



APPLICATION ACCEPTED: August 23, 2012  
PLANNING COMMISSION: November 29, 2012  
BOARD OF SUPERVISORS: December 4, 2012

# County of Fairfax, Virginia

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November 15, 2012

## STAFF REPORT ADDENDUM

APPLICATION RZ 2012-DR-017

### DRANESVILLE DISTRICT

**APPLICANT:** Christopher and Karen Barth

**PRESENT ZONING:** R-2, HC

**REQUESTED ZONING:** R-3, HC

**PARCELS:** 40-3 ((1)) 82

**SITE AREA:** 40,591 square feet

**PLAN MAP:** Residential, 2 – 3 du/ac

**PROPOSAL:** To rezone from the R-2 District to the R-3 District to permit two single family detached dwellings at a density of 2.15 du/ac.

#### STAFF RECOMMENDATIONS:

Staff recommends approval of RZ 2012-DR-017 subject to the execution of proffers consistent with the proffers contained in Attachment 1.

Staff recommends approval of a waiver of construction of the sidewalk and road frontage improvements on Redd Road.

Staff recommends approval of a waiver of construction of road frontage improvements on Idylwood Road.

Megan Brady

Staff recommends approval of a waiver of the trail requirement along Idylwood Road subject to the construction of a 5-foot wide concrete sidewalk or a 6-foot wide asphalt path in accordance with the Public Facilities Manual across the property's Idylwood Road frontage.

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 2012-DR-017 Barth\Staff Report\Addendum\RZ 2012-DR-017\_Addendum Staff Report cover.doc



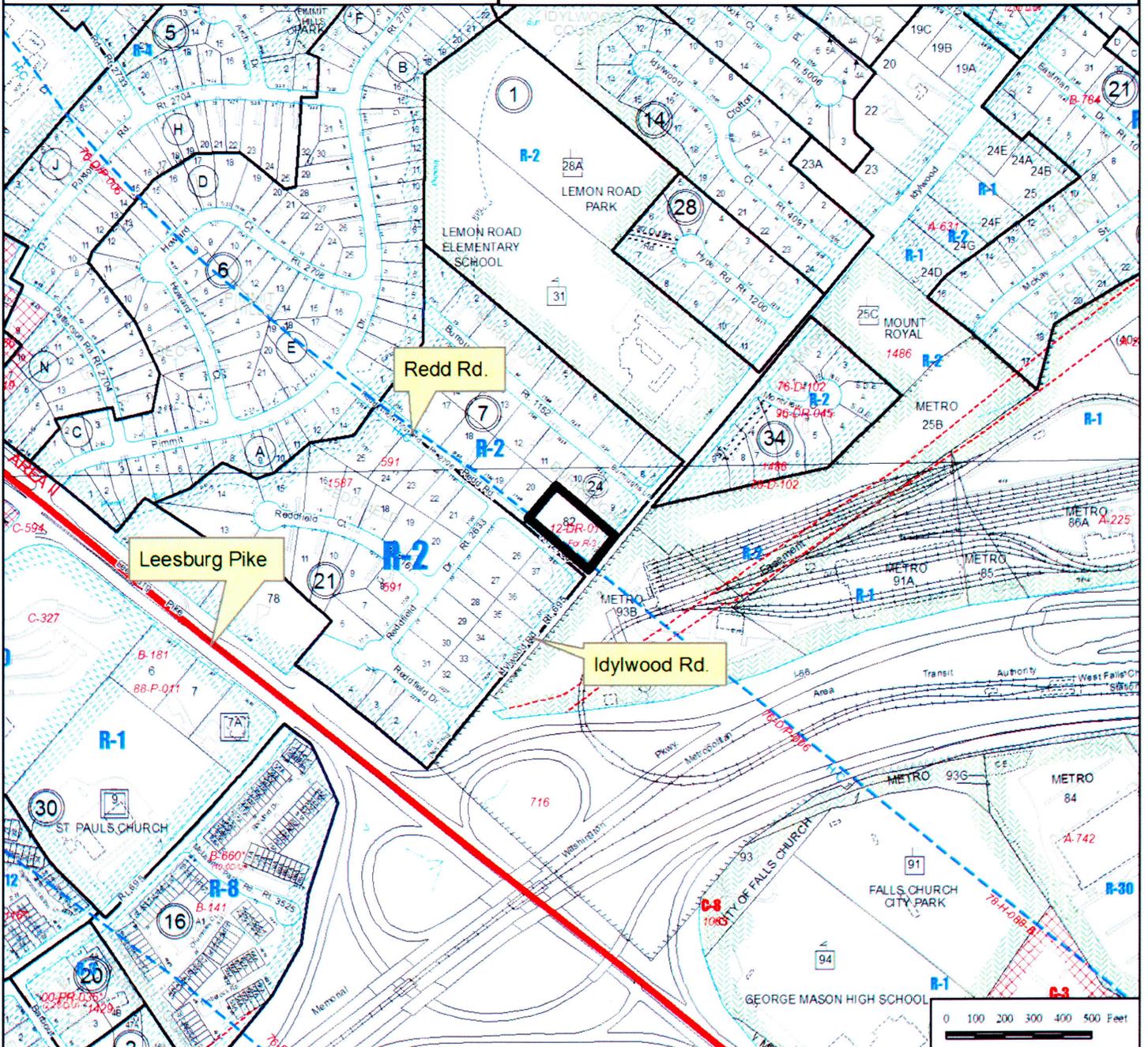
Americans with Disabilities Act (ADA): Reasonable accommodation is available upon 48 hours advance notice. For additional information on ADA call (703) 324-1334 or TTY 711 (Virginia Relay Center).

# Rezoning Application

RZ 2012-DR-017



Applicant: CHRISTOPHER AND KAREN BARTH  
Accepted: 08/23/2012  
Proposed: RESIDENTIAL  
Area: 40,591 SF OF LAND;  
DISTRICT - DRANESVILLE  
ZIP - 22043  
Located: NORTHWEST CORNER OF IDYLDWOOD ROAD AND  
REDD ROAD INTERSECTION  
Zoning: FROM R- 2 TO R- 3  
Overlay Dist: HC  
Map Ref Num: 040-3- /01/ /0082



# MID PIKE SUBDIVISION LOT 82 BLOCK 1 DRANESVILLE DISTRICT #1 FAIRFAX COUNTY, VIRGINIA GENERALIZED DEVELOPMENT PLAN REZONING & SUBDIVIDING RZ 2012-0147 7250 IDYLWOOD ROAD FALLS CHURCH, VA 22043

**APPLICANT:** CHRISTOPHER AND KAREN BARTH  
7250 IDYLWOOD ROAD,  
FALLS CHURCH, VA 22043

**PREPARED BY:** ADVANCE ENGINEERING GROUP, LLC  
701 W BROAD ST, SUITE 306  
FALLS CHURCH, VA 22046  
703-533-1581

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Advance Engineering Group LLC  
Civ., Structural & Geotechnical Engineers / Planners  
701 W Broad St, Suite 306, Falls Church VA 22046  
703-533-1581 Fax: 703-533-1502  
www.advancegroup.net info@advancegroup.net



MID PIKE  
LOT 82 BLK 1  
FAIRFAX COUNTY  
DRANESVILLE DISTRICT #1  
TM MAP 040-S-41J - 0002  
COVER SHEET

PROJECT MANAGER	A.E.F.
PROJECT NO.	11-VA-264
DATE OF RECORD	A.E.F.
ISSUE DATE	4-23-2012
APPLICANT NO.	

10-31-12  
10  
SEAL

NO.	DATE	BY	REMARKS
1	8-07-12	A.E.F.	PER CITY COMMENTS
2	9-26-12	A.E.F.	PER CITY COMMENTS
3	10-25-12	A.E.F.	INDIVIDUAL REVISIONS REGISTERED FOR SEALS

824  
CO-1  
SHEET 1 OF 7

*Christopher Barth*

**GENERAL NOTES:**

- THE PROPERTY DELINEATED ON THESE PLANS IS LOCATED ON FAIRFAX COUNTY TAX ASSESSMENT MAP NUMBER 40-3 (011) 0082. THE SITE IS CURRENTLY ZONED R-2, THE PROPOSED ZONING IS R-3.
- BOUNDARY INFORMATION OBTAINED FROM CERTIFIED SURVEY BY DOMINION SURVEYS DATED NOV016-2010.
  - TOPOGRAPHIC INFORMATION OBTAINED FROM FIELD RUN TOPOGRAPHIC SURVEY WITH TOTAL STATION PREPARED BY ADVANCE ENGINEERING GROUP, LLC, ON DEC-13-2011.
  - TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO HAZARDOUS OR TOXIC SUBSTANCES AS SET FORTH IN TITLE 40, CODE OF FEDERAL REGULATIONS PART 116.4, 302.4 AND 358; WASTE MANAGEMENT VR 672-1-D - VIRGINIA HAZARDOUS WASTE MANAGEMENT REGULATION; AND/OR PETROLEUM PRODUCTS AS DEFINED IN TITLE 40 CODE OF FEDERAL REGULATIONS PART 260; TO BE GENERATED, UTILIZED, STORED, TREATED, AND/OR DISPOSED OF ON SITE.
  - THE PROPERTY IS LOCATED ON HC ZONING OVERLAY DISTRICT.
  - THERE ARE NO AFFORDABLE DWELLING UNITS (ADU) REQUIRED OR PROPOSED FOR THIS PROJECT.
  - NO DENSITY REDUCTIONS ARE REQUIRED BY ZONING SECTION 2-308.
  - THERE ARE NO PROPOSED RECREATION FACILITIES PROPOSED FOR THIS DEVELOPMENT.

**SITE TABULATIONS:**

SITE AREA	= 40.5915 SQ = 0.932 ACRES
ADJUSTED SITE AREA	= 38.5415 SQ = 0.850 ACRES
DISTRICT	= R-3 RESIDENTIAL
PROPOSED ZONE	= R-3 RESIDENTIAL

BULK REGULATION (R-3 ZONING DISTRICT)			
NUMBER OF UNITS:	REQUIRED	PROPOSED	
DENSITY:	2.28	2.27	
MINIMUM LOT AREA:	10,500 SQ FT	19,126.5 SQ FT	19,125.00 SQ FT
AVERAGE LOT AREA:	11,500 SQ FT		
MINIMUM LOT WIDTH:	INTERIOR LOT - 60	NA	128.10
	CORNER LOT - 102	NA	127.81
MAX BUILDING HEIGHT:	32	27 (SECT)	30 (PROP)
SET BACKS: FRONT YD	30	37.61 TO REED RD ROW	36.00 (PROP)
REAR YD	25	32.92 TO ENDWOOD ROW	NA
SIDE YD	12	87.81 (PROP)	14.00 TO LOT TO R+30.01 TO LOT 1
OPEN SPACE:	NA	NA	NA
PARKING:	2 SPACES FOR DR	2 SPACES	2 SPACES
LOT SHAPE FACTOR:	16.20	16.20	16.08

**GENERALIZED DEVELOPMENT PLAN SUBMISSION CHECKLIST:**

- THIRTY-THREE (33) COPIES OF A GENERALIZED DEVELOPMENT PLAN PROVIDED HEREIN WITH APPLICATION.
- ONE 8 1/2 X 11 REDUCTION OF THE PLAN PROVIDED WITH APPLICATION.
- A GENERALIZED DEVELOPMENT PLAN, AT A SCALE OF NOT LESS THAN ONE INCH EQUALS ONE HUNDRED FEET (1"=100'), SMALL SHALL SHOW THE FOLLOWING:
  - A. SCALE AND NORTH ARROW, WITH NORTH, TO THE EXTENT FEASIBLE, ORIENTED TO THE TOP OF THE PLAN.
  - B. SCALE AND NORTH ARROW HAVE BEEN PROVIDED ON PLAN, SEE SHEET 2 OF 7.

- EXCEPT FOR SINGLE FAMILY DETACHED DWELLINGS, THE APPROPRIATE LOCATION AND DIMENSIONS OF ALL PROPOSED STRUCTURES AND LOTS, TO INCLUDE THE MAXIMUM HEIGHT IN FEET OF ALL STRUCTURES AND PORCHES, AND A GRAPHIC DEFINITION OF THE ANGLE OF BULK PLANE, IF APPLICABLE.
- PROPOSED STRUCTURE AND LOTS INCLUDING MAXIMUM HEIGHT HAS BEEN PROVIDED ON PLANS, SEE SHEET 2 OF 7 (THIS SHEET).
- THE PROPOSED TRAFFIC CIRCULATION PLAN INCLUDING MAJOR STREETS AND MAJOR PEDESTRIAN, BICYCLE AND HORSE PATHS, AND THE LOCATION OF ALL TRAILS REQUIRED BY THE ADOPTED COMPREHENSIVE PLAN.

- PROPOSED DRIVEWAY LOCATION HAS BEEN PROVIDED ON PLANS. TRAILS ARE REQUIRED FOR THE FAIRFAX COUNTY TRAILS PLAN: A MAJOR FOR AN 10 FT TRAIL, REQUIREMENT ALONG ENDWOOD IS REQUIRED. THERE IS AN EXISTING JOGGING TRAIL ALONG ENDWOOD ROAD AND A WALKING TO 6 FT IS PROPOSED (SEE GENERAL DEVELOPMENT PLAN OF 7).
- A WAIVER OF STREET FRONTAGE IMPROVEMENTS ALONG REED RD IS REQUESTED.
- ALL PROPOSED MAJOR OPEN SPACE AREAS AND THE APPROPRIATE LOCATION OF ALL PROPOSED COMMUNITY AND PUBLIC FACILITIES.

- THERE IS NO OPEN SPACE REQUIREMENT FOR THIS SITE, THEREFORE NO MAJOR OPEN SPACE AREAS HAVE BEEN PROPOSED. THERE ARE NO PROPOSED COMMUNITY OR PUBLIC FACILITIES.
- THE PROPOSED PLAN FOR ALL MAJOR SANITARY SEWER IMPROVEMENTS.
- NA NO SANITARY IMPROVEMENTS WITHIN THE ROW PROPOSED.
- APPROXIMATE LOCATION, ESTIMATED SIZE OF FOOTPRINT IN ACRES AND TYPE OF ALL PROPOSED STORMWATER MANAGEMENT FACILITIES, INCLUDING THE FULL EXTENT OF SIDE SLOPES, SUBWARRANTS, SWALLEYS, DAMS, AND APPROPRIATE WATER SURFACE ELEVATION FOR DESIGN STORMS, IF APPLICABLE. IN ADDITION, A PRELIMINARY STORMWATER MANAGEMENT PLAN THAT INCLUDES INFORMATION ABOUT THE ADEQUACY OF DOWNSTREAM DRAINAGE, INCLUDING THE SUFFICIENCY OF CAPACITY OF ANY STORM DRAINAGE, PIPES, AND OTHER CONVEYANCES INTO WHICH STORMWATER RUNOFF WILL BE CONVEYED. WHEN THERE IS 2500 SQUARE FEET OR MORE OF LAND DISTURBING ACTIVITY ON THE ENTIRE APPLICATION PROPERTY, IN ADDITION TO THE ABOVE, THE PRELIMINARY STORMWATER MANAGEMENT PLAN SHALL INCLUDE:
  - (1) A GRAPHIC DEPICTING INFORMATION AS DESCRIBED WITHIN DETAILED APPLICATION CHECKLIST.
  - (2) A PRELIMINARY STORMWATER MANAGEMENT NARRATIVE SETTING FORTH THE REQUIRED INFORMATION WITHIN THE DETAILED APPLICATION CHECKLIST.

- STORM WATER OUTFALL ANALYSIS AND SWF CALCULATIONS FOR PROPOSED INFILTRATION TRENCHES HAVE BEEN PROVIDED, SEE SHEETS 4 OF 7 AND 5 OF 7 INCLUDING THE CHECKLIST.
- THE LOCATION OF ALL EXISTING UTILITY EXHAUSTS HAVING A WIDTH TWENTY-FIVE (25) FEET OR GREATER.
- A SCHEDULE SHOWING THE NUMBER OF PARKING SPACES PROVIDED AND THE NUMBER REQUIRED BY THE PROVISIONS OR ARTICLE 11 OF THE ZONING ORDINANCE.
- A SCHEDULE SHOWING THE NUMBER OF PARKING SPACES PROVIDED AND THE NUMBER REQUIRED HAS BEEN PROVIDED. SEE SHEET 2 OF 7 (THIS SHEET).

- IN APPLICANT'S KNOWLEDGE, THERE ARE NO EXISTING UTILITY EXHAUSTS HAVING A WIDTH TWENTY-FIVE (25) FEET OR GREATER.
- A SCHEDULE SHOWING THE NUMBER OF PARKING SPACES PROVIDED AND THE NUMBER REQUIRED BY THE PROVISIONS OR ARTICLE 11 OF THE ZONING ORDINANCE.
- A SCHEDULE SHOWING THE NUMBER OF PARKING SPACES PROVIDED AND THE NUMBER REQUIRED HAS BEEN PROVIDED. SEE SHEET 2 OF 7 (THIS SHEET).

**WHETHER IT IS AIR SURVEY OR FIELD RUN.**

- TOPOGRAPHIC INFORMATION PROVIDED ON SHEETS 8 OF 7 IS PREPARED BY A FIELD RUN SURVEY COMPLETED BY AEG GROUP, LLC (SEE NOTE ON THIS SHEET).
- A DELINEATION OF THOSE GENERAL AREAS THAT HAVE SCENIC ASSETS OR NATURAL FEATURES DESERVING OF PROTECTION AND PRESERVATION, AND A STATEMENT OF HOW SUCH WILL BE ACCOMPLISHED.
- IN THE APPLICANT'S OPINION, THE SITE HAS NO SCENIC ASSETS OR NATURAL FEATURES DESERVING OF PROTECTION OR PRESERVATION.

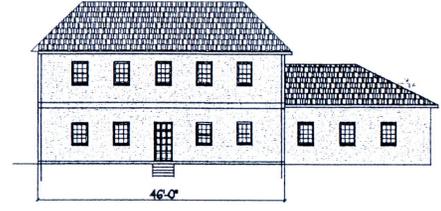
- A STATEMENT OR VISUAL PRESENTATION OF HOW ADJACENT AND NEIGHBORING PROPERTIES SHALL BE PROTECTED FROM ANY ADVERSE EFFECTS PROMPTED BY THE PROPOSED DEVELOPMENT, TO INCLUDE VISUAL ACCESS PLANS AND DIMENSIONS OF ALL PEDESTRIAN YARDS THAT WILL BE PROVIDED.
- ALL REQUIRED PERIPHERAL YARDS FOR PROPOSED STRUCTURES AND DRIVEWAYS HAVE BEEN PROVIDED IN ACCORDANCE WITH THE BULK REGULATIONS SET FORTH IN SECTION 3-207 OF THE FAIRFAX COUNTY ZONING ORDINANCE. SEE SHEET 3 OF 7.

- A DELINEATION OF ALL EXISTING STRUCTURES, AND AN INDICATION OF THEIR DATE OF CONSTRUCTION IF KNOWN, AND WHETHER THEY WILL BE RETAINED OR DEMOLISHED.
- EXISTING DWELLING CONSTRUCTED CIRCA 1940 IS TO REMAIN THE DETACHED GARAGE WILL BE DEMOLISHED. SEE SHEET 3 OF 7.
- A STATEMENT SETTING FORTH THE MAXIMUM GRADES FLOOR AREA AND PARK PROPOSED FOR ALL LOTS OTHER THAN BURIAL SITE.
- NA NO PARK REQUIREMENTS FOR RESIDENTIAL DEVELOPMENT.

- A STATEMENT OR PRESENTATION SETTING FORTH THE MAXIMUM NUMBER OR DWELLING UNITS PROPOSED, AND THE DENSITY AND THE OPEN SPACE CALCULATIONS BASED ON THE PROVISIONS OF SECTIONS 2-308 (MAXIMUM DENSITY) AND 2-309 (OPEN SPACE) OF THE ZONING ORDINANCE.
- A TABLE SHOWING MAXIMUM DWELLING UNITS PER ACRE IS SHOWN ON THIS SHEET.
- A STATEMENT OF THOSE SPECIAL AMENITIES THAT ARE PROPOSED WITHIN THE DEVELOPMENT.
- THERE ARE NO SPECIAL AMENITIES THAT ARE PROPOSED ON THIS PLAN.

- A STATEMENT OF THE PUBLIC IMPROVEMENTS, BOTH ON AND OFF-SITE, THAT ARE PROPOSED FOR DEDICATION AND/OR CONSTRUCTION, AND AN ESTIMATE OF THE TIMING OF PROVIDING SUCH IMPROVEMENTS.
- STREET FRONTAGE DEDICATION CAN BE PROVIDED IF REQUESTED.
- A STATEMENT SETTING FORTH THE PROPOSED APPROXIMATE DEVELOPMENT SCHEDULE.
- DEVELOPMENT IS ANTICIPATED TO COMMENCE UPON APPROVAL OF SITE PLAN.

- APPROXIMATE DELINEATION OF ANY FLOODPLAIN DESIGNED BY THE FEDERAL INSURANCE ADMINISTRATION, UNITED STATES GEOLOGICAL SURVEY, OR FAIRFAX COUNTY, THE APPROXIMATE DELINEATION OF ANY RESOURCE PROTECTION AREA AND RESOURCE MANAGEMENT ARE, AND THE APPROXIMATE DELINEATION OF ANY ENVIRONMENTAL QUALITY CORRIDOR AS DEFINED IN THE ADOPTED COMPREHENSIVE PLAN, AND, IF APPLICABLE, THE DISTANCE OF ANY EXISTING AND PROPOSED STRUCTURES FROM THE FLOODPLAIN, RESOURCE PROTECTION AREA AND RESOURCE MANAGEMENT AREA, OR ENVIRONMENTAL QUALITY CORRIDOR.
- IN ACCORDANCE WITH FEMA ISSUED FLOOD MAPS, THERE IS NO 100-YEAR FLOODPLAIN ON THE SITE, IN ACCORDANCE WITH FAIRFAX COUNTY GIS MAP #89-4. THERE ARE NO RESOURCE PROTECTION AREAS PER OR ENVIRONMENTAL QUALITY CORRIDORS (EQC) ON THE SITE.
- ANY PROPOSED IMPROVEMENTS TO THE PUBLIC RIGHT-OF-WAY AND DELINEATION OF THE EXISTING CENTERLINE TO THE EDGE OF THE PAVEMENT AND TO THE EDGE OF THE RIGHT-OF-WAY.
- A DEDICATION OF A 15 FT WIDE PARCEL PARALLEL TO ENDWOOD RD TO EXTEND ENDWOOD RD 10 TO 33 FT FROM THE CENTERLINE OF THE RD, TO THE EDGE OF THE PROPERTY, SEE SHEET 3 OF 7.
- A PLAN SHOWING LIMITS OF CLEARING, PROPOSED LANDSCAPING AND SCREENING IN ACCORDANCE WITH ARTICLE 13 OF THE ZONING ORDINANCE. A DELINEATION OR EXISTING VEGETATION, TO INCLUDE EXISTING VEGETATION TO BE PRESERVED, AND WHEN THERE IS 2500 SQUARE FEET OR MORE OF LAND DISTURBING ACTIVITY, A DESIGN VEGETATION MAP.
- THE PROPOSED LIMITS OF CLEARING HAS BEEN PROVIDED, SEE SHEET 3 OF 7. AN EXISTING VEGETATION MAP AND TREE PRESERVATION PLAN HAVE BEEN PROVIDED. SEE SHEETS 6 OF 7 & SHEET 7 OF 7 RESPECTIVELY.
- APPROXIMATE DELINEATION OF ANY GRAVE, OBJECT OR STRUCTURE MARKING A PLACE OF BURIAL, FURN, AND A STATEMENT INDICATING HOW THE PROPOSED DEVELOPMENT WILL IMPACT THE BURIAL SITE.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO GRAVES, MARKERS, OBJECTS OR STRUCTURES MARKING A PLACE OF BURIAL.
- A STATEMENT WHICH CONFIRMS THE CHANGERS OF THE SUBJECT PROPERTY, AND THE NATURE OF THE APPLICANT'S INTEREST IN SAME.
- THE PROPERTY HEREON IS IN THE OWNERSHIP OF MR. CHRISTOPHER D BARTH RECORDED IN DEED BOOK 2175 PAGE 012 IS AMONG THE LAND RECORDS OF FAIRFAX COUNTY.



PROPOSED NEW HOUSE FOR LOT 2  
SCALE 1" = 10 FT APPROX

**LEGEND**

- EXISTING INTERMEDIATE CONTOUR
- EXISTING INDEX CONTOUR
- PROPOSED CONTOUR
- EXISTING EDGE OF PAVEMENT
- PROPOSED EDGE OF PAVEMENT
- EXISTING CURBS AND GUTTER
- PROPOSED CURBS AND GUTTER
- TRANSITION FROM CG-6 TO CG-GR
- EXISTING UTILITY POLE
- FENCELINE
- EXISTING WATER METER
- EXISTING STORM SEWER MANHOLE
- PROPOSED SANITARY SEWER
- EXISTING ELECTRIC SERVICE
- EXISTING GAS LINE
- BASEMENT LINE
- CONTRAILINE
- PROPOSED SPOT ELEVATION
- EXISTING TREE
- EXISTING STOP SIGN
- TEMP. CONST. ENTRANCE
- EXISTING LANDSCAPE TO REMAIN
- LIMITS OF DISTURBANCE
- EXISTING STREET LIGHT

- ADDITIONAL NOTES**
- TO THE BEST OF OUR KNOWLEDGE, NO HAZARDOUS WASTE EXISTS ON THIS SITE.
  - TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO KNOWN CEMETERIES ON THIS PROPERTY.
  - THIS SITE IS LOCATED WITHIN THE FIMMIT RUN WATERSHED LOCATED OVER 15% SLOPES IN THE FOLLOWING:
 

R, PA	( ) YES	(X) NO
R, M, A	( ) YES	(X) NO
OVERLAY DISTRICT (WATER SUPPLY)	( ) YES	(X) NO
WETLANDS	( ) YES	(X) NO
FLOODPLAIN	( ) YES	(X) NO
  - THE PROPERTY DELINEATED ON THIS PLAN IS NOT ON THE 100 YEARS FLOOD PLAN.
  - TO THE BEST OF OUR KNOWLEDGE THERE IS NO KNOWN ARCHAEOLOGICAL SITES ON THIS PROPERTY.
  - THE PROPERTY DELINEATED ON THIS PLAN IS NOT LOCATED WITHIN A RESOURCE PROTECTION AREA AS SHOWN ON CHESAPEAKE BAY PRESERVATION AREA MAP (MAP APA-2).
  - THIS LOT RECORDED PRIOR TO AUGUST 1, 1978 AND AS SUCH IS NOT REQUIRED TO MEET CURRENT LOT WIDTH AND SIZE REQUIREMENTS UNDER FAIRFAX COUNTY ZONING ORDINANCE, ARTICLE 2-405.
  - THIS PROPERTY IS SERVED BY PUBLIC WATER AND SEWER. PROTECTED OR CONDITIONED SITE:
 

WATER SUPPLY	( ) YES	( ) NO SPECIAL EXCEPTION
SEWER SERVICE	(X) PUBLIC	( ) WELL
	(X) PUBLIC	( ) PRIVATE
  - THE PROPOSED DEVELOPMENT CONFORMS WITH THE PROVISIONS OF ARTICLE 3, FOR R3 PROPOSED ZONING DISTRICT AND ALL APPLICABLE ORDINANCES, REGULATIONS AND ADOPTED STANDARDS, NO WAIVERS, VARIANCES, SPECIAL EXCEPTIONS, NOR PPM MODIFICATIONS ARE REQUESTED IN ASSOCIATION WITH THIS PROPOSED DEVELOPMENT.
  - THERE ARE NO PROPOSED PUBLIC IMPROVEMENT PLANS CONTEMPLATED FOR THIS DEVELOPMENT.
  - THE PROPOSED CHANGE FROM R2 TO R3 ZONING DISTRICT IS IN HARMONY WITH THE FAIRFAX COUNTY COMPREHENSIVE PLAN WHICH CALLS FOR THIS TYPE OF REDEVELOPMENT, THE PROPOSED PROJECT WILL COMPLY WITH ALL OTHER REQUIREMENTS OF THE COMPREHENSIVE PLAN.

WATERSHED = FIMMIT RUN  
TOTAL LAND DISTURBANCE = 34700 SQ FT

Advance Engineering Group LLC  
Civil, Structural & Geotechnical Engineers / Planners  
701 W. Broad St. Suite 306, Falls Church VA, 22046  
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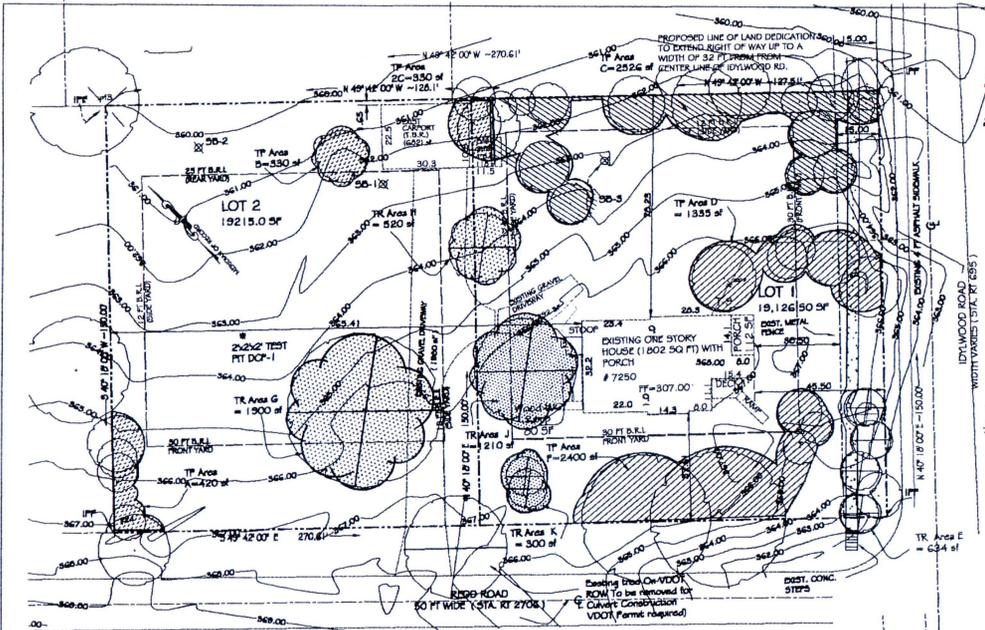
MID PIKE  
LOT 82 BLK 1  
FAIRFAX COUNTY  
DRAWSVILLE DISTRICT #1  
TAX MAP 040-5-011 - 0082

PROJECT INFORMATION AND VICINITY MAP

PROJECT MANAGER	A.E.F.
PROJECT NO.	11/VAL/BA
DWG. NO. OF RECORD	A.E.F.
ISSUE DATE	4-23-2012
APPLICANT NO.	

REMARKS	
PER CITY COMMENTS	
PER CITY COMMENTS	
INDIVIDUAL DEVELOPER ADJUSTED LOT SIZE	

824  
CO-2  
SHEET 2 OF 7



TOPOGRAPHY AND EXISTING CONDITIONS  
SCALE 1" = 20 FT

IMPERVIOUS AREA CALCULATIONS LOT 1

Description	Development	Foot
Existing House	1,690 sf	1,690 sf
Existing Driveway to be Removed	292 sf	292 sf
Existing Stairs & Slopes	55 sf	55 sf
Existing Front Ramp to Stay	80 sf	80 sf
Existing Jogging Trail	604 sf	604 sf
Addition to Jogging Trail	302 sf	302 sf
New Concrete Driveway	2544 sf	2544 sf
New Garage	640 sf	640 sf
New Front Conc Walk	124 sf	124 sf
Total	2,899 sf	6,077 sf
Total lot area	19,215 sf	0.441 AC
Increase in impervious	3,162 sf	
Percentage of imp.	31.45%	> 10% DMF is Required

STORM WATER MANAGEMENT

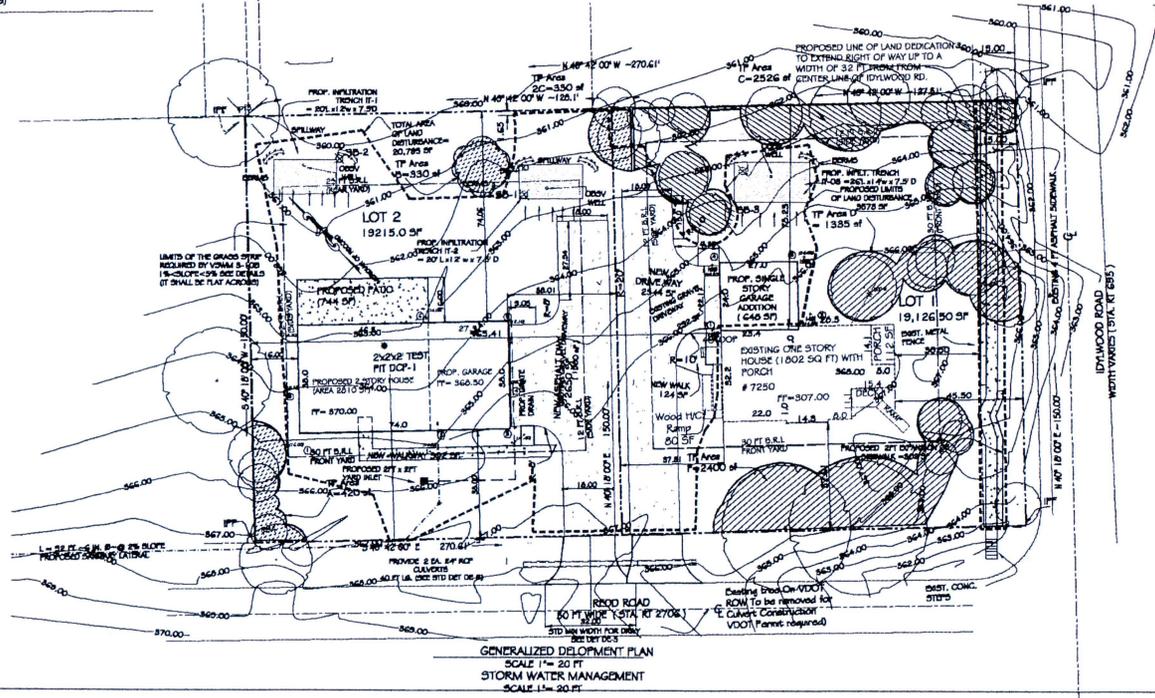
Impervious C-factor	Paved	Unpaved
0.8		
0.25		
15,045 sf	0.433 AC	
Pre development Impervious Areas	2,895 sf	or 0.066 AC
Landscaped lawn	16,320 sf	or 0.375 AC
C Factor	(0.066*0.90 + 0.375*0.25) = 0.340	
Pre development Impervious Areas	6,077 sf	or 0.140 AC
Landscaped lawn	13,130 sf	or 0.302 AC
C Factor	(0.140*0.90 + 0.302*0.25) = 0.458	
Pre development Q2	0.348	5.45
Q10	0.348	7.27
Post development Q2	0.456	5.45
Q10	0.456	7.27
CHANGE IN RUNOFF		
Q2 Inc =	0.259 cfs	
Q10 Inc =	0.345 cfs	

IMPERVIOUS AREA CALCULATIONS LOT 2

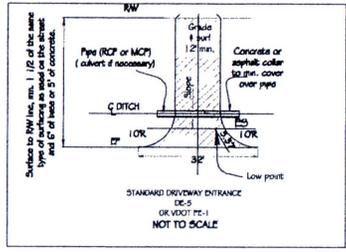
Description	Development	Foot
New House	0.0 (Vacant)	2,810 sf
Existing and New Driveways	1,900 sf	2,650 sf
Carport to be Removed	682 sf	682 sf
Storage Shed to be Removed	56 sf	56 sf
New Concrete Walk	744 sf	744 sf
Front Concrete Walk	302 sf	302 sf
Total	2,746 sf	6,506 sf
Total lot area	19,126.50 sf	0.439 AC
Increase in impervious	3,755 sf	0.086 AC
Percentage of imp.	34.82%	> 10% DMF is Required

STORM WATER MANAGEMENT

Impervious C-factor	Paved	Unpaved
0.8		
0.25		
19,126.50 sf	0.439 AC	
Pre development Impervious Areas	2,746 sf	or 0.063 AC
Landscaped lawn	16,379.50 sf	or 0.376 AC
C Factor	(0.063*0.90 + 0.376*0.25) = 0.343	
Pre development Impervious Areas	6,506 sf	or 0.146 AC
Landscaped lawn	12,620.5 sf	or 0.290 AC
C Factor	(0.146*0.90 + 0.290*0.25) = 0.471	
Pre development Q2	0.343	5.45
Q10	0.343	7.27
Post development Q2	0.471	5.45
Q10	0.471	7.27
CHANGE IN RUNOFF		
Q2 Inc =	0.306 cfs	
Q10 Inc =	0.406 cfs	



GENERALIZED DEVELOPMENT PLAN  
SCALE 1" = 20 FT  
STORM WATER MANAGEMENT  
SCALE 1" = 20 FT



PROPOSED NEW DRIVEWAY ENTRANCE

Advance Engineering Group LLC  
Civil, Structural & Geotechnical Engineers / Planners  
701 W. Broad St. Suite 306, Falls Church VA 22046  
www.aeggroup.net  
703-533-1501 Fax: 703-533-1502  
info@aeggroup.net

**GROUP**

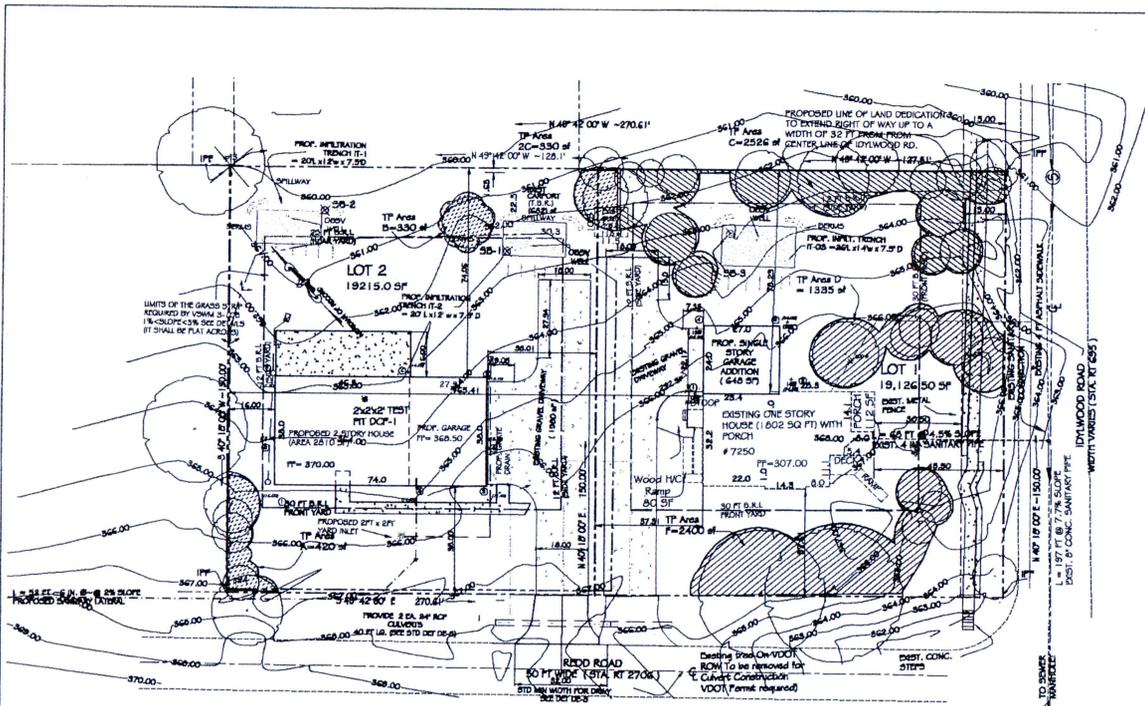
MID PIKE  
LOT 2 (BLK 1)  
PARRIS SUB  
DRAKESVILLE DISTRICT #1  
TAX MAP 040-3-11-0002  
EXISTING CONDITIONS AND  
GENERALIZED DEVELOPMENT PLAN

PROJECT NUMBER	PROJECT NO.	ENG. OF RECORD	ISSUE DATE	APPLICAT. NO.
ALF	11-VA-854	ALF	4-23-12	

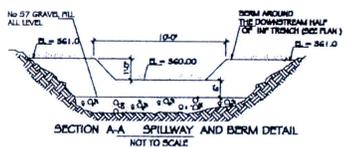


NO.	DATE	BY	REVISIONS
1	8-07-12	ALF	PER CITY COMMENTS
2	9-26-12	ALF	PER CITY COMMENTS
3	10-25-12	ALF	INDIVIDUAL REVISIONS

824  
GDP-1  
SHEET 3 OF 7



STORM WATER MANAGEMENT  
SCALE 1" = 20 FT



INFILTRATION TRENCH DESIGN FOR IT-01 & IT-02 (LOT 2)

TOTAL RAINFALL ACCUMULATION = 3 IN  
DURATION OF STORM (2-HR AND 2-HR STORM) = 2 hr  
SLOPE, FAIRFAX COUNTY VA, 2003 G-1 (309-A4)  
MAXIMUM ALLOWABLE DRAIN TIME = 46 hr

IMPERVIOUS AREA TO BE TREATED =  $2939 + 2.0(0.2) = 3574.5 \text{ SF}$   
INFILTRATION RATE AS MEASURED IN THE FIELD = 6.0 IN/hr  
INFILTRATION RATE FOR DESIGN = 3.0 IN/hr  
[VIRGINIA STORMWATER MANAGEMENT HANDBOOK, 3.00 (B-3)]  
VOLUME IN =  $3574 \times 3/12 = 893.5 \text{ CF}$

TRENCH DIMENSIONS  
LENGTH = 20 FT  
WIDTH = 12 FT  
SURFACE AREA OF TRENCH =  $20 \times 12 = 240 \text{ SF}$   
MIN SURFACE AREA =  
 $S_{min} = (V \times 12) / (12 \times 48 \text{ in/hr} \times 2) = 1.25 \text{ SF}$   
 $S_{min} = (893.5 \text{ CF}) / (12 \times 48 \text{ in/hr} \times 2) = 7.79 \text{ SF}$   
VOLUME OUT =  $3.0 \text{ IN/hr} \times 2 \text{ hr} \times 240 \text{ SF} = 1440 \text{ CF}$   
STORAGE VOL. REQUIRED =  $893.5 - 1440 = -546.5 \text{ CF}$   
USING # 57 STONE @ VOID 40%

DEPTH OF TRENCH =  $V_{in} / (S_{min} \times 12) = 723.6 \text{ CF} / (0.4 \times 364 \text{ SF}) = 7.5 \text{ FT}$   
USE 2 TRENCHES OF EACH SIZE (20' x 12' x 7.5' D)  
RATE OF DISCHARGE,  $Q_{out} = 3.0 \times (1/12 \times 240 \text{ SF}) = 60.0 \text{ CF/hr}$   
INFILTRATION TIME REQUIRED =  $723.6 \text{ CF} / 60.0 = 12.0 \text{ hrs}$   
MAXIMUM ALLOWABLE DRAIN TIME = 46 hr OK

SPILLWAY DESIGN  
 $I = 3.0 \text{ in/hr}$   $C = 0.471$   $A_c = 0.065 + 0.065 + 0.223 = 0.353$   
 $Q_{in} = 1.25 \text{ CL (ft}^3\text{) s}^{-1}$   
 $Q_{in} = 1.25(47.1) \times 0.353 = 20.0 \text{ cfs}$   
 $H_{in} = 0.15$   $C = 3.5$   $FTM G-1(302.11)$   
 $L_{min} = (1.00 \text{ cfs} / (1.25(3.5)(0.15))^2) = 1.00(2.4) = 4.5 \text{ FT USE } 6 \text{ FT}$

INFILTRATION TRENCH DESIGN FOR IT-03 (LOT 1)

TOTAL RAINFALL ACCUMULATION = 3 IN  
DURATION OF STORM (2-HR AND 2-HR STORM) = 2 hr  
SLOPE, FAIRFAX COUNTY VA, 2003 G-1 (303-A4)  
MAXIMUM ALLOWABLE DRAIN TIME = 46 hr

IMPERVIOUS AREA TO BE TREATED =  $2350 + 2(753) = 5058 \text{ SF}$   
INFILTRATION RATE AS MEASURED IN THE FIELD = 6.0 IN/hr  
INFILTRATION RATE FOR DESIGN = 3.0 IN/hr  
[VIRGINIA STORMWATER MANAGEMENT HANDBOOK, 3.00 (B-3)]  
VOLUME IN =  $5058 \times 3/12 = 1264.5 \text{ CF}$

TRENCH DIMENSIONS  
LENGTH = 26 FT  
WIDTH = 14 FT  
SURFACE AREA OF TRENCH =  $26 \times 14 = 364 \text{ SF}$   
MIN SURFACE AREA =  
 $S_{min} = (V \times 12) / (12 \times 48 \text{ in/hr} \times 2) = 1.25 \text{ SF}$   
 $S_{min} = (1264.5 \text{ CF}) / (12 \times 48 \text{ in/hr} \times 2) = 10.95 \text{ SF}$   
VOLUME OUT =  $3.0 \text{ IN/hr} \times 2 \text{ hr} \times 364 \text{ SF} = 2184 \text{ CF}$   
STORAGE VOL. REQUIRED =  $1264.5 - 2184 = -919.5 \text{ CF}$   
USING # 57 STONE @ VOID 40%

DEPTH OF TRENCH =  $V_{in} / (S_{min} \times 12) = 1090 \text{ CF} / (0.4 \times 364 \text{ SF}) = 7.5 \text{ FT}$   
USE 2 TRENCHES OF EACH SIZE (26' x 14' x 7.5' D)  
RATE OF DISCHARGE,  $Q_{out} = 3.0 \times (1/12 \times 364 \text{ SF}) = 91.0 \text{ CF/hr}$   
INFILTRATION TIME REQUIRED =  $1090 \text{ CF} / 91.0 = 12.0 \text{ hrs}$   
MAXIMUM ALLOWABLE DRAIN TIME = 46 hr OK

SPILLWAY DESIGN  
 $I = 3.0 \text{ in/hr}$   $C = 0.055 + 0.065 + 0.192 = 0.309$   $A_c$   
 $Q_{in} = 1.25 \text{ CL (ft}^3\text{) s}^{-1}$   
 $Q_{in} = 1.25(47.1) \times 0.309 = 17.9 \text{ cfs}$   
 $H_{in} = 0.15$   $C = 3.5$   $FTM G-1(302.11)$   
 $L_{min} = (1.73 \text{ cfs} / (1.25(3.5)(0.15))^2) = 1.73(1.25(3.5)(0.05)) = 1.73(2.4) = 7.2 \text{ FT USE } 10 \text{ FT OK}$

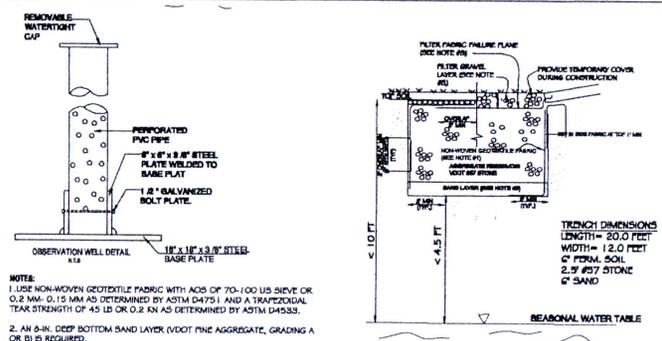
TEST DATE: 2-25-2012 TIME: 2 HRS

Time	Discharge		Infiltration rate
	Absolute	Relative	
5:00	18.00	0	0
5:30	15.00	0	0
6:00	17.00	2.00	4.00
6:30	23.00	4.00	8.00
7:00	25.00	6.00	6.00
7:30	25.00	6.00	6.00
8:00	25.00	6.00	6.00

Time	Discharge		Infiltration rate
	Absolute	Relative	
8:00	10.00	0	0
8:30	14.00	4.00	6.00
9:00	18.00	8.00	6.00
9:30	23.00	4.00	9.00
10:00	25.00	6.00	6.00
10:30	25.00	6.00	6.00

USE BORINGS #1 RESULTS FOR ALL (3) TRENCH LOCATIONS AND 3.0 IN/hr FOR DESIGN.

NOTE: THE DIAMETER OF THE HOLE WAS 4 INCH. AND DEPTH 108 INCH. INFILTRATION TEST PERFORMED FOLLOWING 24 HOUR SATURATION PERIOD.



- NOTES:
- USE NON-WOVEN GEOTEXTILE FABRIC WITH ACS OF 70-100 US SIEVE OR 0.2 MM - 0.15 MM AS DETERMINED BY ASTM D4751 AND A TRIANGULAR TENSILE STRENGTH OF 45 LB OR 2 KN AS DETERMINED BY ASTM D4533.
  - AN 8-IN. DEEP BOTTOM SAND LAYER (VOID FINE AGGREGATE, GRADING A OR B) IS REQUIRED.
  - FOR AN AGGREGATE SURFACE TRENCH, FILTER FABRIC SHALL SURROUND ALL OF THE AGGREGATE FILL MATERIAL EXCEPT THE TOP ONE FOOT. A SEPARATE PIECE OF FABRIC SHALL BE USED FOR THE TOP LAYER TO ACT AS A FAILURE PLANE. THIS TOP PIECE CAN THEN BE REPLACED AND REPLACED UPON CLOGGING.

MINIMUM STORMWATER INFORMATION FOR REZONING, SPECIAL EXCEPTIONS, 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.

- The information is required under the following Zoning Ordinance paragraphs:
- Special Permits (9-011.1 21 # 21)
  - Cluster Subdivision (9-615 16 # 1N)
  - Development Plans: PKC District (11-302.2 # 4L)
  - PD/P Districts (except PKC) (91-6-302 IF # 1Q)
  - Special Exceptions (9-011.1 21 # 2L)
  - Commercial Revitalization Districts (9-622.2A (12)(14)(1))
  - PKC Plan (11-303 IE # 10)
  - Amendments (11-202.10F # 10)

1. Plat is at a minimum scale of 1"=50' (unless it is depicted on one sheet with a minimum scale of 1"=100). The Plat Scale is 1"= 20 ft (larger than minimum) OK.
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         . All above shown on sheets 4 of 7 # 5 of 7. No access road required, No Outlet protection required.

Facility Name/Type & No.	On-Site area served (acres)	Off-Site area served (acres)	Drainage area (acres)	Footprint area (sf)	Storage Volume (cf.)	If pond, dam height (ft.)
IT-01	0.186	0.0	0.186	240	724.0	
IT-02	0.186	0.0	0.186	240	724.0	
IT-03	0.309	0.0	0.309	364	1090.0	

3. Provide:
4. Onsite drainage channels, outfalls and pipe systems are shown on Sheet 5 of 7. (One Yard Inlet and Drain)
5. Maintenance accesses (road) to stormwater management facility(ies) are shown on Sheet Not required.
6. Landscaping and tree preservation shown in and near the stormwater management facility is shown on Sheet Tree Preservation Canopy on Sheet 3 of 7 and Landscaping is shown on sheet 6 of 7.
7. A "stormwater management narrative" which contains a description of how detention and best management practices requirements will be met is provided on Sheet 5 of 7. (WATER QUANTITY AND WATER QUALITY)
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 No Concentrated Outfall Required. Excess runoff leaves the site as sheetflow.
9. A description of how the outfall requirements, including contributing drainage areas of the Public Facilities Manual will be satisfied is provided on Sheet Not Required.
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 2 of 7.
11. A submission waiver is requested for Not Required.
12. Stormwater management is not required because Not Applicable.

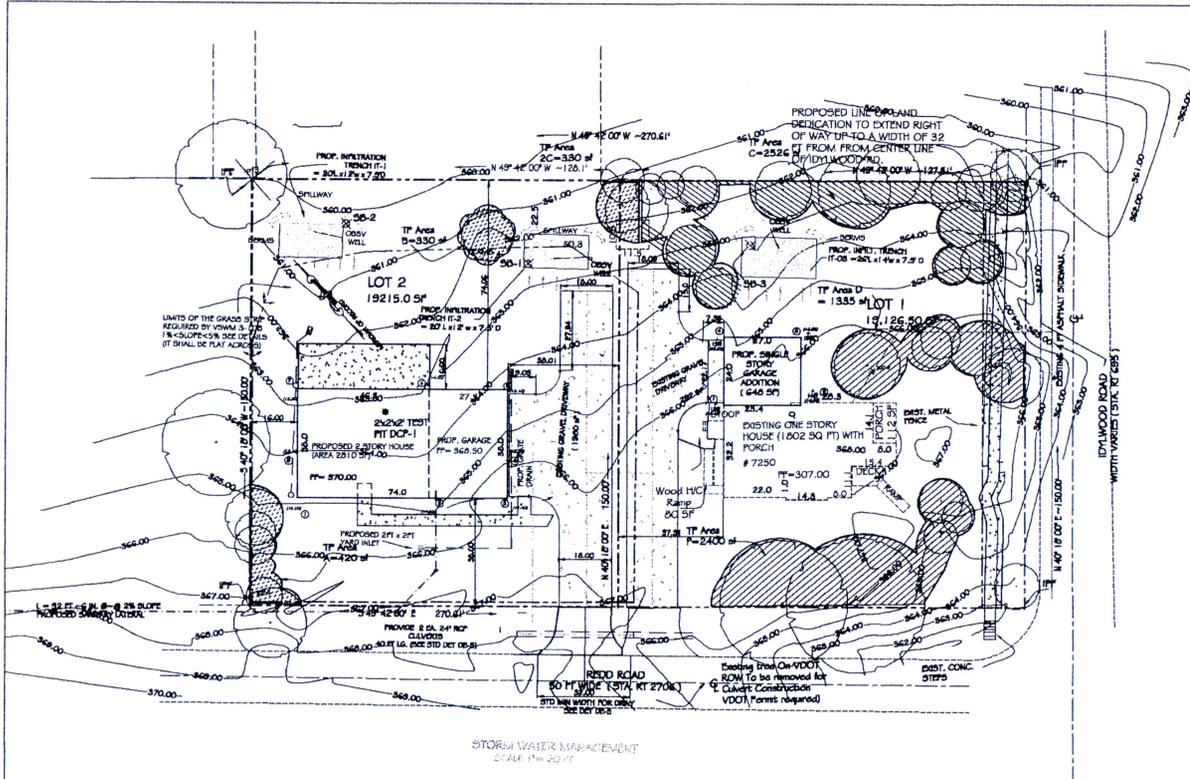
Advance Engineering Group LLC  
Civil, Structural & Geotechnical Engineering / Planning  
701 Woodland St. Suite 305C, Falls Church VA, 22046  
703-533-1551 Fax: 703-533-1502  
www.advancegroup.net info@advancegroup.net



MID PIKE  
LOT 82 BLK 1  
FAIRFAX COUNTY  
DRAINAGE DISTRICT #1  
TAX MAP 040-3(1)-0002

PROJECT MANAGER	A.E.F.
PROJECT NO.	11-VA-254
DATE OF RECORD	11-VA-254
ISSUE DATE	4-23-2012
APPLICANT NO.	

REMARKS	BY	DATE
PER CITY COMMENTS	A.E.F.	6-27-12
PER CITY COMMENTS	A.E.F.	9-26-12
INDIVIDUAL DRAINWAYS ADJUSTED LOT 505	A.E.F.	10-25-12



- LEGEND**
- A1 - BUILDING AREA (CONTROLLED)  
(AREA= 2360 sq ft = 0.054 AC.)
  - A2 - PAVED AREA (CONTROLLED)  
(AREA= 355 + 164 = 519 sq ft = 0.012 AC.)
  - A3 - PAVED AREA (UNCONTROLLED)  
(AREA= 623 sq ft = 0.014 AC.)
  - A4 - UNPAVED AREA (CONTROLLED)  
(AREA= 2527 sq ft = 0.058 AC.)
  - A5 - UNPAVED AREA (UNCONTROLLED)  
(AREA= 2062 + 2910 + 575 = 6367 sq ft = 0.306 AC.)
- DRAINAGE DIVIDE

**WATER QUALITY NARRATIVE**  
 THE PROPOSED INFILTRATION TRENCHES WILL PROVIDE WATER TREATMENT TO APPROXIMATELY 0.186 ACRES OF IMPERVIOUS AND PERVIOUS AREA FOR EACH TRENCH ON LOT 1 (IT-08) AND 0.306 ACRES IN LOT 1, BUILDING AREA, OTHER IMPERVIOUS AREAS AND TRIBUTARY PORTION OF THE PERVIOUS AREA. THE PHOSPHOROUS REMOVAL REQUIRED IS 40% FOR LOT 1 AND 40% FOR LOT 2 (REDEVELOPMENT FROM FAIRFAX VA, 2003 6-401.2B). THE PHOSPHOROUS REMOVAL REQUIREMENTS ARE EXCEEDED, 53.7% IS REMOVED FROM LOT 1 AND 64.4% FROM LOT 2. THE WATER QUALITY REQUIREMENT IS MET BY THE BMP FACILITIES (INFILTRATION TRENCHES) FOR THIS PROJECT. AFTER INSTALLATION OF INFILTRATION TRENCH, BOTH STORMWATER QUALITY AND QUANTITY WILL BE CONTROLLED.

**STORM WATER MANAGEMENT NARRATIVE**  
 FOR LOT 1, APPROXIMATELY 0.306 ACRES OF THE RUNOFF IS CONVEYED TO THE PROPOSED INFILTRATION TRENCH (IT-08), AND THIS WILL PROVIDE WATER TREATMENT TO APPROXIMATELY 0.306 ACRES OF IMPERVIOUS AREA, BUILDING AREA AND TRIBUTARY PORTION OF THE PERVIOUS AREA. THE INFILTRATION RATE IS SUCH THAT THE TRENCH PROVIDES WATER DETENTION AND INFILTRATION AT THE SAME RATE. A 100 YEAR STORM WITH NO OVERFLOW. THE OTHER 50% OF UNTREATED AREA IS SHEET FLOW NATURALLY FLOWING TOWARDS WOODHOLLOW AND NEED NOT HAVE ANY CHANGES FROM EXISTING DRAINAGE PATTERNS AND NO ADDITIONAL IMPERVIOUS AREA. EXISTING CONDITIONS SHOW NO CONCENTRATED FLOW BOUNDS.

FOR LOT 2 APPROXIMATELY 0.375 ACRES OF THE RUNOFF IS CONVEYED TO THE 2 PROPOSED INFILTRATION TRENCHES ON LOT 2 (IT-01) AND (IT-02), AND THIS WILL PROVIDE WATER TREATMENT AND DETENTION TO APPROXIMATELY 0.375 ACRES OF IMPERVIOUS AREA. EACH TRENCH ON LOT 2 REQUIRES 724 CUBIC FEET OF STORAGE, AND SAME CUBIC FEET OF STORAGE IS PROVIDED. THEREFORE, WATER DETENTION FOR 3" ON RUNOFF REQUIREMENT IS MET.

**PHOSPHOROUS REMOVAL CALCULATIONS - LOT 1 "OCOCOQUAN METHOD"**

Impervious Area	Pre	Post	136.7 % Net Increase	
%P Removal	1.0	140.19	139.19	57.1 %
Development	Revolv. W/O Best BMP	[PFM, FAIRFAX COUNTY VA, 2003 6-401.2B1]		
%P Removal Required	40 %			
Area of the site - (A)	0.441 AC			
Surface area design (B)	Designation	C-Factor	Acres	Product
Building area (Controlled)	A1	0.9	0.054 AC	0.046
Paved area (Controlled)	A2	0.9	0.063 AC	0.057
Paved area (Uncontrolled)	A3	0.9	0.021 AC	0.019
Unpaved area (Controlled)	A4	0.25	0.192 AC	0.048
Unpaved area (Uncontrolled)	A5	0.25	0.111 AC	0.028
Weighted average C-Factor	Total	0.441 AC	0.200	(C) = (B) / (A) = 0.471 AC
%P Removal	1 Hr Detention	2 Year Storm		
Subarea Designation	BMP Type	Efficiency	Area Ratio	C-Factor Ratio %P Removal
A1	Infiltration Trench	70%	0.122 AC	1.587 19.9 %
A2	Infiltration Trench	70%	0.143 AC	1.907 19.9 %
A3	None	0%	0.047 AC	1.567 0.0%
A4	Infiltration Trench	70%	0.433 AC	0.532 16.0%
A5	None	0%	0.252 AC	0.252 0.0%
Total %P Removal Required	40.0 %		Total	53.7 %

The phosphorus removal is in compliance with Phosphorus Removal Requirement. Therefore, the design is acceptable.

**PHOSPHOROUS REMOVAL CALCULATIONS - LOT 2 "OCOCOQUAN METHOD"**

Impervious Area	Pre	Post	137.0 % Net Increase	
%P Removal	1-0.3*(10,140,33)	33 %	62.4 %	
Development	Revolv. W/O Best BMP	[PFM, FAIRFAX COUNTY VA, 2003 6-401.2B1]		
%P Removal Required	40.0 %			
Area of the site - (A)	0.439 AC			
Surface area design (B)	Designation	C-Factor	Acres	Product
Building area (Controlled)	A1	0.9	0.065 AC	0.058
Paved area (Controlled)	A2	0.9	0.090 AC	0.076
Paved area (Uncontrolled)	A3	0.9	0.000 AC	0.000
Unpaved area (Controlled)	A4	0.25	0.223 AC	0.056
Unpaved area (Uncontrolled)	A5	0.25	0.067 AC	0.017
Weighted average C-Factor	Total	0.439 AC	0.207	(C) = (B) / (A) = 0.471 AC
%P Removal	1 Hr Detention	2 Year Storm		
Subarea Designation	BMP Type	Efficiency	Area Ratio	C-Factor Ratio %P Removal
A1	Infiltration Trench	70%	0.147 AC	1.910 19.6 %
A2	Infiltration Trench	70%	0.193 AC	1.910 25.0%
A3	None	0%	0.000 AC	1.910 0.0%
A4	Infiltration Trench	70%	0.508 AC	0.531 18.3%
A5	None	0%	0.152 AC	0.531 0.0%
Total %P Removal Required	40.0 %		Total	64.4 %

The phosphorus removal is in compliance with Phosphorus Removal Requirement. Therefore, the design is acceptable.

Advance Engineering Group LLC  
 Civil, Structural & Geotechnical Engineers / Planners  
 701 W. Broad St. Suite 306, Falls Church, VA 22046  
 703-533-1501 Fax: 703-533-1502  
 www.advancegroup.net info@advancegroup.net



MID PINE  
 LOT B2 BLK 1  
 FLOOD BLANKET  
 DRAINAGE DISTRICT #1  
 TAX MAP 040-3(1)-008

PROJECT NUMBER: 11-11-2012  
 PROJECT NO.: 11-11-2012  
 ENG. OF RECORD: A.E.F.  
 ISSUE DATE: 4-23-2012

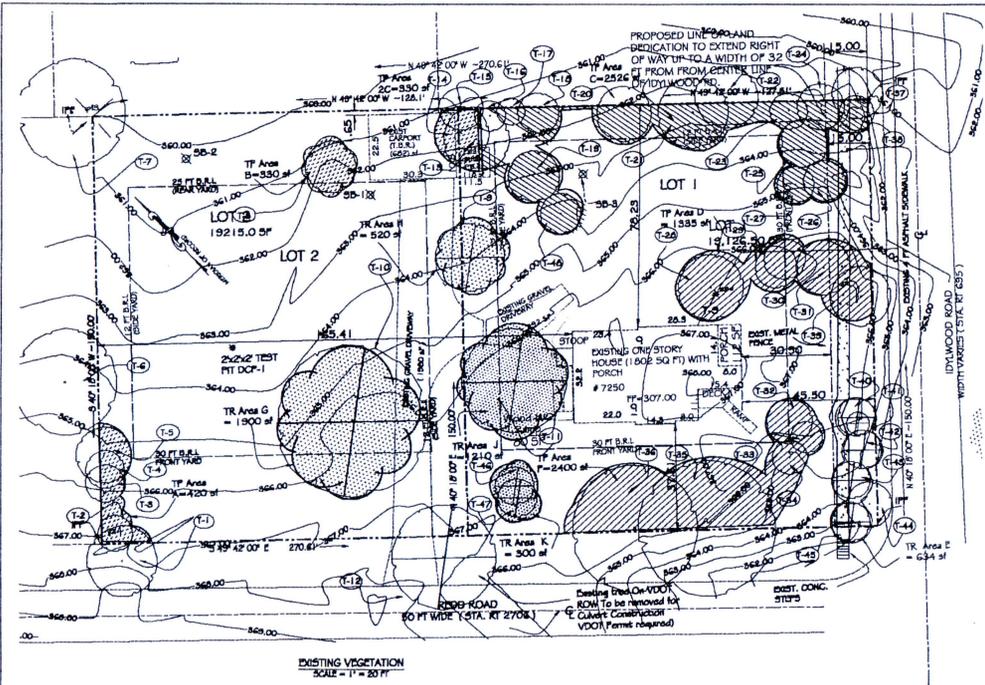
PROJECT MANAGER: A.E.F.  
 PROJECT NO.: 11-11-2012  
 ENG. OF RECORD: A.E.F.  
 ISSUE DATE: 4-23-2012

APPLICANT NO.:  
 SEAL: ALEX S. FERNANDEZ  
 PROFESSIONAL ENGINEER  
 No. 13887  
 10-31-12

NO.	DATE	BY	REMARKS
1	0-07-12	A.E.F.	PER CITY COMMENTS
2	9-26-12	A.E.F.	PER CITY COMMENTS
3	10-25-12	A.E.F.	FINAL DRAINAGE PLAN

824  
 GDP-3  
 SHEET 3 OF 7

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EXISTING VEGETATION

TRUNK AREA CALCULATIONS:

- TP Area A = 420 SF
- TR Area B = 330 SF
- TP Area C = 232.5 SF
- TR Area D = 1335 SF
- TP Area E = 534 SF
- TR Area F = 2100 SF
- TR Area G = 1900 SF
- TP Area H = 1810 SF
- TR Area I = 3000 SF

TOTAL EV = 11,875 SF

VEGETATION TO BE REMOVED

TR Area J = 684 SF

TR Area K = 230 SF

TR Area L = 1810 SF

TR Area M = 3000 SF

TOTAL TR = 4564 SF

VEGETATION TO PRESERVE

EXISTING - REMOVAL = 11,875 - 4564 = 6711 SF

**TREE INVENTORY AND CONSERVATION NARRATIVE**

A. EXISTING YARD VEGETATION COVER CONSISTS OF REMNANTS OF UPLAND FOREST MAINLY OAKS, AMERICAN BEECH AND YELLOW POPLAR OF REGULAR HEIGHT INTERMIXED WITH VEGETATION CORRESPONDING TO THE EARLY SUCCESSIONAL FOREST MAINLY NORWAY MAPLES, LOCUSTS, WALNUTS, DOGWOODS, AMERICAN HOLLY, REDBUDDS, AMERICAN ELM AND OTHER UNDERSTORY TREES INTERMIXED WITH SOME LOWLY TURFGRASSES, REMNANTS OF NATIVE HERACLIUS PLANTS AND SUCH ORIGINAL LAND COVER. ALL TREES IN THE INVENTORY ARE NATIVE AND IN SATISFACTORY CONDITION

B. IN LOT ONE BACK YARD, SOME LANDSCAPED NON NATIVE NURSERY STOCK TREES, AND SHRUBS WERE NOT CONSIDERED IN THE INVENTORY FOR BEING LESS THAN 4" IN CALIPER.

C. FOUR TREES ON THE SURVEY ARE VALLIABLE TREES. (No. T-10, 46 INCH CALIPER TULIP POPLAR, T-11, A 44" CALIPER WHITE OAK, T-34 AND T-35, A 42" AND A 35" CALIPER AMERICAN BEECH TREES) DUE TO LARGE DIAMETER AND CANOPY IN ADDITION TO A HIGH SPECIES RATING. VALLIABLE FOR AIR QUALITY OR WILDLIFE SUPPORT. THE WHITE OAK (T-11) FALLS WITHIN THE DISTANCE AND NORTHWESTERN- SOUTHEASTERN RANGE TO SAVE ENERGY FOR LOT 1

D. FOR LOT 2 ONLY T-3, T-4 AND T-5 FALL WITHIN THE REQUIRED SIMILAR LOCATION FOR ENERGY CONSERVATION CREDIT IF THEY WERE NEW PLANTINGS, BUT IT IS RECOMMENDED TO SAVE THEM FOR THE PROPOSED DEVELOPMENT IN LOT 2

E. TWO TREES IN THIS INVENTORY, CONSIDERED RARE OR ENDANGERED SPECIES WERE FOUND AT THE SITE. T-11 AND T-36 BOTH ARE QUERCUS ALBA. THEIR PRESERVATION IS ENCOURAGED.

F. SOME TREES ON THIS SURVEY ARE CONSIDERED MODERATELY INVASIVE SPECIES. TREES T-39 THROUGH T-45 CONSISTING OF HONEY LOCUSTS OR BLACK LOCUSTS AND NORWAY MAPLES ARE RATED AS SUCH. HOWEVER THEY ARE LOCATED PARALLEL TO IDYLWOOD ROAD RIGHT OF WAY LINE AND FAR FROM THE PROPOSED RE-DEVELOPMENT IMPACT.

G. NO CONSTRUCTION DEBRIS, FILL AND OR OTHER MATERIALS SHALL BE PLACED OR STORED BENEATH THE CANOPY COVER OF PROTECTED TREES OR OUTSIDE OF THE LIMITS OF DISTURBANCE ON APPROVED PLANS

H. VEGETATION TO BE REMOVED SHALL BE APPROVED BY THE COUNTY ARBORIST. TREES MEASURING 1/2 OR MORE IN DIAMETER WITHIN THE 25 FT OF THE PROPOSED LIMITS OF CLEARING THAT DO NOT MEET THE STANDARDS OF STRUCTURAL INTEGRITY BY THE GUIDE FOR PLAT APPRAISAL SHALL BE LABELED IN "POOR CONDITION" AND SHALL BE CONSIDERED FOR REMOVAL AFTER APPROVAL OF THE COUNTY ARBORIST

**TREE INVENTORY**  
7250 IDYLWOOD RD, FAYETTEVA, VA  
Date of site visit: April 25th, 2012  
Carthage Anagnostis Alex E Perennance PE

TREE #	BOTANIC NAME	COMMON NAME	CALIPER (DBH) (inches)	SPECIES RATING (0-100%)	CONDITION RATING (0-100%)	PRESERVE / REMOVE
T-1	Juglans nigra	Black Walnut	27	70	70	Preserve
T-2	Carnea canadensis	Redbud	4	50	60	Preserve
T-3	Juniperus Virginiana	Juniper	9	60	60	Preserve
T-4	Juniperus Virginiana	Juniper	10	60	65	Preserve
T-5	Juglans nigra	Walnut	18	70	65	Preserve
T-6	Prunus Serotina	Black Cherry	22	50	90	Out Of Prop.
T-7	Juglans nigra	Walnut	26	70	70	Out Of Prop.
T-8	Ulmus americana	American Elm	64	70	70	Preserve
T-9	Acer Saccharum	Silver Maple	20	55	70	Remove
T-10	Liquidambar Tulipifera	Tulip Poplar	45	60	75	Remove
T-11	Quercus Alba	White Oak	44	60	70	Remove
T-12	Quercus Prinus	Chestnut Oak	20	60	65	In ROW/Remove
T-13	Juglans nigra	Black Walnut	11	70	40	Preserve
T-14	Ulmus americana	American Elm	17	70	65	Preserve
T-15	Juglans nigra	Walnut	19	70	65	Preserve
T-16	Acer Platanoides	Norway Maple	6	60	65	Preserve
T-17	Cornus Florida	Flowering Dogwood	6	50	60	Preserve
T-18	Cornus Florida	Flowering Dogwood	6+4	50	60	Preserve
T-19	Quercus Rubra	Red Oak	11	60	70	Preserve
T-20	Cornus Florida	Flowering Dogwood	6	50	70	Preserve
T-21	Prunus Serotina	Black Cherry	16	45	65	Preserve
T-22	Quercus Falcata	Southern Red Oak	25	60	70	Out Of Prop.
T-23	Cornus Florida	Flowering Dogwood	2+4+2+3	50	65	Preserve
T-24	Robinia Pseudacacia	Locust	16	50	70	Preserve
T-25	Robinia Pseudacacia	Locust	8+6	50	65	Preserve
T-26	Prunus Serotina	Black Cherry	9	45	65	Preserve
T-27	Prunus Serotina	Black Cherry	6	60	65	Preserve
T-28	Acer Platanoides	Norway Maple	16	60	70	Preserve
T-29	Sassafras Albidum	Sassafras	6	60	70	Preserve
T-30	Sassafras Albidum	Sassafras	6+C	60	70	Preserve
T-31	Prunus Serotina	Black Cherry	10	45	65	Preserve
T-32	Picea strobus	Norway Spruce	9	70	70	Preserve
T-33	Ilex opaca	American Holly	6+5+4+4	60	65	Preserve
T-34	Ilex opaca	American Holly	5+5	60	65	Preserve
T-35	Fagus Grandifolia	American Beech	42	60	60	Preserve
T-36	Fagus Grandifolia	American Beech	35	60	60	Preserve
T-37	Robinia Pseudacacia	Locust	20	50	75	Preserve
T-38	Quercus Alba	White Oak	18	60	65	Preserve
T-39	Acer Platanoides	Norway Maple	15	50	70	Preserve
T-40	Acer Platanoides	Norway Maple	5	50	65	Remove
T-41	Acer Platanoides	Norway Maple	9	50	70	Remove
T-42	Acer Platanoides	Norway Maple	10	50	70	Remove
T-43	Acer Platanoides	Norway Maple	6	50	70	Remove
T-44	Robinia Pseudacacia	Locust	11	40	65	Preserve
T-45	Robinia Pseudacacia	Locust	13	40	60	Remove
T-46	Koeleria paniculata	Golden Ram Tree	6	60	70	Remove
T-47	Koeleria paniculata	Golden Ram Tree	5	60	60	Remove
T-48	Cornus Florida	Flowering Dogwood	6	50	70	Preserve

- Notes:
- Condition and Species Rating are based on trends provided by the Guide for Plant Appraisal published by the International Society of Arborists.
  - All trees indicated so, are to be cleared from the site due to construction impacts.
  - All trees with a minimum DBH, were inventoried and numbered.
  - Out Of Property trees are included due to proximity to Project Land Disturbance Limits
  - Neither the Project Architect or Advanced Engineering Group, LLC considered the implementation of any suggested tree preservation or removal techniques without the agreement/consent of the adjacent property owner or HOA, given the issue of border lines and boundary line trees.
  - Removal of trees on Redd Rd R.O.W will require the contractor to secure VDOT permits.

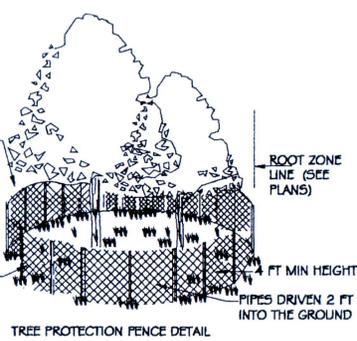
G. TREES T-13, T-14, T-15 AND T-19 (WALNUTS, ELM AND A RED OAK) ARE BEING CLAIMED WITHIN THE TREE CONSERVATION PLANS FOR LOTS 1 AND 2. HOWEVER, DUE TO THE IMMEDIATE PROXIMITY TO THE DEMOLITION OF THE EXISTING CARPORT AND STORAGE SHED, PROBABLY IT IS NOT POSSIBLE TO INSTALL REGULAR TREE PROTECTION FENCE. THIS DEMO WORK WOULD NEED TO BE DONE WITH LIGHT EQUIPMENT AND AS MANUALLY AS POSSIBLE TO MINIMIZE ROOT ZONE DAMAGE.

**PRESERVATION & PROTECTION OF EXISTING VEGETATION**

A. TREES DESIGNATED FOR PROTECTION SHALL RECEIVE ENHANCED LEVEL OF MAINTENANCE THROUGHOUT THE ENTIRE CONSTRUCTION PERIOD. PRESERVE ROOT AND LIMBS PRUNING IN ANY EXCAVATION ENCRDACHING THE CANOPY OF TREES TO BE PRESERVED IN ACCORDANCE WITH PPM PLATE 7-12. PROVIDE TREE PROTECTION FENCE WITHIN 10 FEET OF THE TRUNK OF PRESERVATION TREES BEHIND THE SILT FENCE.

B. VEGETATION TO BE REMOVED SHALL BE APPROVED BY THE COUNTY ARBORIST. TREES MEASURING 1/2 OR MORE IN DIAMETER WITHIN THE 25 FT OF THE PROPOSED LIMITS OF CLEARING THAT DO NOT MEET THE STANDARDS OF STRUCTURAL INTEGRITY BY THE GUIDE FOR PLAT APPRAISAL SHALL BE LABELED IN "POOR CONDITION" AND SHALL BE CONSIDERED FOR REMOVAL BY THE COUNTY ARBORIST'S REQUEST

C. LOCATION AND METHOD OF FOR PROTECTION AND PRESERVATION OF EXISTING TREES SHALL BE APPROVED BY THE COUNTY INSPECTOR PRIOR TO COMMENCEMENT OF GROUND DISTURBING ACTIVITY.



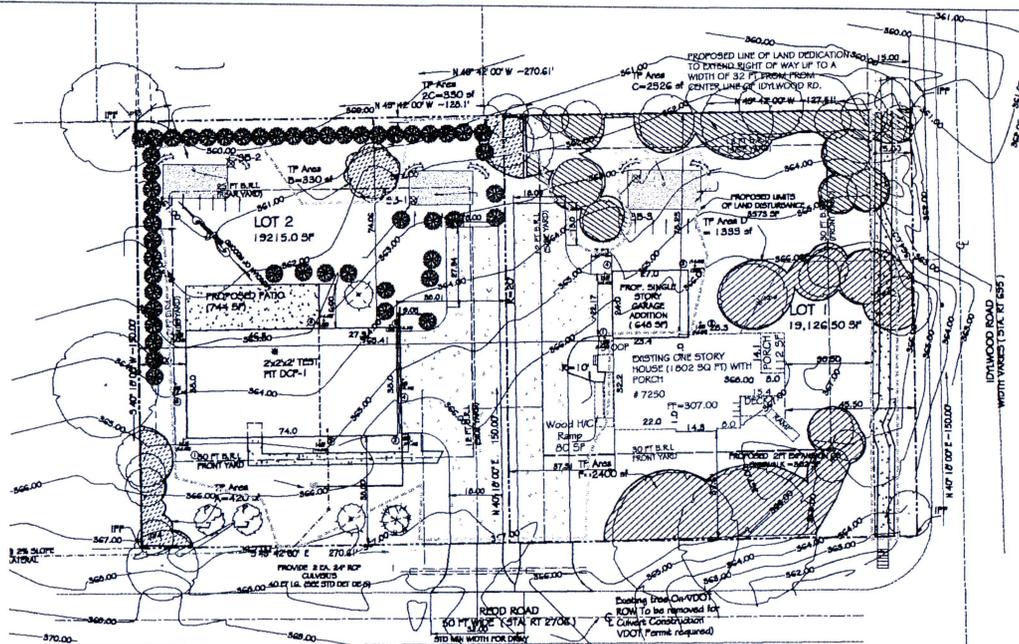
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**MID PIKE LOT 82 B/LK 1 FAYETTE COUNTY DRANESVILLE DISTRICT #1 TAX MAP 040-5-1(1) - 0082**

PROJECT MANAGER: A.E.P.  
PROJECT NO.: 11-VA-054  
DATE OF RECORD: 4-23-2012  
DATE: 10-25-12

REMARKS: PER CITY COMMENTS, PER CITY COMMENTS, INDIVIDUAL DRAINAGE ASSESSED PER SPS

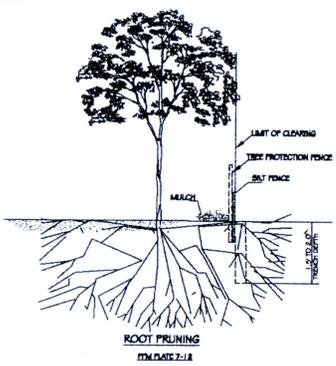
824 GDP-4 SHEET 6 of 7



GENERALIZED DEVELOPMENT PLAN  
SOLE = 11" = 80 FT

TREE PLANTING SCHEDULE										
ID	PLAN SYMBOL	D/E	BOTANICAL NAME	COMMON NAME	CAT	CAL IN	10 YR CANOPY	CREDIT FACTOR	QTY	TOTAL SF
RM	⊕	LD	ACER RUBRUM	RED MAPLE	IV	2"	200 sf	1.50	WL	2 EA 600 sf
OK	⊕	LD	QUERCUS RUBRA	NORTHERN RED OAK	IV	2"	200 sf	1.50	EC	2 EA 600 sf
DY	⊕	LD	PLATANUS OCCIDENTALIS	SYCAMORE	IV	2"	200 sf	1.50	NAT	1 EA 300 sf
PV	⊕	LE	THUJA OCCIDENTALIS	AMERICAN ARBOVITAE	I	6 FT	40 sf	1.00	SO EA	2000 sf
TOTAL = 5500 SF										

LD = LARGE DECIDUOUS MD = MEDIUM DECIDUOUS SO = SMALL DECIDUOUS  
 LE = LARGE EVERGREEN ME = MEDIUM EVERGREEN SE = SMALL EVERGREEN  
 CREDIT CODES: WQ = WATER QUALITY AQ = AIR QUALITY EC = ENERGY CONSERVATION  
 WL = WILD LIFE NAT = VIRGINIA NATIVE



TREE PRESERVATION NARRATIVE

- A. THE SITE IS POPULATED WITH A RANGE OF NATIVE SPECIES OF VALUE. MANY SPECIES ON LOT ONE ARE VALUABLE FOR AIR QUALITY, WILD LIFE, WATER QUALITY, ENERGY CONSERVATION ETC.
- B. EVERY EFFORT SHALL BE MADE TO PROTECT THE TREE PRESERVATION CANOPY SHOWN HEREIN DURING CONSTRUCTION. NO CONSTRUCTION DEBRIS, FILL AND/OR OTHER MATERIALS SHALL BE PLACED OR STORED BENEATH THE CANOPY COVER OF PROTECTED TREES.
- C. VEGETATION TO BE REMOVED SHALL BE APPROVED BY THE COUNTY ARBORIST. TREES ENSURING 1/2" OR MORE IN DIAMETER WITHIN THE 25 FT OF THE PROPOSED LIMITS OF CLEARING THAT DO NOT MEET THE STANDARDS OF STRUCTURAL INTEGRITY BY THE GUIDE FOR PLANT APPRAISAL SHALL BE LABELED IN POOR CONDITION AND SHALL BE CONSIDERED FOR REMOVAL BY THE COUNTY ARBORIST.
- D. PROVIDE, IMPLEMENT AND FOLLOW A TREE CONSERVATION AND PROTECTION PROGRAM THAT IS DEVELOPED TO THE SATISFACTION OF THE COUNTY ARBORIST.
- E. LOCATION AND METHOD OF FOR PROTECTION AND PRESERVATION OF EXISTING TREES SHALL BE APPROVED BY THE COUNTY INSPECTOR PRIOR TO COMMENCEMENT OF GROUND DISTURBING ACTIVITY.
- F. APPLICANT MUST PROVIDE DOCUMENTATION OF COMMUNICATION WITH ADJACENT PROPERTY OWNERS DESCRIBING NOTIFICATION OF CONSTRUCTION IMPACT, POTENTIAL FOR ROOT LOSS, AND AGREED UPON REMEDIAL MEASURES PERTAINING TO THE EXISTING TREES ON ADJACENT PROPERTIES AND WITHIN THE 25 FT LINE OUTSIDE OF THE LIMITS OF DISTURBANCE, FOR INSTANCE T-6, T-7 AND T-22.

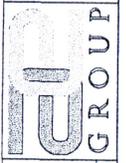
Table 12.3 - Tree Preservation Target Calculation And Statement

A. - Pre-development Area Of Existing Tree Canopy (From Existing Vegetation Map) =	11275
B. - Percentage Of Gross Site Area Covered By Exst. Tree Canopy =	25 %
C. - Percentage Of Ten Year Tree Canopy Required For Site (From Table 12.4) =	25.0 %
D. - Percentage Of Ten Year Tree Canopy Requirement That Should Be Met Through Tree Preservation =	26 %
E. - Proposed Percentage Of Tree Canopy Requirement That Will Be Met Through Tree Preservation =	63 %
F. - Has The Tree Preservation Target Minimum been Met ?	YES
G. - If No: Is a request to deviate from the Tree Preservation Target shall be provided on the plans that states one or more of the justifications listed on Art. 12-0007.5 along with a narrative that provides a site-specific explanation of why the Tree Preservation Target cannot be met. Provide sheet number where deviation request is provided	
H. - If G requires a narrative it shall be prepared in accordance with Article 12-0007.4	
I. - Place the information prior to the Ten Year Canopy Calculations as per instructions on Table 12.12	2610

Table 12.12 10-Year Tree Canopy Calculation Worksheet

Item	Description	Value	Reference
A	Tree Preservation Target and Statement		
A1	Place the Tree Preservation Target Calculations and Statement here preceding the 10 year tree canopy calculations	6221	§ 12-0507.2
<b>B. Tree Canopy Requirements</b>			
B1	Identify Gross Site Area	40591	§ 12-0510.1.A
B2	Subtract area dedicated to parks, road frontage and	0	§ 12-0510.1.B
	Subtract area of Exemptions	40591	§ 12-0510.1.C(1)
B3	Adjusted gross site area (B1-B2) =	40591	§ 12-0510.1.C(2)
B4	Identify site zoning and Outlines =	83	
B5	Percentage of 10 Year Canopy required =	25 %	§ 12-0506.1
B6	Area of 10 Year Canopy required (B4xB5) =	10748	§ 12-0510.1.C.4
B7	Mobilization of the 10 Year Canopy required ?	NO	Yes Or No
B8	If Yes, then list plan sheet where mobilization is requested		Sheet Number
<b>C. Tree Preservation</b>			
C1	Tree Preservation Target Area	6221	
C2	Total Canopy Area Meeting standards §f	6221	
C3	C2 x 1.25 =	10276	§ 12-0506.3b
C4	Total Canopy Area provided by unique or valuable forest or Woodland Communities	0.0	
C5	Total Canopy Area provided by "Heritage", "Monumental", "Special" or "Special" trees =	0	§ 12-0506.3b(1)
C6	C4 x 1.5 to 8.0 =	0	
C7	Canopy Area Of Trees within resource Protection area and 100 Yr Woodlot =	0	
C8	C5 x 1.0 =	0	§ 12-0506.5C(1)
C9	Total of C6, C7, and C8 =	10276	
D1	Area Of Canopy to be Met By Tree Planting (C1-C9) =	0	
D2	Area Of Canopy planted for Air Quality benefits	0	
D3	x 1.5 =	0	§ 12-0510.4B(1)
D4	Area Of Canopy planted for Energy Conservation	400	
D5	x 1.5 =	600	§ 12-0510.4B(2)
D6	Area Of Canopy planted for Water Quality benefits	0	
D7	x 1.25 =	0	§ 12-0510.4B(3)
D8	Area Of Canopy planted for Wildlife benefits	400	
D9	x 1.5 =	600	§ 12-0510.4B(4)
D10	Area Of Canopy provided by Native Trees	200	
D11	x 1.5 =	300	§ 12-0510.4B(5)
D12	Area Of Canopy Provided by Improved Cutovers and Varieties	0	
D13	x 1.25 =	0	§ 12-0510.4B(6)
D14	Area Of Canopy Provided Through Seedlings x 1.0	0	§ 12-0510.4B(1)
D15	Area Of Canopy Provided Through Native Shrubs x 1.0	0	§ 12-0510.4C(1a)
D16	Percentage Of D14 represented by D15	0	Must Not Exceed 35% of D14
D17	Total Of Canopy Area Provided Through Tree Planting	3500	
D18	Is an Offset Planting Ratio Requested ?	NO	Yes Or No?
D19	Tree Bank Or Tree Fund ?	NO	Yes Or No?
D20	Canopy Area Requested To Be Provided Through Offsets Banking Or Tree Fund	0	
D21	Amount To Be deposited into the Tree Preservation and Planting Fund	0	
E	Total Of Ten Year Tree Canopy Provided		
E.1	Total Of Canopy Area Provided Through Tree Preservation = (C-1,C) =	10276	
E.2	Total Of Canopy Area Provided Through Tree Planting = (D-17) =	3500	
E.3	Total Of Canopy Area Provided Through Off-site Mechanisms = (D-18) =	0	
E.4	Total Of Ten Year Canopy Provided = (E.1 + E.2 + E.3) =	13776	

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MID PIKE  
 LOT 82 BLK 1  
 FAIRFAX COUNTY  
 DRANESVILLE DISTRICT #1  
 TAX MAP 040-3-11-0082

PROJECT MANAGER: A.E.F.  
 PROJECT NO.: 11-VA-054  
 DATE OF RECORD: 4-23-2012  
 ISSUE DATE: 4-23-2012  
 ATTACHED NO.:



REMARKS: BY DATE NO. 1 PER CITY COMMENTS: 9-07-12 2 PER CITY COMMENTS: 9-8-12 3 INDIVIDUAL DRAWING ADJUSTED LOT 5/20

## BACKGROUND AND DISCUSSION

The applicant, Christopher and Karen Barth, requests to rezone Tax Map 40-3 ((1)) 82 from the R-2 District to the R-3 District. The applicant intends to subdivide the property into two lots and construct one single family detached dwelling on one of the lots (lot #2). While the existing single family detached dwelling on the property will remain on proposed lot #1 in the near future, provisions have been included in the proffers to allow for future reconstruction..

A staff report was published on November 1, 2012. Staff recommended approval of the application subject to the proffers included in the report. Since that time, the applicant has submitted a revised GDP and associated proffers, which were unable to be evaluated by staff prior to the publication of the staff report on November 1, 2012.

The applicant's revised GDP proposes an alternative development option to supplement the site design evaluated in the original staff report. Specifically, this alternative proposes to subdivide the parcel into two lots such that each lot has its own individual driveway, rather than the shared driveway that was shown on the GDP included in the staff report. The applicant proposes several modifications to the existing GDP in order to accommodate the individual driveways associated with this additional development option, including:

- Lot Sizes, Lot Widths, and Setbacks** (Sheet 2 of GDP): This alternative GDP shifts the lot line that divides the lots to the west to accommodate two individual driveways. As a result, the proposed lot sizes, lot widths, and side yard setbacks to the common property line will differ between the two alternatives. Both lots would continue to meet the lot size, lot width, and setback requirements. The chart below summarizes the differences in lot size, lot width, and side yard setbacks between the two development options.

	<b>Shared Driveway Option</b>	<b>Individual Driveway Option</b>
<b>Lot Size</b>	Lot 1: 18,045 sf (after dedication) Lot 2: 20,296 sf	Lot 1: 19,126 sf (after dedication) Lot 2: 19,215 sf
<b>Lot Width</b>	Lot 1: 120.3 ft Lot 2: 135.3 ft	Lot 1: 127.5 ft Lot 2: 128.1 ft.
<b>Side Setback</b>	Lot 1: 30.1 ft Lot 2: 44.9 ft	Lot 1: 37.3 ft Lot 2: 38.0 ft

- Tree Preservation** (Sheets 6 and 7 of the GDP): Several additional trees would be removed to accommodate the individual driveways in comparison to the shared driveway alternative: two small trees (5 – 6 inch caliper) located near the Redd Road frontage on lot 1 and one large white oak tree (44 inch caliper) located to the west of the existing dwelling on proposed lot 1. Although the applicant's tree preservation calculations shown on sheet 7 the GDP have not been revised to reflect the removal of these trees, supplemental calculations have been provided (Attachment 2)

that indicate that the applicant intends to continue to meet the tree preservation target and tree canopy requirements after the removal of these additional trees. The applicant's revised proffers commit to meeting the tree preservation and tree canopy requirements with the proposed development. This commitment would apply to both the shared driveway and the individual driveway development alternatives.

- **Stormwater** (Sheets 3, 4, and 5 of the GDP): The individual driveway option will increase the impervious area in comparison to the shared driveway option; this will impact the stormwater management calculations. As stated the proffers, the applicant will be required to meet the stormwater management and BMP requirements as determined by DPWES prior to Subdivision Plan approval. This commitment would apply to both development alternatives.

The major changes to the proffers from those in the staff report include:

- **Proffer #1:** Proffer #1 now allows the applicant the flexibility to pursue either the shared driveway GDP (Proffer 1a) or the individual driveway GDP (proffer 1b) at the time of Subdivision Plan.
- **Proffer #6:** The applicant added a sentence that states that prior to subdivision plan approval, stormwater management (SWM), best management practices (BMP) facilities, and adequate outfall shall be provided in accordance with the PFM as determined by DPWES. This would be applicable for both development scenarios.
- **Proffer #13a:** The applicant added a new proffer 13a that states that the applicant shall satisfy the tree preservation and tree canopy requirements of the PFM.
- **Proffer #16:** This proffer stipulates that the applicant shall provide an easement for the common driveway. Because this proffer only impacts the development scenario with the common driveway, the applicant edited this proffer to clarify that it would only apply if the applicant pursues that option.
- **Proffer #18:** The proffers contained in the staff report included a proffer to provide a monetary contribution in lieu of constructing the major paved trail or other alternative discussed in the staff report. Staff's preference is for the applicant to construct the improvement instead of a monetary contribution. As described in the staff report, staff will only support a waiver of the major paved trail requirement if the applicant provides an ADA-compliant 5-foot concrete sidewalk or a 6-foot asphalt path across Lot One's Idylwood Road frontage. The applicant's revised proffers now commit to staff's request.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

The applicant seeks the ability to pursue an alternative development option to construct a driveway on both proposed lots; the GDP included in the staff report depicts a shared driveway. Staff finds that the proposed lot sizes with this alternative remain in character with the adjacent development. Although this alternative will result in the loss of 3 more trees compared to the shared driveway option, the applicant will still be required to meet the tree preservation target and tree canopy requirements of the Public Facilities Manual. Therefore, staff finds that with the changes shown on the GDP and the proposed proffers, the application continues to be in conformance with the Comprehensive Plan and the applicable Zoning Ordinance provisions.

### **Staff Recommendations**

Staff recommends approval of RZ 2012-DR-017 subject to the execution of proffers consistent with the proffers contained in Attachment 1.

Staff recommends approval of a waiver of construction of the sidewalk and road frontage improvements on Redd Road.

Staff recommends approval of a waiver of construction of road frontage improvements on Idylwood Road.

Staff recommends approval of a waiver of the trail requirement along Idylwood Road subject to the construction of a 5-foot wide concrete sidewalk or a 6-foot wide asphalt path in accordance with the Public Facilities Manual across the property's Idylwood Road frontage.

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.

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.

## **ATTACHMENTS**

1. Draft Proffers
2. Revised Tree Preservation and Tree Canopy Calculations

NOV 08 2012

Zoning Evaluation Division

Christopher and Karen Barth  
App # RZ 2012-DR-017  
Proffers  
November 7, 2012

Pursuant to Section 15.2-2303 (a) of The Code of Virginia, 1950, as amended, the undersigned; Christopher and Karen Barth, the Applicants and Owners, for themselves and their successors and assigns (hereinafter referred to as the "Applicant") filed for the rezoning for the property located at Tax Map 40-3-01 Parcel 82 (hereinafter referred to as the "Application Property") hereby agrees to the following Proffers, provided that the Fairfax County Board of Supervisors approves the rezoning of the Application Property to the R-3 Zoning District, as proffered herein.

**1. Substantial Conformance.**

- a. Shared driveway plan:** Subject to the provisions of Section 18-204 of the Fairfax County Zoning Ordinance ("the Ordinance"), development of the Application Property identified on the Fairfax County Tax Map 40-3 ((1)), Parcel 82 shall be in substantial conformance with the Generalized Development Plan ("GDP") entitled Mid Pike Subdivision Lot 82 Block 1 and prepared by Advance Engineering Group, LLC, dated 4-23-2012 as revised through 9-26-2012.
- b. Separate driveway plan:** If at the time of Subdivision Plan the applicant elects to develop the site in substantial conformance with the GDP dated 4-23-2012 as revised through 10-25-2012, then development of the Application Property shall be in substantial conformance with this GDP.

- 2. Minor Modifications.** Minor modifications from the GDP and these Proffers, which may become occasioned as part of the final architectural and engineering design, may be permitted as determined by the Zoning Administrator in accordance with the provisions set forth in Section 18-204 of the Fairfax County Zoning Ordinance.
- 3. Successors and Assigns.** Each reference to Applicant in this Proffer Statement shall include within its meaning, and shall be binding upon, Applicant's successor(s) in interest, assigns, and/or developer(s) of the Application Property or any portion of the Application Property.
- 4. Maximum Density.** A maximum of 2 dwelling units shall be permitted on the Application Property. (1 dwelling per lot after subdivision)
- 5. Zoning Agreement.** While the property is being rezoned to R-3, the Applicant property shall meet all R-2 setback and lot size requirements, other than the density requirement. One exception to R-2 setback requirements is that the Idylwood Road setback measurement shall include the dedicated land. Only 2 single family homes shall be located on the application property, and the homes shall be single family dwellings.
- 6. Storm Water Detention/Water Quality.** The Applicant shall provide stormwater management and stormwater quality facilities as generally depicted on the GDP, subject to the requirements of the Fairfax County Public Facilities Manual. Prior to subdivision plan approval, stormwater management (SWM), best management practice (BMP) facilities, and adequate outfall shall be provided in accordance with the Public Facilities Manual (PFM) as determined by DPWES. The Applicant reserves the right to pursue innovative stormwater detention and water quality measures, subject to the review and approval of Fairfax County DPWES.

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7. **Architecture and Building Materials.** The design and architecture of the approved units shall be in substantial conformance with the illustrative elevation attached as Sheet (2) of the (GDP), or of comparable quality as determined by DPWES. The exterior facade of the new home constructed on the site shall be brick, stone, cementitious siding, vinyl siding, or a combination thereof.
8. **Interior Noise Reduction:** In order to reduce interior noise to a the proposed residential dwelling constructed on lot two, shall employ the following acoustical treatment measures:
  - Exterior walls shall have a laboratory sound transmission class (STC) rating of at least 45.
  - Doors and glazing shall have a laboratory STC rating of at least 34.
  - All surfaces shall be sealed and caulked in accordance with methods approved by the American Society of Testing and Materials to minimize sound transmission.
9. **Energy Efficiency.** The new house on Lot 2 shall be designed and constructed as an ENERGY STAR qualified home. Prior to the issuance of the Residential Use Permit for the new home on Lot 2, documentation shall be submitted to the Environment and Development Review Branch of the Department of Planning and Zoning from a home energy rater certified through the Residential Energy Services network program that demonstrates that the home has attained the ENERGY STAR for homes qualification.
10. **Dedication.** The Applicant shall dedicate and convey in fee simple to the Board of Supervisors right-of-way up to a width of 32 (thirty two) feet from centerline of Idylwood Road as shown on Generalized Development Plan (GDP). Dedication shall occur at the time of subdivision plan approval.
11. **Density Credit.** 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.
12. **Water and Sewer.** The Applicant shall be responsible for constructing all facilities to connect the proposed home on Lot 2 of the Application Property to public water and sewer.
13. **Tree Preservation.**
  - a. **Tree Cover and Tree Preservation in Accordance with PFM.** The applicant shall satisfy the tree preservation and tree canopy requirements of the Public Facilities Manual (PFM) of Fairfax County.
  - b. **Tree Preservation Plan.** The Applicant shall submit a Tree Preservation Plan and Narrative as part of the first and all subsequent subdivision plan submissions. The preservation plan shall be prepared by a professional with experience in the preparation of tree preservation plans, such as a Certified Arborist or Registered Consulting Arborist, and shall be subject to the review and approval of the Urban Forest Management Division, DPWES

The tree preservation plan shall consist of a tree survey that includes the location, species, critical root zone, size, crown spread and condition rating percentage rating of all individual trees 12 inches in diameter and greater located within 25 feet within the undisturbed area and 10 feet of the limits clearing and grading in the disturbed area shown on the GDP for the entire site. The tree preservation plan shall provide for the preservation of those areas shown for tree preservation, those areas outside of the limits of clearing and grading shown on the GDP and those additional areas in which trees can be preserved as a result of final engineering. The condition analysis ratings shall be prepared using methods outlined in the

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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.

- c. **Tree Preservation Walk-Through.** The Applicant shall retain the services of a certified arborist or Registered Consulting Arborist, 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 Registered Consulting Arborist shall walk the limits of clearing and grading with an UFMD, DPWES, representative to determine where adjustments, if any, to the clearing limits can be made to increase the area of tree of tree preservation and/or to increase 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 a little disturbance as possible to adjacent trees and associated understory vegetation and soil conditions.
- d. **Limits of Clearing and Grading.** The Applicant shall conform strictly to the limits of clearing and grading as shown on the GDP, subject to allowances specified in these proffered conditions and for the installation of utilities and/or trails as determined necessary by the Director of DPWES, as described herein. If it is determined necessary to install utilities and/or trails in areas protected by the limits of clearing and grading as shown on the GDP, they shall be located in the least disruptive manner necessary as determined by the UFMD, DPWES. A replanting plan shall be developed and implemented, subject to approval by the UFMD, DPWES, for any areas protected by the limits of clearing and grading that must be disturbed for such trails or utilities.
- e. **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 slit 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 & II erosion and sediment control sheets, as may be modified by the "Root Pruning" proffer below.
- f. All tree protection fencing shall be installed after the three preservation walk-through meeting but prior to any clearing and grading activities, including the demolition of any existing structures. 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 UFMD, DPWES, 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 the UFMD, DPWES.

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- g. **Root Pruning.** The Applicant shall root prune, as needed to comply with the tree preservation requirements of these development conditions. All treatments 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 the UFMD, DPWES, accomplished in a manner that protects affected and adjacent vegetation to be preserved, and may include, but not be limited to the following:
- i. Root pruning shall be done with a trencher or vibratory plow to a depth of 18 inches.
  - ii. Root pruning shall take place prior to any clearing and grading, or demolition of structures.
  - iii. Root pruning shall be conducted with the supervision of a certified arborist.
  - iv. An UFMD, DPWES, representative shall be informed when all root pruning and tree protection fence installation is complete.
- h. **Demolition of existing structures:** At the time of subdivision plan review, the applicant shall submit a narrative that describes how trees adjacent to the existing structures and features to be removed will be protected during demolition activities
- i. **Site Monitoring.** During any clearing or tree/vegetation/structure removal on the Applicant 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 the UFMD. The Applicant shall retain the services of a Certified Arborist or Registered Consulting Arborist to monitor all construction and demolition work adjacent to any vegetation to be preserved and tree preservation efforts in order to ensure conformance with all tree preservation proffers, and UFMD approvals. The monitoring schedule shall be described and detailed in the Landscaping and Tree Preservation Plan, and reviewed and approved by the UFMD, DPWES.
14. **Existing Detached Car Port.** A detached car port currently exists on the Application Property and its footprint rests on both proposed lots. The Applicant shall remove this structure prior to the issuance of the residential use permit (RUP) for the dwelling on Lot 2. The proposed new home on Lot 2 may include an attached garage as shown on the GDP.
15. **Existing Structure on Proposed Lot 1.** Construction of additions or accessory structures, including replacement of existing structures, that conform to the applicable Zoning Ordinance provisions and these proffers, may be permitted without an amendment to these Proffers and the GDP. The applicant may encroach into the limits of clearing and grading shown for lot 1 on the GDP in order to replace the existing dwelling or construct additions or accessory structures, provided that tree preservation and canopy requirements are met.
16. **Common Driveway Easement.** In the event that the applicant elects to develop the site in accordance with Proffer 1A, the Applicant shall grant ingress/egress easements for the benefit of proposed (LOT 1) over the common driveway shown on the (GDP). Said easements shall be the subject of a private maintenance agreement to be recorded at time of subdivision plat approval for the Application Property. Purchasers shall execute a disclosure memorandum at time of contract acknowledging the ingress/egress easement. The homeowners' association documents shall include a disclosure of said easement.
17. **Erosion and Sediment Control.** The applicant shall implement erosion and sediment control measures before and during all construction activities, in accordance with the Public Facilities Manual (PFM) of Fairfax County.

CB/KMB

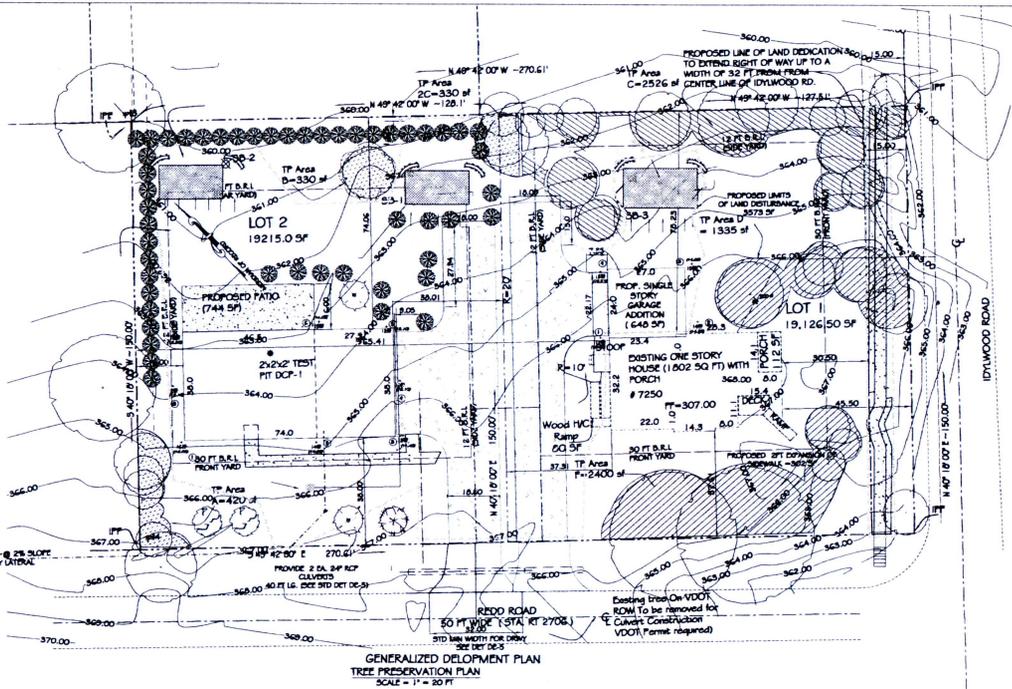
18. **Idylwood Road Sidewalk/Trail Improvements.** In lieu of constructing the required 10 (ten) foot wide trail, the Applicant shall construct either 1) a concrete sidewalk, 5 (five) feet in width or 2) an asphalt shared use path, 6 (six) feet in width extending along the application property's full frontage of Idylwood Road. The sidewalk shall be graded to be ADA compliant.
19. **Park Contribution.** Prior to subdivision plan approval, the Applicant shall contribute \$2,679 to the Fairfax County Park Authority for its use in establishing and maintaining parks and recreational facilities in the Dranesville District of Fairfax County.
20. **Housing Trust Fund Contribution.** Prior to the issuance of the first Building Permit, 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 the new unit approved on the property. The percentage shall be based on the sales price of the unit subject to the contribution and is estimated through comparable sales of similar type units. The projected sales price shall be proposed by the Applicant in consultation with Fairfax County Department of Housing and Community Development (HCD) and shall be approved by HCD and SDID.
21. **Archaeological Study.** Prior to any land disturbing activities on the Application Property, the applicant shall conduct a Phase I archaeological study of the Application Property, and provide the results of such studies to the Resource Management Division of the Fairfax County Park Authority. If deemed necessary by the Resource Management Division, the Applicant shall conduct a Phase II and/or Phase III archaeological study on only those areas of the Application Property identified for further study by the Resource Management Division. The studies shall be conducted by a qualified archaeological professional approved by Resource Management Division, and shall be reviewed and approved by the Resource Management Division. The studies shall be completed prior to subdivision plat recordation.
22. **Culvert Pipe.** Prior to obtaining the VDOT driveway permit, the applicant shall ensure the existing culvert pipe has adequate capacity for the proposed driveway, and if necessary, make the improvements to meet VDOT requirements.
23. **Escalation.** All monetary contributions required by these proffers shall be adjusted upward or downward based on the percentage change in the annual rate of inflation as calculated by referring to the Consumer Price Index for all urban customers, (not seasonally adjusted) as reported by the United States Department of Labor, Bureau of Labor Statics occurring subsequent to the date of rezoning approval and up to the date of payment. In no event shall an adjustment increase exceed the annual rate of inflation as calculated by CPI-U.

 7 NOV 2012

Christopher D. Barth  
Title Owner/Applicant

 7 Nov 12

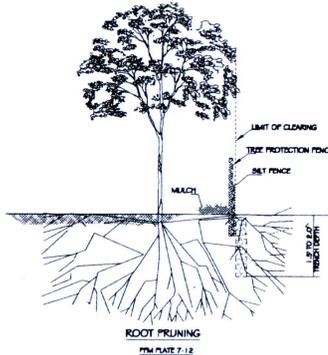
Karen M. Barth  
Title Co-Owner/Co-Applicant



GENERALIZED DEVELOPMENT PLAN  
TREE PRESERVATION PLAN  
SCALE = 1" = 20 FT

TREE PLANTING SCHEDULE											
ID	PLAN SYMB	D	E	BOTANICAL NAME	COMMON NAME	CAT	CAL IN	10 YR CANOPY	CREDIT FACTOR	QTY (EA)	TOTAL SF
RM	(Symbol)	LD		ACER RUBRUM	RED MAPLE	IV	2"	200 sf	1.50	WL	2 EA, 600 sf
OK	(Symbol)	LD		QUERCUS RUBRA	NORTHERN RED OAK	IV	2"	200 sf	1.50	EC	2 EA, 600 sf
SY	(Symbol)	LD		PLATANUS OCCIDENTALIS	SYCAMORE	IV	2"	200 sf	1.50	NAT	1 EA, 300 sf
PV	(Symbol)	LE		THILIA OCCIDENTALIS	AMERICAN ARBOVITAE	I	6 FT	40 sf	1.00	SD EA	2000 sf
TOTAL = 3500 SF											

LD = LARGE DECIDUOUS MD = MEDIUM DECIDUOUS SD = SMALL DECIDUOUS  
 LE = LARGE EVERGREEN ME = MEDIUM EVERGREEN SE = SMALL EVERGREEN  
 CREDIT CODES: WQ = WATER QUALITY AQ = AIR QUALITY EC = ENERGY CONSERVATION  
 WL = WILD LIFE NAT = VIRGINIA NATIVE



TREE PRESERVATION NARRATIVE

- A. THE SITE IS POPULATED WITH A RANGE OF NATIVE SPECIES OF VALUE. MANY SPECIES ON LOT ONE ARE VALUABLE FOR AIR QUALITY, WILD LIFE, WATER QUALITY, ENERGY CONSERVATION ETC.
- B. EVERY EFFORT SHALL BE MADE TO PROTECT THE TREE PRESERVATION CANOPY SHOWN HEREIN DURING CONSTRUCTION. NO CONSTRUCTION DEBRIS, FILL AND/OR OTHER MATERIALS SHALL BE PLACED OR STORED BENEATH THE CANOPY COVER OF PROTECTED TREES.
- C. VEGETATION TO BE REMOVED SHALL BE APPROVED BY THE COUNTY ARBORIST. TREES EXHIBITING 1/2 OR MORE IN DIAMETER WITHIN THE 25 FT OF THE PROPOSED LIMITS OF CLEARING THAT DO NOT MEET THE STANDARD OF STRUCTURAL INTEGRITY BY THE SOURCE FOR PLANT APPRAISAL SHALL BE LABELED IN POOR CONDITION AND SHALL BE CONSIDERED FOR REMOVAL BY THE COUNTY ARBORIST.
- D. PROVIDE, IMPLEMENT AND FOLLOW A TREE CONSERVATION AND PROTECTION PROGRAM THAT IS DEVELOPED TO THE SATISFACTION OF THE COUNTY ARBORIST.
- E. LOCATION AND METHOD OF FOR PROTECTION AND PRESERVATION OF DISTING TREES SHALL BE APPROVED BY THE COUNTY INSPECTOR FROM COMMENCEMENT OF GROUND DISTURBING ACTIVITY.
- F. APPLICANT MUST PROVIDE DOCUMENTATION OF COMMUNICATION WITH ADJACENT PROPERTY OWNERS VERIFYING NOTIFICATION OF CONSTRUCTION IMPACT, POTENTIAL FOR ROOT LOSS, AND AGREED UPON REMEDIAL MEASURES PERTAINING TO THE DISTING TREES ON ADJACENT PROPERTIES AND WITHIN THE 25 FT LINE OUTSIDE OF THE LIMITS OF DISTURBANCE. FOR INSTANCE FIG. 17 AND 1-22.

A. - Pre-development Area Of Disting Tree Canopy (From Existing Vegetation Map) =	11275
B. - Percentage Of Gross Site Area Covered By Dist. Tree Canopy =	26 %
C. - Percentage Of Ten Year Tree Canopy Requested for Site (From Table 12.4) =	25.0 %
D. - Percentage Of Ten Year Tree Canopy Requirement That Should Be Met Through Tree Preservation =	26 %
E. - Proposed Percentage Of Tree Canopy Requirement That Will Be Met Through Tree Preservation =	83 %
F. - Has The Tree Preservation Target Minimum been Met? =	YES
G. - If No: Is a request to deviate from the Tree Preservation Target shall be provided on the plans that states one or more of the justifications listed on Art. 12-0507.3 along with a narrative that provides a site-specific explanation of why the Tree Preservation Target cannot be met. Provide sheet number where deviation request is provided =	
H. - If G requires a narrative it shall be prepared in accordance with Article 12-0507.4 =	
I. - Place this information prior to the Ten Year Canopy Calculations as per instructions on Table 12.12 =	2619

7250 IDYWOOD RD, FAIRFAX, VA  
 Date of site visit: March 20th, 2012

Step	A. - Tree Preservation Target and Statement	Totals	Reference
A1	Place the Tree Preservation Target Calculations and Statement here preceding the 10 year tree canopy calculations	2619	§ 12-0507.2
<b>B. Tree Canopy Requirements</b>			
D1	Identify Gross Site Area	40599	§ 12-0510.1.1
D2	Subtract area dedicated to parts, road frontage and	NA	§ 12-0510.1.2
D3	Subtract area of Dismptions	40599	§ 12-0510.1.2 to § 12-0510.1.4
D4	Adjusted gross site Area (D1-D2) =		
D5	Identify site Zoning and Ordinance =	R3	
D6	Percentage of 10 Year Canopy required =	25 %	§ 12-0509.1 and Table § 12
D7	Area Of 10 Year Canopy required (D4x D5) =	10140	
D8	Modification of the 10 Year Canopy requested? =	NO	Yes Or No
D9	If Yes, then list plan sheet where modification is requested		Sheet Number

<b>C. Tree Preservation</b>			
C1	Tree Preservation Target Area	6711	
C2	Total Canopy Area Meeting standards of § 12-0509	6711	
C3	Total Canopy Area Meeting standards of § 12-0509.3E	6368	§ 12-0509.3E
C4	Total Canopy Area provided by unsplit or visible forest or Woodland Communities		
C5	Total Canopy Area provided by "Heritage", "National", "Species" or "Street" trees =	0	§ 12-0509.3B, C4x1.5 =
C6	C5 x 1.5 to 3.0 =	0	§ 12-0509.3B
C7	Canopy Area Of Trees within resource Protection area and 100' W Roadside	0	
C8	C6 x 1.0 =	0	§ 12-0509.3C
C9	Total of C3, C5, C7 and C8 =	6368	

D1	Area Of Canopy to be Met By Tree Planting (D7-C1) =	1759
D2	Area Of Canopy planted for Air Quality benefits	0
D3	+ 1.5 =	0
D4	Area Of Canopy planted for Energy Conservation	400
D5	+ 1.5 =	600
D6	Area Of Canopy planted for Water Quality benefits	0
D7	+ 1.25 =	0
D8	Area Of Canopy planted for Wildlife Benefits	400
D9	+ 1.5 =	600
D10	Area Of Canopy provided by Native Trees	200
D11	+ 1.5 =	300
D12	Area Of Canopy provided by Improved Cultivars and Varieties	0
D13	+ 1.25 =	0
D14	Area Of Canopy Provided Through Seedlings x 1.0	0
D15	Area Of Canopy Provided Through Native Shrubs x 1.0	0
D16	Percentage Of D14 represented by D15	0
D17	Total Of Canopy Area Provided Through Tree Planting	3500
D18	Is an Official Planting Retail Requested?	NO
D19	Tree Bank Or Tree Fund?	NO
D20	Canopy Area Requested To Be Provided Through Offsite Banking Or Tree Fund	0
D21	Amount To Be deposited into the Tree Preservation and Planting Fund	0

E.1	Total Of Ten Year Tree Canopy Provided	
E.2	Total Of Canopy Area Provided Through Tree Preservation = (C-1) =	6368
E.3	Total Of Canopy Area Provided Through Tree Planting = (D-17) =	3500
E.4	Total Of Canopy Area Provided Through Offsite Mechanism = (D-19) =	0
E.5	Total Of Ten Year Canopy Provided = (E.1 + E.2 + E.3) =	11609

Advance Engineering Group LLC  
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 703-533-1581 Fax: 703-533-1582  
 www.advanceengr.com info@advanceengr.com



MID PIKE  
 LOT 82 BLK 1  
 FAIRFAX COUNTY  
 DRANESVILLE DISTRICT #1  
 TAX MAP 04C-3-1(1) - 0082

PROJECT MANAGER: A, E, F  
 PROJECT NO.: 1111111111  
 DATE OF REVISION: 4/23/2012  
 APPLICANT NO.:  
 ALEX R. FERNANDEZ  
 PROFESSIONAL ENGINEER  
 No. 19287

NO. DATE BY REMARKS  
 1 4-07-12 A, E, F PER CITY COMMENTS  
 2 9-26-12 A, E, F PER CITY COMMENTS  
 3 10-25-12 A, E, F INDIVIDUAL DROWNS ADJUSTED LOT 5000

824  
 GDP-5  
 SHEET 7 OF 7