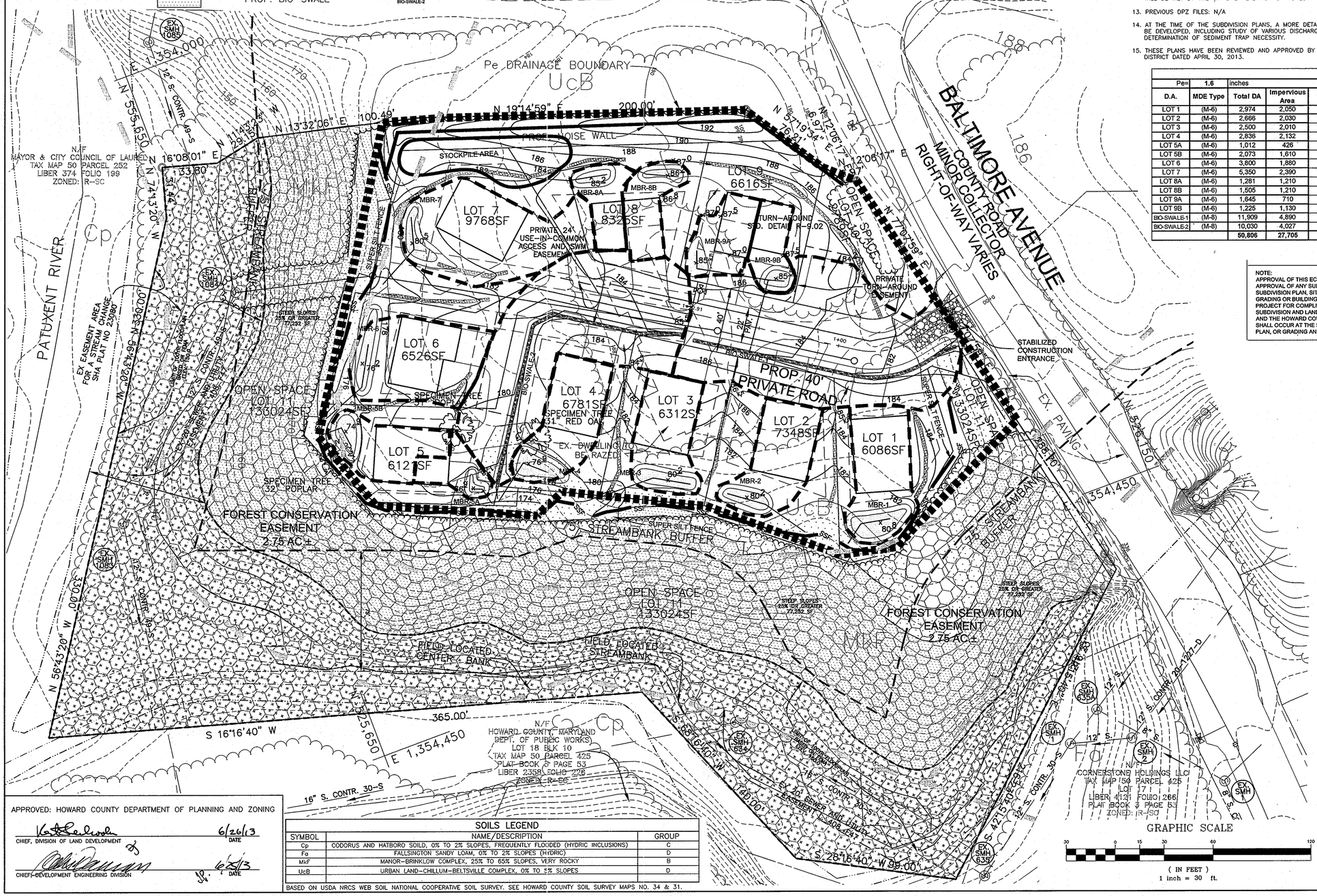
LEGEND

EXISTING CONTOURS	452 / 450
EXISTING TREELINE	
PROPOSED TREELINE	
EXISTING STREAM	
EXISTING STREAM BUFFER	
APPROXIMATE 100 YEAR FLOODPLAIN LIMITS	
EXISTING STRUCTURE	
PROPOSED STRUCTURE	
SLOPES 25% OR GREATER	
SLOPES 15% TO 24.9%	
SOIL DELINEATION	
SOILS DELINEATION	GnA
ESD DRAINAGE AREA	
100 YEAR FLOODPLAIN	
EROSION CONTROL MATTING	
SUPER SILT FENCE	SSF
FOREST CONSERVATION EASEMENT	
PROP. MICRO-BIORETENTION FACILITY	MBR-6
PROP. BIO-SWALE	BIO-SWALE-2



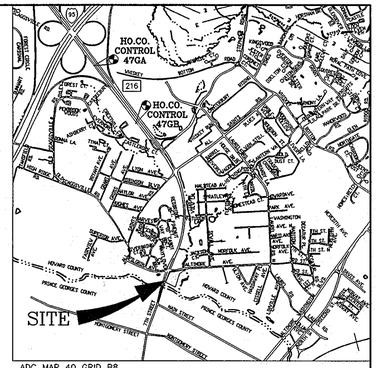
SITE ANALYSIS DATA/TABULATION

A) TOTAL PROJECT AREA..... 4.9± AC.
B) AREA OF WETLANDS AND BUFFER..... N/A
C) AREA OF 100-YR. FLOODPLAIN..... 1.4± AC.
D) AREA OF EXISTING FOREST..... 3.0± AC.
E) AREA OF STEEP SLOPES 25% OF GREATER... 1.2± AC. (OUTSIDE FLOODPLAIN)
F) NET AREA OF SITE..... 2.3± AC.
G) AREA OF MODERATE SLOPES 15% TO 25%... 1.3± AC.
H) HIGHLY ERODIBLE SOILS (K> 0.35) ..... 2.0± AC. (0.2± AC. OUTSIDE STEEP SLOPES AND FLOODPLAIN)
I) NUMBER OF UNITS ALLOWED ..... 9 (2.3± AC.*4)
J) NUMBER OF RESIDENTIAL UNITS PROPOSED... 9
K) AREA OF PLAN SUBMISSION..... 1.8± AC.
L) LIMIT OF DISTURBED AREA..... 2.0± AC.
M) OPEN SPACE REQUIRED..... 1.2 AC. OR 25%

N) OPEN SPACE PROVIDED..... 3.1 AC OR 63%
O) PRESENT ZONING DESIGNATION..... R-SC
P) PROPOSED USE..... SINGLE FAMILY DWELLING
Q) IMPERVIOUS COVER..... 0.6± AC.

GENERAL NOTES

1. SUBJECT PROPERTY ZONED R-SC PER THE 2-2-04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING AMENDMENTS EFFECTIVE 7-28-06.
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. TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY 2008 GIS AND ARE 2' INTERVALS.
4. THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY MONUMENT NOS. 47GA AND 47GB WERE USED FOR THIS PROJECT.
5. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE STREAMS, OR THEIR REQUIRED BUFFERS AND FLOODPLAIN UNLESS DEEMED NECESSARY BY THE DEPARTMENT OF PLANNING AND ZONING. THE SEWER CROSSING AT THE FLOODPLAIN HAS BEEN CONSIDERED AN ESSENTIAL DISTURBANCE BY DPZ.
6. THERE ARE STEEP SLOPES (25% OR GREATER) IN EXCESS 20,000 S.F. ON THIS SITE.
7. A FOREST STAND DELINEATION AND WETLANDS CERTIFICATION WAS PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. THERE ARE NO WETLANDS ON THIS SITE.
8. FLOODPLAIN BASED ON FEMA AT ELEVATION 150.0.
9. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO CEMETERIES LOCATED ON THIS SITE.
10. A NOISE STUDY WAS PREPARED BY BENCHMARK ENGINEERING, INC.
11. THIS SITE IS LOCATED WITHIN THE METROPOLITAN DISTRICT.
12. THE FOREST CONSERVATION ACT IT IS ANTICIPATED THAT THE OBLIGATION FOR THIS PROJECT WILL BE MET BY THE ON-SITE RETENTION OF FOREST.
13. PREVIOUS DPZ FILES: N/A
14. AT THE TIME OF THE SUBDIVISION PLANS, A MORE DETAILED SEDIMENT CONTROL PLAN SHALL BE DEVELOPED, INCLUDING STUDY OF VARIOUS DISCHARGE AREAS, AND MORE COMPLETE DETERMINATION OF SEDIMENT TRAP NECESSITY.
15. THESE PLANS HAVE BEEN REVIEWED AND APPROVED BY THE HOWARD SOIL CONSERVATION DISTRICT DATED APRIL 30, 2013.



VICINITY MAP

SCALE : 1"=2000'

SWM SUMMARY TABLE

Pe=	1.6	inches												
					Af				ESDv			REv		
D.A.	MDE Type	Total DA	Impervious Area	Qe	Required	Provided	2% DA	Depth	Required	Provided	75% ESDv	Required	Provided
LOT 1	(M-6)	2,974	2,050	1.07	317	382	PASS	2.0	377	382	PASS	REV requirement capacity	26
LOT 2	(M-6)	2,666	2,030	1.18	284	219	PASS	2.0	261	219	PASS		15
LOT 3	(M-6)	2,500	2,010	1.24	267	286	PASS	2.0	258	286	PASS		19
LOT 4	(M-6)	2,836	2,132	1.16	303	308	PASS	2.0	275	308	PASS		21
LOT 5A	(M-6)	1,012	426	0.69	108	50	PASS	2.0	58	50	PASS		3
LOT 5B	(M-6)	2,073	1,610	1.20	221	231	PASS	2.0	207	231	PASS		16
LOT 6	(M-6)	3,800	1,880	0.79	405	314	PASS	2.0	251	314	PASS		21
LOT 7	(M-6)	5,350	2,390	0.72	571	257	PASS	2.0	322	257	PASS		17
LOT 8A	(M-6)	1,281	1,210	1.44	137	130	PASS	2.0	154	130	PASS		9
LOT 8B	(M-6)	1,505	1,210	1.24	161	130	PASS	2.0	155	130	PASS		9
LOT 9A	(M-6)	1,645	710	0.70	175	88	PASS	2.0	96	88	PASS		6
LOT 9B	(M-6)	1,225	1,130	1.41	131	131	PASS	2.0	144	131	PASS		9
BIO-SWALE-1	(M-8)	11,909	4,890	0.67	238	320	PASS	2.0	666	640	PASS		11
BIO-SWALE-2	(M-8)	10,030	4,027	0.66	201	388	PASS	2.0	550	970	PASS		11
		50,806	27,705		3,518	3,234			3,774	4,136		161	194

NOTE:
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.

DESIGN NARRATIVE

The subject property is located at the north east corner of the intersection of MD Route 216 and Baltimore Avenue. The site is zoned R-SC and consists of 4.9 acres. There is an existing residence on the property that is to be razed. The site is mostly wooded with a stream running along the eastern edge of the property draining into the Patuxent River to the south of the property. There is a floodplain associated with both streams. Slopes are moderate within the area of the existing dwelling with steep slopes to the existing streams. The onsite soils are predominantly 'D' soils. We are proposing a private road with minimum length and a use-in-common access to reduce impervious areas.

The submission is limited to approximately 2.0 acres to protect onsite natural resources. The site proposes 9 single family lots (6,000 sf to 8,000 sf) with access to the site off Baltimore Avenue. Several private on-lot micro-bioretention facilities are proposed for lots with bio-swales for the proposed roads. With the use of private onsite micro-bioretention facilities there will be limited disturbances to areas outside of the lots grading.

As a result of addressing the stormwater management by use of ESDs (12 on-lot Micro-bioretention facilities and 2 bio-swale areas) to the MEP the land conditions have theoretically been returned to woods in good condition and therefore reduced the overall run-off for the 1-year storm. Therefore, no additional analysis is required.

Sediment and erosion control shall comply with the latest edition of the MDE Standards and Specifications for Sediment Control and has been limited to the areas necessary to conduct ESD practices and onsite functionality.

It is concluded that all ESD to the MEP requirements as defined in the Stormwater Management Act of 2007 have been met for the proposed development. The Water Quality has been provided by the implementation of two (12) on-lot micro-bioretention facilities (M-6) and bio-swales (M-8) to treat all of the proposed impervious onsite. Each facility discharges on lot to maintain natural flow.

A waiver for the removal of the 3 specimen trees within the limit of disturbance will be submitted.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DIVISION OF LAND DEVELOPMENT	DATE 6/26/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE 6/25/13

SOILS LEGEND

SYMBOL	NAME/DESCRIPTION	GROUP
Cp	CODORUS AND HATBORO SOILD, 0% TO 2% SLOPES, FREQUENTLY FLOODED (HYDRIC INCLUSIONS)	C
Fa	FALLSINGTON SANDY LOAM, 0% TO 2% SLOPES (HYDRIC)	D
MkF	MANOR-BRINKLOW COMPLEX, 25% TO 65% SLOPES, VERY ROCKY	B
UcB	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX, 0% TO 5% SLOPES	D

BASED ON USDA NRCS WEB SOIL NATIONAL COOPERATIVE SOIL SURVEY. SEE HOWARD COUNTY SOIL SURVEY MAPS NO. 34 & 31.

BENCHMARK
ENGINEERS ▲ LAND SURVEYORS ▲ PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE ▲ SUITE 418 ▲ ELLICOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
60 THOMAS JOHNSON DRIVE ▲ FREDERICK, MARYLAND 21702
(P) 301-371-3505 (F) 301-371-3506
WWW.BEI-CIVILENGINEERING.COM

Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 28606, Expiration Date: 7.22.13.

STATE OF MARYLAND — BRIAN F. CLEARY — No. 28606 — PROFESSIONAL ENGINEER — 6/10/2013

OWNER:
BOY FAMILY, LLC
11807 WOLLINGFORD COURT
CLARKSVILLE, MD 21029
410-792-2565

DEVELOPER:
BOY FAMILY, LLC
11807 WOLLINGFORD COURT
CLARKSVILLE, MD 21029
410-792-2565

9801 BALTIMORE AVENUE

PATUXENT OVERLOOK

LOTS 1-9 AND OPEN SPACE LOTS 10 & 11

TAX MAP 50, GRID 02, PARCELS 257
6th ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

ENVIRONMENTAL CONCEPT PLAN

DATE:	JUNE 2013	BEI PROJECT NO.	1583
SCALE:	1"=30'	SHEET	1 OF 1

ECP-13-065

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