

SITE DATA
 LOCATION: TAX MAP 41, GRID 5, PARCEL 273
 DEED REFERENCE: L 1930 F.574
 5TH ELECTION DISTRICT
 EXISTING ZONING: R-20
 PER THE COMPREHENSIVE ZONING PLAN DATED 2/02/04.
 GROSS AREA OF PARCEL: 1.00 AC.
 AREA OF RIGHT OF WAY: 0.00000 AC.
 AREA OF FLOODPLAIN: N/A
 AREA OF STEEP SLOPES: N/A
 NET AREA OF PROJECT: 1.00 AC
 NUMBER OF RESIDENTIAL LOTS PROPOSED: 2 LOTS
 AREA OF PROPOSED RESIDENTIAL LOTS: 1.00 AC
 NUMBER OF PROPOSED OPEN SPACE LOTS: 0
 NUMBER OF NON-BUILDABLE BULK PARCELS: 0

GRADING DATA
 TOTAL DISTURBED AREA = 0.683 AC
 IMPERVIOUS COVER = 0.219 AC
 AREA TO BE STABILIZED = 0.464 AC

ENVIRONMENTAL CONCEPT PLAN

ECP-13-017

HOLIDAY HILLS, SECTION 5, LOTS 113 & 114

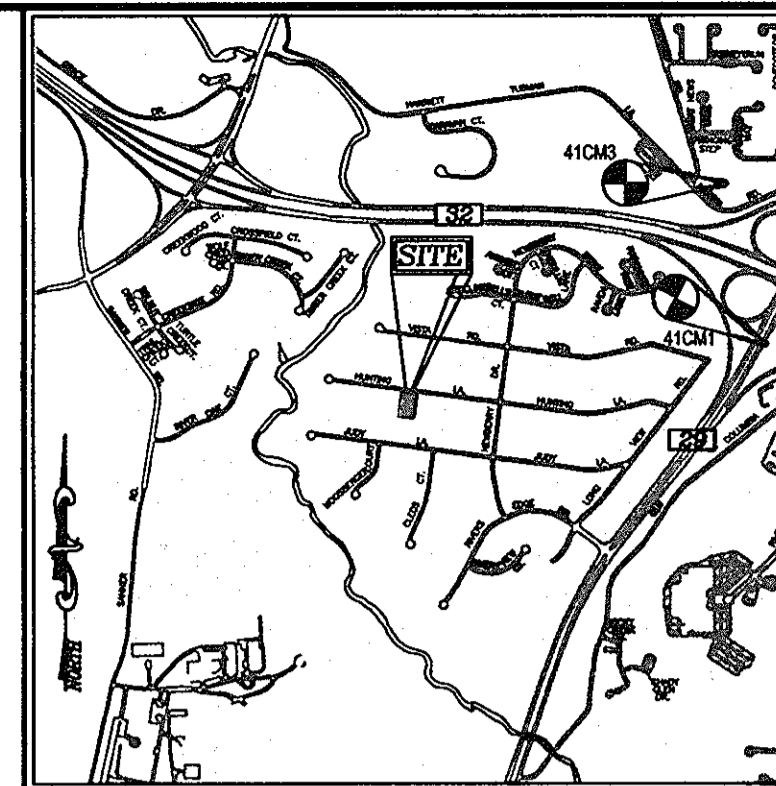
A RESUBDIVISION LOT 54 SECOND ADDITION TO
 HOLIDAY HILLS SUBDIVISION PLAT BOOK 8 FOLIO 79

LEGEND

- LOD LIMIT OF DISTURBANCE
- PROPOSED PAVEMENT
- PROPOSED MICRO BIORETENTION FACILITY
- PROPOSED EROSION CONTROL MATTING
- TREE PROTECTIVE FENCE

BENCHMARKS

HOWARD COUNTY BENCHMARK 41CA
 N 550,124.8331 E 1,342,960.8189 ELEV. 295.328
 HOWARD COUNTY BENCHMARK 41CM3
 N 550,835.2139 E 1,347,017.6897



VICINITY MAP
 SCALE: 1"=2000'
 ADC MAP COORDINATES: 5052/H2

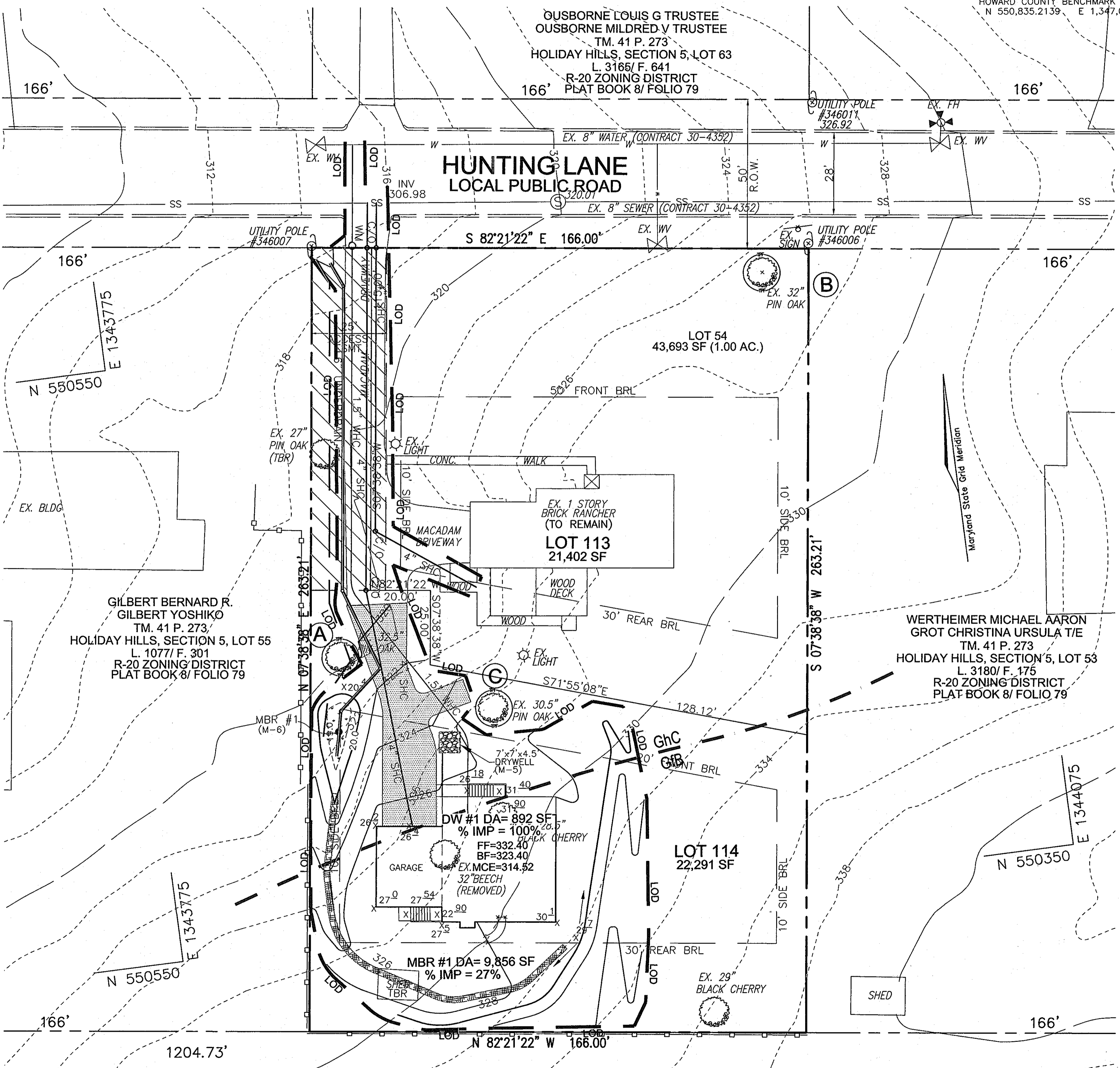
SOILS LEGEND		
SYMBOL	NAME/DESCRIPTION	TYPE
GhC	GLENELG-URBAN LAND COMPLEX, 8 TO 15 PERCENT SLOPES	B
GfB	GLADSTONE-URBAN LAND COMPLEX 0 TO 8 PERCENT SLOPES	B

FOREST STAND ANALYSIS TABLE							
KEY	A. TYPE OF COMMUNITY	B. AREA	C. SOILS INFORMATION		D. EXISTING VEGETATION	E. STAND CHARACTERISTICS	
			1. SOIL TYPES	2. TYPICAL FOREST COVER FOR SOIL TYPE	3. WOODLAND SUITABILITY INDEX	4. HABITAT	
						1. SIZE (A) (YRS) COOD.	
1-1	LAWN AND OPEN FIELD	1.00 AC	GhB	MIXED UPLAND HARDWOODS	12	1	MAINTAINED LAWN MAPLE & APPLE
			GfB	WETLANDS	16	1	12-27' 30.2' FAIR

FOREST CONSERVATION WORKSHEET						
Version 1.0						
Project: 10821 Hunting Lane						
Date: August 28, 2012						
NET TRACT AREA						
A. Total tract area						Acres
B. Area within 100 Year Floodplain						0.0
C. Area of site included in overhead transmission line						0.0
D. Net Tract Area						1.0
LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)						
AREA	MDR	IDA	X	MPD	CA	
E. Afforestation Threshold	(percentage)					0.15
F. Conservation Threshold	(percentage)					0.20
EXISTING FOREST COVER:						
G. Existing forest cover (excluding floodplain)						0
H. Area of forest above afforestation threshold						0
I. Area of forest above conservation threshold						0
BREAK EVEN POINT:						
J. Forest retention above threshold with no mitigation						Break Even Point
K. Clearing permitted without mitigation						Break Even Point
PROPOSED FOREST CLEARING						
L. Total area of forest to be cleared or retained Outside FCE						0.0
M. Total area of forest to be retained in FCE						0.0
PLANTING REQUIREMENTS						
N. Reforestation for clearing above Conservation Threshold						0
P. Reforestation for clearing below Conservation Threshold						0
Q. Credit for retention above conservation threshold						0
R. Total reforestation required						0
S. Total afforestation required						0.2
T. Total reforestation and afforestation required						0.2

OWNERS
 SD PROPERTIES
 3138 ROGERS AVENUE
 ELICOTT CITY, MARYLAND 21043
 (410-263-2490)

- GENERAL NOTES**
- THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. IN AUGUST 2012.
 - THE TOPOGRAPHY SHOWN HEREON IS BASED ON FIELD RUN TOPOGRAPHY PERFORMED BY ROBERT H. VOGEL ENGINEERING, INC. IN AUGUST 2012.
 - PUBLIC WATER AVAILABLE THROUGH CONTRACT 34-1810-D AND PUBLIC SEWER AVAILABLE THROUGH CONTRACT 30-3123-D. WATER AND SEWER SERVICE WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122B OF THE HOWARD COUNTY CODE.
 - THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
 - NO STREAMS EXIST ON SITE.
 - NO 100-YEAR FLOODPLAIN EXIST ON SITE.
 - SUBJECT PROPERTY ZONED R-20 PER 2/02/04 COMPREHENSIVE ZONING PLAN AND AMENDED BY THE COMPREHENSIVE LITE AMENDMENT DATED 07/28/06.
 - THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003). DEVELOPMENT OR CONSTRUCTION ON THESE LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN, WAIVER PETITION APPLICATION OR BUILDING/GRADING PERMIT.
 - THE FOREST CONSERVATION OBLIGATION WILL BE MET BY A FEE-IN-LIEU PAYMENT OF \$6,532.00 MADE OUT TO HOWARD COUNTY FOREST CONSERVATION FUND FOR THE 0.2 ACRE FORESTATION REQUIREMENT FOR THIS PROJECT.
 - STORM WATER MANAGEMENT ADDRESSED FOR SITE USING 2007 MARYLAND STORMWATER DESIGN MANUAL (CHAPTER 5).
 - A. CHANNEL PROTECTION VOLUME (CPV) IS PROVIDED IN THE MICRO BIORETENTION FACILITY SINCE THE P_e IS 1.2.
 - B. WATER QUALITY VOLUME (WQV) AND RECHARGE VOLUME (REV) TO BE PROVIDED BY MICRO BIORETENTION FACILITIES AND DRYWELLS.
 - THERE ARE NO WETLANDS OR SLEEP SLOPES LOCATED ON THIS SITE.
 - SITE DEVELOPMENT PLAN APPROVAL BY THE DEPARTMENT OF PLANNING AND ZONING IS REQUIRED PRIOR TO BUILDING PERMITS BEING ISSUED FOR THE CONSTRUCTION OF RESIDENTIAL DWELLINGS ON THESE LOTS.
 - THIS DEVELOPMENT IS DESIGNED TO BE IN ACCORDANCE WITH SECTION 16.127 RESIDENTIAL INFILL DEVELOPMENT OF SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. THE DEVELOPER OF THIS PROJECT SHALL CREATE COMPATIBILITY WITH THE EXISTING NEIGHBORHOOD THROUGH THE USE OF ENHANCED PERIMETER LANDSCAPING, BERMS, FENCES, SIMILAR HOUSING UNIT TYPES AND THE DIRECTIONAL ORIENTATION OF THE PROPOSED HOUSES.
 - APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION AND/OR SITE DEVELOPMENT 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 AND SITE PLAN STAGES. THEREFORE THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED COMMENTS (INCLUDING THOSE THAT MAY ALTER OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES.
 - SHOULD ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH CREDIT IS GIVEN, DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE LANDSCAPE MANUAL.
 - A SIMPLIFIED FOREST STAND DELINEATION WAS PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC., DATED AUGUST 2012. FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION MANUAL SHALL BE COMPLIED WITH.
 - SPECIMEN TREES A, B & C FOUND ON THIS SITE ARE ALL TO BE RETAINED.



STORMWATER MANAGEMENT NARRATIVE

THE STORMWATER MANAGEMENT FOR THIS SITE HAS BEEN DESIGN TO PRESERVE THE NATURAL RESOURCES TO THE MAXIMUM EXTENT POSSIBLE. A MICRO BIORETENTION FACILITIES WAS USED WHERE IT WAS NOT FEASIBLE TO USE NON STRUCTURAL MEASURES. THE P_e FOR THE SITE WAS 1.2, SO CP_v WAS PROVIDED IN THE MICRO BIORETENTION FACILITY AND DRYWELLS. MANY OF THE EXISTING TREES AND NATURAL FEATURES FOR THIS SUBDIVISION HAVE BEEN SAVED TO KEEP THE EXISTING CHARACTERISTICS IN TACT. MANY OF THE SLOPES ON THE SITE EXCEEDED 5% SO DISCONNECTS AND OTHER TYPES OF NON STRUCTURAL MEASURES WERE NOT PRACTICAL. OVERALL, THE ORIGINAL NATURAL INTEGRITY OF THIS SITE IS PRESERVED AS MUCH AS IS PRACTICAL.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION *[Signature]* 4/6/13
 CHIEF, DIVISION OF LAND DEVELOPMENT *[Signature]* 4/10/13



NO.	REVISION	DATE

ENVIRONMENTAL CONCEPT PLAN
COVER SHEET
 HOLIDAY HILLS, SECTION 5, LOTS 113 & 114

10821 HUNTING LANE
 A RESUBDIVISION LOT 54 SECOND ADDITION TO
 HOLIDAY HILLS SUBDIVISION PLAT BOOK 8, FOLIO 79

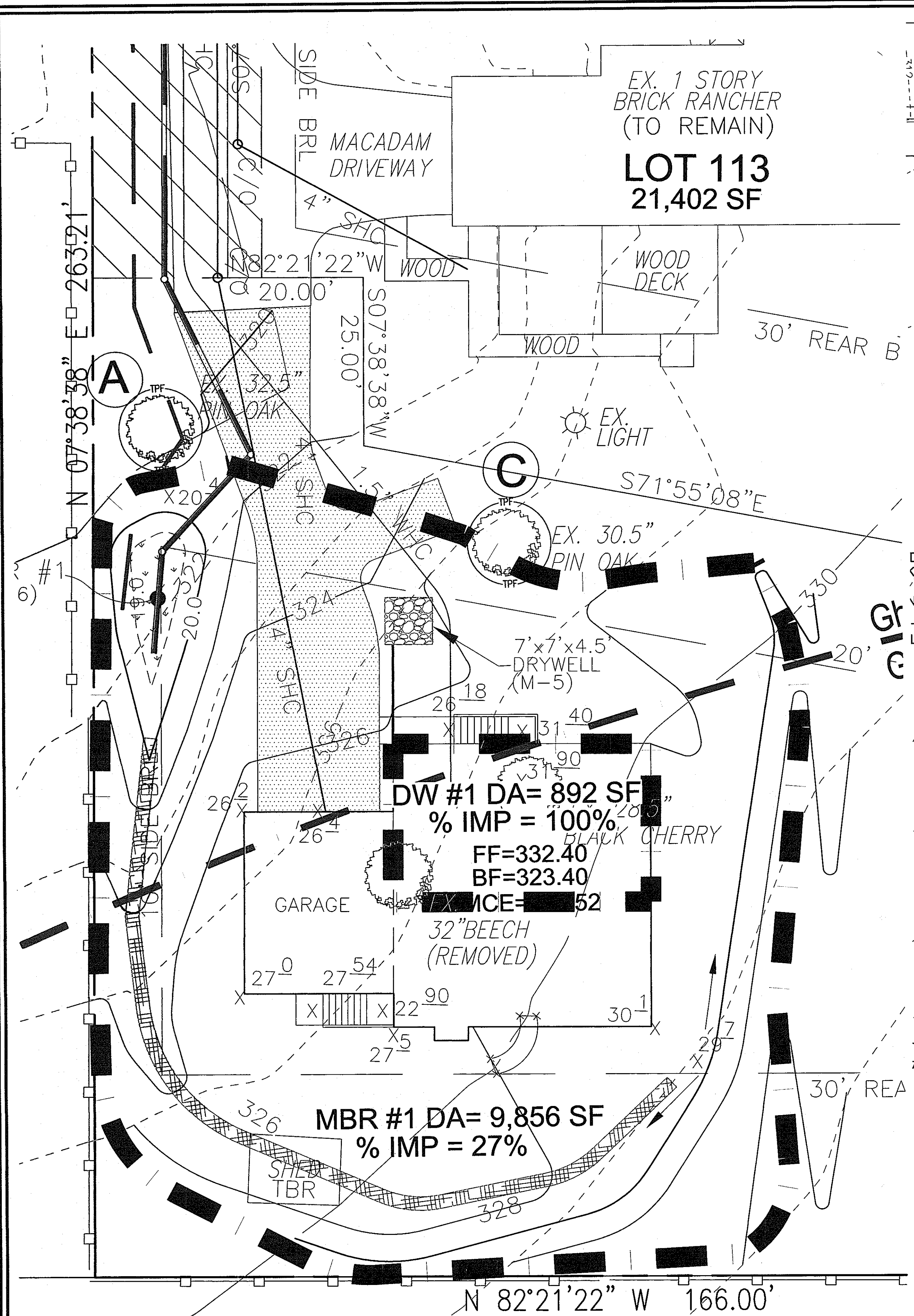
TAX MAP 41, GRID 5, PARCEL 273
 5TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

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

DESIGN BY: JTD
 DRAWN BY: JTD
 CHECKED BY: RHV
 DATE: AUGUST, 2012
 SCALE: SEE PLAN
 W.O. NO.: 12-40

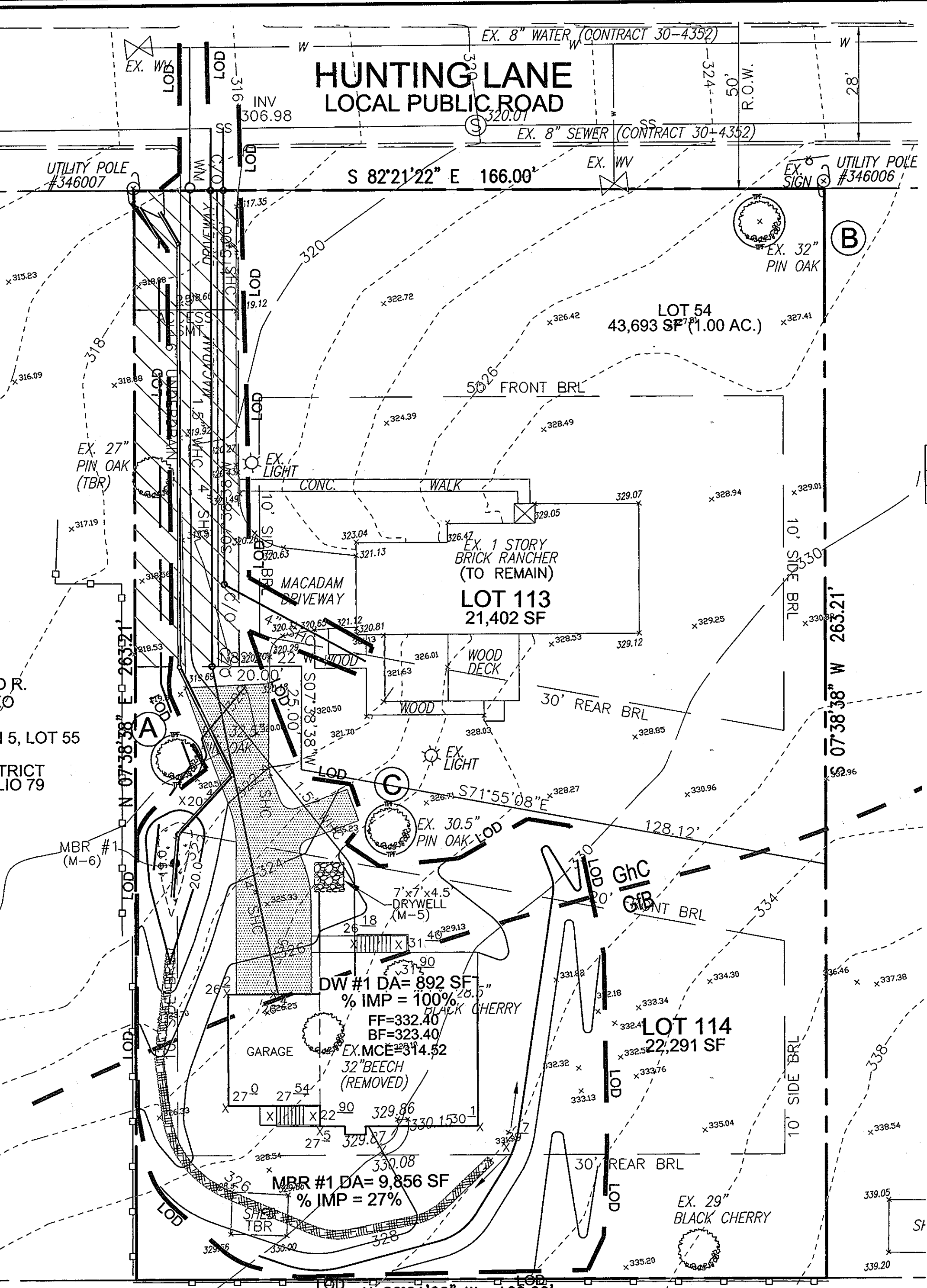
PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2012.

1 SHEET OF 2

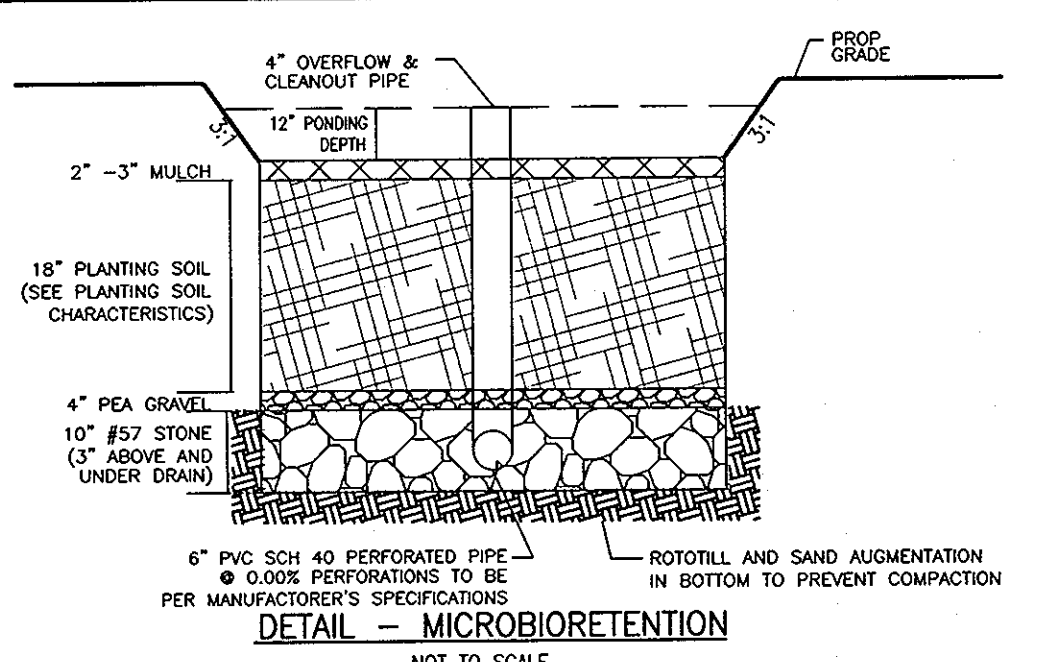
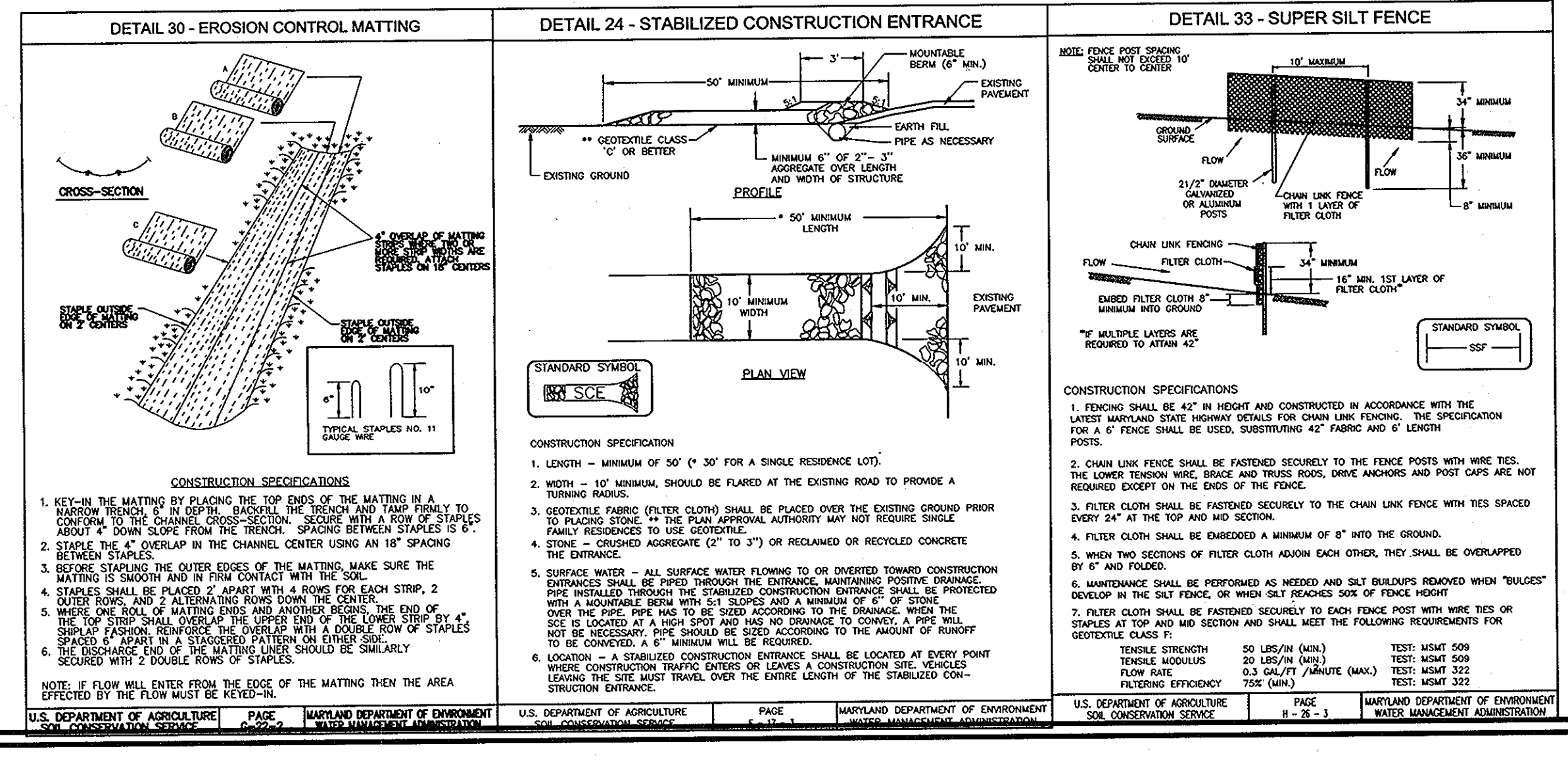


SWM DRAINAGE AREA MAP
SCALE: 1"=10'

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION & DATE: 4/6/13
 CHIEF, DIVISION OF LAND DEVELOPMENT & DATE: 4/6/13



SEDIMENT CONTROL PLAN VIEW
SCALE: 1"=20'



STORMWATER MANAGEMENT CALCULATIONS

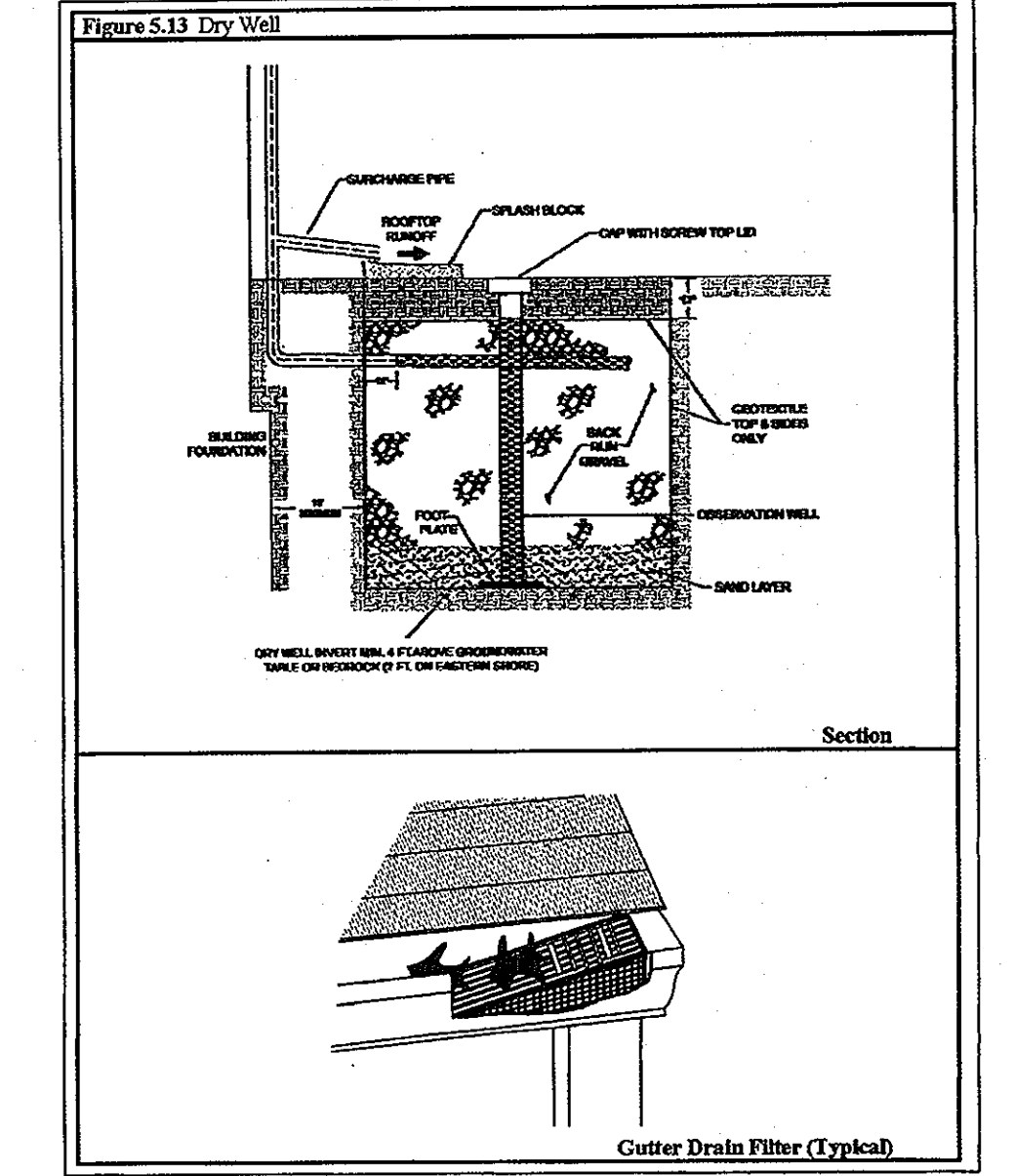
DRAINAGE AREA	METHOD	VOL. REQUIRED	VOL. PROVIDED
MBR #1	M-6	263 CF	276 CF

M-6 IS A MICRO BIORETENTION FACILITY. SEE DETAIL THIS SHEET.

STORMWATER MANAGEMENT CALCULATIONS

DRAINAGE AREA	METHOD	VOL. REQUIRED	VOL. PROVIDED
DW #1	M-6	263 CF	276 CF
DW #2	M-6	263 CF	276 CF

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STORMWATER MANAGEMENT CALCULATIONS

DRAINAGE AREA	METHOD	VOL. REQUIRED	VOL. PROVIDED
DW #1	M-6	263 CF	276 CF
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- LEGEND**
- LOD LIMIT OF DISTURBANCE
 - PROPOSED PAVEMENT
 - PROPOSED MICRO BIORETENTION FACILITY
 - PROPOSED EROSION CONTROL MATTING
 - TPF TREE PROTECTIVE FENCE
 - SWM DRAINAGE AREA
 - SSF SUPER SILT FENCE
 - PROPOSED DRYWELL

NO.	REVISION	DATE

ENVIRONMENTAL CONCEPT PLAN
SWM DA MAP & DETAILS
HOLIDAY HILLS, SECTION 5, LOTS 113 & 114
 10821 HUNTING LANE
 A RESUBDIVISION LOT 54 SECOND ADDITION TO
 HOLIDAY HILLS SUBDIVISION PLAT BOOK 8, FOLIO 79
 DDP# FILES: ECP-13-017

TAX MAP 41, GRID 5
 5TH ELECTION DISTRICT

PARCEL 273
 HOWARD COUNTY, MARYLAND

ROBERT H. VOGEL
ENGINEERS - SURVEYORS - PLANNERS
 8407 MAIN STREET • TEL: 410-461-7666
 ELLICOTT CITY, MD 21043 FAX: 410-461-1891

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PROFESSIONAL CERTIFICATION
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 PREPARED OR APPROVED BY ME, AND THAT I
 AM A DULY LICENSED PROFESSIONAL ENGINEER
 UNDER THE LAWS OF THE STATE OF MARYLAND.
 LICENSE NO. 16183 EXPIRATION DATE:
 09-27-2012

2 SHEET OF 2