

GENERAL NOTES

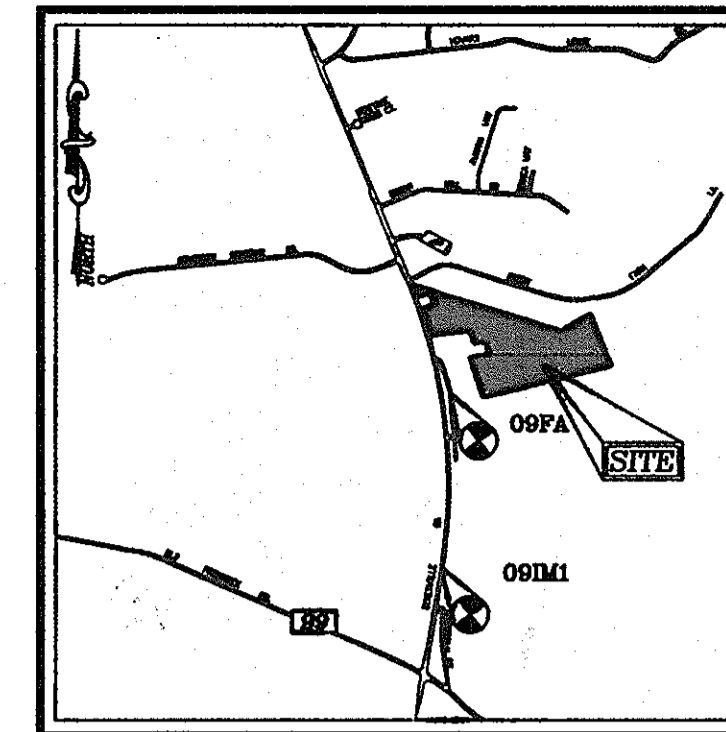
1. THE TOPOGRAPHY SHOWN HEREON IS BASED ON HOWARD COUNTY GIS
2. THE PROJECT BOUNDARY SHOWN HEREON IS BASED ON A PLAT PREPARED BY BENCHMARK ENGINEERING DATED MAY 12, 1998
3. THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
4. THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO START OF WORK.
5. ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAVING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
6. TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO CEMETERIES OR GRAVE SITES LOCATED ON THE SUBJECT PROPERTY.
7. STORM WATER MANAGEMENT TO BE PROVIDED FOR THIS DEVELOPMENT BY ENVIRONMENTAL SITE DESIGN UTILIZING NON-ROOFTOP & ROOFTOP DISCONNECTS AND DRY WELLS.
8. THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. DEVELOPMENT OR CONSTRUCTION OF THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION, OR BUILDING AND GRADING PERMITS.
9. THE SUBDIVISION PLAN IS SUBJECT TO THE FOLLOWING DPZ FILES: F-99-98
10. THE SUBJECT PROPERTY IS ZONED "RR-DEO" IN ACCORDANCE WITH THE 2/2/04 COMPREHENSIVE ZONING PLAN AND THE COMP. LITE ZONING REGULATIONS EFFECTIVE ON 7/28/06.
11. THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
12. THE PROPOSED SUBDIVISION AND RELATED CONSTRUCTION WILL HAVE MINIMAL AFFECT ON EXISTING ENVIRONMENTAL FEATURES AND BUFFERS.
13. EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS, FIELD SURVEYS, PUBLIC WATER AND AND SEWER EXTENSION PLANS AND AVAILABLE RECORD DRAWINGS. APPROXIMATE LOCATION OF EXISTING UTILITIES ARE SHOWN FOR THE CONTRACTORS INFORMATION. CONTRACTOR SHALL LOCATE EXISTING UTILITIES WELL IN ADVANCE OF CONSTRUCTION ACTIVITIES AND TAKE ALL NECESSARY PRECAUTIONS TO PROTECT THE EXISTING UTILITIES AND TO MAINTAIN UNINTERRUPTED SERVICE. ANY DAMAGE INCURRED DUE TO CONTRACTOR'S OPERATION SHALL BE REPAIRED IMMEDIATELY AT THE CONTRACTOR'S EXPENSE.
14. 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. 2411 AND 2413 WERE USED FOR THIS PROJECT.
15. NO RARE, THREATENED OR ENDANGERED SPECIES WERE OBSERVED ON THE PROPERTY.
16. THERE IS NO 100-YR FLOODPLAIN WITHIN THE LIMITS OF THIS SITE.
17. SEDIMENT AND EROSION CONTROL WILL BE PROVIDED FOR THIS SITE.
18. WETLANDS SHOWN ON-SITE ARE BASED ON PREVIOUSLY APPROVED PLAT #13804 & F-99-98.
19. A TOTAL OF 4 LOTS AND 1 NON-BUILDABLE LOT ARE PROPOSED UNDER THIS PLAN.
20. NON-BUILDABLE LOT 'A' TO BE OWNED AND MAINTAINED BY THE HOME OWNERS ASSOCIATION.
21. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.
22. WETLANDS AND THEIR BUFFERS WILL NOT BE IMPACTED BY THE CONSTRUCTION OF THE SITE.
23. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. 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.

ENVIRONMENTAL CONCEPT PLAN

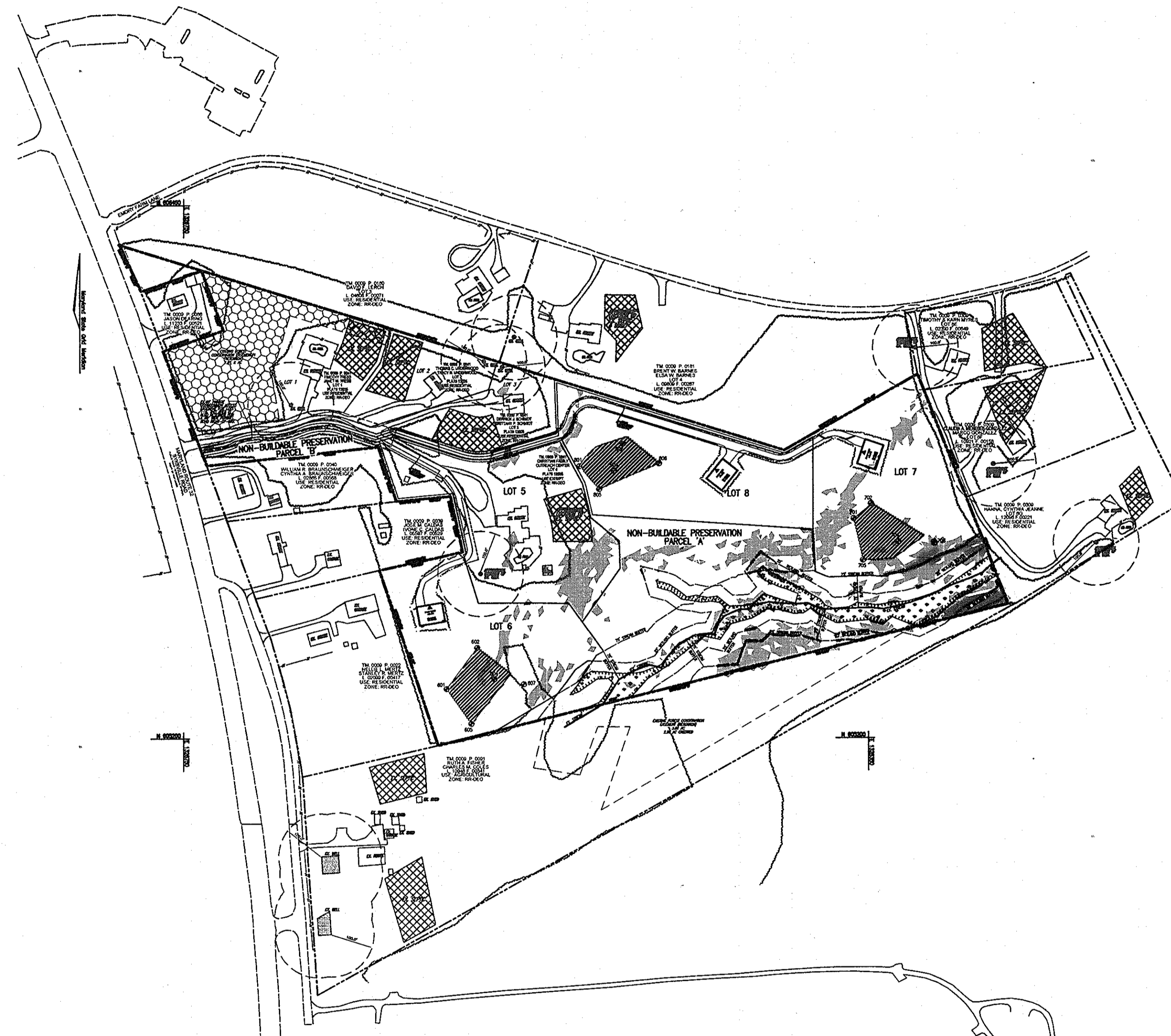
KEANE PROPERTY

LOTS 5-8 & NON-BUILDABLE PARCEL 'A' & 'B'

PARCEL 41 (L. 04105 / F. 00168)



VICINITY MAP
SCALE: 1"=200'
ADC MAP COORDINATES: 4693 / J7



LOT	GROSS AREA	PIPESTEM AREA	NET AREA
PARCEL A	265,832.38 SF 6.10 AC	6,653.74 SF 0.15 AC	259,178.64 SF 5.95 AC
PARCEL B	11,876.35 SF 0.27 AC	NA	11,876.35 SF 0.27 AC
5	133,447.68 SF 3.06 AC	2,671.07 SF 0.06 AC	130,776.61 SF 3.00 AC
6	135,850.44 SF 3.12 AC	5,170.29 SF 0.12 AC	130,680.15 SF 3.00 AC
7	140,867.48 SF 3.23 AC	10,174.41 SF 0.23 AC	130,693.07 SF 3.00 AC
8	136,116.65 SF 3.12 AC	5,436.63 SF 0.12 AC	130,680.02 SF 3.00 AC

	EXISTING CONTOUR
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING WELL
	EXISTING TREE LINE (FIELD LOCATED)
	EXISTING FENCE
	PROPERTY LINE
	RIGHT-OF-WAY LINE
	SOILS BOUNDARY
	PASSED PERC TEST
	PROP. PRIVATE SEPTIC EASEMENT
	PROP. PRIVATE WELL EASEMENT
	EXISTING WETLAND
	EX. PRIVATE SEPTIC EASEMENT

SYMBOL	NAME / DESCRIPTION	GROUP
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B
GgC	GLENELG LOAM, 8 TO 15 PERCENT SLOPES	B
GmB	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	C
GmC	GLENVILLE-SALE SILT LOAM, 0 TO 8 PERCENT SLOPES	C

DESCRIPTION	SHEET NO.
COVER SHEET	1 OF 3
OVERALL SITE PLAN	2 OF 3
SOILS MAP, GRADING, EROSION AND SEDIMENT CONTROL PLAN	3 OF 3

OWNER
CHRISTIAN FAMILY OUTREACH CENTER
1475 SYKESVILLE ROAD
SYKESVILLE, MARYLAND 21784

I. Introduction

The subject site is located at the east side of Route 32 just south of Emory Farm Lane in Sykesville, Maryland. The site is zoned RR-DEO and is identified as Tax Map 9, Parcel 41, the address is 1475 E. Route 32. The site area is 18.9 acres and access will be provided via a private right of way to Route 32.

The site contains an existing residence, driveway, pool and a shed. The existing residence will remain. It is proposed to develop three single family detached house on a new lots of approximately 3 acres each. The remaining area will be placed in non-buildable conservation. The new houses will consist of a driveway and both private water and sewer (septic). Forest conservation area was previously approved under plat #13804. There is a stream and wetlands onsite located along the south property line, these will be placed within the conservation area and will not be disturbed during construction.

Environmental Site Design for the proposed 3 lots is based on the proposed limit of disturbance is considered new development. The ESDv is based on the reduction of runoff to mimic "woods in good condition".

II. METHODOLOGY

Stormwater management for the project has been provided in accordance with the 2000 Maryland Stormwater Design Manual, 2007 Stormwater Management Act, MDE Design Computations and Anne Arundel County requirements. The proposed improvements consist of three single family detached houses.

The site slopes from west to east. The Maryland Department of the Environment, Environmental Site Design criteria has been implemented. The Environmental Concept Plan addresses the overall requirements for the site. There are 2 drainage sub areas which have been delineated by ESD treatment. The attached spreadsheet tabulates the ESDv by drainage area (minimum, maximum and target). The Environmental Concept Plan utilizes non-rooftop & rooftop disconnection and dry wells to accommodate the total ESD volume required for the project.

The offsite drainage flowing to the site will remain undisturbed and flow through the existing stream/wetland area this area will not be managed or treated.

The site consists of Hydrologic Soil Group type 'B' & 'C' soils; however the proposed development mainly consists of 'B' soils. The weighted P_2 to mimic "woods in good condition" is 1.0 based on an overall development impervious percentage of 4.9. The resulting recharge factor (R_v) is 0.33. Applying an overall limit of disturbance of 1.33 acres, the total ESDv required for this project is 2800 cf. The Rev required is 375 cf.

Disconnection of Rooftop & Non-Rooftop runoff will be utilized to fulfill the ESDv requirement. Each drainage area provides ESDv which exceeds the minimum ($P_2 = 1.0$) and does not exceed the maximum ($P_2 = 2.6$). Additionally, Rev is provided via these practices.

PLAN VIEW
SCALE: 1"=200'

III. CONCLUSION

The ESDv requirement of 2800 cf for the proposed project is provided utilizing disconnection of rooftop, non-rooftop practices and dry wells. The required Rev of 375 cf will be provided by the same practice. Considering the size and configuration of the development we anticipate sediment control will be accommodated by perimeter reinforced silt fence.

The Environmental Site Design for this project successfully incorporates the methodology present in the MDE stormwater Design Manual, Chapter 5. This report and the associated Plan successfully address the following:

1. Map if all site resources
2. Field verification of the natural resource map
3. Proposed limits of clearing and grading
4. Location of proposed impervious areas
5. Location of existing and proposed utilities
6. Estimates of stormwater requirements
7. Location of ESD practices
8. Stable conveyance of stormwater at potential outfall locations
9. Narrative addresses:
 - a. Natural resource protection and enhancement
 - b. Maintenance of natural flow patterns
 - c. Reduction of impervious areas through better site design, alternative surfaces, and non-structural practices
 - d. Integration of erosion and sediment control into the stormwater strategy
 - e. Implementation of ESD planning techniques and practices to the MEP

SITE DATA

LOCATION: TAX MAP 9, BLOCK 18
PARCEL: 41
3RD ELECTION DISTRICT
PRESENT ZONING: RR-DEO
GROSS AREA OF PROJECT: 18.9 AC.
LIMIT OF DISTURBANCE: 1.33 AC.
PROPOSED USE OF SITE: RESIDENTIAL (SFD)
NUMBER OF RESIDENTIAL LOTS PROPOSED: 4 LOTS
IMPERVIOUS AREA: 0.79 AC.
AREA OF STREAM/BUFFER: 3.59 AC.
AREA OF WETLANDS/BUFFER: 0.27 AC (OUTSIDE THE STREAM BUFFER)
AREA OF STEEP SLOPES: 0.15 AC.
AREA OF FLOOD PLAIN: 0.00 AC.
NET PROJECT AREA: 14.89 AC.
AREA OF EXISTING FOREST COVER: 15.94 AC.
DPZ REFERENCES: F-99-98

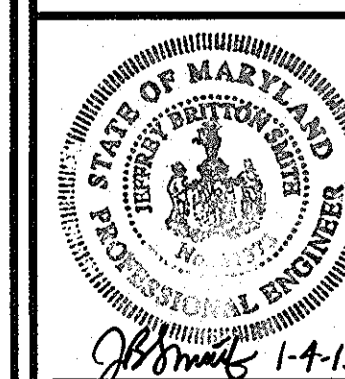
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

[Signature] 1/9/13
CHIEF, DEVELOPMENT ENGINEERING DIVISION
[Signature] 1/9/13
CHIEF, DIVISION OF LAND DEVELOPMENT

ENVIRONMENTAL CONCEPT PLAN

**KEANE PROPERTY LOTS 5,6,7,8,
AND NON-BUILDABLE PRESERVATION PARCEL 'A' & 'B'**
A RESUBDIVISION OF CHRISTIAN FAMILY OUTREACH CENTER LOT 4
TAX MAP #9 GRID 17, 18 PARCEL 41
3RD ELECTION DISTRICT HOWARD COUNTY, MARYLAND

**ROBERT H. VOGEL
ENGINEERS • SURVEYORS • PLANNERS**
8407 MAIN STREET ELLICOTT CITY, MD 21043
TEL: 410.461.7666 FAX: 410.461.8961



DESIGN BY: RHV
DRAWN BY: JBS
CHECKED BY: JBS
DATE: MAY 2012
SCALE: AS SHOWN
W.O. NO.: 12-08

PROFESSIONAL CERTIFICATE
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. 31373 EXPIRATION DATE: 01-21-2013



LEGEND:

	EXISTING CONTOUR
	EXISTING UTILITY POLE
	EXISTING LIGHT POLE
	EXISTING MAILBOX
	EXISTING SIGN
	EXISTING WELL
	EXISTING TIE LINE (FIELD LOCATED)
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	EXISTING WETLAND
	EX. PRIVATE SEPTIC EASEMENT
	EX. MODERATE SLOPES
	EX. STEEP SLOPES

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**ENVIRONMENTAL CONCEPT PLAN
 OVERALL SITE PLAN
 KEANE PROPERTY LOTS 5,6,7,8,
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 A RESUBDIVISION OF CHRISTIAN FAMILY OUTREACH CENTER LOT 4**

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DESIGN BY: RHV
 DRAWN BY: JBS
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 SCALE: AS SHOWN
 W.O. NO.: 12-06

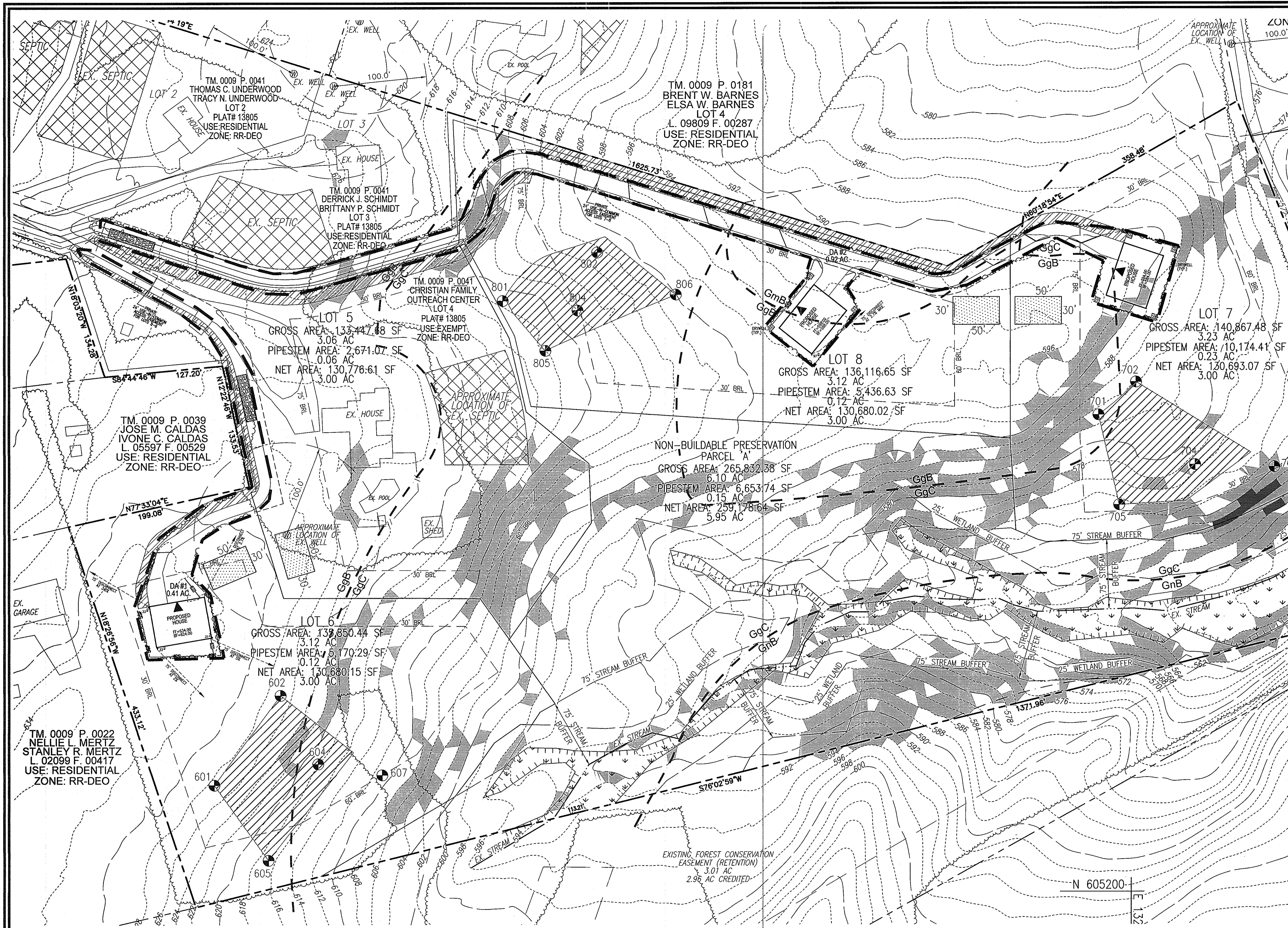
2 SHEET OF 3

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION 1/9/13 DATE

CHIEF, DIVISION OF LAND DEVELOPMENT 1/27/13 DATE

PLAN VIEW
 SCALE: 1"=100'



LEGEND:

	EXISTING CONTOUR
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	LIMITS OF DISTURBANCE
	NON-ROOFTOP DISCONNECT
	EX. MODERATE SLOPES
	EX. STEEP SLOPES
	PROP. SUPER SILT FENCE
	PROP. LIMIT OF DISTURBANCE
	PROP. STABILIZED CONSTRUCTION ENTRANCE

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SOIL MAP, GRADING,
EROSION & SEDIMENT CONTROL PLAN
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3 SHEET OF 3

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 10/13

CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 10/27/13

PLAN VIEW
SCALE: 1"=50'