

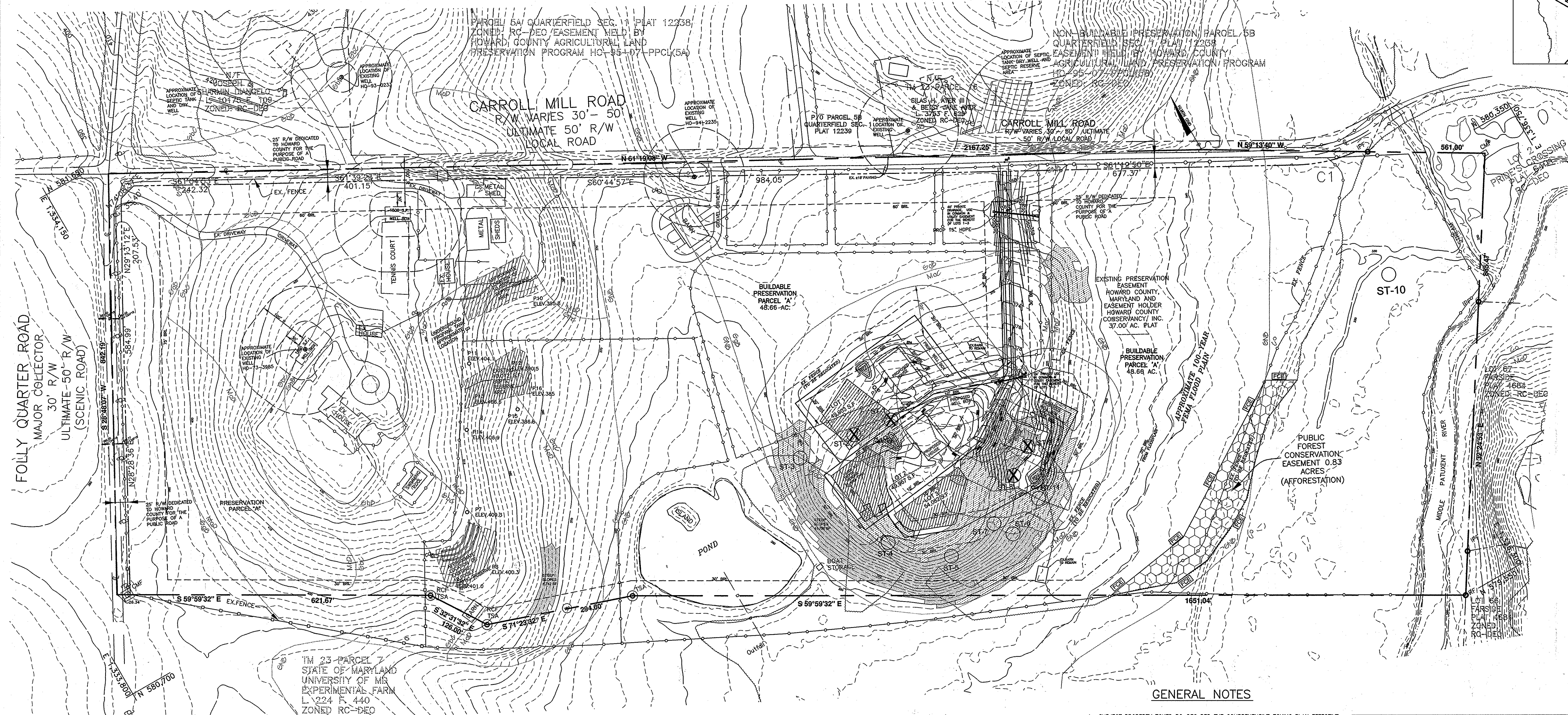
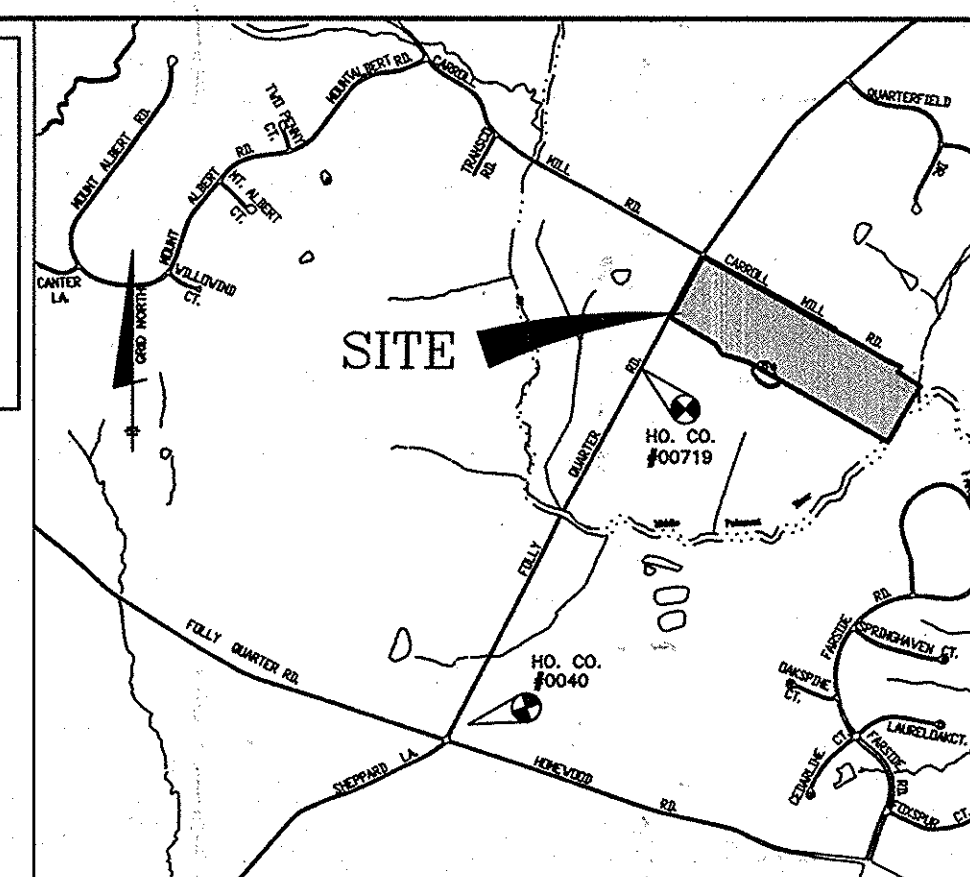
SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND					
SYMBOL	HYDRIC	HYDROLOGIC GROUP	ALTERNATE GROUP	NAME	Kw
Co*		C	D	CODORUS AND HATBORO SILT LOAMS, 0 TO 3 PERCENT	0.37
GbB		B		GLADSTONE LOAM, 3 TO 8 PERCENT SLOPES	0.20
GbC		B		GLADSTONE LOAM, 8 TO 15 PERCENT SLOPES	0.20
GgB		B		GLENELG LOAM, 3 TO 8 PERCENT SLOPES	0.20
GgC		B		GLENELG LOAM, 8 TO 15 PERCENT SLOPES	0.20
GmC		C		GLENVILLE SILT LOAM, 8 TO 15 PERCENT SLOPES	0.37
GnB*	YES	C	D	GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	0.37
MaD		B		MANOR LOAM, 15 TO 25 PERCENT SLOPES**	0.24
MaC		B		MANOR LOAM, 8 TO 15 PERCENT SLOPES	0.24

HSCD MAP #13  
HYDRIC SOILS  
\*\*ERODIBLE SOILS (DUE TO SLOPES)

# ENVIRONMENTAL CONCEPT PLAN FOLLY EQUINE ESTATES

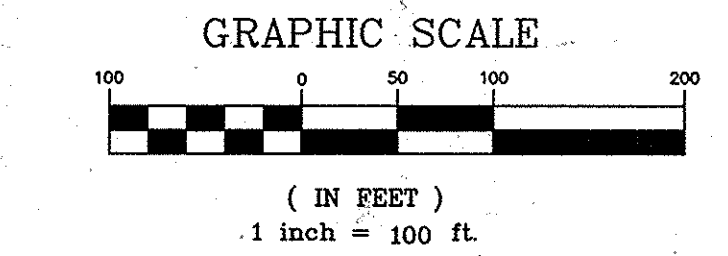
LOTS 1 thru 3  
3rd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

BENCH MARKS (NAD'83)	
HO. CO. No.0019 STAMPED BRASS DISK SET ON TOP OF CONCRETE (3' DEEP) COLUMN.	ELEV. 358.131 E 1,333,675.52
HO. CO. No.0040 STAMPED BRASS DISK SET ON TOP OF CONCRETE (3' DEEP) COLUMN.	ELEV. 364.599 E 1,332,002.58



ADC MAP 25 GRID E1  
VICINITY MAP  
SCALE: 1" = 2000'

LEGEND	
	EXISTING CONTOURS
	EXISTING TREELINE
	LIMIT OF SUBMISSION
	PROPOSED SEPTIC AREA
	PERC TEST HOLE
	SOILS DELINEATION
	PROPOSED DWELLING
	15%-24.9% SLOPES
	25% AND GREATER SLOPES
	ST-9 SPECIMEN TREE
	BIORETENTION FACILITY



ECP Site Analysis Data Sheet	
Gross Area (LOTS)	3.72 ac
100yr Floodplain (Developable Area)	0.00 ac
Slopes 15% or Greater (Developable Area)	0.86 ac
Slopes 25% or Greater (Developable Area)	0.04 ac
Slopes 25% or Greater (Whole Property)	1.18 ac
Wetlands (Developable Area)	0.00 ac
Wetlands Buffer (Developable Area)	0.00 ac
Stream (Developable Area)	0.00 if
Stream Buffer (Developable Area)	0.00 ac
Forested Area (Developable Area)	0.00 ac
Erodible Soils (Developable Area)	0.56 ac
Limit of Disturbance	2.76 ac
Impervious Area (Developable Area)	0.53 ac
Green Space (Developable Area)	2.22 ac

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*Kate L. D... 3-18-16*  
CHIEF, DIVISION OF LAND DEVELOPMENT

*Ch... 4-12-16*  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**DESIGN NARRATIVE**

The area of this property is approximately 55 acres and is known as Parcel 30 on Tax Map 23 and is in the 3rd Election District of Howard County, Maryland. The property is being utilized as a horse farm and contains a residential structure located towards the front of the property facing Folly Quarter Road. The property also contains several barns and pastures. The area of the development is treed but not considered forest. There are no forest, floodplain, wetlands, streams or their buffers within the developable area. There are several specimen trees in the developable area with four to be removed. The property lies within the Patuxent River watershed (02-13-11) and the use is III-P. The property owner is proposing subdivision of 3 one acre buildable lots with access from Carroll Mill Road via pipeliner. A large portion of the remainder of the property has been placed in a preservation easement. Stormwater management for the 3.53 acres of development will be provided.

The target Pe for this site is 1.0 inches based on the lot sizes. 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 bio-retention facilities, grass swale and non-rooftop disconnects.

As a result of addressing the stormwater management by use of ESDs to the MEP the land conditions have theoretically been returned to woods in good condition and therefore controlled the overall run-off for the 1-year storm. A reduction in impervious area with the use of grass swales, micro bio-retention and nonstructural practices makes for a better site design as well as maintaining the original drainage patterns.

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 micro bio-retention facilities (M-6) and non-rooftop disconnects (N-2) to treat all of the proposed impervious onsite.

A waiver has been submitted for the removal of specimen trees ST-1, ST-2, ST-8 and ST-9.

SPECIMEN TREE CHART					
NUMBER	DBH(INCHES)	COMMON NAME	CONDITION	CRZ(FT)	REMOVE/RETAIN
ST-1	48	OAK	GOOD	72	REMOVE
ST-2	43	OAK	GOOD	65	REMOVE
ST-3	48	OAK	GOOD	72	RETAIN
ST-4	38	OAK	GOOD	57	RETAIN
ST-5	49	OAK	GOOD	74	RETAIN
ST-6	32	OAK	GOOD	48	RETAIN
ST-7	33	OAK	GOOD	50	RETAIN
ST-8	36	POPLAR	GOOD	54	REMOVE
ST-9	53	OAK	GOOD	80	REMOVE
ST-10	39.5	OAK	FAIR	60	RETAIN
ST-11	36	POPLAR	POOR	54	RETAIN

- GENERAL NOTES**
- SUBJECT PROPERTY ZONED RC-DEO PER THE COMPREHENSIVE ZONING PLAN EFFECTIVE 10-6-2013.
  - THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE ZONING REGULATIONS EFFECTIVE APRIL 13, 2004.
  - PROJECT BOUNDARY IS BASED ON FIELD RUN BOUNDARY SURVEY PERFORMED ON OR ABOUT MARCH 8, 2008 BY BENCHMARK ENGINEERING, INC.
  - 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.
  - TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETRIES LOCATED ON THIS SITE.
  - THE FOREST CONSERVATION OBLIGATION FOR THIS PROJECT WILL BE ADDRESSED BY 0.87 OF FOREST AFFORESTATION FROM CASH PROPERTY, PRESERVATION PARCEL 'A' WHICH WILL BE DEDICATED TO HOWARD COUNTY AND HOWARD COUNTY CONSERVANCY INC.. THE FOREST CONSERVATION WILL BE FURTHER REVIEWED WITH THE SUBDIVISION PROCESS.
  - THERE ARE STEEP SLOPES (25% OR GREATER) WITHIN LOT 3 OF THE SITE HOWEVER THE AREAS (2,889 SF) ARE LESS THAN 20,000 SF CONTIGUOUS.
  - 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.
  - PREVIOUS DPZ FILES: F-15-05(91)
  - 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.
  - DETAILED GRADING PLANS WILL BE REQUIRED FOR CONSTRUCTION OF THE DRIVEWAY AND THE INDIVIDUAL LOTS. THESE PLANS WILL REQUIRE INDIVIDUALIZED SEDIMENT CONTROLS FOR THE EXTENT OF DISTURBANCE PROPOSED. THESE LOT WILL NOT QUALIFY FOR THE STANDARD SEDIMENT CONTROL PLAN.

**BENCHMARK**  
ENGINEERS • LAND SURVEYORS • PLANNERS

**ENGINEERING, INC.**

8480 BALTIMORE NATIONAL PIKE • SUITE 315  
ELLCOTT CITY, MARYLAND 21043  
PHONE: 410-465-6105 FAX: 410-465-6844  
www.bel-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. 28376, Expiration Date: 01.01.17.

3-14-16

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**OWNER:** JONAS W. CASH  
JOAN C. CASH  
3925 FOLLY QUARTER ROAD  
ELLCOTT CITY, MARYLAND 21042  
410-531-2680

**PROJECT:** FOLLY EQUINE ESTATES  
ZONED: RC-DEO

**LOCATION:** TAX MAP 23 - GRID 14  
PARCEL 30  
3rd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

**TITLE:** ENVIRONMENTAL CONCEPT PLAN

**DATE:** MARCH, 2016 **PROJECT NO.:** 2100

**SCALE:** AS SHOWN **DRAWING:** 1 OF 2

Design: AM/JCO Draft: JCO Check: AM

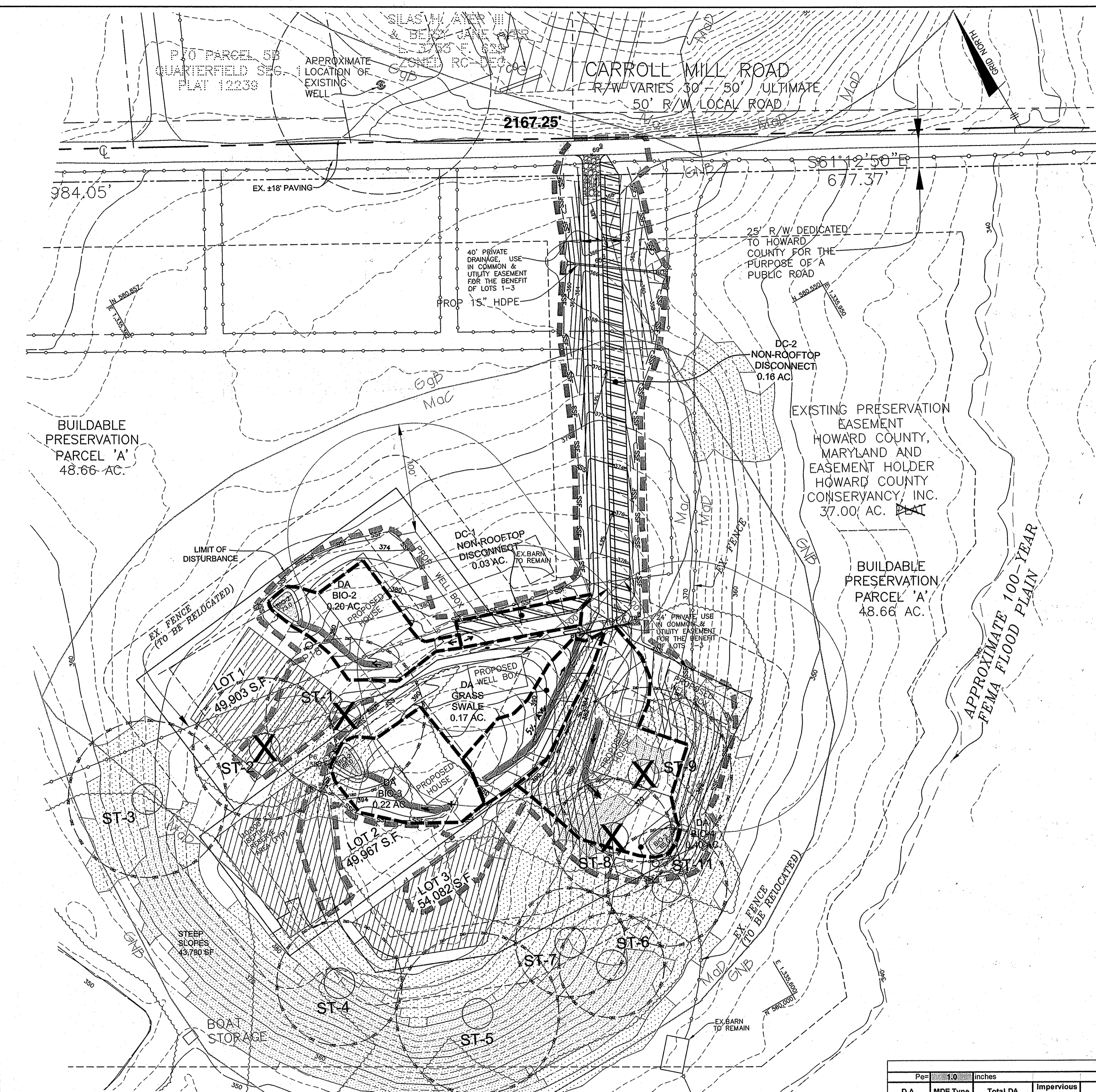
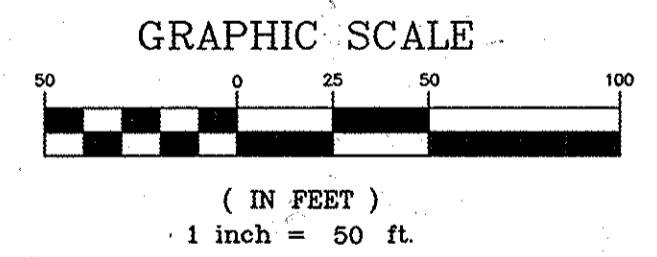
ECP-15-087

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LEGEND

- EXISTING CONTOURS
- EXISTING TREELINE
- LIMIT OF SUBMISSION
- PROPOSED SEPTIC AREA
- PERC TEST HOLE
- SOILS DELINEATION
- PROPOSED DWELLING
- 15%-24.9% SLOPES
- 25% AND GREATER SLOPES
- SPECIMEN TREE
- BIORETENTION FACILITY
- LIMIT OF DISTURBANCE
- ESD DRAINAGE AREA
- NON-ROOFTOP DISCONNECT
- STABILIZED CONSTRUCTION ENTRANCE
- SUPER SILT FENCE
- EROSION CONTROL MATTING



D.A.	MDE Type	Total DA	Impervious Area	Qe	A <sub>f</sub>		2% DA	Depth	ESD <sub>v</sub>		75% ESD <sub>v</sub>
					Required	Provided			Required	Provided	
BIO-LOT 1	(M-6)	8,898	5,000	0.98	333	350	PASS	2.0	412	350	PASS
BIO-LOT 2	(M-6)	9,615	4,555	0.48	304	325	PASS	2.0	382	325	PASS
BIO-LOT 3	(M-6)	17,366	5,352	0.33	357	360	PASS	2.0	474	360	PASS
D.A.	MDE Type	DISCONNECT AREA	RECEIVING AREA	R <sub>v</sub>							
DC-1	(N-2)	1,359	1,448	0.95					108	115	
DC-2	(N-2)	6,876	7,077	0.95					544	560	
									1,919	1,710	

DETAILED DESIGN FOR THE ON LOT FACILITIES WILL BE PROVIDED WITH LOT-SPECIFIC GRADING PLANS.

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 3-18-16  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 4-12-16  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

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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. 28376, Expiration Date: 01/01/17.

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ZONED: RC-DEO

LOCATION: TAX MAP 23 - GRID 14  
PARCEL 30  
3rd ELECTION DISTRICT  
HOWARD COUNTY, MARYLAND

TITLE: CONCEPT SEDIMENT CONTROL PLAN AND DRAINAGE AREA MAP

DATE: MARCH, 2016 PROJECT NO. 2100

Design: AM/JCO Draft: JCO Check: AM SCALE: AS SHOWN DRAWING 2 OF 2