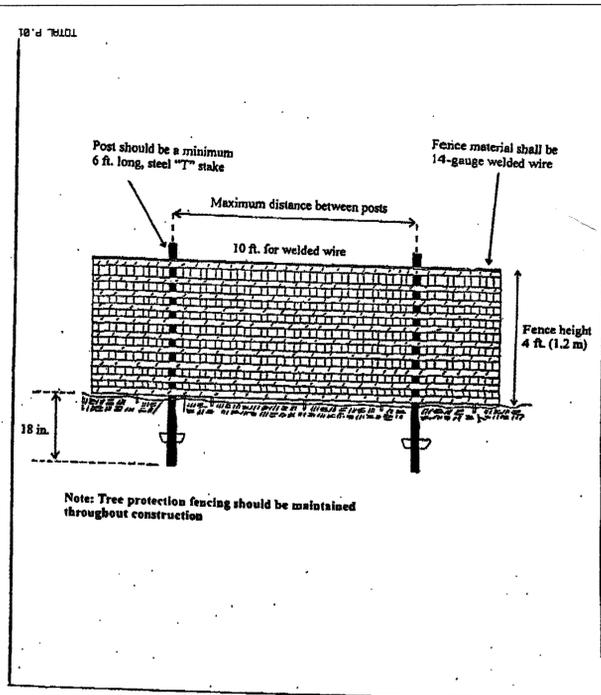
ECS REVISIONS  
10/30/13 - AEA

ENGINEER: AMS  
DRAFTING: IMR  
SCALE: 1" = 50'  
PROJECT NO.: 01:20820  
SHEET: SA of 7  
DATE: 03/07/13

CELEBRATING  
25 YEARS  
OF EXCELLENCE

ECS MID-ATLANTIC, LLC  
1408 WOODBURN PLACE  
SUITE 100  
CHANTILLY, VA 20151  
1-800-822-2489  
703-471-6600  
(FAX) 703-834-5927

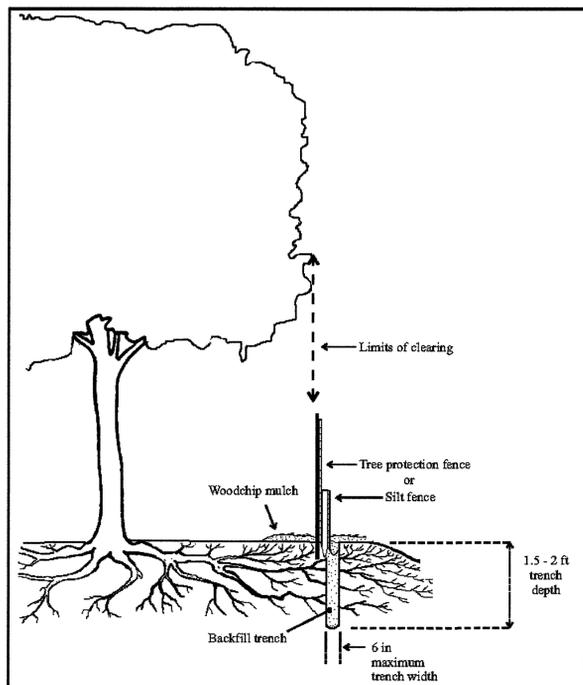
SETTING THE STANDARD FOR SERVICE



TREE PROTECTION FENCE INSTALLATION DETAIL

18'-0" x 11'-0" 6/25/13 15:16:18 10/18/13

FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Ref. Sec. 12-0702.1	PLATE NO.	STD. NO.
Rev. 10-08	7-12	

TREE CONDITION ANALYSIS

ECS Mid-Atlantic, LLC (ECS) conducted a site reconnaissance to evaluate the wooded habitat on the project site in February 2013. The undeveloped portions of the site are comprised primarily of Upland Hardwoods (i.e. Oak species, Red Maple, and Tulip Poplar). The species of trees assessed near the limits of clearing are listed in the Tree Table on the Existing Vegetation Map. In addition to those species, American Sycamore, Red Cedar, Virginia Pine, White Pine, Eastern Hemlock, American Holly, and American Beech were also observed onsite.

Based on our site reconnaissance, invasive and/or noxious species (i.e.: Japanese Honeysuckle and English Ivy) are present in the project site. Invasive species located within the areas to be preserved should be removed by hand wherever practicable to minimize site disturbance. The trees onsite are in Good/Fair condition, except where otherwise noted on the EVM (i.e.: Poor or Dead). Onsite trees within 150-feet of the proposed limits of clearing meet the standards for structural integrity and health identified in § 12-0403.2A and 12-0403.2B and are identified on the Existing Vegetation Map. At the time of inspection there were poor and dead trees located within 150-feet of the proposed limits of clearing, which are identified on the Existing Vegetation Map.

In accordance with § 12-0507.E2(1), trees designated for preservation shall be protected during construction.

TREE PRESERVATION NARRATIVE

§ 12-0509.3B: Dead or potentially hazardous trees shall be removed upon their discovery if they are located within 100-feet of the proposed limits of clearing. Dead trees not within this area shall be left in place to serve as wildlife habitat. Dead or potentially hazardous trees will be removed by hand (i.e.: chainsaw) wherever practical and will be conducted in a manner that incurs the least amount of damage to surrounding trees and vegetation proposed for preservation. Felled trees shall be left in place and brush should be removed by hand. No heavy equipment shall be used within tree preservation areas.

§ 12-0509.3C: Based on the current condition of the existing wooded areas, no adverse human health risks are anticipated provided that trees which pose a hazard to human health and safety are properly removed from areas where they could pose such a risk

§ 12-0509.3D: Invasive and/or noxious species (i.e.: Japanese Honeysuckle and English Ivy) are present in the project site. Invasive species located within the areas to be preserved should be removed by hand wherever practicable to minimize site disturbance. See the previous sheet for species-specific control measures. Most of the forested areas within the tree preservation area do not contain invasive plant species at levels that endanger the long-term ecological functionality, health, and regenerative capacity of any native plant communities present onsite.

§ 12-0509.3E: The Applicant is not requesting official Specimen Tree designation for any of the large trees located onsite and is not using a multiplier for tree canopy calculations.

§ 12-0509.3F: Non-impacted Specimen trees located on and off-site shall be protected throughout all phases of construction by utilizing tree protection fencing as required by §12-0507.2E(1).

§ 12-0509.3G: Prior to land disturbing activities, root pruning with a vibratory plow, trencher or other device approved by the Director shall be conducted along the limits of clearing adjacent to tree preservation areas. Root pruning shall be conducted along the proposed limits of clearing and grading adjacent to the wooded habitat to be preserved and along property boundaries where the CRZ of off-site trees will be impacted. Locations of root pruning and tree protection fencing are shown on the Tree Preservation & Protection Plan.

§ 12-0509.3H: No trees will be transplanted as part of the proposed construction activities.

§ 12-0509.3I: Tree protection fencing and signage shall be placed subsequent to the staking of the limits of clearing in the field prior to construction in accordance with current Fairfax County ordinances. 14-gauge welded wire fence shall be used as devices to protect trees and forested areas. The protective device shall be placed within the disturbed area at the limits of clearing and erected at a minimum height of 4 feet, except for super silt fence where height may be 3.5 feet. The fencing material shall be mounted on 6-foot tall steel posts driven 1.5 feet into the ground and placed a maximum of 10 feet apart.

§ 12-0509.3J: No work shall occur within the areas to be protected. Onsite trees within the limits of clearing and grading will be removed. No trees outside this area shall be removed unless indicated on the plan. Trees in preservation areas indicated on the plan to be removed shall be removed by hand. Dead or hazardous trees within this area may be limbed or topped, rather than removing the entire tree and left as snags.

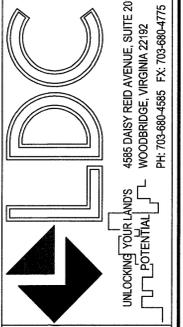
§ 12-0509.3K: There are no known proffer conditions which would require a tree inventory, tree condition, tree valuation or tree bonding information.

Tree Number	Common Name	Size (inches DBH)	Critical Root Zone (feet)	Condition	Remove	Notes
345	Red Maple	13.8	13.8	66%	x	Girdling, cavity near base, large dead limbs
346	Tulip Poplar	19.9	19.9	89%		
347	Northern Red Oak	25.5	25.5	64%		Slight lean, small dead limbs
348	Northern Red Oak	25.5	25.5	64%		Some dead limbs
349	Northern Red Oak	13.8	13.8	64%		Some dead limbs
350	Chestnut Oak	34.3	34.3	78%		Double trunk, some large dead limbs
351	Dead	-	-	0%		
352	White Oak	41.1	41.1	72%	x	Double trunk, slight lean, trunk damage, dead limbs
353	Red Maple	14.6	14.6	69%	x	Shaded, dead limbs, ground for crown trees
354	Black Oak	22.2	22.2	66%		
355	White Oak	19.3	19.3	69%		One-sided, small dead limbs
356	White Oak	39.2	39.2	69%	x	Triple trunk, one-sided, trunk damage
357	Northern Red Oak	17.8	17.8	66%	x	Lean, trunk growths
358	Chestnut Oak	28.7	28.7	69%	x	Girdling, dead limbs
359	Chestnut Oak	18.4	18.4	63%	x	Cavity at base, trunk disease, dead limbs
360	Chestnut Oak	19.8	19.8	81%	x	Some dead limbs
361	White Oak	13.5	13.5	72%	x	Trunk disease, one-sided, small dead limbs
362	Chestnut Oak	15.1	15.1	69%	x	Trunk damage, dead limbs
363	Chestnut Oak	17.0	17.0	78%	x	Small dead limbs
364	Chestnut Oak	17.4	17.4	72%	x	Root growths, lean, small dead limbs
365	Chestnut Oak	15.6	15.6	69%	x	Trunk crooked, one-sided
366	Chestnut Oak	15.9	15.9	78%	x	Dead limbs
367	Chestnut Oak	20.8	20.8	66%	x	Large dead limbs
368	Chestnut Oak	19.4	19.4	78%	x	Small dead limbs, double trunk
369	Chestnut Oak	15.0	15.0	75%	x	One-sided, top crooked, dead limbs
370	Northern Red Oak	17.3	17.3	66%	x	Root growths, large dead limbs
371	Chestnut Oak	22.2	22.2	69%	x	Lean, cavity at base, large dead limbs, girdling roots
372	Chestnut Oak	14.3	14.3	75%	x	One-sided, small dead limbs
373	White Oak	15.2	15.2	81%	x	Small dead limbs
374	Chestnut Oak	45.4	45.4	72%	x	Large dead limbs, trunk damage, dead limbs
375	Chestnut Oak	33.7	33.7	66%	x	Double trunk, large dead limbs, trunk crooked, girdling roots
376	Chestnut Oak	24.3	24.3	72%	x	Large dead limbs
377	Chestnut Oak	12.4	12.4	75%	x	Small dead limbs
378	Chestnut Oak	15.1	15.1	75%	x	Dead limbs
379	Northern Red Oak	14.9	14.9	69%		
380	Chestnut Oak	15.5	15.5	75%		
381	Chestnut Oak	13.3	13.3	81%		
382	Chestnut Oak	23.0	23.0	75%	x	Double trunk, small dead limbs
383	Chestnut Oak	14.3	14.3	78%		
384	Chestnut Oak	20.2	20.2	69%		
385	Chestnut Oak	20.2	20.2	69%		
386	Northern Red Oak	16.3	16.3	78%		
387	Chestnut Oak	12.8	12.8	81%		
388	Northern Red Oak	15.2	15.2	84%		
389	Northern Red Oak	14.9	14.9	78%		
390	White Oak	19.0	19.0	69%		
391	White Oak	21.1	21.1	69%		
392	Chestnut Oak	16.0	16.0	81%		
393	White Oak	16.0	16.0	75%		
394	Chestnut Oak	23.3	23.3	78%		
395	Chestnut Oak	22.7	22.7	75%		
396	Northern Red Oak	12.0	12.0	36%		
397	White Oak	12.3	12.3	78%		
398	Northern Red Oak	15.0	15.0	69%		
399	Chestnut Oak	13.8	13.8	91%	x	Root growth, small dead limbs
400	Chestnut Oak	18.1	18.1	75%	x	Root growth, small dead limbs
401	Chestnut Oak	44.8	44.8	75%	x	Triple trunk, small dead limbs
402	Chestnut Oak	17.7	17.7	69%	x	Trunk growths, small dead limbs
403	Chestnut Oak	13.8	13.8	75%		
404	Chestnut Oak	15.9	15.9	75%		
405	White Oak	20.5	20.5	69%		
406	Northern Red Oak	14.4	14.4	63%		
407	Chestnut Oak	23.3	23.3	81%		
408	Northern Red Oak	16.7	16.7	75%		
409	White Oak	19.7	19.7	69%		
410	Chestnut Oak	40.6	40.6	75%		
411	Tulip Poplar	12.8	12.8	75%		
412	White Oak	17.3	17.3	81%		
413	White Oak	30.3	30.3	72%		
414	Tulip Poplar	12.8	12.8	91%	x	Dead leader, cavity
415	Tulip Poplar	19.9	19.9	100%	x	
416	Red Maple	17.3	17.3	72%	x	Trunk growths, slight lean
417	Tulip Poplar	12.8	12.8	69%		
418	Northern Red Oak	19.7	19.7	66%		
419	Northern Red Oak	41.7	41.7	69%		
420	Chestnut Oak	13.0	13.0	75%		
421	Chestnut Oak	28.2	28.2	69%		
422	Chestnut Oak	13.8	13.8	69%		
423	Chestnut Oak	18.6	18.6	69%		
424	Chestnut Oak	25.7	25.7	75%	x	Double trunk, one-sided, small dead limbs
425	Chestnut Oak	22.8	22.8	72%	x	Double trunk, dead limbs
426	Chestnut Oak	15.0	15.0	81%	x	Small dead limbs
427	Chestnut Oak	12.7	12.7	75%	x	Dead limbs, slight lean
428	Chestnut Oak	24.5	24.5	81%	x	Dead limbs
429	Chestnut Oak	15.0	15.0	69%	x	Cavity at base
430	Chestnut Oak	13.0	13.0	81%		
431	Chestnut Oak	25.8	25.8	63%		
432	Chestnut Oak	31.1	31.1	36%		
433	Chestnut Oak	12.5	12.5	78%		
434	Chestnut Oak	14.3	14.3	75%		
435	Chestnut Oak	14.3	14.3	75%		
436	Chestnut Oak	14.3	14.3	75%		
437	White Oak	20.2	20.2	78%		
438	Dead	-	-	0%		
439	Chestnut Oak	20.1	20.1	72%		
440	Northern Red Oak	20.4	20.4	75%		
441	Chestnut Oak	13.3	13.3	75%		
442	Chestnut Oak	17.1	17.1	78%		
443	Chestnut Oak	24.1	24.1	69%		
444	Chestnut Oak	18.4	18.4	69%		
445	Red Maple	12.5	12.5	69%		
446	Chestnut Oak	14.9	14.9	81%		
447	Chestnut Oak	12.0	12.0	72%		
448	White Oak	15.0	15.0	75%		
449	Dead	-	-	0%		
450	Tulip Poplar	20.8	20.8	84%		
451	White Oak	20.3	20.3	84%		
452	White Oak	12.3	12.3	69%		
453	White Oak	21.1	21.1	63%		
454	Tulip Poplar	14.3	14.3	81%		
455	Tulip Poplar	12.0	12.0	81%		
456	Tulip Poplar	23.0	23.0	81%		
457	Red Maple	25.5	25.5	75%	x	Double trunk, small dead limbs
458	Tulip Poplar	55.5	55.5	88%	x	Double trunk
459	Red Maple	14.0	14.0	66%	x	Dead leader, dead limbs
460	White Oak	14.7	14.7	75%	x	Small dead limbs, growing against shed
461	White Oak	18.9	18.9	69%		
462	White Oak	13.9	13.9	69%	x	Girdling roots, dead limbs
463	Chestnut Oak	17.0	17.0	59%	x	One-sided, dead trunk
464	Chestnut Oak	16.7	16.7	75%	x	Crooked at top, trunk damage
465	Chestnut Oak	21.0	21.0	75%	x	Large dead limbs
466	White Oak	20.8	20.8	72%	x	Large dead limbs
467	White Oak	20.8	20.8	69%	x	Dead limbs
468	Tulip Poplar	12.5	12.5	81%	x	Small dead limbs
469	White Oak	14.7	14.7	78%	x	Dead limbs
470	Chestnut Oak	14.2	14.2	75%	x	Large dead limbs
471	Black Oak	17.8	17.8	59%	x	Root growths, large dead limbs
472	Northern Red Oak	15.3	15.3	69%	x	Dead trunk, dead limbs
473	Northern Red Oak	18.2	18.2	66%	x	Large root disease, lean, dead limbs
474	Northern Red Oak	16.1	16.1	72%	x	Root growths
475	Chestnut Oak	24.4	24.4	72%	x	Double trunk, dead limbs, weak crown
476	Northern Red Oak	35.0	35.0	72%	x	Triple trunk, beaken trunk
477	Chestnut Oak	17.3	17.3	75%	x	Dead limbs
478	Chestnut Oak	12.4	12.4	84%	x	Small dead limbs
479	Black Oak	17.4	17.4	81%	x	One-sided, small dead limbs
480	Chestnut Oak	27.5	27.5	66%	x	Double trunk, weak crown, dead limbs
481	White Oak	17.3	17.3	72%	x	Large dead limbs
482	Chestnut Oak	13.1	13.1	66%	x	Small cavity at base
483	Black Oak	19.6	19.6	84%	x	Half dead
484	Chestnut Oak	22.0	22.0	72%	x	Crooked trunk, small dead limbs
485	Chestnut Oak	16.0	16.0	69%		
486	Chestnut Oak	15.2	15.2	75%		
487	Dead	-	-	0%		
488	Chestnut Oak	13.5	13.5	75%		
489	Black Oak	13.4	13.4	75%	x	Small dead limbs
490	Black Oak	13.4	13.4	75%	x	Large dead limbs
491	Chestnut Oak	19.2	19.2	79%	x	Dead limbs
492	White Oak	14.6	14.6	69%	x	Root growth, one-sided, small dead limbs
493	Chestnut Oak	12.9	12.9	75%	x	Dead limbs
494	Dead	-	-	0%		

895	Chestnut Oak	21.8	21.8	78%	x	One-sided, dead limbs
896	Tulip Poplar	20.2	20.2	81%		
897	Chestnut Oak	15.1	15.1	81%	x	One-sided
898	Tulip Poplar	16.0	16.0	78%	x	One-sided
899	Tulip Poplar	18.7	18.7	81%		
900	Tulip Poplar	23.7	23.7	75%	x	Supporting fallen tree
901*	White Pine	13.0	13.0	75%		Offsite, few dead limbs
902*	White Oak	24.5	24.5	75%		Offsite, large dead limbs
903*	White Oak	16.2	16.2	75%		Offsite, few dead limbs
904*	White Oak	19.6	19.6	75%	x	Some dead limbs
905*	Tulip Poplar	20.2	20.2	75%		Shaded, some deadwood at base
906*	Tulip Poplar	25.6	25.6	72%		Leaning
907*	Chestnut Oak	32.7	32.7	69%		Double trunk
908*	White Oak	12.1	12.1	72%		Some dead limbs
909*	Chestnut Oak	18.7	18.7	89%		Few dead limbs
910*	Chestnut Oak	13.1	13.1	41%	x	Trunk disease
911*	Chestnut Oak	22.5	22.5	80%	x	Insect damage, leaning
912*	Chestnut Oak	22.9	22.9	72%	x	Double trunk, dead limbs
913*	Chestnut Oak	16.0	16.0	89%	x	Double trunk, known leader
914*	Chestnut Oak	12.9	12.9	69%		Leaning
915*	Chestnut Oak	22.2	22.2	75%	x	Few dead limbs



*FOR ILLUSTRATIVE PURPOSES ONLY!*

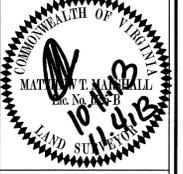


ELEVATIONS

SPRING LAKE  
SECTION 3  
HUNTER HILL DISTRICT  
FAIRFAX COUNTY, VIRGINIA

REVISE ELEVATIONS SHEET NUMBER	REVISION	DESCRIPTION	REVIEW BY	APPROVED DATE
1	REVISE FIRE MARSHAL DETAIL			
2	REVISE FIRE MARSHAL DETAIL			

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



SCALE:  
N/A

SHEET 6 OF 7

DATE: MARCH, 2013  
DRAFT: KMA CHECK: MTTM  
FILE NUMBER: 12265-1-0 3.0B

# STORMWATER MANAGEMENT NARRATIVE

THE STORMWATER MANAGEMENT REQUIREMENTS FOR THE SUBJECT PROPERTY SHALL BE SATISFIED VIA THE CONSTRUCTION OF TWO INFILTRATION TRENCHES AND A BIO-FILTER AS WELL AS UNDISTURBED CONSERVATION AREAS. THESE FACILITIES SHALL BE DESIGNED IN ACCORDANCE WITH THE PUBLIC FACILITIES MANUAL (PFM).

THE INFILTRATION TRENCHES AND BIO-FILTER HAVE BEEN DESIGNED FOR THE 10 YEAR 2 HOUR STORM IN ORDER TO PROVIDE DETENTION FOR THE 1, 2 & 10 YEAR STORM EVENTS AND TO MEET BMP REQUIREMENTS. UNDISTURBED CONSERVATION AREA IS PROPOSED TO HELP MEET THE BMP REQUIREMENTS FOR THE SITE. 40% PHOSPHORUS REMOVAL SHALL BE PROVIDED. DETAILED DETENTION AND BMP CALCULATIONS SHALL BE PROVIDED AT THE TIME OF THE SUBDIVISION PLAN. THE SITE CURRENTLY HAS SEVERAL EXISTING BUILDINGS, PAVED SURFACES, AND SOME TREES CURRENTLY, APPROXIMATELY 13.82 CFS OF RUNOFF IS LEAVING THE SUBJECT PROPERTY UNCONTROLLED AND UNTREATED DURING A 10-YEAR STORM EVENT. WITH THE PROPOSED ATTENUATION, THE POST DEVELOPMENT RUNOFF WILL BE REDUCED SUBSTANTIALLY. THEREFORE, THERE WILL BE A REDUCTION IN RUNOFF LEAVING THE PROPERTY AS A RESULT OF THE PROPOSAL. THE INFILTRATION TRENCHES AND BIO-FILTER HAVE BEEN SIZED TO PROVIDE WATER QUALITY AND QUANTITY CONTROL FOR THE SUBJECT PROPERTY.

IN DECEMBER, 2012, FEBRUARY, 2013, AND AUGUST, 2013 TERRA ENGINEERING SERVICES, INC. COMPLETED GEOTECHNICAL INVESTIGATIONS AND INFILTRATION TESTING IN THE VICINITY OF THE INFILTRATION TRENCHES AND BIO-FILTER. FOR THE INFILTRATION TRENCH AREAS THIS FIELD INVESTIGATION FOUND NO ROCK OR GROUNDWATER THROUGH A DEPTH OF 10 FEET, WHICH IS APPROX. 4.0 FEET BELOW THE PROPOSED BOTTOM OF THE INFILTRATION TRENCHES. AN AVERAGE INFILTRATION RATE GREATER THAN THE MINIMUM REQUIRED (2.5 INCHES/HOUR OBSERVED) WAS OBSERVED, THEREFORE LDC BELIEVES THE RESULTS OF THIS SUBSURFACE EXPLORATION ILLUSTRATES ADEQUACY OF THE PROPOSED INFILTRATION TRENCHES. FOR THE BIO-FILTER AREA THIS FIELD INVESTIGATION FOUND THAT INFILTRATION WAS NOT FEASIBLE DUE TO INFILTRATION BIO-FILTER IS PROPOSED WITH AN INVERT SET 2.0 FEET ABOVE THE GROUNDWATER LEVEL AND UNDERDRAINS TO DAYLIGHT IN THE ADJACENT NATURAL SWALE.

THE FINAL DESIGN OF THE INFILTRATION TRENCHES AND BIO-FILTER IS SUBJECT TO FURTHER REVIEW BY A GEOTECHNICAL ENGINEER AND FINAL ENGINEERING. ADDITIONAL INFILTRATION TESTING WILL OCCUR AT THE TIME OF SUBDIVISION PLAN SUBMISSION PER THE REQUIREMENTS OF THE PFM. ALL MAINTENANCE SHALL BE CONDUCTED IN ACCORDANCE WITH CHAPTER 3, STANDARD 3.10 OF THE VIRGINIA STORMWATER MANAGEMENT HANDBOOK.

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

A DRAINAGE STUDY HAS BEEN SUBMITTED (6447-DS-001-1) FOR THE SWALE DRAINING THROUGH THE SUBJECT PROPERTY.

# OUTFALL NARRATIVE

THE SUBJECT PROPERTY IS LOCATED WITHIN THE DIFFICULT RUN WATERSHED AND MAINTAINS TWO STORM DRAINAGE OUTFALLS (ONE OF WHICH HAS BEEN DESIGNATED OUTFALLS #1 & #2 TO SIGNIFY BOTH SIDES OF THE DRAINAGE SWALE THAT CUTS THROUGH THE PROPERTY AND ONE OF WHICH HAS BEEN DESIGNATED OUTFALL #3 TO SIGNIFY THE DRAINAGE THAT DISCHARGES NEAR THE INTERSECTION OF BESLEY ROAD AND TETTERTON AVENUE, SEE PLAN VIEW, SHEET 2, AND DRAINAGE AREA MAP, THIS SHEET). 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. TWO INFILTRATION TRENCHES AND A BIO-FILTER ARE PROPOSED TO MEET DETENTION REQUIREMENTS FOR THE SUBJECT PROPERTY. THE LAYOUT OF THE SITE HAS BEEN DESIGNED TO MINIMIZE THE IMPACTS TO DOWNSTREAM PROPERTIES. THE INTENT SHALL BE TO MAINTAIN THE EXISTING DRAINAGE PATTERNS AND TO NOT HAVE A NEGATIVE IMPACT ON ADJACENT PROPERTIES. NO DOWNSTREAM WATER INFILTRATIONS ARE WITHIN THE INFLUENCE AREA OF THE PROPOSED PROJECT AND NO BATHYMETRIC NOTIFICATIONS OR SURVEYS ARE REQUIRED.

OUTFALLS #1 & #2 DISCHARGE LEAVES THE SUBJECT PROPERTY VIA AN EXISTING STORM SEWER SYSTEM UNDER BESLEY ROAD. THE EXISTING STORM SEWER SYSTEM HAS ADEQUATE CAPACITY FOR THE DISCHARGE FROM THE SUBJECT PROPERTY AND CONVEYS THE DISCHARGE TO AN EXISTING RIP-RAP CHANNEL AND THEN INTO AN EXISTING STORM DRAINAGE EASEMENT ON THE SPRING LAKE SECTION 2 SUBDIVISION (D.B. 1734, PG. 22) AND THEN INTO THE WOLFTRAP CREEK FLOODPLAIN (D.B. 5040, PG. 368). STORMWATER MANAGEMENT AND BEST MANAGEMENT PRACTICES FOR THE SITE ARE PROVIDED BY THE PROPOSED INFILTRATION TRENCHES, THE BIO-FILTER AND CONSERVATION AREA (SEE "STORMWATER MANAGEMENT INFORMATION" ON THIS SHEET FOR INFILTRATION TRENCH, BIO-FILTER AND CONSERVATION AREA INFORMATION). CROSS-SECTIONS WILL BE PROVIDED FOR THE CONVEYANCE CHANNEL TO WOLFTRAP CREEK TO DEMONSTRATE THAT AN ADEQUATE OUTFALL EXISTS FOR THE SUBJECT PROPERTY PER PFM SECTION 6-0203.

THIS OUTFALL CONVEYS 4.28 ACRES OF DRAINAGE FROM THE SUBJECT PROPERTY IN THE PRE-DEVELOPED CONDITION AND 4.35 ACRES OF DRAINAGE IN THE POST-DEVELOPED CONDITION (SEE DRAINAGE DIVERSION STATEMENT, THIS SHEET). AS A RESULT OF THE PROPOSED INFILTRATION TRENCHES AND THE BIO-FILTER, DETENTION OF THE TWO AND TEN YEAR STORM EVENT WILL BE PROVIDED FOR THE SUBJECT PROPERTY. ADEQUATE OUTFALL REQUIREMENTS FOR THIS OUTFALL WILL BE DEMONSTRATED BY CROSS-SECTIONS FROM THE OUTFALL OF THE SITE TO THE WOLFTRAP CREEK FLOODPLAIN AS REQUIRED PER PFM SECTION 6-0203.3. THE EXTENT OF REVIEW FOR THE SITE IS WHERE THE CONVEYANCE CHANNEL JOINS THE WOLFTRAP CREEK FLOODPLAIN AS DEFINED BY THE TOTAL DRAINAGE AREA BEING 100 TIMES THE SUBJECT PROPERTY AREA AS OUTLINED IN PFM SECTIONS 6-0203.3 & 6-0203.2B. AT THE POINT WHERE THE CONVEYANCE CHANNEL FROM THE STORM SEWER SYSTEM UNDER BESLEY ROAD JOINS WITH WOLFTRAP CREEK, THE TOTAL DRAINAGE AREA IS 1,949 ACRES WHICH IS GREATER THAN 100 TIMES THE DEVELOPMENT SITE AREA OF 5.43 ACRES MAKING THIS THE EXTENT OF THE STUDY AREA FOR THE OUTFALL. THE EXISTING FLOODPLAIN CHANNEL WAS INVESTIGATED AND FOUND TO HAVE A DEFINED BED AND BANKS CHANNEL. THIS OUTFALL IS ADEQUATE IN ACCORDANCE WITH SECTIONS 6-0203.2B & 6-0203.3 OF THE PUBLIC FACILITIES MANUAL.

OUTFALL #3 DISCHARGE LEAVES THE SUBJECT PROPERTY VIA SHEET FLOW OFF OF THE PROPERTY AND INTO THE BESLEY ROAD AND TETTERTON AVENUE RIGHT-OF-WAYS. IT THEN DISCHARGES VIA AN EXISTING STORM SEWER SYSTEM UNDER BESLEY ROAD AT THE INTERSECTION WITH TETTERTON AVENUE. THE EXISTING STORM SEWER SYSTEM HAS ADEQUATE CAPACITY FOR THE DISCHARGE FROM THE SUBJECT PROPERTY AND CONVEYS THE DISCHARGE TO AN EXISTING RIP-RAP CHANNEL AND THEN INTO AN EXISTING STORM DRAINAGE EASEMENT ON THE SPRING LAKE SECTION 2 SUBDIVISION (D.B. 1734, PG. 22) AND THEN INTO THE WOLFTRAP CREEK FLOODPLAIN (D.B. 5040, PG. 368). STORMWATER MANAGEMENT AND BEST MANAGEMENT PRACTICES FOR THE SITE ARE PROVIDED BY THE PROPOSED INFILTRATION TRENCHES, THE BIO-FILTER AND CONSERVATION AREA (SEE "STORMWATER MANAGEMENT INFORMATION" ON THIS SHEET FOR INFILTRATION TRENCH, BIO-FILTER AND CONSERVATION AREA INFORMATION). CROSS-SECTIONS WILL BE PROVIDED FOR THE CONVEYANCE CHANNEL TO WOLFTRAP CREEK TO DEMONSTRATE THAT AN ADEQUATE OUTFALL EXISTS FOR THE SUBJECT PROPERTY PER PFM SECTION 6-0203.

THIS OUTFALL CONVEYS 1.15 ACRES OF DRAINAGE FROM THE SUBJECT PROPERTY IN THE PRE-DEVELOPED CONDITION AND 1.08 ACRES OF DRAINAGE IN THE POST-DEVELOPED CONDITION (SEE DRAINAGE DIVERSION STATEMENT, THIS SHEET). AS A RESULT OF THE PROPOSED INFILTRATION TRENCHES AND THE BIO-FILTER, DETENTION OF THE TWO AND TEN YEAR STORM EVENT WILL BE PROVIDED FOR THE SUBJECT PROPERTY. ADEQUATE OUTFALL REQUIREMENTS FOR THIS OUTFALL WILL BE DEMONSTRATED BY CROSS-SECTIONS FROM THE OUTFALL OF THE SITE TO THE WOLFTRAP CREEK FLOODPLAIN AS REQUIRED PER PFM SECTION 6-0203.3. THE EXTENT OF REVIEW FOR THE SITE IS WHERE THE CONVEYANCE CHANNEL JOINS THE WOLFTRAP CREEK FLOODPLAIN AS DEFINED BY THE TOTAL DRAINAGE AREA BEING 100 TIMES THE SUBJECT PROPERTY AREA AS OUTLINED IN PFM SECTIONS 6-0203.3 & 6-0203.2B. AT THE POINT WHERE THE CONVEYANCE CHANNEL FROM THE STORM SEWER SYSTEM UNDER BESLEY ROAD AT THE INTERSECTION WITH TETTERTON AVENUE JOINS WITH WOLFTRAP CREEK, THE TOTAL DRAINAGE AREA IS 1,976 ACRES WHICH IS GREATER THAN 100 TIMES THE DEVELOPMENT SITE AREA OF 5.43 ACRES MAKING THIS THE EXTENT OF THE STUDY AREA FOR THE OUTFALL. THE EXISTING FLOODPLAIN CHANNEL WAS INVESTIGATED AND FOUND TO HAVE A DEFINED BED AND BANKS CHANNEL. THIS OUTFALL IS ADEQUATE IN ACCORDANCE WITH SECTIONS 6-0203.2B & 6-0203.3 OF THE PUBLIC FACILITIES MANUAL.

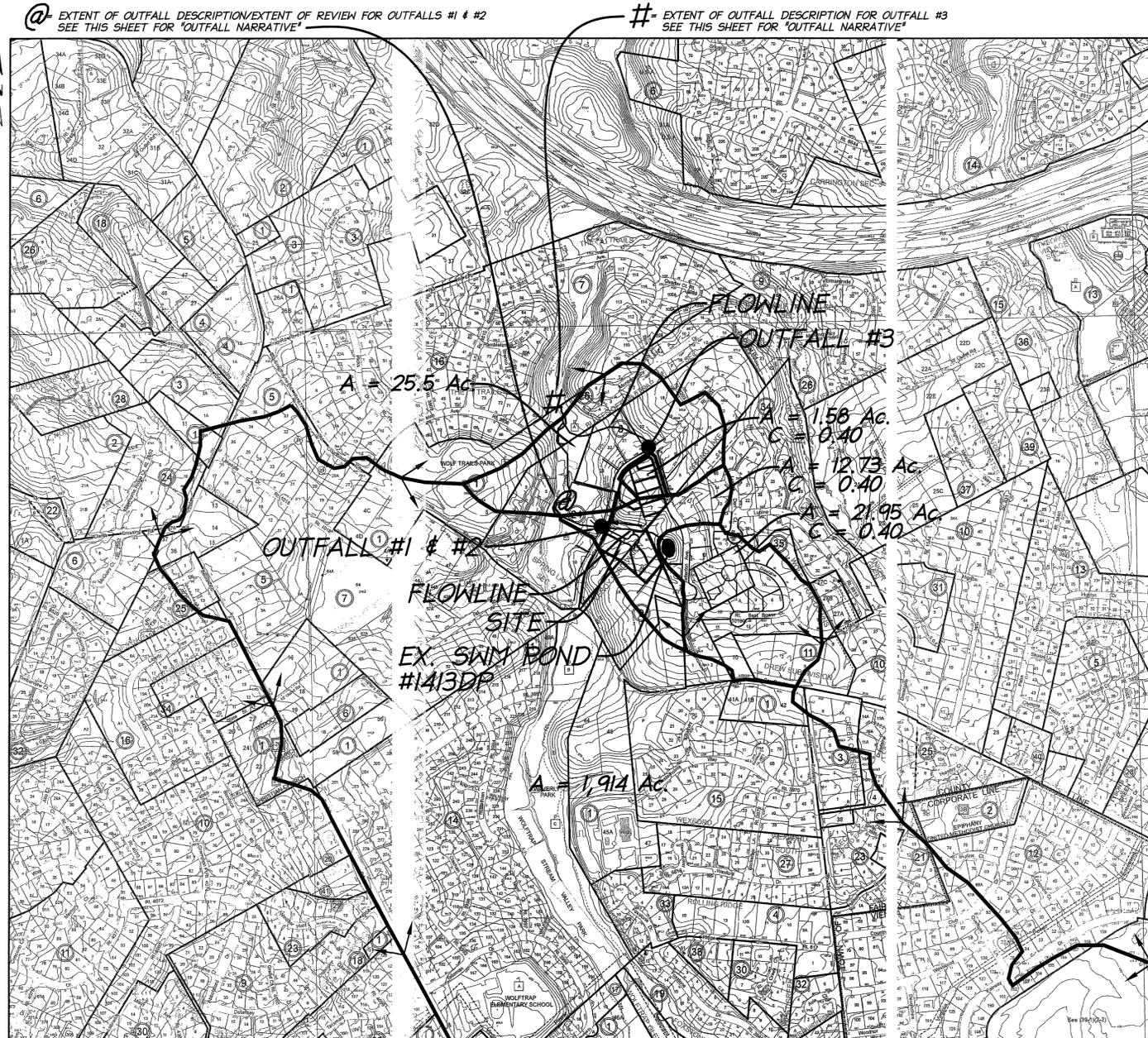
IT IS OUR PROFESSIONAL OPINION THAT ALL OUTFALLS ARE ADEQUATE IN ACCORDANCE WITH THE PFM.

# STORMWATER MANAGEMENT INFORMATION

TYPE OF FACILITY = INFILTRATION TRENCH (OUTFALL #1) FACILITY MAINTENANCE = PRIVATE/HOA	TYPE OF FACILITY = INFILTRATION TRENCH (OUTFALL #3) FACILITY MAINTENANCE = PRIVATE/HOA
<b>INFILTRATION TRENCH #1</b> APPROXIMATE REQUIRED 10-YEAR VOLUME = \$2,070 C.F. APPROXIMATE AVAILABLE VOLUME = \$2,225 C.F. APPROXIMATE SURFACE AREA = \$1,112 S.F. APPROXIMATE FINISHED GRADE = \$359.5 APPROXIMATE GRADE TRENCH BOTTOM = \$354.0	<b>INFILTRATION TRENCH #2</b> APPROXIMATE REQUIRED 10-YEAR VOLUME = \$2,500 C.F. APPROXIMATE AVAILABLE VOLUME = \$2,800 C.F. APPROXIMATE SURFACE AREA = \$2,000 S.F. APPROXIMATE FINISHED GRADE = \$363.5 APPROXIMATE GRADE TRENCH BOTTOM = \$359.5

TYPE OF FACILITY = BIO-FILTER (OUTFALL #2)  
FACILITY MAINTENANCE = PRIVATE/HOA

**BIO-FILTER #1**  
APPROXIMATE REQUIRED 10-YEAR VOLUME = \$3,150 C.F.  
APPROXIMATE AVAILABLE VOLUME = \$4,200 C.F.  
APPROXIMATE SURFACE AREA = \$1,630 S.F.  
APPROXIMATE FINISHED GRADE = \$346.5  
APPROXIMATE GRADE TRENCH BOTTOM = \$342.0



# DRAINAGE AREA MAP

SCALE: 1" = 500'

## PRE-DEVELOPMENT SUBJECT PROPERTY

$A=5.43 \text{ AC}, C^*=0.35, Tc=5 \text{ MIN}, i_2=5.45 \text{ IN/HR}, i_{10}=7.27 \text{ IN/HR}$

$Q_2 = (0.35)(5.45)(5.43) = 10.36 \text{ CFS}$

$Q_{10} = (0.35)(7.27)(5.43) = 13.82 \text{ CFS}$

## POST-DEVELOPMENT SUBJECT PROPERTY

$A=5.43 \text{ AC}, C^*=0.40, Tc=5 \text{ MIN}, i_2=5.45 \text{ IN/HR}, i_{10}=7.27 \text{ IN/HR}$

$Q_2 = (0.40)(5.45)(5.43) = 11.84 \text{ CFS (DETENTION PROVIDED BY I.T. #1, B.F. #1 \& I.T. #2)}$

$Q_2 = 17.9 \text{ AFTER DETENTION}$

$Q_{10} = (0.40)(7.27)(5.43) = 15.79 \text{ CFS (DETENTION PROVIDED BY I.T. #1, B.F. #1 \& I.T. #2)}$

$Q_{10} = 10.55 \text{ AFTER DETENTION}$

● - DENOTES OUTFALLS

# STORMWATER MANAGEMENT CHECKLIST

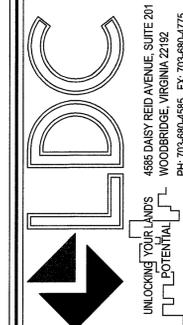
## MINIMUM STORMWATER INFORMATION FOR REZONING, SPECIAL EXCEPTION, SPECIAL PERMIT AND DEVELOPMENT PLAN APPLICATIONS

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 paragraphs:  
Special Permits (9-011 2J & 2L) Special Exceptions (9-011 2J & 2L)  
Cluster Subdivision (9-615 1G & 1N) Commercial Revitalization Districts (9-622 2A (12) & (14))  
Development Plans PRC District (16-302 3 & 4L) PRC Plan (16-303 1E & 1C)  
FDP P Districts (except PRC) (16-502 1F & 1Q) Amendments (18-202 10F & 10J)

- 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 2.
- 3. Provide:

Facility Name/ Type & No.	On-site area served (acres)	Off-site area served (acres)	Drainage area (ac)	Footprint area (sf)	Storage Volume (cf)	If pond, dam height (ft)
INFILTRATION TRENCH #1	\$0.45 AC	\$0.00 AC	\$0.45 AC	\$1,112 SF	\$2,224 CF	N/A
BIO-FILTER #1	\$0.48 AC	\$0.00 AC	\$0.48 AC	\$1,630 SF	\$4,200 CF	N/A
INFILTRATION TRENCH #2	\$0.50 AC	\$0.00 AC	\$0.50 AC	\$2,004 SF	\$2,806 CF	N/A
CONSERVATION AREA	\$0.89 AC	\$0.00 AC	\$0.89 AC	N/A	N/A	N/A
Totals						
- 4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 2 & 7. Pond inlet and outlet pipe systems are shown on Sheet N/A.
- 5. Maintenance access (road) to stormwater management facility(ies) are shown on Sheet 2. Type of maintenance access road surface noted on the plat is GRASS (asphalt, geoblock, gravel, etc.).
- 6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet 2.
- 7. A 'stormwater management narrative' which contains a description of how detention and best management practices requirements will be met is provided on Sheet 7.
- 8. A description of the 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 7.
- 9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet 7.
- 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 Sheets 1-2.
- 11. A submission waiver is requested for \_\_\_\_\_.
- 12. Stormwater management is not required because \_\_\_\_\_.



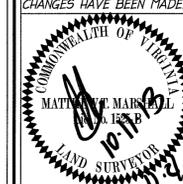
# STORMWATER MANAGEMENT INFORMATION

# SPRING LAKE SECTION 3

HUNTER HILL DISTRICT  
FAIRFAX COUNTY, VIRGINIA

DATE	REVISION	DESCRIPTION	REVISION APPROVED BY:
08/18/13	1	UPDATE TITLE & SHEET NUMBER	
10/27/13	2	UPDATE NARRATIVE CHECKLIST, CALCULATIONS, DIVERSION NOTE	

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



SCALE: AS SHOWN

SHEET 7 OF 7

DATE: MARCH, 2013  
DRAFT: KMA CHECK: MTT  
FILE NUMBER: 12265-1-0 3.0B

## **DESCRIPTION OF THE APPLICATION**

The applicant, Sekas Homes, Ltd., requests approval of a rezoning of approximately 5.43 acres from the R-1 District to the PDH-2 District to permit the development of nine single family detached dwellings at a density of 1.66 dwelling units per acre (du/ac). The nine proposed lots range in size from 14,100 square feet to 20,500 square feet with an average lot size of approximately 18,044 square feet. In addition to the nine proposed lots, the development includes three outlots (Parcels A, B, and C). Four of the nine dwellings would be accessed from a private street off Besley Road that would terminate in a cul-de-sac. Three of the proposed dwellings would have access off Tetterton Avenue near the northern end of the application property, while Besley Road would provide access to two of the dwellings. The proposed development contains approximately 73,000 square feet of open space, which includes a 29,000 square foot Environmental Quality Corridor (EQC) in the center of the site and conservation areas on Parcels A and C.

A reduced copy of the Conceptual/Final Development Plan (CDP/FDP) is included in the front of this report. The applicant's draft proffers and staff's proposed Final Development Plan conditions are included in Appendix 1 and 2, respectively. The applicant's statement of justification and affidavit are included in Appendix 3 and 4, respectively.

### **Waivers Requested:**

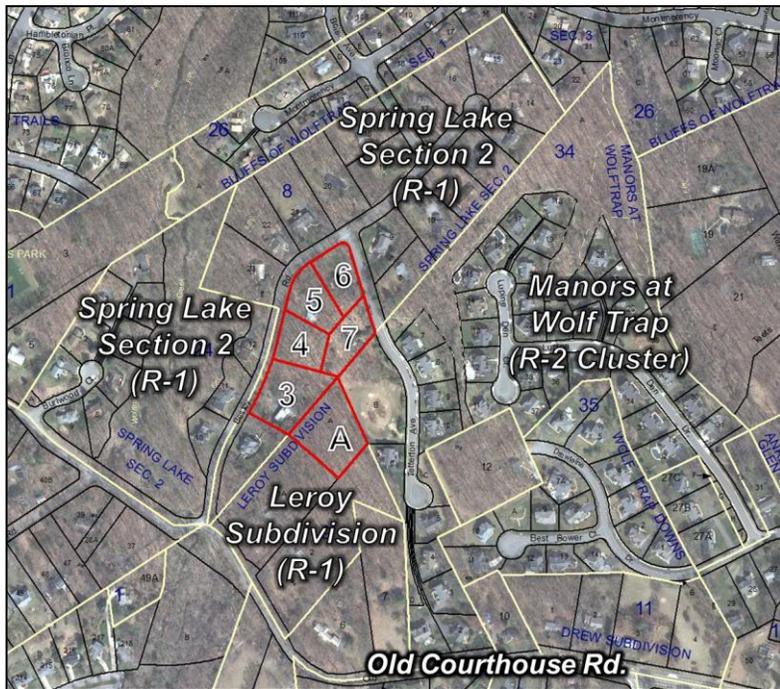
The applicant requests the following waivers:

- Waiver of Section 8-0201.3 of the Public Facilities Manual (PFM) requiring a trail along Tetterton Avenue;
- Waiver of Sections 8-0101.1 and 8-0102 of the PFM for the sidewalk along Besley Road and one side of the proposed private street; and,
- Waiver of Section 7-1002.1B(2) of the PFM requiring a streetlight at the proposed private street entrance.

## **LOCATION AND CHARACTER**

The subject property is located in the Hunter Mill District near the intersection of Tetterton Avenue and Besley Road. The 5.43 acre application area includes five parcels and one outlot. The site currently contains two single family detached dwellings and 233,952 square feet of existing upland forest tree canopy according to the Existing Conditions Plan and Existing Vegetation Map. The existing dwellings would be removed as a result of the proposed development. An EQC area containing steep slopes and an intermittent stream traverses the center of the property. There are no Resource Protection Areas (RPAs) or floodplains on the property.

Lots 3 – 7 of the application property are currently part of the Spring Lake Section 2 subdivision, while parcel A is currently an outlot associated with the Leroy Subdivision. Parcel A in its current state is not a buildable lot according to the subdivision plan for the Leroy Subdivision. Staff from the Department of Public Works and Environmental Services (DPWES) commented that this is likely because the property does not have frontage on a street. The subject property is surrounded by residential subdivisions developed with single family detached dwellings and associated outlots and planned for residential use at 1 – 2 dwelling units per acre (du/ac). The image to the right displays the subdivision names and zoning districts of the surrounding parcels.



Source: Fairfax County GIS

## BACKGROUND

On November 17, 1958, DPWES approved a Subdivision Plan for the Leroy Subdivision, which included Parcel A of the application area. Subsequent to this, on December 3, 1970, DPWES approved a resubdivision of one of the parcels in the original Leroy Subdivision (Parcel 1A) to be subdivided into Parcel 1 and Outlot A. Outlot A of this resubdivision is now part of the current application.

On January 13, 1959, DPWES approved a Subdivision Plan for Spring Lake Section 2 for 24 lots at a density of 0.85 dwelling units per acre. On November 14, 1978, DPWES approved a resubdivision of lots 1, 24, and Parcel A. This resulted in a total of 34 lots in the subdivision at a density of 1.01 du/ac. The resubdivision plan indicates that this portion was approved for cluster development (R-1 cluster).

## COMPREHENSIVE PLAN PROVISIONS

The Comprehensive Plan map calls for a density of 1 – 2 du/ac on the subject property and surrounding properties. On page 71 of the Fairfax County Comprehensive Plan, 2011 Edition, Vienna Planning District, as amended through April 9, 2013, in the V3 Spring Lake Community Planning Sector, it states:

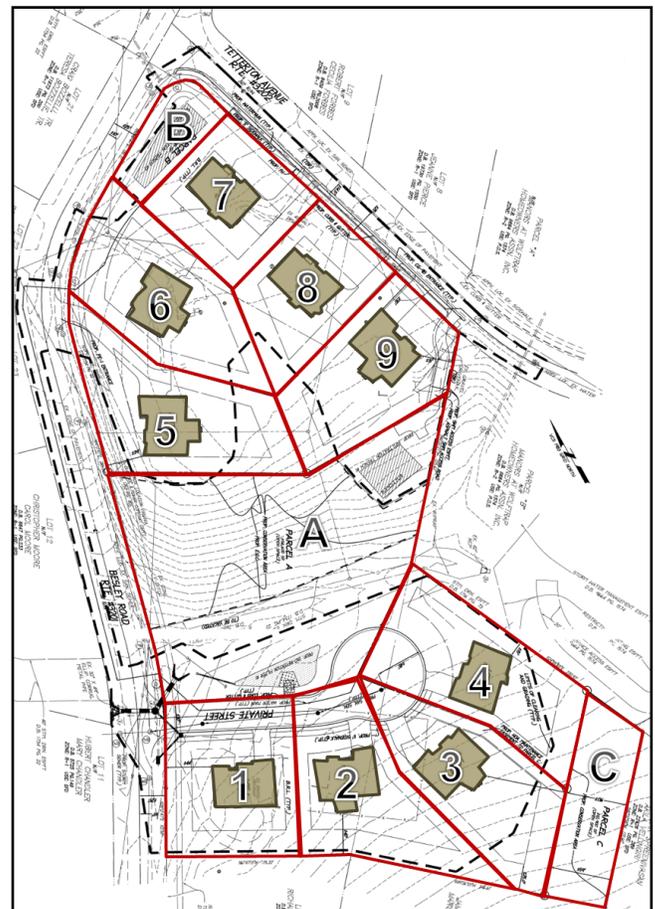
9. The remaining vacant area west of Chain Bridge Road, except for designated public space, should be limited to single-family residential uses at 2-3 dwelling units per acre as shown on the Plan map. However, the area bounded by Old Courthouse Road, Trap Road, the DAAR, Bartholomew Court, and the Tysons Green subdivision, is planned for 1-2 dwelling units per acre as shown on the Plan map. Protection is required for the areas of Moonac Creek and Wolftrap Creek as tributaries to the environmentally sensitive Difficult Run watershed.

## DESCRIPTION OF THE CONCEPTUAL/FINAL DEVELOPMENT PLAN (CDP/FDP)

The CDP/FDP titled "Spring Lake, Section 3," submitted by LDC consisting of nine sheets dated March, 2013, as revised through November 4, 2013, is reviewed below.

### Site Layout

The CDP/FDP depicts the development of nine single family detached dwellings on the 5.43 acre parcel at a density of 1.66 du/ac. The nine proposed lots range in size from 14,100 square feet to 20,500 square feet with an average lot size of approximately 18,044 square feet. In addition to the nine proposed lots, the development includes three outlots (Parcels A, B, and C). Any existing structures on the property will be removed with the proposed development. Sheet 1 of the CDP/FDP provides three lot typicals for the proposed lots. The lot typical for the lots along the private street (Lots 1 – 4) shows a minimum front and rear yard setback of 25 feet and a side yard setback of 12 feet. The lot typical also notes that the Lot 4 easterly peripheral side yard setback would be 15 feet. The lot typical for the lots that front on Tetterton Avenue and Besley Road (Lots 5 - 9) feature 35 foot front yard setbacks, 25 foot rear yard setbacks, and 15 foot side yard setbacks.



Source: CDP/FDP with added graphics

### Vehicular and Pedestrian Access

Four of the nine dwellings would be accessed from a private street off Besley Road that would terminate in a cul-de-sac. Three of the proposed dwellings have direct access from Tetterton Avenue near the northern end of the application property, while Besley Road would provide access to two of the dwellings. The CDP/FDP depicts a proposed

5-foot wide sidewalk on the southern side of the private street. An additional sidewalk on the southern side of Tetterton Avenue across the front of proposed Lots 7, 8, and 9 would provide a pedestrian connection down to Besley Road to the west.

### **Parking**

Each lot will contain sufficient area for a minimum of two parking spaces in the driveway and two parking spaces within an attached garage for a total of four parking spaces per residence. The draft proffers state that the driveway for each unit shall be a minimum of 18 feet in width to accommodate two vehicles side by side.

### **Open Space**

The proposed development contains approximately 73,000 square feet of open space across parcels A, B, and C. Parcel A contains 56,600 square feet and includes a 29,000 square foot EQC in the center of the site. Parcel B contains one of the proposed infiltration trenches and is 5,900 square feet in area, while Parcel C is 10,900 square feet and is located at the rear of Lots 3 and 4. Portions of Parcel A and all of Parcel C are designated as conservation areas for a total of 35,000 square feet of conservation easement areas throughout the proposed development.

### **Stormwater Management**

The application proposes to meet stormwater management (SWM) and Best Management Practices (BMP) through the use of one infiltration trench at the eastern end of Parcel A, an additional infiltration trench on Parcel B near the corner of Besley Road and Tetterton Avenue, a bio-retention filter located at the southern end of Parcel A near the private street, and two conservation areas. The size and location of the facilities may be subject to modifications based on final engineering, provided that such modifications are in substantial conformance with the CDP/FDP.

The stormwater management narrative on Sheet 7 of the CDP/FDP states that the infiltration trenches and bio-retention filter have been designed for the 10-year, 2 hour storm in order to provide detention for the 1, 2, and 10-year storm events and meet the BMP requirements of the Public Facilities Manual. Although the final calculations will be provided at the time of subdivision plan, the CDP/FDP indicates that the post-development runoff will be less than the pre-development runoff and a minimum of 40% phosphorus removal will be achieved, as required by the PFM. As stated in the outfall narrative on the CDP/FDP, the subject property is located within the Difficult Run watershed and maintains two storm drainage outfalls, one of which has been designated as Outfalls #1 and #2 to signify both sides of the drainage swale that cuts through the property and one of which has been designated as Outfall #3 to signify the drainage that discharges near the intersection of Besley Road and Tetterton Avenue. The CDP/FDP states that outfalls are adequate in accordance with the PFM and the proffers state that the stormwater facility will be designed to meet the adequate outfall requirements as outlined in the PFM.

The stormwater facilities will be privately maintained by the future homeowners association (HOA). The proffers state that the maintenance responsibilities and funding mechanisms for the lots within this subdivision will be outlined in the HOA documents as well as in a disclosure memorandum for any contract for sale. A stormwater management access easement within a proposed asphalt access road will provide vehicular access to the facility in accordance with the PFM.

### **Architecture and Design**

Sheet 6 of the CDP/FDP displays conceptual elevation views of the proposed single family detached dwellings. The applicant proffers that the design and architecture of the proposed units will be in substantial conformance with these illustrative elevations, or of comparable quality. The proffers also state that the exterior facades of the homes will be covered with masonry from finished grade to the first floor on all four sides and may include cultured stone, stone, or brick. Masonry and/or cementitious siding or a combination thereof will be applied from the first floor to the roof line. In addition, the homes will incorporate green building features and will attain the ENERGY STAR® for Homes qualification. The proposed dwellings will be a maximum of 35 feet in height.

### **RESIDENTIAL DEVELOPMENT CRITERIA (Appendix 5)**

Fairfax County expects new residential development to enhance the community by fitting into the fabric of the neighborhood, respecting the environment, addressing transportation impacts, addressing impacts on public facilities, being responsive to the County's historic heritage, contributing to the provision of affordable housing, and being responsive to the unique site specific considerations of the property. To that end, the Comprehensive Plan requires that the Residential Development Criteria be used to evaluate zoning requests for new residential development:

#### **Residential Development Criteria 1: Site Design**

All rezoning applications for residential development should be characterized by high quality site design. Rezoning proposals for residential development, regardless of the proposed density, will be evaluated based upon the following principles, although not all of the principles may be applicable for all developments.

#### **Consolidation**

There is no Comprehensive Plan guidance that addresses consolidation for the subject parcel. The applicant has consolidated five existing parcels and one outlot in order to create the proposed development. Lots 3 – 7 of the application property are currently part of the Spring Lake Section 2 subdivision, while Parcel A is currently an outlot associated with the Leroy Subdivision. The applicant has stated that they have been unable to achieve any further consolidation. The applicant is unable to consolidate to the north and west due to existing roads. A stormwater management facility within the

Manors at Wolftrap subdivision is located to the east, which limits the ability to consolidate in this direction. The applicant stated that they reviewed opportunities to further consolidate with the other parcels in the Leroy Subdivision to the south. However, these parcels are currently accessed from Old Courthouse Road and contain approximately 60 feet of topographic relief, which constrains the inclusion of these parcels within the proposed development. Finally, the applicant's statement of justification states that the adjacent Parcel 2 within the Spring Lake Subdivision does not wish to redevelop.

### Layout

The proposed layout includes nine lots that range in size from 14,100 square feet to 20,500 square feet with an average lot size of approximately 18,044 square feet. The lot typical for the lots along the private street (Lots 1 – 4) shows a minimum front and rear yard setback of 25 feet and a side yard setback of 12 feet. The lot typical also notes that the Lot 4 easterly peripheral side yard setback would be 15 feet. The lot typical for the lots that front on Tetterton Avenue and Besley Road (Lots 5 – 9) feature 35-foot front yard setbacks, 25-foot rear yard setbacks, and 15-foot side yard setbacks. There is no minimum lot size, average lot size, or minimum setback requirement for the PDH-2 District. Staff believes that the proposed lot sizes and setbacks provide for usable yard areas within the individual lots that may accommodate the future construction of decks in accordance with Section 2-412 of the Zoning Ordinance.

### Open Space, Landscaping, and Amenities

The PDH-2 district requires that a minimum of 20% of the gross area of the site (approximately 47,286 square feet) be provided as open space. The CDP/FDP depicts approximately 73,000 square feet of open space (approximately 30%) dispersed among Parcels A, B, and C of the proposed development. Parcel A contains 56,600 square feet and includes a 29,000 square foot EQC in the center of the site. Parcel B contains one of the proposed infiltration trenches and is 5,900 square feet in area, while Parcel C is 10,900 square feet and is located at the rear of Lots 3 and 4. In addition, the CDP/FDP depicts proposed landscaping along Tetterton Avenue, Besley Road, and the private street. Two large evergreen trees, two large deciduous trees, and four Category four deciduous trees are shown along the western side of the dwelling on proposed Lot 1 to attempt to screen that portion of the proposed development along Besley Road.

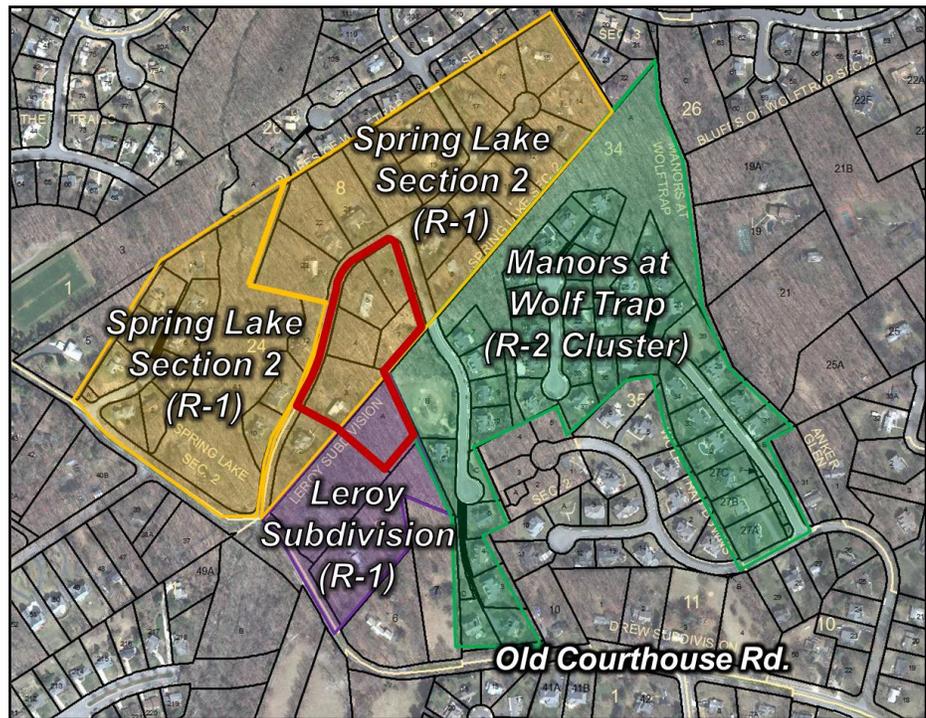
Based on the features described above, staff finds that the application satisfies Criterion 1.

## Residential Development Criteria 2: Neighborhood Context

All rezoning applications for residential development, regardless of the proposed density, should be designed to fit into the community within which the development is to be located. Developments should fit into the fabric of their adjacent neighborhoods, as evidenced by an evaluation of:

### Transitions to abutting and adjacent uses

The application property is surrounded by residential subdivisions developed with single family detached dwellings and associated outlots in similar layouts. Therefore, the proposed residential use is compatible with the adjacent uses. The image on this page illustrates the three nearby subdivisions in relation to the application parcels. The Manors at Wolf Trap subdivision is zoned R-2 Cluster and is located to the east of the application property. This subdivision was approved at a density of 1.32 du/ac. The Spring Lake Section 2 subdivision, which is zoned R-1 and R-1 with Cluster, is located to the north and west of the application property, and was originally approved at a density of 0.85 du/ac. A resubdivision of Spring Lake Section 2 occurred in 1978 that resulted in an overall density of 1.01 du/ac for the subdivision. Finally, the Leroy Subdivision is zoned R-1 and is located to the south of the application area. The Leroy Subdivision was approved at a density of 0.28 du/ac.



Source: Fairfax County GIS with added graphics

The density of the applicant's proposed development is 1.66 du/ac. Although this density is higher than that of adjacent developments, the proposed density is within the Comprehensive Plan's recommended density range for the subject properties. The adjacent properties are also planned for a density of 1 – 2 du/ac. Staff believes that the proposed density is compatible with the density of the adjacent subdivisions.

Lot sizes, particularly along the periphery

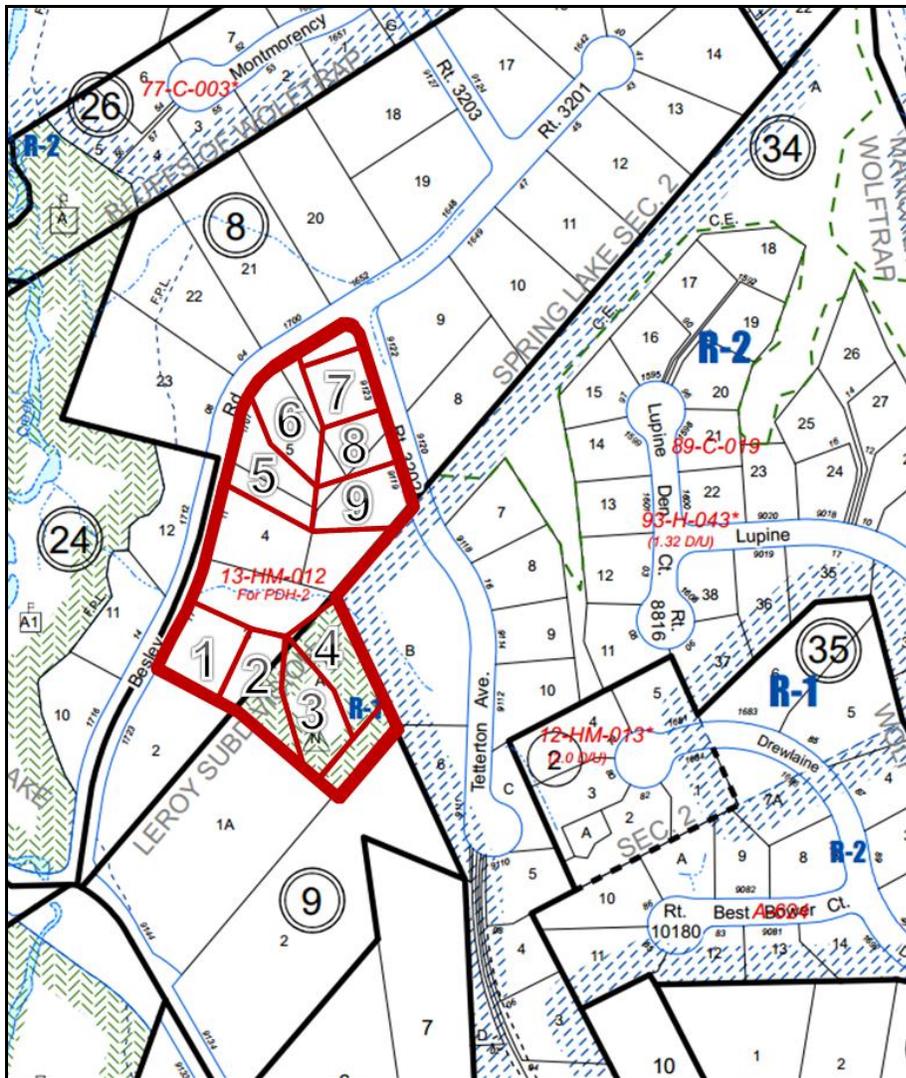
The chart below contains a summary of the average lot sizes, the minimum lot area, and the maximum lot area for the subject application and the three adjacent subdivisions.

	<b>Average Lot Area (sf)</b>	<b>Min. Lot Area (sf)</b>	<b>Max. Lot Area (sf)</b>
<b>Current Application</b>	18,044	14,100	20,500
<b>Spring Lake, Section 2</b>	33,312	20,093	61,150
<b>Leroy Subdivision</b>	127,394	109,205	145,582
<b>Manors at Wolftrap</b>	17,760	13,026	25,614

*Notes:*

1. *The above calculations for Spring Lake, Section 2 include the lots within the Spring Lake, Section 2 resubdivision*
2. *The above calculations for Spring Lake, Section 2 and Leroy Subdivision exclude the parcels included with the current application*
3. *The above calculations are based on the Department of Tax Administration's Real Estate Assessment records and do not include any outlots*

This table demonstrates that the average lot size within the proposed development is smaller than that of the Spring Lake Section 2 and Leroy Subdivisions and larger than that of the Manors at Wolf Trap subdivision, exclusive of outlots. The graphic on the following page overlays the proposed development onto the existing zoning map to display the development in the context of the existing adjacent lots. The table that follows contains a summary of the lot sizes for the proposed lots and directly abutting parcels.



Source: Fairfax County Digital Map Viewer with added graphics

Surrounding Parcels	
Lot 2 Leroy Subdivision:	145,582
Lot 1A Leroy Subdivision:	109,205
Lot 2 Spring Lake Section 2:	44,903
Lot 11 Spring Lake Section 2 Re-subdivision:	21,591
Lot 12 Spring Lake Section 2 Re-subdivision:	20,864
Lot 23 Spring Lake Section 2:	61,150
Lot 22 Spring Lake Section 2:	46,798
Lot 21 Spring Lake Section 2:	54,090
Lot 20 Spring Lake Section 2:	54,770
Lot 9 Spring Lake Section 2:	31,563
Lot 8 Spring Lake Section 2:	31,379
Lot 6 Manors at Wolf Trap:	23,222
<b>Average:</b>	<b>53,760</b>

Proposed Development
Lot 1: 18,700
Lot 2: 19,500
Lot 3: 18,300
Lot 4: 20,500
Lot 5: 19,900
Lot 6: 19,400
Lot 7: 14,100
Lot 8: 14,400
Lot 9: 17,600
<b>Average: 18,044</b>

As demonstrated in the surrounding parcels table, the lots within the proposed development are smaller in area than all of the adjacent lots. However, staff notes that the two dwellings proposed along Besley Road are adjacent to three dwellings across Besley Road and the three proposed dwellings along Tetterton Avenue face two existing dwellings across Tetterton Avenue. Therefore, in staff's opinion the proposed lot sizes, though smaller, still allow for a logical relationship between developed lots that are adjacent to the subject property. In addition, staff recognizes that one of the reasons for the smaller lot sizes is to provide for the preservation of the EQC and existing vegetation on the property in Parcels A and C, as discussed in the Environment section below. Therefore, although the lots sizes are smaller than that of adjacent development, staff believes that the preservation of environmental features on the property better achieves the goals of the Comprehensive Plan than an increase in average lot size within the proposed development. Overall, staff believes that the proposed lot sizes provide for a logical relationship between the proposed development and the adjacent properties and allow for the preservation of environmental features on the site.

#### Bulk/mass of the proposed dwelling units

According to the statement of justification, the applicant intends to construct dwellings that contain an above grade living area between 3,400 and 4,000 square feet. The Department of Tax Administration records indicate that the above grade living areas of dwellings within the three nearby subdivisions range in size from 1,228 square feet to 4,857 square feet. Staff believes that the proposed dwellings are roughly consistent with the existing dwellings in the surrounding residential developments in terms of bulk and mass.

#### Setbacks (front, side, and rear)

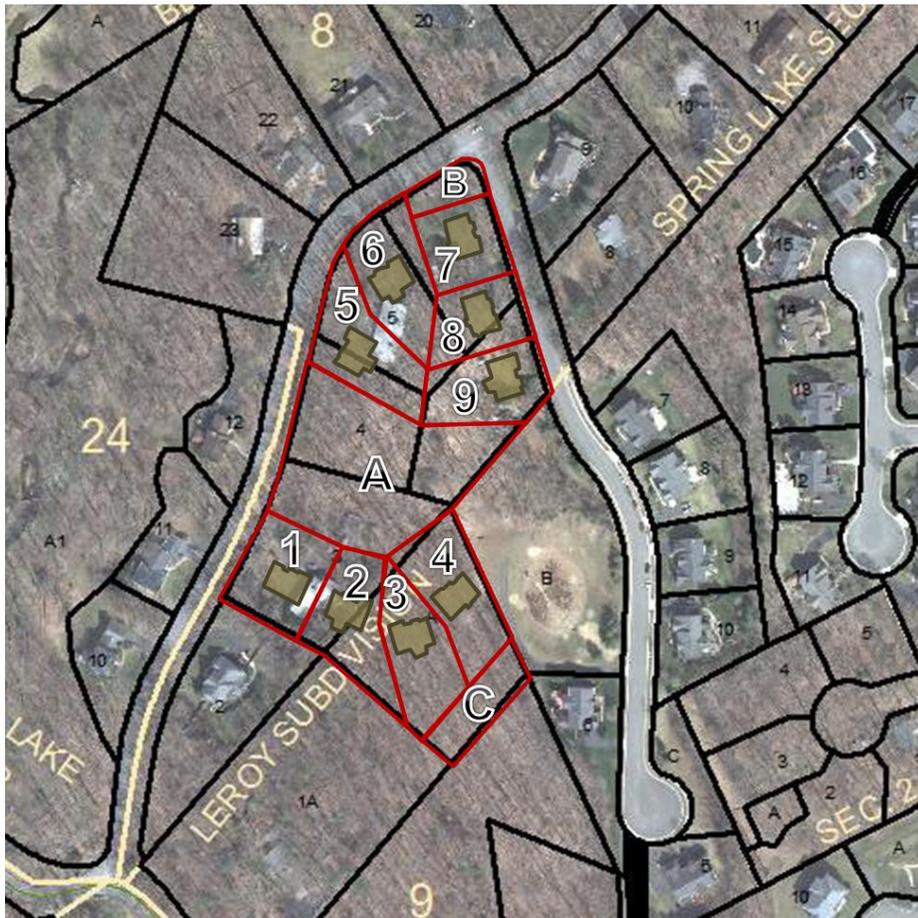
As previously discussed, the lot typical for the lots along the private street (Lots 1 – 4) shows a minimum front and rear yard setback of 25 feet and a side yard setback of 12 feet. The lot typical also notes that the Lot 4 easterly peripheral side yard setback would be 15 feet. The placement of the dwellings as shown on the CDP/FDP indicates that rear yards in excess of this setback could be achieved. Staff's estimates using Geographic Information Systems (GIS) indicates that the abutting properties across Besley Road in the vicinity of the southern portion of the proposed development have front yard setbacks of approximately 35 feet, rear yard setbacks of approximately 20 feet, and minimum side yard setbacks of approximately 15 feet. In addition, staff estimates that Parcel 2 to the south of proposed Lot 1 has a 40-foot front yard setback and side and rear yard setbacks in excess of 55 feet.

The lot typical for the lots that front on Tetterton Avenue and Besley Road (Lots 5-9) feature minimum setbacks of 35 feet in the front, 25 feet in the rear, and 15 feet on the side. These setbacks are consistent with the required setbacks of the R-2 conventional Zoning District. Staff estimates that the abutting dwellings across proposed Lots 5 and 6 have front yard setbacks of approximately 45 – 50 feet, rear yard setbacks in

excess of 150 feet, and minimum side yard setbacks that range from 15 feet up to approximately 40 feet. Staff estimates that the abutting dwellings across Tetterton Avenue from Lots 7 – 9 have front yard setbacks of approximately 35 feet and 105 feet, rear yard setbacks in excess of 50 feet, and minimum side yard setbacks of 65 feet and 20 feet. Staff notes that the minimum required setbacks for the R-1 District, which is what these surrounding parcels are zoned, is 40 feet in the front, 25 feet in the rear, and 20 feet on the side. Staff also notes that the setbacks within the Manors at Wolftrap subdivision, which is located to the east of the application area and zoned R-2 cluster, has setbacks consistent with the R-2 cluster requirements (25-foot front yard, 8 feet with a minimum total of 24 foot-side yard, and 25-foot rear yard setbacks).

#### Orientation of the proposed dwelling units to adjacent streets and homes

The image below displays the orientation of the proposed dwellings in the context of the existing neighborhood.



Source: Fairfax County GIS with added graphics

In staff's opinion, the proposed dwellings along Besley Road and Tetterton Avenue are appropriately oriented toward the street and the adjacent dwellings. In addition, the

proposed dwellings on Lots 1 – 4 are properly oriented along the proposed private street and around the cul-de-sac that would terminate on the subject property. As a result, in staff's opinion the proposed dwellings are logically oriented in terms of their relationship to adjacent streets and homes. Because the sides of the proposed dwellings on Lots 1 and 7 are adjacent to Besley Road, staff requested that the applicant provide landscaping and architectural treatment to screen the proposed dwelling from Besley Road and any adjacent homes. The applicant's CDP/FDP depicts two large evergreen trees, two large deciduous trees, and four Category four deciduous trees along the western side of Lot 1. In addition, the applicant has proffered to provide architectural treatments for the side facades on Lots 1 and 7 similar to those provided for the front facades.

The proposed dwelling on Lot 7 is oriented such that the rear of this dwelling faces the side of the dwelling on Lot 6. Staff requested that the applicant buffer the rear of this dwelling by providing for additional landscaping or using special architectural treatment. The applicant's revised proffers commit to providing three large deciduous trees behind Lot 7.

#### Architectural elevations and materials

Sheet 6 of the CDP/FDP provides illustrative elevations of the proposed dwellings. The applicant proffers that the design and architecture of the proposed units shall be in substantial conformance with these illustrative elevations, or of comparable quality. The proffers also state that the exterior facades of the homes will be covered with masonry from finished grade to the first floor on all four sides and may include cultured stone, stone, or brick. Masonry and/or cementitious siding or a combination thereof will be applied from the first floor to the roof line. The dwellings will be a maximum of 35 feet in height. In staff's opinion, this architecture is generally consistent with the existing residences in the neighboring subdivisions.

#### Pedestrian, bicycle and vehicular connections to off-site trails, roadways, transit facilities and land uses

The proposed private street provides an adequate vehicular connection to Lots 1 – 4 within the proposed development. The driveways for Lots 5 - 9 provide direct access to existing public streets (Besley Road and Tetterton Avenue). There is an existing sidewalk along a portion of the northern side of Tetterton Avenue. The proposed sidewalk across Lots 7 – 9 would provide for a complete pedestrian connection down Tetterton Avenue to Besley Road.

#### Existing topography and vegetative cover and proposed changes to them as a result of clearing and grading

The site currently contains an area of steep slopes in the vicinity of proposed Parcel A. As a result, staff requested that the applicant preserve this area to the greatest extent possible. The applicant responded by including this area of steep slopes within a

defined EQC and conservation area. Staff believes that this will allow for the preservation of existing topography as a result of clearing and grading to the greatest extent possible.

The applicant is proposing tree preservation within two conservation areas on the CDP/FDP and supplemental plantings throughout the development. The calculations provided on sheet 5A of the CDP/FDP indicate that the proposed development will provide for the preservation of 89,055 square feet of existing tree canopy, which represents approximately 37% of the site area. This area of canopy would satisfy the tree preservation target and the tree canopy requirements through preservation alone.

Based on the analysis described above, staff believes that the application satisfies Criterion 2.

### **Residential Development Criteria 3: Environment (Appendices 6 – 8)**

All rezoning applications for residential development should respect the environment. Rezoning proposals for residential development, regardless of the proposed density, should be consistent with the policies and objectives of the environmental element of the Policy Plan, and will also be evaluated on the following principles, where applicable.

#### Preservation (Appendix 6)

The Policy Plan states that developments should conserve natural environmental resources such as floodplains, stream valleys, woodlands, and wetlands. The subject property does not contain any floodplains, stream valleys, wetlands, or RPAs. Parcel A within the proposed development is an area characterized by dramatic topography and a dense canopy of deciduous trees and also serves as an important drainageway for much of the land area which surrounds it. The applicant has delineated much of the feature as a headwater EQC that will be preserved with the proposed development. This EQC contains 29,000 square feet and is largely located within a proposed conservation area on Parcel A. Therefore, the proposed development will provide for the long-term preservation of this environmentally sensitive area. The applicant has proffered to show the limits of the EQC and conservation area on any future subdivision or grading plans and to install tree protection fence to protect these areas prior to any clearing and grading activities. In addition, the applicant has proffered to include the approved Landscaping Plan from the Subdivision Plan with a detail for each lot that clearly delineates the EQC, conservation areas, and trees to be preserved to all prospective homeowners. The proffers also commit to marking all private corner lots where private lots share boundaries with common open space and where trees have been preserved to clearly delineate the property boundaries on-site.

The preservation of the EQC serves as a strong feature of the proposed development and staff commends the applicant's preservation of this feature. The applicant's impact to existing vegetation is discussed in Development Criterion 4 below.

### Slopes and Soils (Appendix 7)

As discussed above, the site contains steep slopes in the center of the site where Parcel A is located. The applicant has defined this area of steep slopes as EQC on the CDP/FDP and the limits of clearing and grading do not extend into this area. Therefore, staff believes that the proposal will allow for the preservation of the steep slopes on the property, which may not be similarly achieved with a by-right development.

According to the County Soils Map, the majority of the site contains a soil type that is rated as "good" for foundation support and drainage. A portion of the site contains a soil type that is rated as "poor" for foundation support and drainage. The final engineering of any stormwater facilities will be subject to review and approval by DPWES at the time of subdivision plan. The Northern Virginia Soil and Water Conservation District reviewed the application and commented that some of the soils are highly erosive if not adequately protected during construction. The applicant will be required to meet the Erosion and Sediment Control requirements contained in Section 11 of the PFM.

Overall, staff finds that the proposed development takes the existing topographic conditions and soil characteristics into consideration.

### Water Quality and Drainage (Appendices 8 and 9)

As previously described, the application proposes to meet stormwater management (SWM) and Best Management Practices (BMP) through the use of one infiltration trench at the eastern end of Parcel A, an additional infiltration trench on Parcel B near the corner of Besley Road and Tetterton Avenue, a bio-retention filter located at the southern end of Parcel A near the private street, and two conservation areas. The size and location of the facilities may be subject to modifications based on final engineering, provided that such modifications are in substantial conformance with the CDP/FDP.

The stormwater management narrative on Sheet 7 of the CDP/FDP states that the infiltration trenches and bio-retention filter have been designed for the 10-year, 2 hour storm in order to provide detention for the 1, 2, and 10-year storm events and meet the BMP requirements of the PFM. Although the final calculations will be provided with the subdivision plan, the CDP/FDP indicates that the post-development runoff will be less than the pre-development runoff and a minimum of 40% phosphorus removal will be achieved, as required by the PFM. The CDP/FDP states that outfalls are adequate in accordance with the PFM and the proffers state that the stormwater facility shall be designed to meet the adequate outfall requirements as outlined in the PFM.

The Northern Virginia Soil and Water Conservation District raised a concern with the potential for the existing intermittent channel on the property to experience erosion as a result of the development. It was observed during their analysis that an erosive condition is also developing at the point of discharge into its receiving channel (Wolftrap Creek) approximately 350 feet downstream from the proposed development site. Their review states that the under-cutting that is occurring in this area will eventually become

a head-cutting type of erosion that will accelerate and probably jeopardize an existing sanitary sewer infrastructure in its path. Staff from the Northern Virginia Soil and Water Conservation District suggested that the applicant line the channel with stone and install a step-pool structure at the discharge point if an adequate outfall condition is to be met for the proposed development. In addition, staff commented that the applicant should consider making amendments to the stormwater management to further improve the overall environmental and stormwater benefits. Suggested amendments include reinforcing the onsite channel with a layer of appropriately sized stone to slow down the channel flow before it passes Besley Road and ensuring that the bio-retention filter is sited in an area where the soil type has good drainage potential. The Northern Virginia Soil and Water Conservation District also requested that the applicant consider design changes to reduce the runoff volume from the section of the development near Lots 1 – 4.

The applicant has stated that an adequate outfall narrative has been provided on the CDP/FDP and that the post-development runoff will be less than pre-development runoff. The applicant has also stated in response to the comment regarding the on-site channel that the application area represents less than 10% of the contributing drainage area. In reference to the location of the infiltration trench and bio-retention filter, the applicant indicates that the locations have been field tested. Staff from DPWES commented that the existing outfall would be considered inadequate by PFM standards if the outfall has existing erosion problems. The applicant will be required to provide a drainage system that precludes adverse impact on downstream properties or the receiving channel in order to meet the PFM standards. In cases where the downstream facilities are inadequate, the applicant will need to design a storm drainage system that demonstrates there will be no adverse impacts and at least a minimum required proportional improvement is achieved pursuant to the PFM. The final engineering of any stormwater facilities will be subject to review and approval by DPWES at the time of subdivision plan.

Staff from the Fairfax County Park Authority commented that the applicant should provide underdrains with the design of the infiltration and bio-retention filter facilities (Appendix 9). Underdrains can be useful to handle overflow and could be needed if the soil has a very slow rate of infiltration. Staff from DPWES clarified that some sites cannot accommodate underdrains or are often not necessary when the existing soil has good infiltration properties. Specific design features such as underdrains, therefore, are looked at during final engineering of such facilities. As a result, staff has proposed a development condition that would require the applicant to provide underdrains with the design of the infiltration and bio-retention filter facilities if recommended by DPWES at the time of subdivision plan when more detailed information regarding the grading and infiltration rates is available.

### Noise

The property is surrounded by other residential development and is not within close proximity to a source of transportation generated noise. Old Courthouse Road is

located approximately 425 feet from the proposed development at the southernmost portion of the development, according to measurements taken with GIS. Therefore, the proposed dwelling units are unlikely to experience adverse impacts as a result of transportation-generated noise.

### Lighting

Any proposed lighting will be required to meet all standards set forth in the PFM and Article 14 of the Zoning Ordinance.

### Energy

The applicant's proposal seeks a density at the high end of the Comprehensive Plan's recommended density range for this parcel (1 – 2 du/ac). Objective 13 Policy C of the Environment section of the Policy Plan states, "Ensure that zoning proposals for residential development will qualify for the ENERGY STAR Qualified Homes designation, where such zoning proposals seek development at the high end of the Plan density range and where broader commitments to green building practices are not being applied." Therefore, staff requested that the applicant commit to this ENERGY STAR<sup>®</sup> Qualified Homes designation. The applicant's draft proffers commit to this request.

Based on the features described above, staff believes that Criterion 3 generally has been met. Staff recognizes that the engineering of the stormwater facilities will be subject to the review and approval of DPWES at the time of subdivision plan.

### **Residential Development Criteria 4: Tree Preservation and Tree Cover Requirements (Appendix 10)**

All rezoning applications for residential development, regardless of the proposed density, should be designed to take advantage of the existing quality tree cover. If quality tree cover exists on site as determined by the County, it is highly desirable that developments meet most or all of their tree cover requirement by preserving and, where feasible and appropriate, transplanting existing trees. Tree cover in excess of ordinance requirements is highly desirable. Proposed utilities, including stormwater management and outfall facilities and sanitary sewer lines, should be located to avoid conflicts with tree preservation and planting areas. Air quality-sensitive tree preservation and planting efforts (see Objective 1, Policy c in the Environment section of the Policy Plan) are also encouraged.

The site currently contains 233,952 square feet of existing upland forest tree canopy according to the Existing Vegetation Map. The applicant is proposing tree preservation within two conservation areas on the CDP/FDP as well as some supplemental plantings throughout the development. The calculations provided on Sheet 5A of the CDP/FDP indicate that the proposed development will provide for the preservation of 89,055 square feet of existing tree canopy, which represents approximately 37% of the site

area. This area of canopy would satisfy the tree preservation target and the tree canopy requirements through preservation alone. The CDP/FDP also depicts areas within the proposed lots eligible for energy conservation credit and proffer 4 states that trees will be planted in these areas to contribute to energy conservation for the dwellings on each lot where possible.

The applicant proposes two conservation areas on the property that will be owned by the Homeowners Association (HOA). Staff believes that providing for tree preservation on these common properties is preferred over preservation on private lots because it provides for better assurance of the long-term preservation of existing vegetation. Further, the applicant's draft proffers commit to marking all private lot corners where private lots share boundaries with common open space and where trees have been preserved in order to create a visual boundary in an attempt to preclude the removal of any existing vegetation.

The applicant has also included several proffers related to tree preservation and landscaping, including but not limited to tree preservation fencing and site monitoring. Staff from the Urban Forest Management Division (UFMD) also recommended that the applicant commit to a tree bond proffer due to the high quality of existing trees proposed for preservation on-site. This would require the applicant to post a cash bond and letter of credit at the time of subdivision plan approval to ensure preservation and/or replacement of the trees for which a Tree Value has been determined (the "bonded trees"). At any time prior to bond release, if any bonded trees die, are removed, or severely decline due to unauthorized construction activities, the applicant would be required to replace the trees at their expense. In addition, a payment equal to the value of any bonded tree that is dead or dying or improperly removed due to unauthorized construction activities would be required. The applicant's draft proffers commit to this request.

In summary, the CDP/FDP indicates that the tree preservation target and the 10-year tree canopy requirements will be met. In addition, the applicant has included proffers to address tree preservation and landscaping, including a tree bond proffer. Therefore, staff believes that the application satisfies Criterion 4.

#### **Residential Development Criteria 5: Transportation (Appendix 11)**

All rezoning applications for residential development should implement measures to address planned transportation improvements. Applicants should offset their impacts to the transportation network. Accepted techniques should be utilized for analysis of the development's impact on the network. Residential development considered under these criteria will range widely in density and, therefore, will result in differing impacts to the transportation network. Some criteria will have universal applicability while others will apply only under specific circumstances. Regardless of the proposed density, applications will be evaluated based upon the following principles, although not all of the principles may be applicable.

### Transportation Improvements (including Non-Motorized Facilities)

As previously discussed, four of the nine dwellings would be accessed from a private street off Besley Road that would terminate in a cul-de-sac. Three of the proposed dwellings would have access off Tetterton Avenue near the northern end of the application property, while Besley Road would provide access to two of the dwellings. Safe and adequate access to the road network will, therefore, be provided for each residence.

Section 7-0103.1 of the PFM states that curb and gutter shall be installed on sides of arterial, collector and local streets which provide frontage to lots within new subdivisions where the average lot size is less than 18,000 square feet. The average lot size for the proposed development is 18,044 square feet and thus, above the minimum of 18,000 square feet. Although curb and gutter are not required, the CDP/FDP depicts curb and gutter along Tetterton Avenue in front of Lots 7 – 9, as well as along the proposed private street. The Virginia Department of Transportation (VDOT) commented that the applicant should provide a shoulder treatment along Besley Road. This is an issue that will be addressed at the time of subdivision plan.

The applicant is also providing several additional transportation amenities and contributions, including a completed pedestrian connection along Tetterton Avenue down to Besley Road as well as a sidewalk on one side of the proposed private street. In addition, the applicant has proffered to provide an escrow to the Board of Supervisors for the future construction of a 5-foot sidewalk along the subject property's Besley Road frontage in lieu of constructing the required 5-foot wide sidewalk. The proffers also allow flexibility for the funds to be used for other transportation improvements in the vicinity of the site, as requested by staff. The escrow amount would be determined at the time of subdivision plan and would be posted prior to subdivision plan approval.

### Transit/Transportation Management

The applicant is not proposing to provide bus shelters, shuttle service, or other transportation management commitments. Due to the minimal impact that nine residences will likely have on the nearby transportation network, staff did not identify a need for such transportation management measures.

### Interconnection of the Street Network

Given the short length of the proposed private street and its termination in a cul-de-sac on the property, the applicant was not asked to consider traffic calming measures and additional connections to other adjacent streets. The cul-de-sac contains a radius of 45 feet, which meets the PFM requirement to provide for adequate fire vehicle access.

## Streets

The Residential Development Criteria state that public streets are preferred and that if private streets are proposed in single-family detached dwellings the benefit of such streets must be demonstrated. In this instance, the applicant has stated that the use of the private street allows greater flexibility because the private street does not need to meet the VDOT standards for maximum slope. According to the applicant, meeting the standards on this site would require additional grading, retaining walls, and loss of vegetation.

Based on the features described above, staff finds that the application satisfies Criterion 5.

## **Residential Development Criteria 6: Public Facilities** (Appendices 12 – 15)

All rezoning applications for residential development are expected to offset their public facility impact and to first address public facility needs in the vicinity of the proposed development. Impact offset may be accomplished through the dedication of land suitable for the construction of an identified public facility need, the construction of public facilities, the contribution of specified in-kind goods, services or cash earmarked for those uses, and/or monetary contributions to be used toward funding capital improvement projects. Selection of the appropriate offset mechanism should maximize the public benefit of the contribution.

The Fairfax County Public Schools' Office of Facilities Planning Services (Appendix 12) determined that the proposal is anticipated to yield a net increase of approximately three new students if five dwellings can be constructed by-right. Although the applicant has stated that they believe six dwellings can be built by-right, staff from DPWES has indicated that it has not yet been demonstrated that six dwellings can definitely be constructed by-right. Based on the approved proffer formula guidelines and using five as the number of by-right dwellings, staff determined that a proffer contribution of \$31,464 is appropriate in order to address capital improvements for the receiving schools. Staff recommended that the contributions be directed to the Marshall HS pyramid and/or the Cluster II schools that encompass the surrounding area. The applicant's proffers satisfy this request.

The Fairfax County Park Authority (FCPA) requested that the applicant provide a fair share contribution to the Park Authority to offset impacts to park and recreation service levels (Appendix 9). To offset the additional impact caused by the proposed development, the applicant's draft proffers propose a \$13,350 contribution to the Fairfax County Park Authority. This contribution is consistent with the amount recommended by the FCPA and would be used to establish and maintain parks and recreational facilities in the Hunter Mill District. In addition, the Zoning Ordinance requires a minimum expenditure of \$1,700 per non-ADU residential unit for outdoor recreational facilities to serve the development population. The applicant's proffers commit to providing this amount.

The proposed development would not adversely impact sanitary sewer capacity (Appendix 13) and would be serviced by the Fairfax County Fire and Rescue Department Station #402, Vienna (Appendix 14). The proposed development is more than 3,000 feet from the nearest Fairfax Water main and, therefore, is not required to connect to Fairfax Water's system (Appendix 15). However, the applicant intends to extend public water onto the site by extending an existing water main to serve the proposed dwellings. The Health Department noted that the existing septic tanks and wells will have to be properly abandoned prior to the approval of a demolition permit (Appendix 16). Finally, the proposal meets the guidelines expressed by the Office of the Fire Marshal.

Given the features discussed above, staff concludes that the application meets Criterion 6.

### **Residential Development Criteria 7: Affordable Housing**

Ensuring an adequate supply of housing for low and moderate income families, those with special accessibility requirements, and those with other special needs is a goal of the County. Part 8 of Article 2 of the Zoning Ordinance requires the provision of Affordable Dwelling Units (ADUs) in certain circumstances. Criterion 7 applies to all rezoning applications and/or portions thereof that are not required to provide any Affordable Dwelling Units, regardless of the planned density range for the site.

The Zoning Ordinance does not require the applicant to provide Affordable Dwelling Units (ADUs) because only nine dwellings are proposed. Section 2-802 of the Zoning Ordinance states that the requirements of the Affordable Dwelling Unit Program shall apply when the rezoning yields fifty or more dwelling units at an equivalent density greater than one unit per acre. However, the Comprehensive Plan recommends a contribution to the County's Housing Trust Fund in rezoning applications that propose new residential dwellings. The application satisfies this Comprehensive Plan guideline by proffering to contribute 0.5% of the projected sales price for all of the units approved on the property to the Fairfax County Housing Trust Fund.

Given this draft proffer, staff finds that the application satisfies Criterion 7.

### **Residential Development Criteria 8: Heritage Resources**

Heritage resources are those sites or structures, including their landscape settings, that exemplify the cultural, architectural, economic, social, political, or historic heritage of the County or its communities. Such sites or structures have been: 1) listed on, or determined eligible for listing on, the National Register of Historic Places or the Virginia Landmarks Register; 2) determined to be a contributing structure within a district so listed or eligible for listing; 3) located within and considered as a contributing structure within a Fairfax County Historic Overlay District; or 4) listed on, or having a reasonable potential as determined by the County, for meeting the criteria for listing on, the Fairfax County Inventories of Historic or Archaeological Sites.

Staff from the Fairfax County Park Authority reviewed the proposed development for any potential impact to cultural resources. Staff concluded that the parcels have been disturbed by previous development and, therefore, are unlikely to contain significant cultural resources. Staff has not identified any cultural resource issues and no archaeological work is warranted. As a result, the application meets Criterion 8 in staff's opinion.

## **ZONING ORDINANCE PROVISIONS (Appendix 17)**

### **Planned Development Housing District (PDH)**

The PDH District is established to encourage innovative and creative design and to facilitate use of the most advantageous construction techniques in the development of land for residential and other selected secondary uses. The district regulations are designed to insure ample provision and efficient use of open space; to promote high standards in the layout, design and construction of residential development; to promote balanced developments of mixed housing types; to encourage the provision of dwellings within the means of families of low and moderate income; and, to otherwise implement the stated purpose and intent of the Zoning Ordinance. To these ends, rezoning to and development under this district will be permitted only in accordance with a development plan prepared and approved in accordance with the provisions of Article 16.

Staff's review of the development's conformance with the standards for all planned developments is contained below.

### **Standards for all Planned Developments (Sect. 16-100)**

Section 16-101 contains six general standards that a planned development must meet. In addition, Sect. 16-102 contains three design standards that all Conceptual and Final Development Plans must satisfy. These standards are summarized below and contained in Appendix 17.

#### General Standards (Sect. 16-101)

*General Standard 1 requires that the planned development substantially conform to the adopted Comprehensive Plan with respect to type, character and intensity.*

The subject property is planned for residential use a density of 1 – 2 du/ac. The applicant's proposal at a density of 1.66 du/ac is in conformance with the recommendations of the Comprehensive Plan. In addition, as described above, staff finds that the proposed development meets the Residential Development Criteria of the Policy Plan. Therefore, staff finds that the application meets this standard.

*General Standard 2 requires that the planned development achieve the stated purpose and intent of the planned development district more than under a conventional district.*

The PDH District is established to encourage innovative and creative design and to facilitate use of the most advantageous construction techniques in the development of land for residential and other selected secondary uses. The applicant's proposal allows for the preservation of a 29,000 square foot EQC in the center of the site. Staff believes that the preservation of this environmentally sensitive area could not be similarly achieved by a conventional district that requires larger minimum lot sizes, lot widths, and setbacks and does not have a minimum open space requirement. As a result, the application meets this standard in staff's opinion.

*General Standard 3 requires the planned development to efficiently utilize the land and preserve scenic and natural features to the extent possible.*

As previously discussed, staff identified an EQC on the subject property due to the steep slopes and adjacent intermittent stream. The applicant is providing for the preservation of this EQC with the proposed development. As such, staff finds that the application meets this standard.

*General Standard 4 requires that the planned development be designed to prevent substantial injury to surrounding development and not deter or impede development.*

The surrounding properties contain single family detached dwellings and associated outlots. As discussed in staff's analysis of the neighborhood context criterion of the Residential Development Criteria, staff believes that the proposed development is compatible with the adjacent development. In staff's opinion, the proposed development on the subject property will not deter or impede development on the surrounding parcels that are planned for residential use at 1 - 2 du/ac.

*General Standard 5 requires the planned development to be located in an area with adequate public facilities.*

As summarized in staff's analysis of the public facilities criterion of the Residential Development Criteria, staff finds that adequate public facilities will be provided. Therefore, staff concludes that this standard is satisfied.

*General Standard 6 requires that the planned development provide coordinated linkages.*

The proposed development includes a sidewalk along one side of the proposed private street and along the southern side of Tetterton Avenue to complete the pedestrian connection from Tetterton Avenue to Besley Road. There is currently no sidewalk on Besley Road. The applicant is requesting a waiver of the sidewalk requirement along Besley Road and the trail requirement along Tetterton Avenue. Staff supports these

requested waivers, as described in the Waivers and Modifications Section of this report. Overall, staff believes that the application satisfies this standard.

### Design Standards (Sect. 16-102)

*Design Standard 1 states that in order to complement development on adjacent properties, at all peripheral boundaries of the PDH, PRM, PDC, PRC Districts the bulk regulations and landscaping and screening provisions shall generally conform to the provisions of that conventional zoning district which most closely characterizes the particular type of development under consideration.*

The R-2 District (Residential 2 dwelling units per acre) is the closest conventional residential district. The table below summarizes the R-2 District's setback requirements and the building setbacks provided by the proposed development.

	<b>R-2 Requirement</b>	<b>Proposed Development</b>
<b>Front Yard</b>	35 feet	25 feet (Lots 1 – 4) 35 feet (Lots 5 – 9)
<b>Side Yard</b>	15 feet	12 feet (Lots 1 – 4)* 15 feet (Lots 5 – 9)
<b>Rear Yard</b>	25 feet	25 feet

\*Easterly side yard setback for Lot 4 is 15 feet

As demonstrated in the chart above, Lots 5 – 9 in the proposed development conform to the required setbacks in the R-2 conventional district. Although the side and front yard setbacks for Lots 1 – 4 are less than the R-2 conventional district's setbacks, staff believes that the proposed setbacks on these lots generally conform to the R-2 conventional setbacks as required by this provision and allow for the preservation of environmental features on the site. In addition, the maximum proposed height of 35 feet is consistent with the bulk regulations of the R-2 conventional district in terms of height.

*Design Standard 2 states that, other than those regulations specifically set forth in Article 6 for a particular P district, the open space, off-street parking, loading, sign and all other similar regulations set forth in this Ordinance shall have general application in all planned developments.*

The proposed development complies with the applicable provisions of the Zoning Ordinance stated above and will be required to comply with these regulations during subsequent stages of the development process.

*Design Standard 3 states that streets and driveways shall be designed to generally conform to the provisions set forth in this Ordinance and all other County ordinances and regulations controlling the same, and where applicable, street systems shall be designed to afford convenient access to mass transportation facilities. In addition, a network of trails and sidewalks shall be coordinated to provide access to recreational amenities, open space, public facilities, vehicular access routes, and mass transportation facilities.*

The applicant is providing a street and sidewalks that will connect the dwellings to the existing vehicular and pedestrian network. There are no proposed connections to mass transportation facilities given the site's distance from such facilities.

Overall, in staff's opinion the application satisfies the General Standards and Design Standards for Planned Developments.

## **REQUESTED WAIVERS AND MODIFICATIONS**

### **Waiver of Section 8-0201.3 of the PFM requiring a trail along Tetterton Avenue**

The Countywide Trails Plan depicts a minor paved trail (described as asphalt or concrete and approximately four to eight feet in width) on Tetterton Avenue immediately adjacent to the subject property. The applicant requests approval of a waiver of Section 8-0201.3 of the PFM requiring this trail. The applicant proposes to install a 5-foot wide sidewalk along the southern side of Tetterton Avenue to provide a pedestrian connection to Besley Road in lieu of this trail. Given that the applicant's proposed sidewalk will provide for a completed pedestrian connection down to Besley Road, staff supports this requested waiver.

### **Waiver of Sections 8-0101.1 and 8-0102 of the PFM requiring a sidewalk along Besley Road and both sides of the private street and in favor of the sidewalks depicted on the CDP/FDP**

The PFM requires the construction of sidewalks on both sides of all streets within subdivisions containing lots averaging less than 25,001 square feet, which applies to this application. The applicant requests a waiver of the sidewalk requirement along the northern side of the private street. There are no dwellings proposed on this side of the private street and the applicant has provided a sidewalk along the private street in front of the proposed dwellings. Therefore, staff is supportive of this waiver request.

In addition, the applicant requests a waiver of the sidewalk requirement along Besley Road. The applicant has proffered to provide an escrow to the Board of Supervisors for the future construction of a 5-foot sidewalk along the subject property's Besley Road frontage in lieu of constructing the sidewalk at this time. Staff recognizes that there is no existing sidewalk along Besley Road and, therefore, a new sidewalk in this location at this time would not connect to any existing sidewalks on Besley Road. Staff does not object to this requested waiver.

### **Waiver of Section 7-1002.1B(2) of the PFM requiring a streetlight at the proposed private street entrance**

The applicant requests a waiver of the streetlight requirement at the proposed private street entrance. Staff from Capital Facilities commented that this waiver request is one that is typically evaluated during the site plan or subdivision plan stage under a specific

set of criteria. Such evaluation includes coordination with the Police Department, which review the request for nighttime event and accident rates. Therefore, staff believes that this waiver request is one that should be reviewed during the subdivision plan stage to ensure that the request is thoroughly reviewed against all appropriate criteria.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **Staff Conclusions**

The applicant requests approval of a rezoning from the R-1 District to the PDH-2 District to permit the construction of nine single family detached dwellings at a density of 1.66 dwelling units per acre (du/ac). The subject property is surrounded by residential subdivisions developed with single family detached dwellings and associated outlots and planned for residential use at 1 – 2 dwelling units per acre (du/ac). A portion of the application property is characterized by dramatic topography and a dense canopy of deciduous trees and serves as an important drainageway for much of the land area which surrounds it. The applicant has delineated much of the feature as a headwater EQC. Therefore, the proposed development will provide for the long-term preservation of this environmentally sensitive area. Staff finds that the applicant's proposed development satisfies the Residential Development Criteria. Furthermore, staff concludes that the application conforms to the applicable provisions of the Comprehensive Plan and Zoning Ordinance.

### **Recommendation**

Staff recommends approval of RZ 2013-HM-012 and the associated Conceptual Development Plan, subject to the execution of proffers consistent with those contained in Appendix 1.

Staff recommends approval of FDP 2013-HM-012, subject to the proposed development conditions contained in Appendix 2 and subject to the Board's approval of the associated rezoning and conceptual development plan.

Staff recommends approval of a waiver of Section 8-0201.3 of the Public Facilities Manual (PFM) requiring a trail along Tetterton Avenue in favor of the construction of the sidewalk shown on the CDP/FDP.

Staff recommends approval of a waiver of Sections 8-0101.1 and 8-0102 of the Public Facilities Manual (PFM) requiring a sidewalk along Besley Road and both sides of the private street in favor of the sidewalks depicted on the CDP/FDP.

It should be noted that it is not the intent of 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 recommendations of staff; it does not reflect the position of the Board of Supervisors.

## **APPENDICES**

1. Draft proffers dated November 15, 2013
2. Proposed Development Conditions
3. Statement of Justification
4. Affidavit
5. Residential Development Criteria
6. Environment and Development Review Analysis
7. Northern Virginia Soil and Water Conservation District Analysis
8. Site Development and Inspections Division Analysis
9. Fairfax County Park Authority Analysis
10. Urban Forest Management Division Analysis
11. Fairfax County Department of Transportation (FCDOT) Analysis
12. Fairfax County Public Schools – Office of Facilities Planning Analysis
13. Wastewater Planning & Monitoring Division Analysis
14. Fairfax County Fire and Rescue Analysis
15. Fairfax County Water Authority Analysis
16. Health Department Analysis
17. Zoning Ordinance Provisions
18. Glossary

**PROFFERS*****Sekas Homes, Ltd.*  
Spring Lake, Section 3**

RZ 2013-HM-012

November 15, 2013

Pursuant to Section 15.2-2303(A) of the 1950 Code of Virginia, as amended, the Applicant, for himself and his successors or assigns (herein collectively referred to as the "Applicant") in this rezoning application filed on property identified on the Fairfax County Tax Map 28-4 ((8)) Parcels 3-7 and 28-4 ((9)) Parcel A hereinafter referred to as the "Application Property", agrees to the following proffers, provided that the Fairfax County Board of Supervisors (hereinafter referred to as the "Board") approves the rezoning of the Application Property from the R-1 zoning district to the PDH-2 district.

**1. Development Plan**

- a) Subject to the provisions of Section 16-403 of the Fairfax County Zoning Ordinance ("the Ordinance"), development of the portion of the Application Property identified on the Fairfax County Tax Map 28-4 ((8)) Parcels 3-7 and 28-4 ((9)) Parcel A shall be in substantial conformance with the Conceptual/Final Development Plan ("C/FDP") entitled "Spring Lake Section 3" containing nine sheets and prepared by Land Design Consultants, Inc., dated March, 2013 and revised through November 4, 2013.
- b) Pursuant to Paragraph 4a of Section 16-403 of the Zoning Ordinance, minor modifications from the C/FDP may be permitted as determined by the Zoning Administrator. These modifications may include the locations of utilities and landscaping, minor adjustment of property lines, and the general location, type and size of dwellings on the proposed lots, provided that the minimum building setbacks outlined on the C/FDP are honored, and the limits of clearing and grading are adhered to.

**2. Homeowners Association**

The Applicant shall establish a homeowners association for the proposed development for the purpose of, among other things, establishing the necessary residential covenants governing the design and operation of the approved development. Prior to entering into a contract of sale, prospective purchasers shall be notified in writing by the Applicant of the HOA and residential covenants. The initial deeds of conveyance shall expressly contain these disclosures.

**3. Transportation**

- a) Density credit shall be reserved as may be permitted by the provisions of Paragraph 4 of Section 2-308 of the Ordinance for all eligible dedications described herein.
- b) Garages and Driveways. Any conversion of garages or use of garages that precludes the parking of vehicles within the garage is prohibited. This covenant shall be recorded among the land records of Fairfax County prior to the sale of lots and shall run to the benefit of the HOA and to the Board of Supervisors. Prior to recordation, the covenant shall be approved by the Fairfax County Attorney's office. The HOA documents shall expressly state this use restriction. The driveway provided for each unit shall be a minimum of eighteen (18) feet in width and length to permit the parking of two (2) vehicles without overhanging onto the sidewalk, if provided. Garages shall be designed to accommodate two (2) vehicles.

- c) The Applicant shall provide an escrow to the Board of Supervisors for the future construction of a 5' sidewalk along the subject property's Besley Road frontage by others. These funds can also be used for transportation improvements in the vicinity of the site. This escrow amount will be determined at time of Subdivision Plan approval and will be based on the Unit Prices listed in the County's Comprehensive Unit Price Schedule at time of Subdivision Plan approval. This escrow shall be posted prior to subdivision plan approval.
- d) The on-site private street shall be constructed in conformance with the Public Facilities Manual ("PFM") and shall be constructed of materials and depth of pavement consistent with Sect. 7-0502 of the PFM, subject to any design modifications as to pavement and easement width and use of curb, that are approved by the Director of DPWES. The Homeowners' Association shall be responsible for the maintenance of the on-site private street. All prospective purchasers shall be advised of this maintenance obligation prior to entering into a contract of sale and said obligation will be disclosed in the HOA documents. The Applicant shall deposit the sum of \$2,000 into a maintenance account that will be available for utilization by the HOA for street maintenance after the Applicant turns over control of the HOA to the homeowners.

#### **4. Landscaping**

- a) The first submission of the subdivision plan and all subsequent plan submissions shall include a landscape plan and specifications, for review and approval by the Forest Conservation Branch. The landscape plan and specifications shall incorporate the following:
  - Reduce turf areas to minimize mowing operations and the resulting air pollution. Turf shall cover no more than 75% of the pervious area of each lot. Mulched planting beds incorporating groups of trees and other plants shall be used to provide a root zone environment more favorable to trees and shrubs. Areas proposed for turf and mulch beds shall be delineated on the landscape plan submitted with the subdivision plan.
  - Plant trees in areas to contribute to energy conservation for the dwelling on each lot where possible, as depicted in Plate 4-12 of the Public Facilities Manual (PFM), and as determined in consultation with Forest Conservation Branch.
  - Provide a diverse selection of native and non-invasive plants to reduce the need for supplemental watering, and the use of chemical fertilizers, herbicides, and chemical control of insects and diseases.
  - Landscaping implemented with the subdivision plan may be made up of groups of trees including larger, overstory type trees (Category III and IV, as listed in PFM Table 12.19) together with smaller understory type trees (Category II). The plan may show overlap of understory trees by overstory trees as might occur in a natural environment.
  - Inspection of mulch beds for conformance with the approved subdivision plan shall be conducted at the time that the Residential Use Permit is issued for each dwelling. After mulch areas have been accepted, they shall become the responsibility of the homeowner who shall not be precluded from managing or planting these areas according to their preference.
  - The Applicant shall reserve the right to modify the location and species of trees at time of final subdivision plan subject to final engineering and approval by FCB.

#### **5. Tree Preservation**

Existing Vegetation Map/Tree Preservation: The Applicant shall submit an Existing Vegetation Map/Tree Preservation Plan as part of the first and all subsequent subdivision plan submissions to identify the trees onsite and address the preservation of the trees, as shown on the Conceptual/Final Development Plan. The Existing Vegetation Map/Tree Preservation Plan shall be prepared by a professional with experience in the preparation of these plans, such as a

certified arborist, Registered Consulting Arborist or landscape architect, and shall be subject to the review and approval of Forest Conservation Branch (FCB), SDID.

The Existing Vegetation Map/Tree Preservation Plan shall consist of tree survey that includes the location, species, size, crown spread and condition rating percentage of all trees 12 inches in diameter and greater, and 25 feet to either side of the limits of clearing and grading shown on the C/FDP for the entire site. The tree preservation plan shall provide those areas outside of the limits of clearing and grading shown on the C/FDP and those additional areas in which trees can be preserved as a result of final engineering and as determined by FCB. The condition analysis ratings shall be prepared using methods outlined in the latest edition of the Guide for Plant Appraisal published by the International Society of Arboriculture. Specific tree preservation activities that will maximize the survivability of any tree identified to be preserved, such as: crown pruning, root pruning, mulching, fertilization, and others as necessary, shall be included in the plan.

Tree Preservation Walk-through: The Applicant shall retain the services of a certified arborist, Registered Consulting Arborist or landscape architect and shall have the limits of clearing and grading marked with a continuous line of flagging prior to the walk-through meeting. During the tree preservation walk-through meeting, the Applicant's certified arborist or landscape architect shall walk the limits of clearing and grading with an FCB, SDID representative to determine where adjustments to the clearing limits can be made to increase the area of tree preservation and/or to increase the survivability of trees at the edge of the limits of clearing and grading, and such adjustment shall be implemented. Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump must be removed, this shall be done using a stump grinding machine in a manner causing as little disturbance as possible to the adjacent trees and associated understory vegetation and soil conditions.

Tree Preservation Fencing: All trees shown to be preserved on the tree preservation plan shall be protected by tree protection fence. Tree protection fencing in the form of four (4) foot high, fourteen (14) gauge welded wire attached to six (6) foot steel posts driven eighteen (18) inches into the ground and placed no further than ten (10) feet apart or, super silt fence, to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees, shall be erected at the limits of clearing and grading as shown on the demolition, and phase I and II erosion and sediment control sheets, as may be modified by the Root Pruning proffer below.

All tree protection fencing shall be installed after the tree preservation walk-through meeting but prior to any clearing and grading activities. The installation of all tree protection fencing shall be performed under the direct supervision of a certified arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved. Three (3) days prior to the commencement of any clearing, grading or demolition activities, but subsequent to the installation of the tree protection devices, the FCB, SDID, shall be notified and given the opportunity to inspect the site to ensure that all tree protection devices have been correctly installed. If it is determined that the fencing has not been installed correctly, no grading or construction activities shall occur until the fencing is installed correctly, as determined by FCB, SDID.

Root Pruning: The Applicant shall root prune as needed to comply with the tree preservation requirements of these proffers. All treatment shall be clearly identified, labeled, and detailed on the erosion and sediment control sheets of the subdivision plan submission. The details for these treatments shall be reviewed and approved by FCB, SDID, accomplished in a manner that protects affected and adjacent vegetation to be preserved, and may include, but not limited to the following:

- a) Root pruning shall be done with a trencher or vibratory plow to a depth of 18 inches,

- b) Root pruning shall take place prior to any clearing and grading,
- c) Root pruning shall be conducted with the on-site supervision of a certified arborist;
- d) FCB, SDID shall be informed in writing when all root pruning and tree protection fence installation is complete.

Site Protection: This proffer shall preclude the removal, disturbance, cutting, destroying, or otherwise harming of any trees, shrubs, or other vegetation on the subject property, except as necessary for (a) the control of invasive species of vines and other vegetation; (b) removal of dead or dying vegetation; (c) the routine maintenance of existing conditions, such as a minor tree limbing or trimming, provided that such activity is consistent with the Tree Preservation Plan; or (d) the removal of trees in order to prevent the endangerment of life or property, meet insurance requirements or damaged due to natural disasters beyond the control of the Applicant.

Site Monitoring: During any clearing or tree/vegetation/structure removal within twenty (20') feet of the clearing limit on the Application Property, a representative of the Applicant shall be present to monitor the process and ensure that the activities are conducted as proffered and as approved by FCB.

The Applicant shall retain the services of a certified arborist, Registered Consulting Arborist or landscape architect to monitor all construction and demolition work in order to ensure conformance with all tree preservation proffers, and FCB approvals. The monitoring schedule shall be described and detailed in the Landscaping and Tree Preservation Plan, and reviewed and approved by FCB, SDID.

Tree Value Determination: The Applicant shall contract a Certified Arborist to determine the monetary value of each tree within twelve (12) feet of the clearing limits (herein, the "Tree Value") and 15 inches in diameter and larger shown to be preserved in the tree inventory. Tree Value shall be determined using the Trunk Formula Method contained in the 9<sup>th</sup> Edition of the Guide for Plant Appraisal, published by the International Society of Arboriculture, and shall be subject to approval by the Forest Conservation Branch Division, DPWES (FCBD) with review and approval of the subdivision plan. The Location Factor of the Trunk Formula Method shall be based on projected post-development Contribution and Placement ratings. The Site rating component shall be equal to at least 80%.

The combined total of monetary values identified in the approved Tree Conservation Plan for trees designated to be preserved shall serve as a baseline sum in determining the amount of the Tree Bond, as discussed below.

Tree Bond: At the time of subdivision plan approval, the Applicant shall both post a cash bond and a letter of credit (herein, the "Tree Bond") payable to the County of Fairfax to ensure preservation and/or replacement of the trees within twelve (12') of the clearing limits for which a Tree Value has been determined as described above (herein, the "bonded trees"). The Tree Bond shall be held by the County as a cash reserve that can be used by the County to ensure the preservation, replacement, removal and/or treatment of the trees identified in the Tree Conservation Plan and as approved on the subdivision plan, and for work relating to the protection and management of undisturbed areas identified on the approved C/FDP. The letter of credit shall be equal to 50% of the replacement value of the bonded trees. The cash deposit shall consist of 33% of the amount of the letter of credit.

At any time prior to final bond release, should any bonded trees die, be removed, or severely decline as determined by FCB due to unauthorized construction activities, the Applicant shall replace such trees at its expense. The replacement trees shall be of equal size, species and/or canopy cover as approved by FCB. In addition to this replacement obligation, the Applicant shall also make a payment equal to the value of any bonded tree that is dead or dying or improperly removed due to unauthorized construction activity. This payment shall be equal to the Tree Value determined during reviewed and approved of the subdivision and paid to a fund established by

the County for the furtherance of tree conservation objectives. At the time of approval of the final RUP, the Applicant shall be entitled to request a release of any monies remaining in the cash bond and a reduction in the letter of credit to an amount up to 20% of the total amounts originally committed.

Any cash or funds remaining in the Tree Bond shall be released two years from the date of the project's final bond release, or sooner, if approved in writing by FCB.

**Areas to be Left Undisturbed and Adherence to Limits of Clearing and Grading:** The limits of clearing and grading shown on the C/FDP shall be strictly adhered to. The subdivision plan shall clearly identify these areas as shown on the C/FDP.

As part of the subdivision plan, the Applicant shall provide management practices for the protection of understory plant materials, leaf litter and soil conditions found in areas to be left undisturbed, subject to the approval of the FCB. The Applicant shall actively monitor the site to ensure that inappropriate activities such as the storage of construction materials, dumping of construction debris, and traffic by construction equipment and personnel do not occur within these areas. The Applicant shall restore understory plant materials, leaf litter and soil conditions to the satisfaction of FCB if these are found to be damaged, removed or altered in a manner not allowed in writing by the FCB.

If it becomes necessary to install utilities determined necessary by DPWES within areas to be left undisturbed, they shall be located and installed in the least disruptive manner possible as determined by FCB in coordination with the Site Development and Inspections Division, DPWES. In addition, the Applicant shall develop and implement a replanting plan for the portions of protected areas disturbed for utility installation taking into account planting restrictions imposed by utility easement agreements.

Any work occurring in or adjacent to the areas to be left undisturbed, such as root pruning, installation of tree protection fencing and silt control devices, removal of trash, or plant debris, or extraction of trees designated to be removed shall be performed in a manner that minimizes damage to any tree, shrub, herbaceous, or vine plant species that grows in the lower canopy environment; and minimizes impacts to the existing top soil and leaf litter layers that provide nourishment and protection to that vegetation, all as approved by FCB. The use of power equipment in these areas shall be limited to small hand-operated equipment such as chainsaws. Any work that requires the use of larger motorized equipment such as, but not limited to, tree transplanting spades, skid loaders, tractors, trucks, stump-grinders, or any accessory or attachment connected to such equipment shall not occur unless reviewed and approved in writing by FCB.

Homeowner's Association: As a permittee that will convey ownership of forested areas in Parcels "A and C" to the Homeowner's Association, the Applicant shall, at the time the HOA takes over management of Parcels A and C, convey to the HOA any long-term tree and forested management information that was prepared to satisfy tree conservation plan requirements of the subdivision plan. Information shall include data collected for the Tree Inventory, updated to note completion of tree preservation activities required by the Tree Preservation Plan approved with the subdivision plan and any additional work performed for preservation and/or maintenance of trees located in Parcels A and C. Transfer of tree and forested area management information shall be verified with an acknowledgement of receipt signed by the buyer prior to issuance of the RUP.

Property Boundary Delineation: Where private lots share boundaries with common open space and where trees have been preserved, the Applicant shall mark all private lot corners with a 36" tall Aluminum Survey Pipe rising 12 inches above grade so that the property lines of private lots adjacent to forested common open space can be clearly and accurately delineated on the site. Pipes shall bear the initials HOA to clearly identify the boundary of the private lot and the common open space on top of the pipes. The location of the pipes shall be shown on the

Subdivision Plan and Grading Plan.

**6. Storm Water Management**

- a) If approved by SDID, Stormwater Management and Best Management Practices (BMP's) shall be accomplished through the provision of a Conservation Area, Gravel Aggregate Infiltration Trench, Stormtech chambers and/or a bioretention facility as generally shown on Sheets 2 and 7 of the C/FDP and in accordance with the requirements of the Fairfax County Public Facilities Manual (PFM) or any approved modifications. Maintenance access will be provided as shown on the C/FDP. The size and location of the facilities may be subject to final modifications based on final engineering provided it is in substantial conformance with the C/FDP. The stormwater facility shall be designed to meet the adequate outfall requirements as outlined in the PFM.
- b) The homeowners of the lots within Spring Lake, Section 3 shall be responsible for implementing the maintenance contract and funding mechanism to provide maintenance for the proposed stormwater facilities. The maintenance responsibilities and funding mechanisms for the lots within Spring Lake, Section 3 will be outlined in the Homeowner's Association documents as well as in a disclosure memorandum for any contract for sale
- c) Prior to bond release, the Applicant shall contribute \$5,000 to the Homeowner's Association for the subject property for use in maintaining the proposed stormwater facilities. This contribution is above and beyond that required per Letter to Industry 01-11.
- d) After establishing the HOA pursuant to these proffers, the Applicant shall provide the HOA with written materials describing proper maintenance of the stormwater facilities in accordance with the PFM and County guidelines.
- e) Should the U.S. Environmental Protection Agency, the Commonwealth of Virginia, Fairfax County, or their designee, issue new or additional stormwater management requirements or regulations affecting the Property, the Applicant shall have the right to accommodate necessary changes to its stormwater management designs without the requirement to amend the CDP/FDP or these proffers. Such changes to the stormwater management design shall not materially impact the limits of clearing and grading, building locations, or road layouts.

**7. Contributions**

- a) Prior to subdivision plan approval, the Applicant shall contribute \$13,350 to the Fairfax County Park Authority for its use in establishing and maintaining parks and recreational facilities in the Hunter Mill District of Fairfax County.
- b) Prior to subdivision plan approval, Applicant shall contribute \$31,464 to the Board of Supervisors for capital improvements to the public schools In the Marshall High School pyramid and/or to Cluster II schools that encompass this area at the time of Building Permit approval. Said contribution shall be deposited with SDID for transfer to Fairfax County Public Schools. Following approval of this Application and prior to the Applicant's payment of the amounts set forth in this Proffer, if Fairfax County should increase the ratio of students per high rise multifamily unit or the amount of the contribution per student, the Applicant shall increase the amount of the contribution for that phase of development to reflect the then current ratio and/or contribution. If the County should decrease the ratio or contribution amount, the Applicant shall provide the greater of the two amounts. Prior to beginning

construction of the proposed development, the Applicant shall notify the Fairfax County Public Schools of the intended construction and anticipated completion date.

- c) Prior to the subdivision plan approval, the Applicant shall contribute to the Fairfax County Housing Trust Fund a sum equal to one-half of one percent (0.5%) of the value of all of the units approved on the property. The percentage shall be based on the aggregate sales price of all of the units subject to the contribution, as if all of those units were sold at the time of the issuance of the first building permit, and is estimated through comparable sales of similar type units. The projected sales price shall be as determined by the Department of Housing and Community Development (HCD) in consultation with the Applicant to assist the County in its goal to provide affordable dwellings.
- d) Pursuant to Paragraph 2 of Section 6-409 of the Zoning Ordinance and prior to subdivision plan approval, the Applicant shall contribute one thousand seven hundred dollars (\$1,700) per approved unit to the Fairfax County Park Authority (FCPA) for its use in providing recreational facilities in Fairfax County.

## **8. Escalation in Contribution Amounts**

For all proffers specifying contribution amounts or budgets for operational expenses, the contribution and/or budget amount shall escalate on a yearly basis from the base year of 2014 and change effective each January 1 thereafter, based on changes in the Consumer Price Index for all urban consumers (not seasonally adjusted) ("CPI-U"), both as permitted by Virginia State Code Section 15.2-2303.3.

Following approval of this Application and prior to the Applicant's payment of the amount(s) set forth in Proffer 7b, if Fairfax County should increase the ratio of students per unit or the amount of contribution per student, the Applicant shall increase the amount of the contribution for that phase of development to reflect the then-current ratio and/or contribution. If the County should decrease the ratio or contribution amount, the Applicant shall provide the greater of the two amounts.

## **9. Architecture**

- a. The design and architecture of the approved units shall be in substantial conformance with the illustrative elevations contained in the C/FDP, or of comparable quality. The Applicant reserves the right to use an alternative product than what is shown on the illustrative elevations provided it is consistent with the illustrative elevations. The exterior facades of the new homes constructed on the site shall be covered with masonry (cultured stone, stone or brick) from finished grade to first floor on all four sides. Masonry and/or cementitious siding (e.g., HardiPlank by James Hardie Building Products), or a combination thereof shall be applied from the first floor to the roof line. All units shall be limited to a maximum of thirty-five (35) feet in height as measured in the Fairfax County Zoning Ordinance.
- b. The side façade treatments on Lots 1 and 7, which face the adjacent public street, shall contain a similar façade treatment to that shown on the front of Lots 1 and 7. Additional landscaping, to include three large deciduous trees, shall be provided behind Lot 7

## **10. Green Building**

Qualification in accordance with ENERGY STAR<sup>®</sup> for Homes as determined by the submission of documentation to the Environment and Development Review Branch of DPZ from a home energy

rater certified through the Residential Energy Services Network (RESNET) program that demonstrates that the dwelling unit has attained the ENERGY STAR<sup>®</sup> for Homes qualification prior to issuance of the Residential Use Permit.

**11. Lighting and Signs**

- a) All exterior lighting shall be in conformance with Part 9 of Article 14 of the Zoning Ordinance.
- b) No temporary signs (including “Popsicle” style paper or cardboard signs) which are prohibited by Article 12 of the Zoning Ordinance, and no signs which are prohibited by Chapter 7 of Title 33.1 or Chapter 8 of Title 46.2 of the Code of Virginia shall be placed on or off-site by the Applicant or at the Applicant’s direction to assist in the initial marketing and sale of homes on the Property. Furthermore, the Applicant shall direct its agents and employees involved in marketing and/or home sales for the Property to adhere to this Proffer.

**12. Telecommuting**

All dwellings shall be pre-wired with broadband, high capacity data/network connections in multiple rooms, in addition to standard phone lines.

**13. Universal Design**

At the time of initial purchase, the following Universal Design options shall be offered to each purchaser at no additional cost: step-less entry from the garage to house or into the front door, main doors on 1<sup>st</sup> floor level 36” wide, lever door handles instead of knobs, light switches 44”-48” high, thermostats a maximum of 48” high, and/or electrical outlets a minimum of 18” high.

At the time of initial purchase, additional Universal Design options shall be offered to each purchaser at the purchaser’s sole cost. These additional options may include, but not be limited to, first floor bedroom and 1<sup>st</sup> floor bathroom, clear space under the kitchen counters, curb less shower (or shower with a curb of less than 4.5” high), five foot turning radius near 1<sup>st</sup> floor bathroom commode, grab bars in 1<sup>st</sup> floor bathroom that are ADA compliant, 1<sup>st</sup> floor bathroom console sink in lieu of cabinet style vanity.

**14. Other**

- a) During development of the subject site, the telephone number of the site superintendent that shall be present on-site during construction shall be provided to the Hunter Mill District Supervisor’s Office.
- b) Outdoor construction activity shall be limited to between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday and 8:00 a.m. and 5:00 p.m. on Saturdays. No outdoor construction activities shall be permitted on Sundays or on federal holidays. The site superintendent shall notify all employees and subcontractors of these hours of operation and shall ensure that the hours of operation are respected by all employees and subcontractors. Construction hours shall be posted on-site in both English and Spanish. This proffer applies to the original construction only and not to future additions and renovations by homeowners.
- c) Any extension into the minimum required side and rear yards for covered and uncovered decks shall be permitted in accordance with Section 2-412 of the Fairfax County Zoning Ordinance. Restrictions placed on the location of covered and uncovered decks per Section 2-412 of the

Zoning Ordinance shall be disclosed to all prospective homeowners as a disclosure memorandum prior to entering into a contract of sale, included in the Homeowner's Association documents, and included as a covenant in the deed of subdivision. In accordance with the Zoning Ordinance, any sunrooms or enclosed porches may not encroach into the minimum required setbacks as shown on Sheet 2 of the C/FDP. This shall be disclosed to all prospective homeowners as a disclosure memorandum prior to entering into a contract of sale, included in the Homeowner's Association documents, and included as a covenant in the deed of subdivision.

- d.) The Applicant shall include the Approved Landscaping Plan from the Subdivision Plan, including a detail for each lot that clearly identifies the Environmental Quality Corridor, Conservation Areas, trees to be preserved, any Maintenance Responsibilities for the proposed vegetation (to be prepared by a Certified Arborist) and information regarding the County's Tree Conservation Ordinance to all prospective homeowners. This shall be provided to all prospective homeowners in a disclosure memorandum prior to entering into a contract of sale, included in the Homeowner's Association documents, and included as a covenant in the deed of subdivision.
- e.) The Applicant shall show the limits of the Environmental Quality Corridor and Conservation Area on any future Subdivision or Grading Plans and have the limits marked with a continuous line of flagging prior to the walk-through meeting with FCB, SDID representative. Trees that are identified as dead or dying may be removed as part of the clearing operation. Any tree that is so designated shall be removed using a chain saw and such removal shall be accomplished in a manner that avoids damage to surrounding trees and associated understory vegetation. If a stump must be removed, this shall be done using a stump grinding machine in a manner causing as little disturbance as possible to the adjacent trees and associated understory vegetation and soil conditions.

The limits of the Environmental Quality Corridor and Conservation Area shown to be preserved shall be protected by tree protection fence. Tree protection fencing in the form of four (4) foot high, fourteen (14) gauge welded wire attached to six (6) foot steel posts driven eighteen (18) inches into the ground and placed no further than ten (10) feet apart or, super silt fence, to the extent that required trenching for super silt fence does not sever or wound compression roots which can lead to structural failure and/or uprooting of trees, shall be erected at the limits of the Environmental Quality Corridor and Conservation Area.

All tree protection fencing shall be installed after the walk-through meeting but prior to any clearing and grading activities. The installation of all tree protection fencing shall be performed under the direct supervision of a certified arborist, and accomplished in a manner that does not harm existing vegetation that is to be preserved. Three (3) days prior to the commencement of any clearing, grading or demolition activities, but subsequent to the installation of the tree protection devices, the FCB, SDID, shall be notified and given the opportunity to inspect the site to ensure that all tree protection devices have been correctly installed. If it is determined that the fencing has not been installed correctly, no grading or construction activities shall occur until the fencing is installed correctly, as determined by FCB, SDID.

Signatures:

Sekas Homes, Ltd., Applicant, Tax Map 28-4 ((8)) Parcels 3-7 and 28-4 ((9)) Parcel A

By: \_\_\_\_\_

John P. Sekas, President

Oakcrest Farms, L.C., Title Owner of Tax Map 28-4 ((8)) Parcels 3-7 and 28-4 ((9)) Parcel A

By: \_\_\_\_\_

John P. Sekas, Manager

**FINAL DEVELOPMENT PLAN CONDITIONS**

**FDP 2013-HM-012**

**November 21, 2013**

If it is the intent of the Planning Commission to approve FDP 2013-HM-012 for residential development at Tax Map 28-4 ((8)) 3, 4, 5, 6, and 7, and 28-4 ((9)) A, staff recommends that the Planning Commission condition the approval by requiring conformance with the following development conditions:

1. Development of the property shall be in substantial conformance with the FDP entitled "Spring Lake Section 3" submitted by LDC consisting of 9 sheets dated March, 2013 as revised through November 4, 2013.
2. The applicant shall provide underdrains with the design of the infiltration and bio-retention filter facilities, if recommended by the Department of Public Works and Environmental Services (DPWES) at the time of subdivision plan review.

The proposed conditions are staff recommendations and do not reflect the position of the Planning Commission unless and until adopted by that Commission.



March 22, 2013  
June 10, 2013 (Revised)  
August 30, 2013 (Revised)  
October 11, 2013 (Revised)

Mrs. Barbara Berlin  
Department of Planning and Zoning  
Fairfax County  
12055 Government Center Parkway, Suite 801  
Fairfax, VA 22035

Re: Statement of Justification  
Spring Lake, Section 3  
Fairfax County Tax Map #28-4 ((8)) Parcels 3-7 and 28-4 ((9)) Parcel A  
Currently Zoned R-1, Approximately 5.4 Acres  
LDC Project #12265-1-0

Dear Mrs. Berlin,

Sekas Homes, Ltd. ("Applicant") and Land Design Consultants, Inc. (LDC) are pleased to present this rezoning application. The subject property, located on Tax Map 28-4 ((8)) Parcels 3-7 and 28-4 ((9)) Parcel A is situated within the Hunter Mill District and is currently zoned R-1. The total area of the property is 5.4 acres per a boundary survey completed by LDC. This property is known as Spring Lake, Section 3.

The subject property currently contains two existing houses and driveways. All existing structures will be removed on the application property as a result of the proposed development. The Applicant has submitted a Conservation Plan in order to remove the existing dwelling at 9119 Tetterton Avenue (6447-CON-001-1) and 1717 Besley Road (6447-CON-002-1).

Upon review of the Comprehensive Plan, LDC notes that there is not any specific text for the area. The site is recommended for development at a density of one to two dwelling units per acre. Therefore, the proposed rezoning to the PDH-2 district is in conformance with the Comprehensive Plan and surrounding densities. This development is not directly adjacent to any portion of Moonac or Wolftrap Creek floodplain. To the north, east and west is the existing Spring Lake, Section 2 Subdivision, which is zoned R-1. Detached homes in this subdivision were constructed primarily in the 1960's and 1970's. However this community is experiencing re-development with new houses and building additions constructed in the 1990's. To the south and east is the existing Manors at Wolf Trap Subdivision, which is zoned R-2 cluster and developed in the late 1990's. To the south is the existing Leroy Subdivision, which is zoned R-1. Houses in this subdivision were constructed in the 1960's. All of these subdivisions contain existing single-family detached houses.

The Applicant has filed the enclosed proposal showing the development of the property with nine single-family detached houses and onsite stormwater management/best management practices (SWM/BMP) facilities at an overall density of 1.66 dwelling units per acre under the PDH-2 zoning district. The purpose of the Planned District is to encourage innovative and creative design to provide efficient use of open space and high standards in layout and design.

Mrs. Barbara Berlin, Branch Chief  
Department of Planning and Zoning  
Re: Statement of Justification  
Summer Hill Estates  
Fairfax County Tax Map #28-4 ((8)) Parcels 3-7 and 28-4 ((9)) Parcel A  
Currently Zoned R-1, Approximately 5.4 Acres  
LDC Project #12265-1-0

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June 10, 2013 (Revised)

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In creating this community, the Applicant is working to create a development that is compatible with the adjacent communities.

The subject property does not contain any Floodplain or Resource Protection Areas per Fairfax County maps. However, the property is bisected by an intermittent channel conveying approximately 30-40 acres of drainage through the property. The property does contain portions of an Environmental Quality Corridor due to the steep slopes adjacent to the intermittent channel. The Applicant is proposing a rezoning to the PDH-2 District in order to preserve a riparian buffer adjacent to the stream, which is a headwater to the Wolftrap Creek floodplain. Additionally, the proposed layout allows for the preservation of steep slopes adjacent to the intermittent channel as well as existing mature tree cover.

A brief review of the Residential Design Criteria and Planned Development Standards would include:

#### **1. High quality site design**

While the Residential Development Criteria does not expect rezoning applications for new developments to exactly match surrounding developments, they must enhance the community and be compatible with the existing neighborhood.

As stated, there is no specific text for the property regarding consolidation. The Applicant has consolidated seven existing parcels in two subdivisions in order to create the proposed development. As the property is bounded to the north and east by existing roads, there is no additional opportunity to consolidate in this direction. The Manors at Wolftrap Stormwater Management facility is located to the south, which precludes the opportunity for consolidation in this direction. The Applicant reviewed opportunities to further consolidate with Parcels 1 and 2 in the Leroy Subdivision, however these parcels are currently accessed from Old Courthouse Road and contain approximately 60 feet of topographic relief. This precludes any logical inclusion of development on these parcels with the proposed development. Finally, adjacent Parcel 2 in the Spring Lake Subdivision contains an existing dwelling constructed by the Applicant in 1992. This property is valued at almost \$1,000,000 and the owner does not wish to re-develop. Therefore, there are no additional consolidation opportunities at this time.

The site layout includes nine single-family detached homes. The application property consists of six existing lots of record, which could be re-developed with five new detached homes. Therefore, the Applicant is proposing an increase of four detached homes beyond the by-right density. The lots range in size from approximately 14,100 square feet to 20,500 square feet. The average lot size is approximately 18,040 square feet. The C/FDP shows a lot typical detail for each lot and reflects minimum front and rear setbacks of 25' and side yard setbacks of 12', which is consistent with the R-2 Cluster requirements provided in the Manors at Wolftrap. However for lots 5-9, which face Besley Road and Tetterton Avenue, these houses have been sited a minimum of 35' from the front and 15' from the sides. These yards are consistent with the R-2 Conventional standards and provide a streetscape more similar to that in the Spring Lake Subdivision with houses setback further from the road. These setbacks provided for usable rear yards, which will accommodate future decks in accordance with Section 2-412 of the Zoning Ordinance.

Mrs. Barbara Berlin, Branch Chief  
Department of Planning and Zoning  
Re: Statement of Justification  
Summer Hill Estates  
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In light of the intermittent channel bisecting the property, the Applicant is proposing to develop the site in two sections as shown. One section will contain five detached homes accessed directly from Tetterton Avenue and Besley Road. The other section will contain four detached homes oriented around a private street, but from Besley Road. The proposed street will be privately maintained by the HOA and contain a 30' wide curb and gutter travelway, which will terminate with a 90' wide cul-du-sac. The Applicant believes the proposed travelway design meets the intent of providing access to the properties that meets the requirements of the Fire Marshal and is aesthetically pleasing, but reduces the amount of pavement typically required with a publicly maintained road. Further, the use of a private street allows greater flexibility with the design of the road. Specifically, a private street does not need to meet the Virginia Department of Transportation (VDOT) standards for maximum slope. Meeting these standards on this site would require additional grading, retaining walls and the loss of vegetation. The P District allows the use of private streets, which will allow for greater tree save and provide an additional benefit.

Finally, the PDH-2 District requires 20% of the property to be provided as open space. At this time, the proposed application provides 30%, which exceeds that required. The Applicant reduced the amount of open space previously being provided by increasing the overall lot size to be more compatible with the adjacent lots. This open space consists primarily of a contiguous parcel that is designed so as to preserve the intermittent channel and adjacent buffer, preserve existing vegetation along Besley Road and provide a buffer along the steepest slopes of the property. This buffer, which includes the preservation of existing mature vegetation, provides an appropriate transition to adjacent R-1 zoned properties.

## **2. Integration and compatibility with the Neighborhood Context**

The subject property is currently developed with two existing single-family detached homes. As stated, the Applicant has submitted a Conservation Plan to remove the existing dwelling on Parcels 3 and 7 prior to rezoning approval. The remaining parcels without detached homes are currently vacant. The property is surrounded by single-family detached homes and open space on outlots. Therefore, the proposed single-family detached homes and outlots are compatible with the adjacent uses.

To the north, east and west is the existing Spring Lake, Section 2 Subdivision, which is zoned R-1 and has an approved density of 0.75 dwelling units per acre (du/acre). To the south and east is the existing Manors at Wolf Trap Subdivision, which is zoned R-2 cluster and has an approved density of 1.32 du/acre. To the south is the existing Leroy Subdivision, which is zoned R-1 and has an approved density of 0.28 du/acre. The proposed density of the Spring Lake, Section 3 Subdivision is 1.66. While this is higher than the adjacent subdivisions, it is within the Comprehensive Plan's recommended density range and a reduction from that previously proposed.

In regards to lot sizes, the layout has been revised to provide larger lots to serve as a transition between the smaller lots in the Manors at Wolf Trap Subdivision and larger lots in Spring Lake.

Mrs. Barbara Berlin, Branch Chief  
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Please see the chart below, which summarizes the average, minimum, and maximum lot area for the proposed development and adjacent subdivisions.

	Zoning Designation	Average Lot Area (SF)	Minimum Lot Area (SF)	Maximum Lot Area (SF)
Spring Lake, Section 3	PDH-2	18,040	14,100	20,500
Manors at Wolf Trap	R-2 Cluster	17,760	13,026	25,614
Spring Lake, Sec. 2*	R-1	41,455	26,603	61,150
Leroy Subdivision	R-1	126,324	108,900	143,748

\*Excludes the lots part of the current application\*

As you can see, the lots in the proposed subdivision exceed the average and minimum lot areas of the lots in the Manors at Wolf Trap and serve as a transition to the larger lots to the west. Again, the Applicant reduced the yield on this property by one lot and reduced the open space to provide larger lots.

The houses proposed within this development will contain above grade living area between 3,400 and 4,000 square feet. The proposed detached homes are approximately consistent with the existing detached homes. Houses in the adjacent Spring Lake and Leroy Subdivisions have above grade living areas, which range in size from 1,687 square feet to 4,918 square feet.

A typical lot detail has been provided on Sheet 1 of the C/FDP. Specifically, the proposed lots will contain a minimum 25' front setback, 12' side setback and 25' rear setbacks. These are consistent with the R-2 Cluster requirements. Again, the houses on los 5-9 have greater front and side setbacks to provide a streetscape more similar to that in Spring Lake. The table below provides a comparison with the adjacent subdivisions.

	Zoning Designation	Front Setback	Side Setback	Rear Setback
Spring Lake, Section 3	PDH-2	25'	12'	25'
Manors at Wolf Trap	R-2 Cluster	25'	8' (Total 24')	25'
Spring Lake, Sec. 2	R-1	40'	20'	25'
Leroy Subdivision	R-1	40'	20'	25'

The Applicant reviewed a number of options for the development of this property utilizing a density of 2 du/acre. This included development assuming conventional, cluster and planned lot standards. In regards to a conventional layout, this could result in six lots oriented directly towards Besley Road and Tetterton Avenue. Individual driveway access would be provided to the

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adjacent streets. Up to four additional lots would be accessed via a proposed public street from Besley Road. This layout would result in significant grading and eliminate a majority of the existing tree canopy with no requirement for open space. In regards to a cluster layout, the proposed lots would be oriented around a pipestem driveway and/or towards Besley Road and Tetterton Avenue. However a cluster design has regulated lot sizes, lot width and open space that does not allow the flexibility necessary to preserve the features on this site.

As shown on the previous exhibit, the proposed houses will fit into the fabric of the existing community by providing a transition between the community to the east and larger lots to the west. The proposed tree preservation provides a visual buffer from the road and adjacent houses.

Elevations of the proposed houses are included with the C/FDP and the Applicant will proffer to building materials. The houses will contain masonry facades from the finished grade to the first floor on all four sides and masonry and/or cementitious siding from the first floor to the roof line. These houses are similar to the houses constructed by Sekas Homes in a variety of communities in the Vienna area and similar in size to those in adjacent communities. Please note that the Applicant will not use vinyl siding on the houses.

**3. Enhance, preserve or contribute towards the preservation of natural environmental resources on site and/or reduce adverse off-site environmental impacts.**

The Comprehensive Plan notes that new development should conserve environmental resources such as Resource Protection Area's (RPA), floodplains, stream valleys and existing preservation. The Planned District standards note that the development shall protect and preserve all scenic assets and natural features such as trees, streams and topographic features. While the subject property does not have an RPA or floodplain, it does have an intermittent channel, which is a headwater to the Wolfrap Creek floodplain. Due to this intermittent channel and adjacent steep slopes, an Environmental Quality Corridor (EQC) exists on site. The proposed layout will allow for the preservation of steep slopes and existing vegetation adjacent to this channel, which is an Environmental Quality Corridor.

The existing topography on site is such that the site is bisected by the intermittent channel. The eastern portion of the property slopes to the north and west, while the western portion of the property slopes to the north. LDC has completed preliminary engineering, which has established proposed grades on the property. This information has been used to finalize the limits of clearing and grading and the proposed layout allows for the preservation of the steepest slopes (approximately 25%) and vegetation adjacent to the stream.

The soils on site consist primarily of the Glenelg Silt Loam (39) and Wheaton-Glenelg Complex (105), which is "good" for foundation support and drainage according to the "Fairfax County Description and Interpretative Guide to Soils". A small portion of the site is mapped Codorous-Hatboro, which is "poor" for foundation support and drainage. A small portion of this soil will be disturbed as a result of the proposed development; however no houses are proposed in this soil. The Applicant has retained a Geotechnical Engineer and submitted a Formal Geotechnical Report for submission to Fairfax County. The Geotechnical Engineer has also completed infiltration and groundwater testing in the vicinity of the proposed infiltration trenches and

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raingarden, and has stated that the average infiltration rate is greater than the minimum requirements. This information was used to size the proposed facilities in accordance with County requirements.

Stormwater Management and Best Management Practices (SWM/BMP) will be met via three onsite facilities, which will be privately maintained, as well as conservation area. Specifically, the Applicant is proposing two infiltration trenches and a bio-retention facility as shown on Parcels A and B. Conservation areas will also be provided on Parcels A and C. These locations will capture the runoff generated from the site and provide for detention and treatment. The facilities have been designed in accordance with field infiltration rates and groundwater levels determined by the Geotechnical Engineer and will substantially reduce the volume and velocity of runoff currently leaving the site uncontrolled and untreated by directing this runoff into the ground. Specifically, these trenches are designed for the 10 year 2 hour storm. They will contribute to a reduction in existing uncontrolled runoff to the Wolftrap Creek floodplain and provide for phosphorus removal in accordance with County requirements. The Applicant has proffered to construct these facilities as Stormtech chambers or aggregate infiltration trenches. The proposed facilities are Low Impact Development (LID) techniques and will provide a water quality benefit to the downstream Wolftrap Creek floodplain.

Based on discussion with adjacent neighbors, the Applicant is requesting a waiver of the lighting requirements as required by the Public Facilities Manual. The neighbors want to preserve the rural character of the neighborhood and the dark sky and have requested this application provide no street lights.

Finally, Sekas Homes is one of three Vienna Builders recognized by the Town of Vienna as a Green Builder. As part of their commitment to reducing energy costs, all Sekas Homes are constructed with a foil faced roof, foam insulation and Andersen windows. All of the proposed homes constructed on the property shall meet the guidelines of the Energy Star for Homes, as determined by submission of documentation to the County from a home energy rater. Further, the Applicant will be providing landscaping on each lot. This additional landscaping provided in conjunction with the proposed tree preservation will provide natural measures for controlling the ambient temperature in this community.

#### **4. Tree Preservation and Tree Cover Requirements**

The Comprehensive Plan encourages applications for rezoning to take advantage of existing quality tree cover and meet most if not all of the required tree cover via preservation.

The Applicant has retained a certified arborist to complete an Existing Vegetation Map. A Tree Inventory and Condition Analysis and Tree Preservation Plan will be provided at a later date. Per this plan, approximately 98.9% of the subject property is covered with existing tree canopy. The majority of the trees are identified as upland hardwoods (Oak, Red Maple, Tulip Poplar). The site also contains American Sycamore, Red Cedar, Virginia Pine, White Pine, Eastern Hemlock, American Holly and American Beech. Upon development, 30% of the subject property shall be required as tree cover, which is encouraged to be provided entirely by preservation. Additional plantings are also proposed as shown on Sheet 2. Portions of this vegetation will also provide for

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energy conservation in light of their location on the lots. As with every rezoning application, the Applicant has committed to standard Tree Preservation proffers, including posting a tree bond, due to the high quality of preservation proposed on site.

**5. Contribute to development of specific transportation improvements.**

Besley Road and Tetterton Avenue are not shown on the Comprehensive Plan and Countywide Transportation Plan to be improved. These roads are existing Subdivision Streets and no additional right-of-way dedication is required.

As stated, the Applicant is proposing to develop the site in two sections as shown. One section will contain five detached homes with access to Tetterton Avenue and Besley Road. The other section will contain four detached homes oriented around a private street from Besley Road. Based on feedback received during a nearby rezoning, LDC has utilized a reduced width cul-du-sac in the proposed development in order to minimize impervious area. LDC is requesting a waiver of the required width of the cul-de-sac radius.

This layout provides for safe and adequate access to Besley Road by providing a single, coordinated access point for four of the proposed lots. LDC has provided a sight distance profile with the C/FDP, which shows sight distance requirements will be met at the proposed entrance. The proposed street will contain a 30' wide curb and gutter travelway, which will terminate with a 90' wide cul-du-sac. This travelway provides for adequate access by a fire truck. For the remaining five lots, LDC has provided individual driveway access to Besley Road and Tetterton Avenue based on feedback received during a community meeting. Due to the increase of four detached homes over what is currently permitted, the proposed development will have a minimal impact on the surrounding transportation network.

The Applicant reviewed opportunities to provide an internal, interparcel connection between Besley Road and Tetterton Avenue. In light of the topography, intermittent channel and existing vegetation, this connection was not pursued in order to preserve these features. As previously discussed, an interparcel connection to the south towards the Leroy Subdivision is not proposed due to the topographical relief on these parcels. Further, these parcels have direct access to Old Courthouse Road.

Since the lots exceed an average lot area of 18,000 square feet, frontage improvements to include curb and gutter are not required in accordance with the Public Facilities Manual. However, curb and gutter will be provided along Tetterton Avenue due to the proposed sidewalk, discussed below. The Applicant is requesting a waiver of the sidewalk requirements along Besley Road and one side of the private street and waiver of the trail requirement along Tetterton Avenue due to the lack of adjacent pedestrian connection, to preserve existing vegetation and maintain the rural character of the neighborhood. The Applicant will escrow the cost of the sidewalk to be provided at a later date by others. A sidewalk will be provided along Tetterton Avenue, which will complete a pedestrian connection from the Manors at Wolftrap Subdivision to Besley Road.

Mrs. Barbara Berlin, Branch Chief  
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In regards to parking, this will be accommodated in the proposed driveways and garages. Please note that a covenant will be recorded with the deed of subdivision, which prohibits the proposed garages from being converted to living space. In addition, each driveway will be a minimum length of 18' to accommodate parking without blocking the travelway.

Due to the small size of this proposed residential development, this site does not lend itself to any Transit or Transportation Demand Management Programs.

**6. Provision of public facilities to alleviate impact of the proposed development on the community.**

According to Fairfax County maps, sanitary sewer is located within the right-of-way of Tetterton Avenue and Besley Road. In conjunction with the development of the site, the Applicant will extend public sewer into the site via an extension of a main from Besley Road via the proposed travelway. The proposed houses will be served by individual connections from the proposed sanitary sewer main. The remaining houses will be served via individual lateral connections from Besley Road and Tetterton Avenue.

At this time, the subject property is not currently served by public water. Public water terminates approximately 80' south of the property within the Manors at Wolftrap Subdivision. As part of this development, the Applicant will extend a water main north along Tetterton Avenue and west through the subject property. The proposed houses will be served by individual connections from the proposed water main.

In regards to the public schools and parks, the Applicant will proffer the necessary monetary contributions. Again, since the Applicant is increasing the number of lots from 5 to 9, we do not anticipate any significant increased demand on schools, parks, fire, rescue or police services as a result of this development.

Finally, the addition of nine homes on 5.4 acres lends itself towards the development of all homes at the same time. The developer believes that the phasing of such a small development is not appropriate and the developer will work with Staff and the adjacent property owners to minimize any disturbance caused by the development. Please note the Applicant has completed many projects within Fairfax County over the past twenty-five years and is not in default of any Bonded Requirements or Projects.

**7. Contribute towards the County's low and moderate-income housing goals.**

Due to the proposed development of only nine homes, the application is not subject to the ADU provisions requiring on site construction for ADU's. The Applicant will proffer a sum equal to one-half of one percent (0.5%) of the value of all of the units approved on the property to the Fairfax County Housing Trust Fund.

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Department of Planning and Zoning  
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**8. Preserve, protect and/or restore items or significance to the County's heritage.**

The subject property is not specifically shown in the Comprehensive Plan as having a potential for historic resources and has been previously disturbed. Further, the site is not located in a Historic Overlay District nor is the existing dwelling located on the National Register of Historic Places or the Virginia Landmarks Register. Therefore, the Applicant does not believe any further work is warranted at this time.

The surrounding community has been undergoing a change in the last twenty years. Houses constructed in the 1960's and 1970's are slowly being replaced with newer detached homes or consolidated and rezoned for higher density. The Applicant believes the proposed PDH-2 development will provide far greater benefits to the community over an R-1, by-right development for the following reasons:

- Designated, usable open space will be provided.
- Tree preservation will be provided on a Homeowner's Association parcel as opposed to an individual lot and portions of this open space will be encumbered with a conservation easement.
- Preservation of steep slopes and an Environmental Quality Corridor.
- Stormwater management and best management practices is being provided, where this would not be required under a by right scenario due to the existing lot sizes.
- An escrow for the construction of sidewalk along Besley Road.
- Construction of a water main.
- Contributions to the County's Schools, Parks and Affordable Housing.

In your review of this application, I believe that you will find it meets the spirit and criteria of the County's Comprehensive Plan, the character of the surrounding neighborhoods and is a positive compliment to the existing community.

Very truly yours,

**Land Design Consultants, Inc.**

Kelly M. Atkinson, AICP  
Senior Project Manager

Enclosures

cc: John Sekas, Sekas Homes, Ltd.  
Matt Marshall, L.S., President, LDC, Inc.

**REZONING AFFIDAVIT**

DATE: October 29, 2013  
 (enter date affidavit is notarized)

I, Kelly M. Atkinson, do hereby state that I am an  
 (enter name of applicant or authorized agent)

(check one)             applicant  
                               applicant's authorized agent listed in Par. 1(a) below

121644a

in Application No.(s): RZ/FDP 2013-HM-012  
 (enter County-assigned application number(s), e.g. RZ 88-V-001)

and that, to the best of my knowledge and belief, the following information is true:

1(a). The following constitutes a listing of the names and addresses of all **APPLICANTS, TITLE OWNERS, CONTRACT PURCHASERS, and LESSEES** of the land described in the application,\* and, if any of the foregoing is a **TRUSTEE,\*\*** each **BENEFICIARY** of such trust, and all **ATTORNEYS and REAL ESTATE BROKERS**, and all **AGENTS** who have acted on behalf of any of the foregoing with respect to the application:

**(NOTE:** All relationships to the application listed above in **BOLD** print must be disclosed. Multiple relationships may be listed together, e.g., **Attorney/Agent, Contract Purchaser/Lessee, Applicant/Title Owner**, etc. For a multiparcel application, list the Tax Map Number(s) of the parcel(s) for each owner(s) in the Relationship column.)

<b>NAME</b> (enter first name, middle initial, and last name)	<b>ADDRESS</b> (enter number, street, city, state, and zip code)	<b>RELATIONSHIP(S)</b> (enter applicable relationships listed in <b>BOLD</b> above)
Sekas Homes, Ltd. John P. Sekas	407-L Church Street, N.E., Vienna, VA 22180 407-L Church Street, N.E., Vienna, VA 22180	Applicant/Agent for Title Owner Agent for Applicant
Land Design Consultants, Inc.	4585 Daisy Reid Avenue, Suite 201 Woodbridge, VA 22192	Agent for Applicant/Title Owner
Matthew T. Marshall, L.S.	4585 Daisy Reid Avenue, Suite 201 Woodbridge, VA 22192	Agent for Applicant/Title Owner
Joshua C. Marshall, P.E.	4585 Daisy Reid Avenue, Suite 201 Woodbridge, VA 22192	Agent for Applicant/Title Owner
Kelly M. Atkinson, AICP	4585 Daisy Reid Avenue, Suite 201 Woodbridge, VA 22192	Agent for Applicant/Title Owner
Oakcrest Farms, L.C.	407-L Church Street, N.E., Vienna, VA 22180	Title Owner of Tax Map 28-4 ((8)), Parcels 3-7 and 28-4 ((9)), Parcel A
John P. Sekas	407-L Church Street, N.E., Vienna, VA 22180	Agent for Title Owner

(check if applicable)             There are more relationships to be listed and Par. 1(a) is continued on a "Rezoning Attachment to Par. 1(a)" form.

\* In the case of a condominium, the title owner, contract purchaser, or lessee of 10% or more of the units in the condominium.

\*\* List as follows: Name of trustee, Trustee for (name of trust, if applicable), for the benefit of: (state name of each beneficiary).

REZONING AFFIDAVIT

DATE: October 29, 2013  
(enter date affidavit is notarized)

121644a

for Application No. (s): RZ/FDP 2013-HM-012  
(enter County-assigned application number(s))

1(b). The following constitutes a listing\*\*\* of the **SHAREHOLDERS** of all corporations disclosed in this affidavit who own 10% or more of any class of stock issued by said corporation, and where such corporation has 10 or less shareholders, a listing of all of the shareholders, **and if the corporation is an owner of the subject land, all of the OFFICERS and DIRECTORS of such corporation:**

(NOTE: Include **SOLE PROPRIETORSHIPS, LIMITED LIABILITY COMPANIES, and REAL ESTATE INVESTMENT TRUSTS** herein.)

CORPORATION INFORMATION

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)

Land Design Consultants, Inc.  
4585 Daisy Reid Avenue  
Suite 201  
Woodbridge, VA 22192

**DESCRIPTION OF CORPORATION:** (check one statement)

- There are 10 or less shareholders, and all of the shareholders are listed below.
- There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
- There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

**NAMES OF SHAREHOLDERS:** (enter first name, middle initial, and last name)

Matthew T. Marshall  
Joshua C. Marshall

**NAMES OF OFFICERS & DIRECTORS:** (enter first name, middle initial, last name & title, e.g. **President, Vice President, Secretary, Treasurer, etc.**)

Matthew T. Marshall, President  
Joshua C. Marshall, Vice President

(check if applicable)  There is more corporation information and Par. 1(b) is continued on a "Rezoning Attachment 1(b)" form.

\*\*\* All listings which include partnerships, corporations, or trusts, to include the names of beneficiaries, must be broken down successively until: (a) only individual persons are listed or (b) the listing for a corporation having more than 10 shareholders has no shareholder owning 10% or more of any class of stock. ***In the case of an APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\* of the land that is a partnership, corporation, or trust, such successive breakdown must include a listing and further breakdown of all of its partners, of its shareholders as required above, and of beneficiaries of any trusts. Such successive breakdown must also include breakdowns of any partnership, corporation, or trust owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\* of the land. Limited liability companies and real estate investment trusts and their equivalents are treated as corporations, with members being deemed the equivalent of shareholders; managing members shall also be listed.*** Use footnote numbers to designate partnerships or corporations, which have further listings on an attachment page, and reference the same footnote numbers on the attachment page.

**Rezoning Attachment to Par. 1(b)**

DATE: October 29, 2013  
(enter date affidavit is notarized)

121644a

for Application No. (s): RZ/FDP 2013-HM-012  
(enter County-assigned application number (s))

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)  
Sekas Homes, Ltd.  
407-L Church Street, N.E.  
Vienna, VA 22180

**DESCRIPTION OF CORPORATION:** (check one statement)  
 There are 10 or less shareholders, and all of the shareholders are listed below.  
 There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.  
 There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

**NAMES OF THE SHAREHOLDER:** (enter first name, middle initial, and last name)  
John P. Sekas

=====  
**NAMES OF OFFICERS & DIRECTORS:** (enter first name, middle initial, last name, and title, e.g. **President, Vice-President, Secretary, Treasurer, etc.**)  
John P. Sekas, President  
Bryan L. Deege, Vice President  
Sandra A. Booze, Secretary

=====  
**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)  
Oakcrest Farms, L.C.  
407-L Church Street, N.E.  
Vienna, VA 22180

**DESCRIPTION OF CORPORATION:** (check one statement)  
 There are 10 or less shareholders, and all of the shareholders are listed below.  
 There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.  
 There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

**NAMES OF THE SHAREHOLDERS:** (enter first name, middle initial, and last name)  
Opportunity Developers, Ltd.

=====  
**NAMES OF OFFICERS & DIRECTORS:** (enter first name, middle initial, last name, and title, e.g. **President, Vice-President, Secretary, Treasurer, etc.**)  
John P. Sekas, Manager  
Bryan L. Deege, Manager

(check if applicable)  There is more corporation information and Par. 1(b) is continued further on a "Rezoning Attachment to Par. 1(b)" form.

**Rezoning Attachment to Par. 1(b)**

DATE: October 29, 2013  
(enter date affidavit is notarized)

1Z1644a

for Application No. (s): RZ/FDP 2013-HM-012  
(enter County-assigned application number (s))

**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)

Opportunity Developers, Ltd.  
407-L Church Street, N.E.  
Vienna, VA 22180

**DESCRIPTION OF CORPORATION:** (check one statement)

- There are 10 or less shareholders, and all of the shareholders are listed below.
- There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
- There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

**NAMES OF THE SHAREHOLDER:** (enter first name, middle initial, and last name)

John P. Sekas

=====  
**NAMES OF OFFICERS & DIRECTORS:** (enter first name, middle initial, last name, and title, e.g. President, Vice-President, Secretary, Treasurer, etc.)

John P. Sekas, President

=====  
**NAME & ADDRESS OF CORPORATION:** (enter complete name, number, street, city, state, and zip code)

**DESCRIPTION OF CORPORATION:** (check one statement)

- There are 10 or less shareholders, and all of the shareholders are listed below.
- There are more than 10 shareholders, and all of the shareholders owning 10% or more of any class of stock issued by said corporation are listed below.
- There are more than 10 shareholders, but no shareholder owns 10% or more of any class of stock issued by said corporation, and no shareholders are listed below.

**NAMES OF THE SHAREHOLDERS:** (enter first name, middle initial, and last name)

=====  
**NAMES OF OFFICERS & DIRECTORS:** (enter first name, middle initial, last name, and title, e.g. President, Vice-President, Secretary, Treasurer, etc.)

(check if applicable)  There is more corporation information and Par. 1(b) is continued further on a "Rezoning Attachment to Par. 1(b)" form.

REZONING AFFIDAVIT

DATE: October 29, 2013  
(enter date affidavit is notarized)

121644a

for Application No. (s): RZ/FDP 2013-HM-012  
(enter County-assigned application number(s))

1(c). The following constitutes a listing\*\*\* of all of the **PARTNERS**, both **GENERAL** and **LIMITED**, in any partnership disclosed in this affidavit:

PARTNERSHIP INFORMATION

**PARTNERSHIP NAME & ADDRESS:** (enter complete name, number, street, city, state and zip code)  
None

(check if applicable)  The above-listed partnership has no limited partners.

**NAMES AND TITLE OF THE PARTNERS** (enter first name, middle initial, last name, and title, e.g. **General Partner, Limited Partner, or General and Limited Partner**)

(check if applicable)  There is more partnership information and Par. 1(c) is continued on a "Rezoning Attachment to Par. 1(c)" form.

\*\*\* All listings which include partnerships, corporations, or trusts, to include the names of beneficiaries, must be broken down successively until: (a) only individual persons are listed or (b) the listing for a corporation having more than 10 shareholders has no shareholder owning 10% or more of any class of stock. *In the case of an APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\* of the land that is a partnership, corporation, or trust, such successive breakdown must include a listing and further breakdown of all of its partners, of its shareholders as required above, and of beneficiaries of any trusts. Such successive breakdown must also include breakdowns of any partnership, corporation, or trust owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER or LESSEE\* of the land. Limited liability companies and real estate investment trusts and their equivalents are treated as corporations, with members being deemed the equivalent of shareholders; managing members shall also be listed.* Use footnote numbers to designate partnerships or corporations, which have further listings on an attachment page, and reference the same footnote numbers on the attachment page.

REZONING AFFIDAVIT

DATE: October 29, 2013  
(enter date affidavit is notarized)

121644a

for Application No. (s): RZ/FDP 2013-HM-012  
(enter County-assigned application number(s))

1(d). One of the following boxes **must** be checked:

In addition to the names listed in Paragraphs 1(a), 1(b), and 1(c) above, the following is a listing of any and all other individuals who own in the aggregate (directly and as a shareholder, partner, and beneficiary of a trust) 10% or more of the **APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\*** of the land:

Other than the names listed in Paragraphs 1(a), 1(b), and 1(c) above, no individual owns in the aggregate (directly and as a shareholder, partner, and beneficiary of a trust) 10% or more of the **APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\*** of the land.

2. That no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household owns or has any financial interest in the subject land either individually, by ownership of stock in a corporation owning such land, or through an interest in a partnership owning such land.

**EXCEPT AS FOLLOWS:** (NOTE: If answer is none, enter "NONE" on the line below.)

None

(check if applicable)  There are more interests to be listed and Par. 2 is continued on a "Rezoning Attachment to Par. 2" form.

REZONING AFFIDAVIT

DATE: October 29, 2013  
(enter date affidavit is notarized)

121644a

for Application No. (s): RZ/FDP 2013-HM-012  
(enter County-assigned application number(s))

3. That within the twelve-month period prior to the public hearing of this application, no member of the Fairfax County Board of Supervisors, Planning Commission, or any member of his or her immediate household, either directly or by way of partnership in which any of them is a partner, employee, agent, or attorney, or through a partner of any of them, or through a corporation in which any of them is an officer, director, employee, agent, or attorney or holds 10% or more of the outstanding bonds or shares of stock of a particular class, has, or has had any business or financial relationship, other than any ordinary depositor or customer relationship with or by a retail establishment, public utility, or bank, including any gift or donation having a value of more than \$100, singularly or in the aggregate, with any of those listed in Par. 1 above.

**EXCEPT AS FOLLOWS:** (NOTE: If answer is none, enter "NONE" on line below.)

None

(NOTE: Business or financial relationships of the type described in this paragraph that arise after the filing of this application and before each public hearing must be disclosed prior to the public hearings. See Par. 4 below.)

(check if applicable) [ ] There are more disclosures to be listed and Par. 3 is continued on a "Rezoning Attachment to Par. 3" form.

4. That the information contained in this affidavit is complete, that all partnerships, corporations, and trusts owning 10% or more of the APPLICANT, TITLE OWNER, CONTRACT PURCHASER, or LESSEE\* of the land have been listed and broken down, and that prior to each and every public hearing on this matter, I will reexamine this affidavit and provide any changed or supplemental information, including business or financial relationships of the type described in Paragraph 3 above, that arise on or after the date of this application.

WITNESS the following signature:

*[Handwritten Signature]*

(check one)

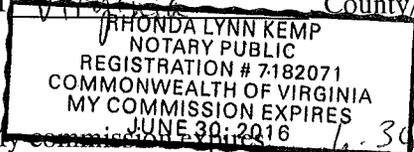
[ ] Applicant

[x] Applicant's Authorized Agent

Kelly M. Atkinson, AICP

(type or print first name, middle initial, last name, and title of signee)

Subscribed and sworn to before me this 29 day of Oct 2013, in the State/Comm. of Virginia County/City of Prince William



*[Handwritten Signature]*  
Notary Public

My commission expires 6-30-16  
I was commissioned a notary public as Rhonda Lynn Kemp

## **RESIDENTIAL DEVELOPMENT CRITERIA**

Fairfax County expects new residential development to enhance the community by: fitting into the fabric of the neighborhood, respecting the environment, addressing transportation impacts, addressing impacts on other public facilities, being responsive to our historic heritage, contributing to the provision of affordable housing and, being responsive to the unique site specific considerations of the property. To that end, the following criteria are to be used in evaluating zoning requests for new residential development. The resolution of issues identified during the evaluation of a specific development proposal is critical if the proposal is to receive favorable consideration.

Where the Plan recommends a possible increase in density above the existing zoning of the property, achievement of the requested density will be based, in substantial part, on whether development related issues are satisfactorily addressed as determined by application of these development criteria. Most, if not all, of the criteria will be applicable in every application; however, due to the differing nature of specific development proposals and their impacts, the development criteria need not be equally weighted. If there are extraordinary circumstances, a single criterion or several criteria may be overriding in evaluating the merits of a particular proposal. Use of these criteria as an evaluation tool is not intended to be limiting in regard to review of the application with respect to other guidance found in the Plan or other aspects that the applicant incorporates into the development proposal. Applicants are encouraged to submit the best possible development proposals. In applying the Residential Development Criteria to specific projects and in determining whether a criterion has been satisfied, factors such as the following may be considered:

- the size of the project
- site specific issues that affect the applicant's ability to address in a meaningful way relevant development issues
- whether the proposal is advancing the guidance found in the area plans or other planning and policy goals (e.g. revitalization).

When there has been an identified need or problem, credit toward satisfying the criteria will be awarded based upon whether proposed commitments by the applicant will significantly advance problem resolution. In all cases, the responsibility for demonstrating satisfaction of the criteria rests with the applicant.

### **1. Site Design:**

All rezoning applications for residential development should be characterized by high quality site design. Rezoning proposals for residential development, regardless of the proposed density, will be evaluated based upon the following principles, although not all of the principles may be applicable for all developments.

- a) *Consolidation:* Developments should provide parcel consolidation in conformance with any site specific text and applicable policy recommendations of the Comprehensive Plan. Should the Plan text not specifically address consolidation, the nature and extent of any proposed parcel consolidation should further the integration of the development with adjacent parcels. In any event, the proposed consolidation should not preclude nearby properties from developing as recommended by the Plan.
- b) *Layout:* The layout should:
  - provide logical, functional and appropriate relationships among the various parts (e. g. dwelling units, yards, streets, open space, stormwater management)

- facilities, existing vegetation, noise mitigation measures, sidewalks and fences);
  - provide dwelling units that are oriented appropriately to adjacent streets and homes;
  - include usable yard areas within the individual lots that accommodate the future construction of decks, sunrooms, porches, and/or accessory structures in the layout of the lots, and that provide space for landscaping to thrive and for maintenance activities;
  - provide logical and appropriate relationships among the proposed lots including the relationships of yards, the orientation of the dwelling units, and the use of pipestem lots;
  - provide convenient access to transit facilities;
  - Identify all existing utilities and make every effort to identify all proposed utilities and stormwater management outfall areas; encourage utility collocation where feasible.
- c) *Open Space*: Developments should provide usable, accessible, and well-integrated open space. This principle is applicable to all projects where open space is required by the Zoning Ordinance and should be considered, where appropriate, in other circumstances.
- d) *Landscaping*: Developments should provide appropriate landscaping: for example, in parking lots, in open space areas, along streets, in and around stormwater management facilities, and on individual lots.
- e) *Amenities*: Developments should provide amenities such as benches, gazebos, recreational amenities, play areas for children, walls and fences, special paving treatments, street furniture, and lighting.

## 2. **Neighborhood Context:**

All rezoning applications for residential development, regardless of the proposed density, should be designed to fit into the community within which the development is to be located. Developments should fit into the fabric of their adjacent neighborhoods, as evidenced by an evaluation of:

- transitions to abutting and adjacent uses;
- lot sizes, particularly along the periphery;
- bulk/mass of the proposed dwelling units;
- setbacks (front, side and rear);
- orientation of the proposed dwelling units to adjacent streets and homes;
- architectural elevations and materials;
- pedestrian, bicycle and vehicular connections to off-site trails, roadways, transit facilities and land uses;
- existing topography and vegetative cover and proposed changes to them as a result of clearing and grading.

It is not expected that developments will be identical to their neighbors, but that the development fit into the fabric of the community. In evaluating this criterion, the individual circumstances of the property will be considered: such as, the nature of existing and planned development surrounding and/or adjacent to the property; whether the property provides a transition between different uses or densities; whether access to an infill development is through an existing neighborhood; or, whether the property is within an area that is planned for redevelopment.

### **3. Environment:**

All rezoning applications for residential development should respect the environment. Rezoning proposals for residential development, regardless of the proposed density, should be consistent with the policies and objectives of the environmental element of the Policy Plan, and will also be evaluated on the following principles, where applicable.

- a) *Preservation:* Developments should conserve natural environmental resources by protecting, enhancing, and/or restoring the habitat value and pollution reduction potential of floodplains, stream valleys, EQCs, RPAs, woodlands, wetlands and other environmentally sensitive areas.
- b) *Slopes and Soils:* The design of developments should take existing topographic conditions and soil characteristics into consideration.
- c) *Water Quality:* Developments should minimize off-site impacts on water quality by commitments to state of the art best management practices for stormwater management and better site design and low impact development (LID) techniques.
- d) *Drainage:* The volume and velocity of stormwater runoff from new development should be managed in order to avoid impacts on downstream properties. Where drainage is a particular concern, the applicant should demonstrate that off-site drainage impacts will be mitigated and that stormwater management facilities are designed and sized appropriately. Adequate drainage outfall should be verified, and the location of drainage outfall (onsite or offsite) should be shown on development plans.
- e) *Noise:* Developments should protect future and current residents and others from the adverse impacts of transportation generated noise.
- f) *Lighting:* Developments should commit to exterior lighting fixtures that minimize neighborhood glare and impacts to the night sky.
- g) *Energy:* Developments should use site design techniques such as solar orientation and landscaping to achieve energy savings, and should be designed to encourage and facilitate walking and bicycling. Energy efficiency measures should be incorporated into building design and construction.

### **4. Tree Preservation and Tree Cover Requirements:**

All rezoning applications for residential development, regardless of the proposed density, should be designed to take advantage of the existing quality tree cover. If quality tree cover exists on site as determined by the County, it is highly desirable that developments meet most or all of their tree cover requirement by preserving and, where feasible and appropriate, transplanting existing trees. Tree cover in excess of ordinance requirements is highly desirable. Proposed utilities, including stormwater management and outfall facilities and sanitary sewer lines, should be located to avoid conflicts with tree preservation and planting areas. Air quality-sensitive tree preservation and planting efforts (see Objective 1, Policy c in the Environment section of this document) are also encouraged.

## 5. Transportation:

All rezoning applications for residential development should implement measures to address planned transportation improvements. Applicants should offset their impacts to the transportation network. Accepted techniques should be utilized for analysis of the development's impact on the network. Residential development considered under these criteria will range widely in density and, therefore, will result in differing impacts to the transportation network. Some criteria will have universal applicability while others will apply only under specific circumstances. Regardless of the proposed density, applications will be evaluated based upon the following principles, although not all of the principles may be applicable.

- a) *Transportation Improvements:* Residential development should provide safe and adequate access to the road network, maintain the ability of local streets to safely accommodate traffic, and offset the impact of additional traffic through commitments to the following:
  - Capacity enhancements to nearby arterial and collector streets;
  - Street design features that improve safety and mobility for non-motorized forms of transportation;
  - Signals and other traffic control measures;
  - Development phasing to coincide with identified transportation improvements;
  - Right-of-way dedication;
  - Construction of other improvements beyond ordinance requirements;
  - Monetary contributions for improvements in the vicinity of the development.
  
- b) *Transit/Transportation Management:* Mass transit usage and other transportation measures to reduce vehicular trips should be encouraged by:
  - Provision of bus shelters;
  - Implementation and/or participation in a shuttle bus service;
  - Participation in programs designed to reduce vehicular trips;
  - Incorporation of transit facilities within the development and integration of transit with adjacent areas;
  - Provision of trails and facilities that increase safety and mobility for non-motorized travel.
  
- c) *Interconnection of the Street Network:* *Vehicular connections between neighborhoods should be provided, as follows:*
  - Local streets within the development should be connected with adjacent local streets to improve neighborhood circulation;
  - When appropriate, existing stub streets should be connected to adjoining parcels. If street connections are dedicated but not constructed with development, they should be identified with signage that indicates the street is to be extended;
  - Streets should be designed and constructed to accommodate safe and convenient usage by buses and non-motorized forms of transportation;
  - Traffic calming measures should be implemented where needed to discourage cut-through traffic, increase safety and reduce vehicular speed;
  - The number and length of long, single-ended roadways should be minimized;
  - Sufficient access for public safety vehicles should be ensured.
  
- d) *Streets:* Public streets are preferred. If private streets are proposed in single family detached developments, the applicant shall demonstrate the benefits for such streets.

Applicants should make appropriate design and construction commitments for all private streets so as to minimize maintenance costs which may accrue to future property owners. Furthermore, convenience and safety issues such as parking on private streets should be considered during the review process.

- e) *Non-motorized Facilities:* Non-motorized facilities, such as those listed below, should be provided:
- Connections to transit facilities;
  - Connections between adjoining neighborhoods;
  - Connections to existing non-motorized facilities;
  - Connections to off-site retail/commercial uses, public/community facilities, and natural and recreational areas;
  - An internal non-motorized facility network with pedestrian and natural amenities, particularly those included in the Comprehensive Plan;
  - Offsite non-motorized facilities, particularly those included in the Comprehensive Plan;
  - Driveways to residences should be of adequate length to accommodate passenger vehicles without blocking walkways;
  - Construction of non-motorized facilities on both sides of the street is preferred. If construction on a single side of the street is proposed, the applicant shall demonstrate the public benefit of a limited facility.
- f) *Alternative Street Designs:* Under specific design conditions for individual sites or where existing features such as trees, topography, etc. are important elements, modifications to the public street standards may be considered.

## **6. Public Facilities:**

Residential development impacts public facility systems (i.e., schools, parks, libraries, police, fire and rescue, stormwater management and other publicly owned community facilities). These impacts will be identified and evaluated during the development review process. For schools, a methodology approved by the Board of Supervisors, after input and recommendation by the School Board, will be used as a guideline for determining the impact of additional students generated by the new development.

Given the variety of public facility needs throughout the County, on a case-by-case basis, public facility needs will be evaluated so that local concerns may be addressed.

All rezoning applications for residential development are expected to offset their public facility impact and to first address public facility needs in the vicinity of the proposed development. Impact offset may be accomplished through the dedication of land suitable for the construction of an identified public facility need, the construction of public facilities, the contribution of specified in-kind goods, services or cash earmarked for those uses, and/or monetary contributions to be used toward funding capital improvement projects. Selection of the appropriate offset mechanism should maximize the public benefit of the contribution.

Furthermore, phasing of development may be required to ensure mitigation of impacts.

## 7. **Affordable Housing:**

Ensuring an adequate supply of housing for low and moderate income families, those with special accessibility requirements, and those with other special needs is a goal of the County. Part 8 of Article 2 of the Zoning Ordinance requires the provision of Affordable Dwelling Units (ADUs) in certain circumstances. Criterion #7 is applicable to all rezoning applications and/or portions thereof that are not required to provide any Affordable Dwelling Units, regardless of the planned density range for the site.

- a) *Dedication of Units or Land:* If the applicant elects to fulfill this criterion by providing affordable units that are not otherwise required by the ADU Ordinance: a maximum density of 20% above the upper limit of the Plan range could be achieved if 12.5% of the total number of single family detached and attached units are provided pursuant to the Affordable Dwelling Unit Program; and, a maximum density of 10% or 20% above the upper limit of the Plan range could be achieved if 6.25% or 12.5%, respectively of the total number of multifamily units are provided to the Affordable Dwelling Unit Program. As an alternative, land, adequate and ready to be developed for an equal number of units may be provided to the Fairfax County Redevelopment and Housing Authority or to such other entity as may be approved by the Board.
- b) *Housing Trust Fund Contributions:* Satisfaction of this criterion may also be achieved by a contribution to the Housing Trust Fund or, as may be approved by the Board, a monetary and/or in-kind contribution to another entity whose mission is to provide affordable housing in Fairfax County, equal to 0.5% of the value of all of the units approved on the property except those that result in the provision of ADUs. This contribution shall be payable prior to the issuance of the first building permit. For for-sale projects, the percentage set forth above is based upon the aggregate sales price of all of the units subject to the contribution, as if all of those units were sold at the time of the issuance of the first building permit, and is estimated through comparable sales of similar type units. For rental projects, the amount of the contribution is based upon the total development cost of the portion of the project subject to the contribution for all elements necessary to bring the project to market, including land, financing, soft costs and construction. The sales price or development cost will be determined by the Department of Housing and Community Development, in consultation with the Applicant and the Department of Public Works and Environmental Services. If this criterion is fulfilled by a contribution as set forth in this paragraph, the density bonus permitted in a) above does not apply.

## 8. **Heritage Resources:**

Heritage resources are those sites or structures, including their landscape settings, that exemplify the cultural, architectural, economic, social, political, or historic heritage of the County or its communities. Such sites or structures have been 1) listed on, or determined eligible for listing on, the National Register of Historic Places or the Virginia Landmarks Register; 2) determined to be a contributing structure within a district so listed or eligible for listing; 3) located within and considered as a contributing structure within a Fairfax County Historic Overlay District; or 4) listed on, or having a reasonable potential as determined by the County, for meeting the criteria for listing on, the Fairfax County Inventories of Historic or Archaeological Sites.

In reviewing rezoning applications for properties on which known or potential heritage resources are located, some or all of the following shall apply:

- a) Protect heritage resources from deterioration or destruction until they can be documented, evaluated, and/or preserved;
- b) Conduct archaeological, architectural, and/or historical research to determine the presence, extent, and significance of heritage resources;
- c) Submit proposals for archaeological work to the County for review and approval and, unless otherwise agreed, conduct such work in accordance with state standards;
- d) Preserve and rehabilitate heritage resources for continued or adaptive use where feasible;
- e) Submit proposals to change the exterior appearance of, relocate, or demolish historic structures to the Fairfax County Architectural Review Board for review and approval;
- f) Document heritage resources to be demolished or relocated;
- g) Design new structures and site improvements, including clearing and grading, to enhance rather than harm heritage resources;
- h) Establish easements that will assure continued preservation of heritage resources with an appropriate entity such as the County's Open Space and Historic Preservation Easement Program; and
- i) Provide a Fairfax County Historical Marker or Virginia Historical Highway Marker on or near the site of a heritage resource, if recommended and approved by the Fairfax County History Commission.

### **ROLE OF DENSITY RANGES IN AREA PLANS**

Density ranges for property planned for residential development, expressed generally in terms of dwelling units per acre, are recommended in the Area Plans and are shown on the Comprehensive Plan Map. Where the Plan text and map differ, the text governs. In defining the density range:

- the “base level” of the range is defined as the lowest density recommended in the Plan range, i.e., 5 dwelling units per acre in the 5-8 dwelling unit per acre range;
- the “high end” of the range is defined as the base level plus 60% of the density range in a particular Plan category, which in the residential density range of 5-8 dwelling units per acre would be considered as 6.8 dwelling units per acre and above; and,
- the upper limit is defined as the maximum density called for in any Plan range, which, in the 5-8 dwelling unit per acre range would be 8 dwelling units per acre.
- In instances where a range is not specified in the Plan, for example where the Plan calls for residential density up to 30 dwelling units per acre, the density cited in the Plan shall be construed to equate to the upper limit of the Plan range, and the base level shall be the upper limit of the next lower Plan range, in this instance, 20 dwelling units per acre.



# County of Fairfax, Virginia

## MEMORANDUM

DATE: October 30, 2013

**TO:** Barbara Berlin, Director  
Zoning Evaluation Division, DPZ

**FROM:** Pamela G. Nee, Chief *PGN*  
Environment and Development Review Branch, DPZ

**SUBJECT:** Environmental Assessment: RZ 2013-HM-012  
Summer Hill Estates

This memorandum, prepared by Mary Ann Welton, includes citations from the Comprehensive Plan that provide guidance for the evaluation of the subject Rezoning application (RZ) and Final Development Plan (FDP) revised through August 19, 2013 and proffers, revised through October 13, 2013. The extent to which the application conforms to the applicable guidance contained in the Comprehensive Plan is noted. Possible solutions to remedy identified issues are suggested. Other solutions may be acceptable, provided that they achieve the desired degree of mitigation and are in harmony with Plan policies.

### COMPREHENSIVE PLAN CITATIONS:

The Comprehensive Plan is the basis for the evaluation of this application. The assessment of the proposal for conformity with the environmental recommendations of the Comprehensive Plan is guided by the following citations from the Plan:

The Fairfax County Comprehensive Plan, Policy Plan, 2013 Edition, Environment section as amended through February 12, 2013, page 7-9 states:

**“Objective 2: Prevent and reduce pollution of surface and groundwater resources. Protect and restore the ecological integrity of streams in Fairfax County.**

Policy a. Maintain a best management practices (BMP) program for Fairfax County and ensure that new development and redevelopment

complies with the County's best management practice (BMP) requirements. . . .

Policy k. For new development and redevelopment, apply better site design and low impact development (LID) techniques such as those described below, and pursue commitments to reduce stormwater runoff volumes and peak flows, to increase groundwater recharge, and to increase preservation of undisturbed areas. In order to minimize the impacts that new development and redevelopment projects may have on the County's streams, some or all of the following practices should be considered where not in conflict with land use compatibility objectives:

- Minimize the amount of impervious surface created.
- Site buildings to minimize impervious cover associated with driveways and parking areas and to encourage tree preservation. . . .
- Encourage cluster development when designed to maximize protection of ecologically valuable land. . . .
- Encourage fulfillment of tree cover requirements through tree preservation instead of replanting where existing tree cover permits. Commit to tree preservation thresholds that exceed the minimum Zoning Ordinance requirements.
- Where appropriate, use protective easements in areas outside of private residential lots as a mechanism to protect wooded areas and steep slopes. . . .
- Encourage the use of innovative BMPs and infiltration techniques of stormwater management where site conditions are appropriate, if consistent with County requirements.
- Apply nonstructural best management practices and bioengineering practices where site conditions are appropriate, if consistent with County requirements.

Policy l. In order to augment the EQC system, encourage protection of stream channels and associated vegetated riparian buffer areas along stream channels upstream of Resource Protection Areas (as designated pursuant to the Chesapeake Bay Preservation Ordinance) and Environmental Quality Corridors. To the extent feasible in consideration of overall site design, stormwater management needs and opportunities, and other Comprehensive

Plan guidance, establish boundaries of these buffer areas consistent with the guidelines for designation of the stream valley component of the EQC system as set forth in Objective 9 of this section of the *Policy Plan*. Where applicable, pursue commitments to restoration of degraded stream channels and riparian buffer areas.”

The Fairfax County Comprehensive Plan, Policy Plan, 2013 Edition, Environment section as amended through February 12, 2013, page 10 states:

**“Objective 3: Protect the Potomac Estuary and the Chesapeake Bay from the avoidable impacts of land use activities in Fairfax County.**

Policy a. Ensure that new development and redevelopment complies with the County's Chesapeake Bay Preservation Ordinance. . . .”

The Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Environment, as amended through February 12, 2013, page 18 states:

**“Objective 10: Conserve and restore tree cover on developed and developing sites. Provide tree cover on sites where it is absent prior to development.**

Policy a: Protect or restore the maximum amount of tree cover on developed and developing sites consistent with planned land use and good silvicultural practices. . . .”

The Fairfax County Comprehensive Plan, 2013 Edition, Policy Plan, Environment, as amended through February 12, 2013, page 19 states:

**“Objective 13: Design and construct buildings and associated landscapes to use energy and water resources efficiently and to minimize short- and long-term negative impacts on the environment and building occupants.**

Policy a. Consistent with other Policy Plan objectives, encourage the application of energy conservation, water conservation and other green building practices in the design and construction of new development and redevelopment projects. These practices can include, but are not limited to:

- Environmentally-sensitive siting and construction of development
- Application of low impact development practices, including minimization of impervious cover (See Policy k under Objective 2 of this section of the *Policy Plan*)
- Optimization of energy performance of structures/energy-efficient design

- Use of renewable energy resources
- Use of energy efficient appliances, heating/cooling systems, lighting and/or other products
- Application of water conservation techniques such as water efficient landscaping and innovative wastewater technologies
- Reuse of existing building materials for redevelopment projects
- Recycling/salvage of non-hazardous construction, demolition, and land clearing debris
- Use of recycled and rapidly renewable building materials
- Use of building materials and products that originate from nearby sources
- Reduction of potential indoor air quality problems through measures such as increased ventilation, indoor air testing and use of low-emitting adhesives, sealants, paints/coatings, carpeting and other building materials.

Encourage commitments to implementation of green building practices through certification under established green building rating systems (e.g., the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED®) program or other comparable programs with third party certification). Encourage commitments to the attainment of the ENERGY STAR® rating where applicable and to ENERGY STAR qualification for homes. Encourage the inclusion of professionals with green building accreditation on development teams. Encourage commitments to the provision of information to owners of buildings with green building/energy efficiency measures that identifies both the benefits of these measures and their associated maintenance needs.

...

- Policy c. Ensure that zoning proposals for residential development will qualify for the ENERGY STAR Qualified Homes designation, where such zoning proposals seek development at the high end of the Plan density range and where broader commitments to green building practices are not being applied.”

## **ENVIRONMENTAL ANALYSIS**

This section characterizes the environmental concerns raised by an evaluation of this site and the proposed development. Solutions are suggested to remedy the concerns that have been identified by staff. There may be other acceptable solutions. Particular emphasis is given to opportunities provided by this application to conserve the county's remaining natural amenities. This application seeks approval for 9 single-family homes on 5.43 acres of land at a density of 1.66 dwelling units per acre on land which is proposed to be rezoned from R-1 to the PDH-2 Zoning District.

**Water Quality/ Headwater Water Protection /Conservation Area:** The 5.43 acre subject property falls within the Difficult Run Watershed immediately east of Wolf Trap Creek. Four homes (to be removed) currently exist on the subject site which is characterized by undulating topography and a dense canopy of deciduous trees. The applicant proposes to meet water quality control and water quantity control requirements with two infiltration trenches, one rain garden and the preservation of approximately 1.5 acres of the subject property within a conservation easement. The largest preservation area, identified as Parcel A, encompasses more than one acre and it traverses through the middle of the site. Characterized by significant topography and dense canopy of deciduous trees, Parcel A serves an important drainageway for much of the land area which surrounds it; and its preservation serves as an enhancement of the development.

The development plan depicts a proposed conservation area and a proposed EQC within the middle portion of the site. The boundaries of the delineations are not clear. It is also not clear if the boundaries of the EQC and conservation area are identical. Staff commends the applicant's preservation of the headwaters EQC feature and recommends that the EQC be clearly identified onsite to avoid encroachment not only during land disturbance and construction of the development but also after the development is complete and into perpetuity.

The outfall narrative describes that runoff from the subject property has three discharge locations. The engineer for the applicant indicates that all outfalls adequately convey the discharge from the subject development. Stormwater management/best management practice measures and outfall adequacy are subject to review and approval by the Department of Public Works and Environmental Services (DPWES).

On May 24, 2011, the Virginia Soil and Water Conservation Board adopted Final Stormwater Regulations, which became effective September 13, 2011. The regulations require all local governments in Virginia to adopt and enforce new stormwater management requirements; these new requirements must be effective on July 1, 2014. Staff from the Department of Public Works and Environmental Services is pursuing the development of a stormwater management ordinance in order to implement this state mandate, and it is anticipated that this ordinance will become effective on the July 1, 2014 deadline. The applicant will be required to comply with these new requirements for any subject development activities for which the applicant has not, prior to July 1, 2014, obtained VSMP permit coverage under the Virginia Stormwater Management Program General Permit for Discharges of Stormwater from Construction Activities. The proposed development will not be grandfathered from the new ordinance as a result of approval of this zoning application. While all details regarding the new stormwater management ordinance are not known at this time, the general water quality control and water quantity control parameters are included in the Virginia Stormwater Management Program Permit Regulations found at VAC50-60-10 et seq. of the Virginia Administrative Code. The applicant should, therefore, be encouraged strongly to design the proposed stormwater management system consistent with both existing and anticipated stormwater management requirements.

**Green Building Practices:** This 5.43 acre site is planned for residential development at 1- 2 dwelling units per acre. The current proposal seeks approval for 9 dwelling units, at an overall density of 1.66 dwelling units per acre which is the high end of the Plan's density range. In support of the County's green building policy, the applicant has made a proffered commitment to the attainment of Energy Star Qualified Homes for the proposed new homes demonstrated prior

to the issuance of the residential use permit (RUP) for each dwelling. Staff suggests that the applicant consider adding alternative green building residential certification programs to the proffer such as Earthcraft House and/or 2012 National Green Building Standard (formerly known as NAHB National Green Building Certification) using the Energy Star Qualified Homes path for energy performance to broaden future opportunities.

**Tree Preservation/Restoration:** The subject property is characterized by dense deciduous tree canopy. The current revised plan depicts approximately 30% tree preservation located throughout the proposed development. Sheets #2 & 3 of the proposed plan show a limits of clearing and grading line which preserves a larger area than the area which is encompassed by the EQC delineation. If the applicant places tree preservation area/conservation area within individual lots, then the applicant is encouraged to ensure that this additional tree preservation area is protected during the construction and development process. Staff encourages the applicant to make a proffered commitment to define and protect this additional tree preservation area on site within proposed lot lines by delineation with super silt fencing. The applicant is encouraged to work with the Urban Forestry Management Division (UFMD) of DPWES to identify ways to best protect the existing canopy and root systems of trees located within all the above described preservation.

#### **COUNTYWIDE TRAILS MAP:**

The Countywide Trails Plan depicts a minor paved trail (described as asphalt or concrete; between 4' and 7' 11" in width) on the west side of Tetterton Drive immediately adjacent to the subject property. The development plan depicts a 5 foot wide sidewalk in this location.

PGN/MAW

**Board of Directors**

Jean R. Packard, Chairman  
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 Laura Grape, Executive Director

**Contact**

703-324-1460, TTY 711  
 Fax: 703-324-1421  
 ConservationDistrict@fairfaxcounty.gov

*Working for Clean Streams and Protected Natural Resources in Fairfax County*

October 30, 2013

TO: Barbara C. Berlin  
 Director, Zoning Evaluation Division, DPZ

FROM: Wilfred D. Woode  
 Senior Conservation Specialist

RE: Conservation Report on RZ/FDP 2013-HM-012

This report is in response to the above rezoning and final development plan application for a 5.4-acre property, located at the eastern corner of Besley Road and Tetterton Avenue in the Difficult Run Watershed. It consists of six parcels that can be identified in the Fairfax County Tax Map system as 28-4 ((8)) -3, -4, -5, -6, & -7; and 28-4 ((9)) -A.

The applicant requests a change in zoning from R-1 to PHD-2 and an approval of the final development plan showing a community of nine single family detached homes. An existing natural drainage is planned to be kept undisturbed, and will separate the community into two sections.

There are no RPA, EQC or major flood plain delineated within the limits of the proposed development area.

Soil types and the need for erosion and sediment control:

The property consists of some critical slopes (15 – 25%) on the north side of the drainage. Dominant soil types are, Glenelg, Wheaton-Glenelg Complex and Codorus-Hatboro. The first two soil types are naturally well-drained, and highly erosive if not adequately protected during construction. Codorus-Hatboro has a low erosion potential and poor drainage.

If this development request is approved, adequate perimeter erosion and sediment control measures must be installed prior to the start of any clearing, construction or soil moving activity. Other similar measures must be coordinated with the stages of development in a timely manner.

It should be the responsibility of the developer to ensure that no disturbed area is left unprotected for more than 7 days. Except for portions of the site in which earth moving activities are planned beyond that period.

Runoff contribution into the intermittent channel comes from the adjacent grounds, a storm-drain pipe that discharges at the north-eastern corner and a BMP dry Pond located at the south-eastern side.

Currently, the channel appears to be relatively stable, but close inspection reveals signs of a slowly developing erosive conditions. A concern is that even with slight increase in the channel's carrying volume and/or carrying duration the erosion assessment may change from "slowly developing" to "actively eroding."

Storm water Management:

As a holistic assessment of the flow-path of the sub-shed was performed, it was observed that an erosive condition is developing at the point of discharge into its receiving channel – Wolftrap Creek. This condition was observed about 350 feet downstream from the proposed development site.

It is believed that a sudden change in elevation (about 1.5 feet), between the bed of Wolftrap Creek and the flow path, creates a "hydraulic jump" during discharge. This has caused under-cutting and scouring effects. If not for existing mature tree roots along that portion of the bank of Wolftrap Creek, the head-cutting effect would have been worse. Sooner than later, the under-cutting will "creep" past the massive root network, and be converted to a head-cutting type of erosion which will accelerate, and probably jeopardize an existing sanitary sewer infrastructure in its path.

Due to standard easement restrictions at such utility areas, the use of deep-rooted vegetation to address erosion may not be appropriate. Lining the channel with stone and installing a step-pool structure at the discharge point may be worth considering, if an adequate outfall condition is to be met for the proposed development. Alternatively, some onsite design changes may need to be considered.

The proposed development is designed to meet its stormwater management and adequate outfall requirements through the use of two infiltration trenches, a rain garden and a saved conservation easement. At this stage, computations to show that those features will provide adequate stormwater controls are not required; but considering current erosive conditions and the potential that imperviousness may be increased within this environmentally sensitive sub-shed, the developer may be willing to go the extra mile to make amendments that will further improve the overall environmental/SWM benefits.

For instance:

- 1) The proposed location of infiltration Trench #1 on a relatively steep slope may cause both a Chestnut Oak (15.5" dbh) and a North Red Oak (25.5" dbh) to either be completely removed or may threaten their survivability. Relocating the structure to a less steep area of the property, currently marked as a proposed undisturbed area (i.e., the area at which the apices of lots 5, 6, 8 & 9 meet, may eliminate those concerns. At the suggested location, both of those mature trees will be saved, and the potential for hillside slippage due to seepage from infiltration trench will

be greatly reduced if not eliminated.

Barbara Berlin

RZ/FDP-2013-HM-012

October 30, 2013

Page 3

- 2) The intermittent onsite channel that shows signs of slight erosion may be reinforced with a layer of appropriately sized stone, since a grass stabilization approach will be almost impossible in that environment of dense tree canopy and leafy debris. The stone-lined channel will further slow down the channel flow before it gets passed Besley Road.
  
- 3) The rain garden is proposed to be located in an area where the soil type is expected to have poor drainage potential. Considering that the plan is for this facility to be designed to manage a 10 year, 2hr. storm event, such a facility would be expected to have an underground storage capacity. It will definitely function more adequately should it be positioned in an area where the soil type has good drainage potential. Alternatively, the facility may be subjected to less storm runoff. In which case the developer may consider the following steps to reduce runoff volume from this section of the development:
  - a. Eliminating lot #4, and make room for an open space in an area where the rain garden will be located on a well-drained soil, and will significantly reduce the hydrologic challenges.
  - b. Allow the driveway of Lot #1 to connect directly to Besley Road, and convert the remaining two lots (#2 & #3) into "flag-lots," accessed by narrower pipe-stem driveways that may not need a cul-de-sac or sidewalk.

Please feel free to contact me directly at 703-324-1430 or [willie.woode@fairfaxcounty.gov](mailto:willie.woode@fairfaxcounty.gov) if there is need to discuss the details of this report.

cc: Pam Nee, Branch Chief, Environmental and Development  
Review Branch, Planning Division, DPZ.  
Aileen Santiago, Site Development and Inspections Division



# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** October 28, 2013

**TO:** Megan Duca, Staff Coordinator  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:** Aileen M. Santiago, Senior Engineer III  
Site Development and Inspection Division (SDID)  
North Branch  
Department of Public Works and Environmental Services *A.Sko*

**SUBJECT:** Rezoning Application and Final Development Plan RZ/FDP 2013-HM-012;  
Spring Lake, Section 3, dated October 11, 2013; Tax Map Numbers 028-4-08-  
0003, 0004, 0005, 006, 007 and 028-4-09-A; LDS # 6447-ZONA-001-1,  
Hunter Mill District

We have reviewed the subject RZ/FDP, and offer the following stormwater management comments.

### Chesapeake Bay Preservation Ordinance (CBPO)

There are no Resource Protection Areas on the site.

### Floodplain and Drainage

There are no regulated floodplains on the site.

The Applicant is showing some disturbance and modifications within an existing storm drainage easement and stream channel. The Applicant shall provide during final construction plan a drainage study for any disturbance and/or modification to the existing channel which crosses the site (between parcel A and proposed private road) and to establish the 100-year drainageway that will accommodate on-site post-development runoff and off-site runoff from the upstream drainage area (21.95 acres) which drains through the existing storm drainage easement and into wolftrap creek. PFM 6-1401

### Downstream Drainage Complaints

There is a downstream drainage complaint on file. A yard flooding complaint has been received from 1708 Besley Road in March, 2012. More information on the complaints is available from the Maintenance & Stormwater Management Division (MSMD) (703-877-2800).



### **Stormwater Detention**

Stormwater detention is required, if not waived (PFM 6-0301.3). Applicant proposed to satisfy detention requirements for this project with two (2) on-site infiltration trench facilities and one (1) on-site bioretention filter. Applicant intends to meet detention by detaining all increases in stormwater over existing conditions. At the subdivision construction stage:

- The total 10-year, 2-hour and 2-year-, 2-hour post development peak discharge shall be equal or less than the pre-development peak discharge.
- The results of infiltration tests will be required for the infiltration facilities. PFM 4-0703
- All access ways shall be designated on the construction plans. PFM 6-1306.3A

### **Stormwater Quality Control**

Water quality control (BMP) are required for this proposed development (PFM 6-0401.1, CBPO 118-3-2(f)(2)). Applicant has proposed two (2) infiltration trench, one (1) bioretention filter and a conservation easement area(s) (open space) to meet the water quality control (BMP) requirement of 40% phosphorus removal. Applicant needs to provide a BMP map with sub-drainage area for each facility. At the subdivision construction stage:

- Field run soil borings must demonstrate that a minimum separation between the bottom of the infiltration and bioretention facilities and the groundwater table or bedrock can be provided.
- The results of infiltration tests will be required for the infiltration trench facilities.
- All access ways shall be designated on the construction plans. PFM 6-1306.3A
- A private maintenance agreement for the infiltration trench facilities and the bioretention filter will be required prior to final approval of the construction plan.

The proposed conservation easement area(s) need to be depicted on the plat. For purpose of BMP efficiencies, "open space" in residential areas is defined as perpetually undisturbed Homeowners Association (or "common") areas placed in conservation or floodplain easements and without other encumbrances. (PFM, Table 6.3).

### **Adequate outfall**

An outfall narrative was provided and description of outfall to a point 100 times the contributing drainage area of the site (ZO 18-202.10.F(2)(c)). The PFM 06-0203 outfall requirements of extent of review and analysis shall be addressed during final engineering plan submission.

The applicant shall demonstrate in the construction plan that post development runoff release rates from will not flood existing downstream dwellings, or buildings constructed under an approved building permit, by storms less than or equal to the 100-year storm event, or that any existing flooding condition will not be aggravated by drainage from the development site, in particular outfall #1 & 2. (PFM 6-0202.4)

### **Additional Comment**

These comments are based on the 2011 version of the Public Facilities Manual (PFM). The County is in the process of drafting new and revised County codes and requirements to comply with the Virginia Stormwater Management Law and Regulations adopted by the Virginia Soil

and Water Conservation Board on May 24, 2011 (Regulations). Please note that the Regulations include provisions (4VAC50-60-48.A) which limit which land-disturbing activities could be considered “grandfathered” by the County, and therefore would not be subject to certain new criteria.

The subdivision plan for this application may be required to conform to the updated PFM and the new ordinance.

Please contact me at 703-324-1464 if you require additional information.

cc: Don Demetrius, Chief, Watershed Projects Evaluation Branch, SPD, DPWES  
Shahab Baig, Chief, North Branch, SDID, DPWES  
Greg McLaughlin, P.E., Senior Engineer III, SDID, DPWES  
Zoning Application File



# FAIRFAX COUNTY PARK AUTHORITY



## M E M O R A N D U M

**TO:** Barbara Berlin, AICP, Director  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:** Sandy Stallman, AICP, Manager *AS*  
Park Planning Branch, PDD

**DATE:** July 24, 2013

**SUBJECT:** RZ-FDP 2013-HM-012, Summer Hill Estates (Sekas Homes, Ltd.)  
Tax Map Numbers: 28-4((8)) 3-7; 28-4((9)) A

### BACKGROUND

The Park Authority staff has reviewed the proposed Development Plan dated March 22, 2013 for the above referenced application. The Development Plan shows 10 new single-family dwelling units on an approximately 5.4 acre site, to be rezoned from R-1 to PDH-2 with proffers. Based on an average single-family household size of 3.01 in the Vienna Planning District, the development could add 18 new residents (10 new single-family units – 4 existing units x 3.01 = 18.06) to the Hunter Mill Magisterial District.

### COMPREHENSIVE PLAN GUIDANCE

The County Comprehensive Plan includes both general and specific guidance regarding parks and resources. The Policy Plan describes the need to mitigate adverse impacts to park and recreation facilities caused by growth and development; it also offers a variety of ways to offset those impacts, including contributions, land dedication, development of facilities, and others (Parks and Recreation, Objective 6, p.8). Resource protection is addressed in multiple objectives, focusing on protection, preservation, and sustainability of resources (Parks and Recreation Objectives 2 and 5, p.5-7).

### ANALYSIS AND RECOMMENDATIONS

#### Park and Recreation Needs:

Using adopted service level standards, staff has identified a need for local-serving parkland and numerous recreational facilities in the site's area. Existing nearby parks (Wolf Trails, Wolfrap Stream Valley, Freedom Hill, Waverly, Glyndon, Eudora, Northside, Symphony Hills) meet only a portion of the demand for parkland generated by residential development in the Vienna District. In addition to public parkland, the recreational facilities in greatest need in this area

include rectangle fields, youth baseball fields, basketball courts, playgrounds, neighborhood skate parks, and trails.

The proposed development is located less than ½ mile from a paved trail to the south and an unpaved trail to the west of Besley Road. Both trails are part of Wolftrap Stream Valley Park and also connect to Wolf Trails Park.

Recreational Impact of Residential Development:

The Fairfax County Zoning Ordinance requires provision of open space and recreational features within Planned Development Districts (see Zoning Ordinance Sections 6-110 and 16-404). The minimum expenditure for park and recreational facilities within these districts is set at \$1,700 per non-ADU residential unit for outdoor recreational facilities to serve the development population. Whenever possible, the facilities should be located within the residential development site. With 10 non-ADUs proposed, the Ordinance-required amount to be spent onsite is \$17,000 (10 non-ADU's x \$1,700). The applicant will not be constructing a park onsite. Therefore, the amount should be conveyed to the Park Authority for recreational facility construction at one or more park sites in the service area of the development.

The \$1,700 per unit funds required by Ordinance offset only a portion of the impact to provide recreational facilities for the new residents generated by this development. Typically, a large portion if not all of the Ordinance-required funds are used for recreational amenities onsite. As a result, the Park Authority is not compensated for the increased demands caused by residential development for other recreational facilities that the Park Authority must provide.

With the Countywide Comprehensive Policy Plan as a guide (Appendix 9, #6 of the Land Use section, as well as Objective 6, Policy a, b and c of the Parks and Recreation section), the Park Authority requests a fair share contribution of \$893 per new resident with any residential rezoning application to offset impacts to park and recreation service levels. This allows the Park Authority to build additional facilities needed as the population increases. To offset the additional impact caused by the proposed development, the applicant should contribute \$16,074 (18 new residents x \$893) to the Park Authority for recreational facility development at one or more park sites located within the service area of the subject property.

Natural Resources Impact:

The Park Authority owns and operates Wolftrap Stream Valley Park within 200 feet of the applicant's property. Wolftrap Creek will be receiving water from three outfalls coming from the proposed development.

Stormwater management will be achieved mainly through the construction and maintenance of an infiltration trench and raingarden on the subject property. Therefore, it is critical that these structures function as intended or there will be negative consequences to parkland downstream.

The Park Authority recommends that both of these facilities be constructed with an underdrain. Please clarify that the raingarden design does contain an underdrain. Even when adequate infiltration rates can be demonstrated, these facilities typically fail in the absence of an underdrain. The Park Authority strongly recommends consultation with the Northern Virginia

Soil and Water Conservation District to provide additional guidance on LID facility design. Underdrains should never be wrapped with fabric. Additionally, the Park Authority recommends the complete removal of all fabric within the raingarden. The soil layer and gravel layer can be held in place through the addition of a 4" choke layer of pea gravel between them (not fabric). This design has been used at several rain gardens on Park Authority property and has worked very well.

The Park Authority supports the invasive species plan as described by the applicant on Sheet 6. All plant materials to be installed should be non-invasive to reduce the spread of invasive species and protect the environmental health of parkland, due to the proximity (that is less, than 1,000 feet) of the Park Authority property.

Cultural Resources Impact:

These parcels were reviewed previously and have undergone archival review. The parcels are disturbed by previous development and have low potential to contain significant cultural resources. There are no cultural resources issues and no archaeological work is warranted.

**SUMMARY OF RECOMMENDATIONS**

This section summarizes the recommendations included in the preceding analysis section. Following is a table summarizing required and recommended recreation contribution amounts:

<b>Proposed Uses</b>	<b>P-District Onsite Expenditure</b>	<b>Requested Park Proffer Amount</b>	<b>Total</b>
Single-family detached units	\$17,000	\$16,074	\$33,074
<b>Total</b>	<b>\$17,000</b>	<b>\$16,074</b>	<b>\$33,074</b>

In addition, the analysis identified the following major issues:

- Applicant should construct the infiltration trench with an underdrain.
- Applicant should further clarify the raingarden design. If the proposed raingarden does not have an underdrain, one should be constructed.
- Applicant should consult with the Northern Virginia Soil and Water Conservation District to provide additional guidance on Low Impact Development (LID) facility design.
- Applicant should remove all fabric within the raingarden and add a 4" choke layer of pea gravel between the soil layer and gravel layer.
- All plant materials to be installed should be non-invasive to reduce the spread of invasive species and protect the environmental health of the nearby parkland.

Please note the Park Authority would like to review and comment on proffers and/or development conditions related to park and recreation issues. We request that draft and final

proffers and/or development conditions be submitted to the assigned reviewer noted below for review and comment prior to completion of the staff report and prior to final Board of Supervisors approval.

FCPA Reviewer: Andrea Dorlester/Zeina Ahmed  
DPZ Coordinator: Megan Brady

Copy: Cindy Walsh, Director, Resource Management Division  
Chron Binder  
File Copy



# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** November 6, 2013

**TO:** Megan Duca, Staff Coordinator  
Zoning Evaluation Division, DPZ

**FROM:** Hugh Whitehead, Urban Forester II *HW*  
Forest Conservation Branch, DPWES

**SUBJECT:** Summer Hill Estates, Lot 3-7, Parcel A (Sekas Homes, Ltd.)  
RZ/FDP 2013-HM-012

I have reviewed the above referenced rezoning application consisting of the proposed CDP/FDP stamped as received by the Zoning Evaluation Division (ZED) on November 5, 2013; and draft proffers dated October 11, 2013. All Forest Conservation Branch comments and recommendations made during review of previous submissions of this application have been adequately addressed.

Forest Conservation Branch staff has no further comments regarding this application.

If there are any questions or concerns, please contact me at (703)3243-1770.

HCW/  
UFMDID #: 183241

cc: DPZ File





# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** October 25, 2013

**TO:** Barbara Berlin, Director  
Zoning Evaluation Division, Department of Planning & Zoning

**FROM:** Angela Kadar Rodeheaver, Chief *MAD for AKR*  
Site Analysis Section, Department of Transportation

**FILE:** RZ 2013-HM-012

**SUBJECT:** Sekas Homes, Ltd-  
Parcels on Besley Road & Tetterton Avenue  
Tax Map: # 28-4 ((8)) 3-7; #28-4 ((9)) A

This department has reviewed the subject application including the Conceptual Development Plan/Final Development Plan (CDP/FDP) dated March 2013, revised through October 11, 2013, and proffers dated October 11, 2013. All previous comments have been addressed and we do not object to its approval.

Comments on the proposed proffers were submitted under separate cover.

AKR/EAI



FAIRFAX COUNTY  
PUBLIC SCHOOLS

Department of Facilities and Transportation Services

Office of Facilities Planning Services  
8115 Gatehouse Road, Suite 3200  
Falls Church, Virginia 22042

November 4, 2013

**TO:** Barbara Berlin, Director  
Zoning Evaluation Division  
Fairfax County Department of Planning & Zoning

**FROM:** Lee Ann Pender, Director *lap*  
Office of Facilities Planning Services

**SUBJECT:** RZ/FDP 2013-HM-012, Sekas Homes LTD (Updated)

**ACREAGE:** 5.43 acres

**TAX MAP:** 28-4 ((8)) 3-7; ((9)) A

**PROPOSAL:**

The application requests to rezone the site from R-1 to PDH-2 district. This project would develop the site into a subdivision with 9 single family homes. The site currently contains four single family homes, as well as two vacant lots.

**ANALYSIS:**

School Capacities

The schools serving this area are Westbriar Elementary, Kilmer Middle and Marshall High schools. The chart below shows the existing school capacity, enrollment, and projected enrollment.

School	Capacity 2012 / 2017	Enrollment (9/30/12)	Projected Enrollment 2013-14	Capacity Balance 2013-14	Projected Enrollment 2017-18	Capacity Balance 2017-18
Westbriar ES	447 / 447	547	553	-106	619	-172
Kilmer MS	1116 / 1116	1195	1259	-143	1505	-389
Marshall HS	1511 / 2000	1651	1752	-241	2068	-68

*Capacities based on 2014-2018 Capital Improvement Program (November 2012)  
Project Enrollments based on 2012-13 to 2017-18 6-Year Projections (April 2012)*

The school capacity chart above shows a snapshot in time for student enrollments and school capacity balances. Student enrollment projections are done on a six year timeframe, currently through school year 2017-18 and are updated annually. At this time, if development occurs within the next five years, Westbriar and Kilmer are projected to have capacity deficits. With an increase in capacity at Marshall, only a slight deficit is projected. Beyond the six year projection horizon, enrollment projections are not available.

Capital Improvement Program Projects

The 2014-18 Capital Improvement Program (CIP) includes continued funding for the renovation at Marshall High School. The renovation, which will increase capacity, is scheduled to be completed in FY 2015. In addition, Westbriar Elementary School has been identified for the Tysons area Elementary School Addition. This addition is planned to be funded as part of the 2013 School Bond Referendum.

Development Impact

Based on the number of residential units proposed, the chart below shows the number of anticipated students by school level based on the current countywide student yield ratio.

Existing (Potential By-right)

Student yields calculated for both 5 and 6 single family detached units.

School level	Single Family Detached ratio	Potential By-right # of units	Existing Student yield	Potential By-right # of units	Existing Student yield
Elementary	.273	5	1	6	2
Middle	.086	5	0	6	1
High	.177	5	1	6	1
			<b>2 total</b>		
				<b>4 total</b>	

2012 Countywide student yield ratios (September 2013)

After review of the school level totals above, the existing student yield ranges from 2 students for 5 single family detached units to 4 students for 6 single family detached units. The 2 student variation is the result of rounding at the Elementary and Middle School levels.

Proposed

School level	Single Family Detached ratio	Proposed # of units	Estimated Student yield
Elementary	.273	9	2
Middle	.086	9	1
High	.177	9	2

**5 total**

2012 Countywide student yield ratios (September 2013)

**RECOMMENDATIONS:**

Proffer Contribution

A net of 1 to 3 new students is anticipated (0-1 Elementary, 0-1 Middle and 1 High School). Based on the approved Residential Development Criteria, a proffer contribution of \$10,488 (1 x \$10,488) to \$31,464 (3 x \$10,488) is recommended to offset the impact that new student growth will have on surrounding schools. It is recommended that the proffer contribution be directed toward schools in Cluster II or to schools in the Marshall High School Pyramid at the time of site plan or first building permit approval. A proffer contribution at the time of occupancy is not recommended since this does not allow the school system adequate time to use the proffer contribution to offset the impact of new students.

In addition, an "escalation" proffer is recommended. The suggested per student proffer contribution is updated on an annual basis to reflect current market conditions. The amount has decreased over the last several years because of the down turn in the economy and lower construction costs for FCPS. As a result, an escalation proffer would allow for payment of the school proffer based on either the current suggested per student proffer contribution at the time of zoning approval or the per student proffer contribution in effect at the time of development, whichever is greater. This would better offset the impact that new student yields will have on surrounding schools at the time of development. For your reference, below is an example of an escalation proffer that was included as part of an approved proffer contribution to FCPS.

Adjustment to Contribution Amounts. Following approval of this Application and prior to the Applicant's payment of the amount(s) set forth in this Proffer, if Fairfax County should increase the ratio of students per unit or the amount of contribution per student, the Applicant shall increase the amount of the contribution for that phase of development to reflect the then-current

*ratio and/or contribution. If the County should decrease the ratio or contribution amount, the Applicant shall provide the greater of the two amounts.*

Proffer Notification

It is also recommended that the developer proffer notification be provided to FCPS when development is likely to occur or when a site plan has been filed with the County. This will allow the school system adequate time to plan for anticipated student growth to ensure classroom availability.

**ADDITIONAL INFORMATION:**

Overcrowding at Kilmer could potentially be addressed with a Boundary Adjustment with Thoreau (receiving school) which is anticipated to be at 85% Capacity Utilization in 2017-18 after completion of renovation and capacity enhancements.

Future Development Impacts

In addition, Westbriar, Kilmer, and Marshall also are receiving schools for several other significant developments that are approved or pending approval for the Tysons Corner Area.

LAP/gjb

Attachment: Locator Map

cc: Patty Reed, School Board Member, Providence District  
Pat Hynes, School Board Member, Hunter Mill District  
Jane Strauss, School Board Member, Dranesville  
Ilryong Moon, Chairman, School Board Member, At-Large  
Ryan McElveen, School Board Member, At-Large  
Ted Velkoff, School Board Member, At-Large  
Jeffrey Platenberg, Assistant Superintendent, Facilities and Transportation Services  
Jim Kacur, Cluster II, Assistant Superintendent  
Jay W. Pearson, Principal, Marshall High School  
William Clendaniel, Interim Principal, Kilmer Middle School  
Lisa Pilson, Principal, Westbriar Elementary School



# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** July 10, 2013

**TO:** Megan Brady  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:** Sharad Regmi, P.E.  
Engineering Analysis and Planning Branch

**SUBJECT:** Sanitary Sewer Analysis Report

**REF:** **Application No. RZ/FDP 2013-HM-012**  
**Tax Map No. 028-4-((08))-0003, 0004, 0005, 0006, 0007; 028-4-((09))-A**

The following information is submitted in response to your request for a sanitary sewer analysis for above referenced application:

- The application property is located in the Difficult Run (D-3) watershed. It would be sewer into the Blue Plains Treatment Plant.
- Based upon current and committed flow, there is excess capacity in the Blue Plains Treatment. For purposes of this report, committed flow shall be deemed that for which fees have been paid, building permits have been issued, or priority reservations have been established by the Board of Supervisors. No commitment can be made, however, as to the availability of treatment capacity for the development of the subject property. Availability of treatment capacity will depend upon the current rate of construction and the timing for development of this site.
- An existing 8 inch line located in the Tetterton Avenue and approximately 20 ft from the property is adequate for the proposed use at this time.
- The following table indicates the condition of all related sewer facilities and the total effect of this application.

<u>Sewer Network</u>	<u>Existing Use +Application</u>		<u>Existing Use +Application +Previous Applications</u>		<u>Existing Use + Application + Comp Plan</u>	
	<u>Adeq.</u>	<u>Inadeq</u>	<u>Adeq.</u>	<u>Inadeq</u>	<u>Adeq.</u>	<u>Inadeq</u>
Collector	X		X		X	
Submain	X		X		X	
Main/Trunk	X		X		X	

- Other pertinent comments:**





# County of Fairfax, Virginia

## MEMORANDUM

**DATE:** July 11, 2013

**TO:** Barbara C. Berlin, Director  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:** Eric Fisher, GIS Coordinator  
Information Technology Section  
Fire and Rescue Department

**SUBJECT:** Fire and Rescue Department Preliminary Analysis of Rezoning/Final  
Development Plan Application RZ/FDP 2013-HM-012

The following information is submitted in response to your request for a preliminary Fire and Rescue Department analysis for the subject:

1. The application property is serviced by the Fairfax County Fire and Rescue Department Station #402, Vienna
2. After 01/01/2015, based on current budget planning, this property will be serviced by the Fairfax County Fire and Rescue Department Station #442, Wolftrap



# Fairfax Water

FAIRFAX COUNTY WATER AUTHORITY  
8560 Arlington Boulevard, Fairfax, Virginia 22031  
www.fairfaxwater.org

**PLANNING & ENGINEERING  
DIVISION**

Jamie Bain Hedges, P.E.  
Director  
(703) 289-6325  
Fax (703) 289-6382

July 22, 2013

Ms. Barbara Berlin, Director  
Fairfax County Department of Planning and Zoning  
12055 Government Center Parkway  
Suite 801  
Fairfax, Virginia 22035-5505

Re: FDP 2013-HM-012  
Sekas Homes, LTD  
Tax Map: 028-4

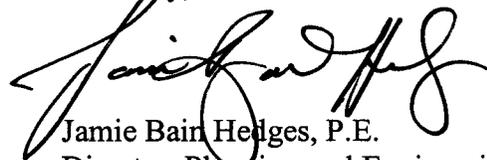
Dear Ms. Berlin:

The *Connection Rule for New Construction/Redevelopment in Accordance with Fairfax County Ordinance 65-6-13 (Rule)* was adopted by the Fairfax Water Board on January 12, 2012.

The applicant is proposing to subdivide existing lots to support construction of ten (10) new single family detached dwelling units. The Rule identifies utility-related reasons for not connecting to Fairfax Water. A utility-related reason exists under Section III.A not to connect to Fairfax Water's system.

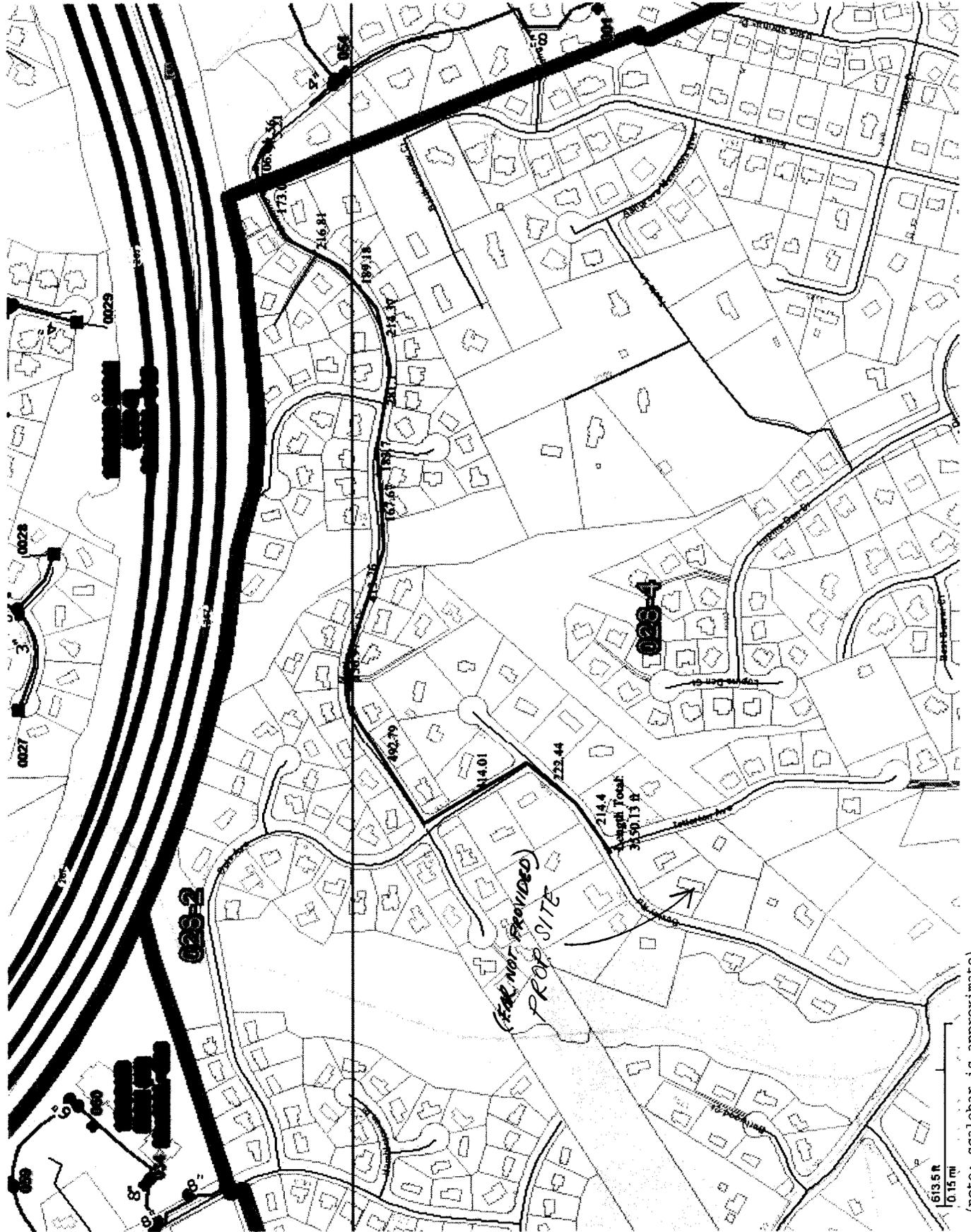
If you have any questions regarding this information please contact Dave Guerra, Chief, Site Plan Review at (703) 289-6343.

Sincerely,



Jamie Bain Hedges, P.E.  
Director, Planning and Engineering

cc: Chief Site Plan Review





# County of Fairfax, Virginia

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**DATE:** July 16, 2013

**TO:** Megan Brady, Staff Coordinator  
Zoning Evaluation Division  
Department of Planning and Zoning

**FROM:** Kevin R. Wastler, EH Supervisor *KW*  
Technical Review and Information Resources Section  
Fairfax County Health Department

**SUBJECT:** Development Plan Analysis

**REFERENCE:** Application No. RZ/FDP 2013-HM-012

After reviewing the application, we have only one comment to be considered. Health Department records indicate that the existing houses on lots 3 and 5 on Besley Road and lots 6 and 7 on Tetterton Avenue to be demolished are/were served by an onsite sewage disposal system as well as a private well water supply. There are no records on file that the wells and septic systems were ever properly abandoned. **The septic tanks and wells will have to be properly abandoned prior to approval of the demolition permit being released.**



**6-100 PDH PLANNED DEVELOPMENT HOUSING DISTRICT****6-101 Purpose and Intent**

The PDH District is established to encourage innovative and creative design and to facilitate use of the most advantageous construction techniques in the development of land for residential and other selected secondary uses. The district regulations are designed to insure ample provision and efficient use of open space; to promote high standards in the layout, design and construction of residential development; to promote balanced developments of mixed housing types; to encourage the provision of dwellings within the means of families of low and moderate income; and otherwise to implement the stated purpose and intent of this Ordinance.

To these ends, rezoning to and development under this district will be permitted only in accordance with a development plan prepared and approved in accordance with the provisions of Article 16.

**PART 1 16-100 STANDARDS FOR ALL PLANNED DEVELOPMENTS****16-101 General Standards**

A rezoning application or development plan amendment application may only be approved for a planned development under the provisions of Article 6 if the planned development satisfies the following general standards:

1. The planned development shall substantially conform to the adopted comprehensive plan with respect to type, character, intensity of use and public facilities. Planned developments shall not exceed the density or intensity permitted by the adopted comprehensive plan, except as expressly permitted under the applicable density or intensity bonus provisions.
2. The planned development shall be of such design that it will result in a development achieving the stated purpose and intent of the planned development district more than would development under a conventional zoning district.
3. The planned development shall efficiently utilize the available land, and shall protect and preserve to the extent possible all scenic assets and natural features such as trees, streams and topographic features.
4. The planned development shall be designed to prevent substantial injury to the use and value of existing surrounding development, and shall not hinder, deter or impede development of surrounding undeveloped properties in accordance with the adopted comprehensive plan.
5. The planned development shall be located in an area in which transportation, police and fire protection, other public facilities and public utilities, including sewerage, are or will be available and adequate for the uses proposed; provided, however, that

the applicant may make provision for such facilities or utilities which are not presently available.

6. The planned development shall provide coordinated linkages among internal facilities and services as well as connections to major external facilities and services at a scale appropriate to the development.

## **16-102 Design Standards**

Whereas it is the intent to allow flexibility in the design of all planned developments, it is deemed necessary to establish design standards by which to review rezoning applications, development plans, conceptual development plans, final development plans, PRC plans, site plans and subdivision plats. Therefore, the following design standards shall apply:

1. In order to complement development on adjacent properties, at all peripheral boundaries of the PDH, PRM, PDC, PRC Districts the bulk regulations and landscaping and screening provisions shall generally conform to the provisions of that conventional zoning district which most closely characterizes the particular type of development under consideration. In the PTC District, such provisions shall only have general applicability and only at the periphery of the Tysons Corner Urban Center, as designated in the adopted comprehensive plan.
2. Other than those regulations specifically set forth in Article 6 for a particular P district, the open space, off-street parking, loading, sign and all other similar regulations set forth in this Ordinance shall have general application in all planned developments.
3. Streets and driveways shall be designed to generally conform to the provisions set forth in this Ordinance and all other County ordinances and regulations controlling same, and where applicable, street systems shall be designed to afford convenient access to mass transportation facilities. In addition, a network of trails and sidewalks shall be coordinated to provide access to recreational amenities, open space, public facilities, vehicular access routes, and mass transportation facilities.

**GLOSSARY**

This Glossary is provided to assist the public in understanding the staff evaluation and analysis of development proposals. It should not be construed as representing legal definitions. Refer to the Fairfax County Zoning Ordinance, Comprehensive Plan or Public Facilities Manual for additional information.

**ABANDONMENT:** Refers to road or street abandonment, an action taken by the Board of Supervisors, usually through the public hearing process, to abolish the public's right-of-passage over a road or road right-of way. Upon abandonment, the right-of-way automatically reverts to the underlying fee owners. If the fee to the owner is unknown, Virginia law presumes that fee to the roadbed rests with the adjacent property owners if there is no evidence to the contrary.

**ACCESSORY DWELLING UNIT (OR APARTMENT):** A secondary dwelling unit established in conjunction with and clearly subordinate to a single family detached dwelling unit. An accessory dwelling unit may be allowed if a special permit is granted by the Board of Zoning Appeals (BZA). Refer to Sect. 8-918 of the Zoning Ordinance.

**AFFORDABLE DWELLING UNIT (ADU) DEVELOPMENT:** Residential development to assist in the provision of affordable housing for persons of low and moderate income in accordance with the affordable dwelling unit program and in accordance with Zoning Ordinance regulations. Residential development which provides affordable dwelling units may result in a density bonus (see below) permitting the construction of additional housing units. See Part 8 of Article 2 of the Zoning Ordinance.

**AGRICULTURAL AND FORESTAL DISTRICTS:** A land use classification created under Chapter 114 or 115 of the Fairfax County Code for the purpose of qualifying landowners who wish to retain their property for agricultural or forestal use for use/value taxation pursuant to Chapter 58 of the Fairfax County Code.

**BARRIER:** A wall, fence, earthen berm, or plant materials which may be used to provide a physical separation between land uses. Refer to Article 13 of the Zoning Ordinance for specific barrier requirements.

**BEST MANAGEMENT PRACTICES (BMPs):** Stormwater management techniques or land use practices that are determined to be the most effective, practicable means of preventing and/or reducing the amount of pollution generated by nonpoint sources in order to improve water quality.

**BUFFER:** Graduated mix of land uses, building heights or intensities designed to mitigate potential conflicts between different types or intensities of land uses; may also provide for a transition between uses. A landscaped buffer may be an area of open, undeveloped land and may include a combination of fences, walls, berms, open space and/or landscape plantings. A buffer is not necessarily coincident with transitional screening.

**CHESAPEAKE BAY PRESERVATION ORDINANCE:** Regulations which the State has mandated must be adopted to protect the Chesapeake Bay and its tributaries. These regulations must be incorporated into the comprehensive plans, zoning ordinances and subdivision ordinances of the affected localities. Refer to Chesapeake Bay Preservation Act, Va. Code Section 10.1-2100 et seq and VR 173-02-01, Chesapeake Bay Preservation Area Designation and Management Regulations.

**CLUSTER DEVELOPMENT:** Residential development in which the lots are clustered on a portion of a site so that significant environmental/historical/cultural resources may be preserved or recreational amenities provided. While smaller lot sizes are permitted in a cluster subdivision to preserve open space, the overall density cannot exceed that permitted by the applicable zoning district. See Sect. 2-421 and Sect. 9-615 of the Zoning Ordinance.

**COUNTY 2232 REVIEW PROCESS:** A public hearing process pursuant to Sect. 15.2-2232 (Formerly Sect. 15.1-456) of the Virginia Code which is used to determine if a proposed public facility not shown on the adopted Comprehensive Plan is in substantial accord with the plan. Specifically, this process is used to determine if the general or approximate location, character and extent of a proposed facility is in substantial accord with the Plan.

**dBA:** The momentary magnitude of sound weighted to approximate the sensitivity of the human ear to certain frequencies; the dBA value describes a sound at a given instant, a maximum sound level or a steady state value. See also Ldn.

**DENSITY:** Number of dwelling units (du) divided by the gross acreage (ac) of a site being developed in residential use; or, the number of dwelling units per acre (du/ac) except in the PRC District when density refers to the number of persons per acre.

**DENSITY BONUS:** An increase in the density otherwise allowed in a given zoning district which may be granted under specific provisions of the Zoning Ordinance when a developer provides excess open space, recreation facilities, or affordable dwelling units (ADUs), etc.

**DEVELOPMENT CONDITIONS:** Terms or conditions imposed on a development by the Board of Supervisors (BOS) or the Board of Zoning Appeals (BZA) in connection with approval of a special exception, special permit or variance application or rezoning application in a "P" district. Conditions may be imposed to mitigate adverse impacts associated with a development as well as secure compliance with the Zoning Ordinance and/or conformance with the Comprehensive Plan. For example, development conditions may regulate hours of operation, number of employees, height of buildings, and intensity of development.

**DEVELOPMENT PLAN:** A graphic representation which depicts the nature and character of the development proposed for a specific land area: information such as topography, location and size of proposed structures, location of streets trails, utilities, and storm drainage are generally included on a development plan. A development plan is a submission requirement for rezoning to the PRC District. A **GENERALIZED DEVELOPMENT PLAN (GDP)** is a submission requirement for a rezoning application for all conventional zoning districts other than a P District. A development plan submitted in connection with a special exception (SE) or special permit (SP) is generally referred to as an SE or SP plat. A **CONCEPTUAL DEVELOPMENT PLAN (CDP)** is a submission requirement when filing a rezoning application for a P District other than the PRC District; a CDP characterizes in a general way the planned development of the site. A **FINAL DEVELOPMENT PLAN (FDP)** is a submission requirement following the approval of a conceptual development plan and rezoning application for a P District other than the PRC District; an FDP further details the planned development of the site. See Article 16 of the Zoning Ordinance.

**EASEMENT:** A right to or interest in property owned by another for a specific and limited purpose. Examples: access easement, utility easement, construction easement, etc. Easements may be for public or private purposes.

**ENVIRONMENTAL QUALITY CORRIDORS (EQCs):** An open space system designed to link and preserve natural resource areas, provide passive recreation and protect wildlife habitat. The system includes stream valleys, steep slopes and wetlands. For a complete definition of EQCs, refer to the Environmental section of the Policy Plan for Fairfax County contained in Vol. 1 of the Comprehensive Plan.

**ERODIBLE SOILS:** Soils that wash away easily, especially under conditions where stormwater runoff is inadequately controlled. Silt and sediment are washed into nearby streams, thereby degrading water quality.

**FLOODPLAIN:** Those land areas in and adjacent to streams and watercourses subject to periodic flooding; usually associated with environmental quality corridors. The 100 year floodplain drains 70 acres or more of land and has a one percent chance of flood occurrence in any given year.

**FLOOR AREA RATIO (FAR):** An expression of the amount of development intensity (typically, non-residential uses) on a specific parcel of land. FAR is determined by dividing the total square footage of gross floor area of buildings on a site by the total square footage of the site itself.

**FUNCTIONAL CLASSIFICATION:** A system for classifying roads in terms of the character of service that individual facilities are providing or are intended to provide, ranging from travel mobility to land access. Roadway system functional classification elements include Freeways or Expressways which are limited access highways, Other Principal (or Major) Arterials, Minor Arterials, Collector Streets, and Local Streets. Principal arterials are designed to accommodate travel; access to adjacent properties is discouraged. Minor arterials are designed to serve both through traffic and local trips. Collector roads and streets link local streets and properties with the arterial network. Local streets provide access to adjacent properties.

**GEOTECHNICAL REVIEW:** An engineering study of the geology and soils of a site which is submitted to determine the suitability of a site for development and recommends construction techniques designed to overcome development on problem soils, e.g., marine clay soils.

**HYDROCARBON RUNOFF:** Petroleum products, such as motor oil, gasoline or transmission fluid deposited by motor vehicles which are carried into the local storm sewer system with the stormwater runoff, and ultimately, into receiving streams; a major source of non-point source pollution. An oil-grit separator is a common hydrocarbon runoff reduction method.

**IMPERVIOUS SURFACE:** Any land area covered by buildings or paved with a hard surface such that water cannot seep through the surface into the ground.

**INFILL:** Development on vacant or underutilized sites within an area which is already mostly developed in an established development pattern or neighborhood.

**INTENSITY:** The magnitude of development usually measured in such terms as density, floor area ratio, building height, percentage of impervious surface, traffic generation, etc. Intensity is also based on a comparison of the development proposal against environmental constraints or other conditions which determine the carrying capacity of a specific land area to accommodate development without adverse impacts.

**Ldn:** Day night average sound level. It is the twenty-four hour average sound level expressed in A-weighted decibels; the measurement assigns a "penalty" to night time noise to account for night time sensitivity. Ldn represents the total noise environment which varies over time and correlates with the effects of noise on the public health, safety and welfare.

**LEVEL OF SERVICE (LOS):** An estimate of the effectiveness of a roadway to carry traffic, usually under anticipated peak traffic conditions. Level of Service efficiency is generally characterized by the letters A through F, with LOS-A describing free flow traffic conditions and LOS-F describing jammed or grid-lock conditions.

**MARINE CLAY SOILS:** Soils that occur in widespread areas of the County generally east of Interstate 95. Because of the abundance of shrink-swell clays in these soils, they tend to be highly unstable. Many areas of slope failure are evident on natural slopes. Construction on these soils may initiate or accelerate slope movement or slope failure. The shrink-swell soils can cause movement in structures, even in areas of flat topography, from dry to wet seasons resulting in cracked foundations, etc. Also known as slippage soils.

**OPEN SPACE:** That portion of a site which generally is not covered by buildings, streets, or parking areas. Open space is intended to provide light and air; open space may function as a buffer between land uses or for scenic, environmental, or recreational purposes.

**OPEN SPACE EASEMENT:** An easement usually granted to the Board of Supervisors which preserves a tract of land in open space for some public benefit in perpetuity or for a specified period of time. Open space easements may be accepted by the Board of Supervisors, upon request of the land owner, after evaluation under criteria established by the Board. See Open Space Land Act, Code of Virginia, Sections 10.1-1700, et seq.

**P DISTRICT:** A "P" district refers to land that is planned and/or developed as a Planned Development Housing (PDH) District, a Planned Development Commercial (PDC) District or a Planned Residential Community (PRC) District. The PDH, PDC and PRC Zoning Districts are established to encourage innovative and creative design for land development; to provide ample and efficient use of open space; to promote a balance in the mix of land uses, housing types, and intensity of development; and to allow maximum flexibility in order to achieve excellence in physical, social and economic planning and development of a site. Refer to Articles 6 and 16 of the Zoning Ordinance.

**PROFFER:** A written condition, which, when offered voluntarily by a property owner and accepted by the Board of Supervisors in a rezoning action, becomes a legally binding condition which is in addition to the zoning district regulations applicable to a specific property. Proffers are submitted and signed by an owner prior to the Board of Supervisors public hearing on a rezoning application and run with the land. Once accepted by the Board, proffers may be modified only by a proffered condition amendment (PCA) application or other zoning action of the Board and the hearing process required for a rezoning application applies. See Sect. 15.2-2303 (formerly 15.1-491) of the Code of Virginia.

**PUBLIC FACILITIES MANUAL (PFM):** A technical text approved by the Board of Supervisors containing guidelines and standards which govern the design and construction of site improvements incorporating applicable Federal, State and County Codes, specific standards of the Virginia Department of Transportation and the County's Department of Public Works and Environmental Services.

**RESOURCE MANAGEMENT AREA (RMA):** That component of the Chesapeake Bay Preservation Area comprised of lands that, if improperly used or developed, have a potential for causing significant water quality degradation or for diminishing the functional value of the Resource Protection Area. See Fairfax County Code, Ch. 118, Chesapeake Bay Preservation Ordinance.

**RESOURCE PROTECTION AREA (RPA):** That component of the Chesapeake Bay Preservation Area comprised of lands at or near the shoreline or water's edge that have an intrinsic water quality value due to the ecological and biological processes they perform or are sensitive to impacts which may result in significant degradation of the quality of state waters. In their natural condition, these lands provide for the removal, reduction or assimilation of sediments from runoff entering the Bay and its tributaries, and minimize the adverse effects of human activities on state waters and aquatic resources. New development is generally discouraged in an RPA. See Fairfax County Code, Ch. 118, Chesapeake Bay Preservation Ordinance.

**SITE PLAN:** A detailed engineering plan, to scale, depicting the development of a parcel of land and containing all information required by Article 17 of the Zoning Ordinance. Generally, submission of a site plan to DPWES for review and approval is required for all residential, commercial and industrial development except for development of single family detached dwellings. The site plan is required to assure that development complies with the Zoning Ordinance.

**SPECIAL EXCEPTION (SE) / SPECIAL PERMIT (SP):** Uses, which by their nature, can have an undue impact upon or can be incompatible with other land uses and therefore need a site specific review. After review, such uses may be allowed to locate within given designated zoning districts if appropriate and only under special controls, limitations, and regulations. A special exception is subject to public hearings by the Planning Commission and Board of Supervisors with approval by the Board of Supervisors; a special permit requires a public hearing and approval by the Board of Zoning Appeals. Unlike proffers which are voluntary, the Board of Supervisors or BZA may impose reasonable conditions to assure, for example, compatibility and safety. See Article 8, Special Permits and Article 9, Special Exceptions, of the Zoning Ordinance.

**STORMWATER MANAGEMENT:** Engineering practices that are incorporated into the design of a development in order to mitigate or abate adverse water quantity and water quality impacts resulting from development. Stormwater management systems are designed to slow down or retain runoff to re-create, as nearly as possible, the pre-development flow conditions.

**SUBDIVISION PLAT:** The engineering plan for a subdivision of land submitted to DPWES for review and approved pursuant to Chapter 101 of the County Code.

**TRANSPORTATION DEMAND MANAGEMENT (TDM):** Actions taken to reduce single occupant vehicle automobile trips or actions taken to manage or reduce overall transportation demand in a particular area.

**TRANSPORTATION SYSTEM MANAGEMENT (TSM) PROGRAMS:** This term is used to describe a full spectrum of actions that may be applied to improve the overall efficiency of the transportation network. TSM programs usually consist of low-cost alternatives to major capital expenditures, and may include parking management measures, ridesharing programs, flexible or staggered work hours, transit promotion or operational improvements to the existing roadway system. TSM includes Transportation Demand Management (TDM) measures as well as H.O.V. use and other strategies associated with the operation of the street and transit systems.

**URBAN DESIGN:** An aspect of urban or suburban planning that focuses on creating a desirable environment in which to live, work and play. A well-designed urban or suburban environment demonstrates the four generally accepted principles of design: clearly identifiable function for the area; easily understood order; distinctive identity; and visual appeal.

**VACATION:** Refers to vacation of street or road as an action taken by the Board of Supervisors in order to abolish the public's right-of-passage over a road or road right-of-way dedicated by a plat of subdivision. Upon vacation, title to the road right-of-way transfers by operation of law to the owner(s) of the adjacent properties within the subdivision from whence the road/road right-of-way originated.

**VARIANCE:** An application to the Board of Zoning Appeals which seeks relief from a specific zoning regulation such as lot width, building height, or minimum yard requirements, among others. A variance may only be granted by the Board of Zoning Appeals through the public hearing process and upon a finding by the BZA that the variance application meets the required Standards for a Variance set forth in Sect. 18-404 of the Zoning Ordinance.

**WETLANDS:** Land characterized by wetness for a portion of the growing season. Wetlands are generally delineated on the basis of physical characteristics such as soil properties indicative of wetness, the presence of vegetation with an affinity for water, and the presence or evidence of surface wetness or soil saturation. Wetland environments provide water quality improvement benefits and are ecologically valuable. Development activity in wetlands is subject to permitting processes administered by the U.S. Army Corps of Engineers

**TIDAL WETLANDS:** Vegetated and nonvegetated wetlands as defined in Chapter 116 Wetlands Ordinance of the Fairfax County Code: includes tidal shores and tidally influenced embayments, creeks, and tributaries to the Occoquan and Potomac Rivers. Development activity in tidal wetlands may require approval from the Fairfax County Wetlands Board.

#### Abbreviations Commonly Used in Staff Reports

A&F	Agricultural & Forestal District	PDH	Planned Development Housing
ADU	Affordable Dwelling Unit	PFM	Public Facilities Manual
ARB	Architectural Review Board	PRC	Planned Residential Community
BMP	Best Management Practices	RC	Residential-Conservation
BOS	Board of Supervisors	RE	Residential Estate
BZA	Board of Zoning Appeals	RMA	Resource Management Area
COG	Council of Governments	RPA	Resource Protection Area
CBC	Community Business Center	RUP	Residential Use Permit
CDP	Conceptual Development Plan	RZ	Rezoning
CRD	Commercial Revitalization District	SE	Special Exception
DOT	Department of Transportation	SEA	Special Exception Amendment
DP	Development Plan	SP	Special Permit
DPWES	Department of Public Works and Environmental Services	TDM	Transportation Demand Management
DPZ	Department of Planning and Zoning	TMA	Transportation Management Association
DU/AC	Dwelling Units Per Acre	TSA	Transit Station Area
EQC	Environmental Quality Corridor	TSM	Transportation System Management
FAR	Floor Area Ratio	UP & DD	Utilities Planning and Design Division, DPWES
FDP	Final Development Plan	VC	Variance
GDP	Generalized Development Plan	VDOT	Virginia Dept. of Transportation
GFA	Gross Floor Area	VPD	Vehicles Per Day
HC	Highway Corridor Overlay District	VPH	Vehicles per Hour
HCD	Housing and Community Development	WMATA	Washington Metropolitan Area Transit Authority
LOS	Level of Service	WS	Water Supply Protection Overlay District
Non-RUP	Non-Residential Use Permit	ZAD	Zoning Administration Division, DPZ
OSDS	Office of Site Development Services, DPWES	ZED	Zoning Evaluation Division, DPZ
PCA	Proffered Condition Amendment	ZPRB	Zoning Permit Review Branch
PD	Planning Division		
PDC	Planned Development Commercial		