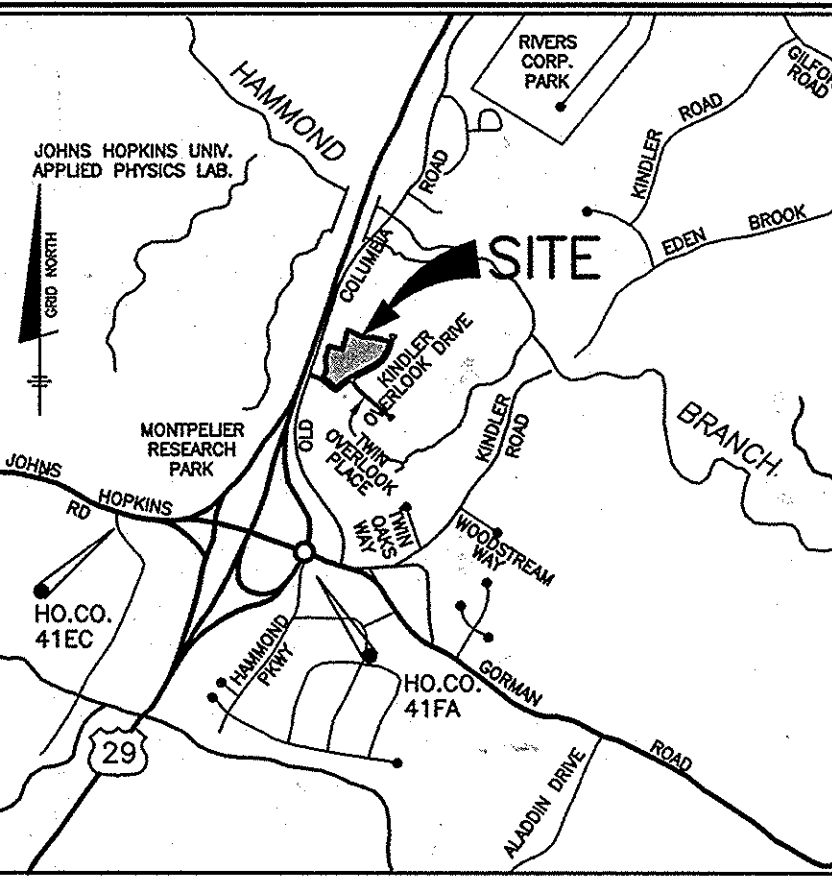


BENCH MARKS—(NAD'83)
 HO.CO. 41EC ELEV. 430.34
 STAMPED DISC SET ON TOP OF
 3" DEEP COLUMN OF CONCRETE
 N 543,588.8040 E 1,342,828.7800
 HO.CO. 41FA ELEV. 407.80
 STAMPED DISC SET ON TOP OF
 3" DEEP COLUMN OF CONCRETE
 N 545210.7590' E 1344786.9530'



ADC MAP: 32 VICINITY MAP
 GRID: E8 SCALE: 1" = 2000'

- LEGEND**
- EXISTING CONTOURS
 - PROPOSED CONTOURS
 - EXISTING TREELINE
 - SOIL DELINEATION AND GROUP
 - SUPER SILT FENCE
 - LIMIT OF DISTURBANCE
 - STABILIZED CONSTRUCTION ENTRANCE
 - EROSION CONTROL MATTING
 - EXISTING STREET TREE PER F-07-003
 - SLOPES > 25%
 - SLOPES 15% - 25%
 - WETLANDS
 - EXISTING SPECIMEN TREE

SEQUENCE OF CONSTRUCTION

NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF CONSTRUCTION

1. OBTAIN GRADING PERMIT. (DAY 1)
2. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND SUPER SILT FENCE. (DAY 2-4)
3. UPON APPROVAL OF HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, CLEAR AND GRUB REMAINDER OF SITE. (DAY 5-16)
4. BRING SITE TO GRADE. (DAY 17-31)
5. UPON APPROVAL OF THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL DEVICES, AND STABILIZED DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDED NOTES. (DAY 32-34)

SEDIMENT CONTROL NOTES:
 1. SEDIMENT CONTROLS SHOWN ARE CONCEPTUAL IN NATURE. DETAILED SWALE COMPUTATIONS, SEDIMENT CONTROL NOTES AND DETAILS WILL BE PROVIDED ON THE FINAL CONSTRUCTION AND SITE DEVELOPMENT PLANS.
 2. ON-SITE STORMWATER MANAGEMENT FACILITIES SHALL BE CONSTRUCTED UNDER THE SITE DEVELOPMENT PLAN. NO PUBLIC FACILITIES ARE PROPOSED FOR THIS DEVELOPMENT.

GENERAL NOTES

1. SUBJECT PROPERTY ZONED R-20 PER THE COMPREHENSIVE ZONING PLAN EFFECTIVE 10-6-2013.
2. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS EFFECTIVE APRIL 13, 2004.
3. PROJECT BOUNDARY AND TOPOGRAPHY WITHIN THE SUBDIVISION AREA ARE BASED ON FIELD RUN BOUNDARY SURVEY AND TOPO PERFORMED BY BENCHMARK ENGINEERING, INC., MARCH, 2015.
4. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM, OR THEIR REQUIRED BUFFERS UNLESS DEEMED NECESSARY BY THE DEPARTMENT OF PLANNING AND ZONING.
5. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERIES LOCATED ON THIS SITE.
6. THE FOREST CONSERVATION ACT OBLIGATION FOR THIS PROJECT WILL BE ADDRESSED ON-SITE WITHIN OPEN SPACE LOT 9, WHICH WILL BE DEDICATED TO HOWARD COUNTY RECREATION AND PARKS. THE FOREST CONSERVATION WILL BE FURTHER REVIEWED WITH THE SUBMISSION OF THE SUBDIVISION PLAN FOR THIS PROJECT.
7. THERE ARE STEEP SLOPES (25% OR GREATER) WITHIN THE OPEN SPACE AREA OF THE SITE.
8. A WETLAND DELINEATION AND FOREST STAND DELINEATION HAVE BEEN PERFORMED BY ECO-SCIENCE PROFESSIONALS AND A REPORT DATED APRIL, 2015 HAS BEEN SUBMITTED WITH THIS ENVIRONMENTAL CONCEPT PLAN.
9. PREVIOUS DPZ FILES: NONE
10. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN, SITE DEVELOPMENT PLAN, OR GRADING OR BUILDING PERMIT PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION, SITE DEVELOPMENT PLAN, OR GRADING AND BUILDING PERMIT STAGES. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.

SPECIMEN TREE CHART				
KEY	SPECIES	SIZE (IN DBH)	CRZ (FT RADIUS)	CONDITION - COMMENTS
1	BLACK OAK	33	49.5	POOR - SEVERE LIMB DIEBACK-POSSIBLE REMOVE
2	TULIP POPLAR	32.5	48.75	GOOD - POSSIBLE REMOVAL
3	RED OAK	35	52.5	GOOD - RETAIN
4	TULIP POPLAR	30.54	45.75	GOOD - RETAIN
5	RED OAK	33	49.5	FAIR - LIMB DIEBACK NOTED - RETAIN
6	TULIP POPLAR	32.5	48.75	GOOD - RETAIN
7	TULIP POPLAR	35	52.5	GOOD - RETAIN
8	TULIP POPLAR	30.54	45.75	GOOD - RETAIN
9	TULIP POPLAR	33	49.5	GOOD - POSSIBLE REMOVAL
10	BLACK OAK	32.5	48.75	GOOD - RETAIN
11	RED OAK	35	52.5	POOR - BROKEN/MISSING BRANCHES - RETAIN
12	TULIP POPLAR	30.54	45.75	GOOD - MULTI STEMMED ABOVE BREAST - RETAIN
13	WHITE OAK	33	49.5	GOOD - RETAIN

DESIGN NARRATIVE:

The site was analyzed as woods in good condition and a target RCN was determined. A target rainfall depth treatment (Pe) was determined based on the measured impervious areas and HSG soil types. The target Pe for this site is 1.2 inches. The target Pe was treated using Environmental Site Design practices as outlined in Chapter 5 of the 2000 Maryland Stormwater Design Manual, as amended by Maryland's Stormwater Management Act of 2007. The selected methods include Micro-bioretenion (M-6), Dry Wells (M-5), and Non-roof-top Disconnections (N-2).

This site is a wooded parcel in a currently developing area. To protect the natural resources in the area, it is important to delay release of stormwater runoff from new impervious areas to avoid increasing peak runoffs, and to adequately treat the stormwater to avoid damage to sensitive species. The design incorporates a dry well and micro-bioretenion facilities to treat stormwater runoff and to delay stormwater release. The outfalls for the facilities will discharge to stabilized, undisturbed areas. The multiple release points help to mimic the natural flow of drainage.

Forest resources will be protected by providing as much on-site retention as possible within an open space lot which will be dedicated to Howard County Recreation and Parks. Although the on-site forest cannot be placed within an easement, there will also be significant forest stand retained on the lots (just under one acre) which will be adjacent to the forest easement, and will allow additional habitat. Steep slopes are being protected by retaining forest in the slope areas, which are not included in the development area. Water resources are being protected by keeping streams, wetlands and their buffers outside of the development area.

Sediment and erosion controls have been designed based on the 2011 Maryland Specifications for Soil Erosion and Sediment Control. Erosion control matting and super silt fence will be used to prevent runoff containing unacceptable levels of TSS from leaving the site and entering the adjacent stream and wetlands during the construction. It will be the obligation of the contractor to install, inspect and maintain these practices.

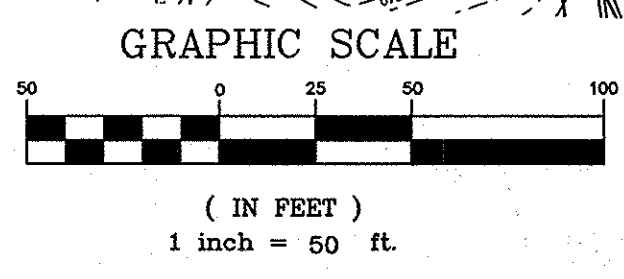
The target Pe for this site is 1.2 inches. By using Environmental Site Design practices as outlined in Chapter 5 of the 2000 Maryland Stormwater Design Manual as amended by Maryland Stormwater Management Act of 2007, full treatment of the target Pe of 1.2 was achieved, fully addressing the stormwater management requirements.

A Waiver Petition will be submitted requesting approval to remove up to three specimen trees. A design manual waiver will be required to authorize units without collar sewer service.

SITE ANALYSIS DATA/TABULATION

A) TOTAL PROJECT AREA.....	5.18 ± AC.
B) AREA OF WETLANDS AND BUFFER.....	0.44 ± AC.*
C) AREA OF 100-YR. FLOODPLAIN AND BUFFER.....	0.00 ± AC.
D) AREA OF FOREST.....	4.50 ± AC.
E) AREA OF STEEP SLOPES 15% - 24.99%.....	0.83 ± AC.*
F) AREA OF STEEP SLOPES 25% OR GREATER.....	0.23 ± AC.*
G) AREA OF DEDICATION.....	0.00 ± AC.
H) ERODIBLE SOILS.....	0.71 ± AC.*
I) AREA OF PLAN SUBMISSION.....	5.18 ± AC.
J) LIMIT OF DISTURBED AREA.....	2.27 ± AC.
K) GREEN OPEN AREA.....	1.23 ± AC.
L) PRESENT ZONING DESIGNATION.....	R-20
M) PROPOSED USES FOR THE SITE: SINGLE FAMILY DETACHED.....	17.0%

* THE HIGHLY ERODIBLE SOILS, WETLANDS AND THEIR BUFFERS AND SLOPES > 25% ARE ENTIRELY OUTSIDE OF THE PROPOSED DEVELOPMENT AREA.



SOILS LEGEND

SYMBOL	TYPE	K* FACTOR	NAME
BaA	D	.37**	BAILE SILT LOAM - 0 TO 3 PERCENT SLOPES
GgC	B	.28	GLENELG LOAM - 8 TO 15 PERCENT SLOPES - MODERATELY ERODED
McC	B	.28	MANOR LOAM - 8 TO 15 PERCENT SLOPES
McD	B	.28	MANOR LOAM - 15 TO 25 PERCENT SLOPES

SOILS TAKEN FROM NRC'S WEB SOIL SURVEY, MARCH, 2015, SOIL SURVEY SHEET 23
 *WHOLE SOIL K FACTOR
 **HIGHLY ERODIBLE SOILS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature] 6-24-15
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

[Signature] 6-30-15
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

BENCHMARK ENGINEERING, INC.
 8480 BALTIMORE NATIONAL PIKE & SUITE 315 & ELICOTT CITY, MARYLAND 21043
 (P) 410-465-6105 (F) 410-465-6644
 WWW.BE-CIVLENGINEERING.COM

STATE OF MARYLAND
[Signature]
 PROFESSIONAL ENGINEER
 LICENSE NO. 28376
 EXPIRATION DATE: 1-1-2017

OWNER: SUSAN JOHNS SMITH (AKA SUSAN J. SLAMA) 7570 KINDLER OVERLOOK DRIVE LAUREL, MD 20723 301-490-0388	PROJECT: KINDLER OVERLOOK III LOTS 1-8, OPEN SPACE LOT 9 AND NON-BUILDABLE LOT 10 7570 KINDLER OVERLOOK DRIVE
DEVELOPER: DEVELOPMENT PARTNERS, LLC 11807 WOLLINGFORD CT CLARKSVILLE, MARYLAND 21029 301-490-0388	LOCATION: TAX MAP: 41 PARCEL: 245 GRID: 18 ZONED: R-20 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
DESIGN: AAM DRAFT: AAM CHECK: CAM	TITLE: ENVIRONMENTAL CONCEPT PLAN
DATE: APRIL, 2015 PROJECT NO. 2658 JUNE, 2015	SCALE: 1" = 50' SHEET 1 OF 1