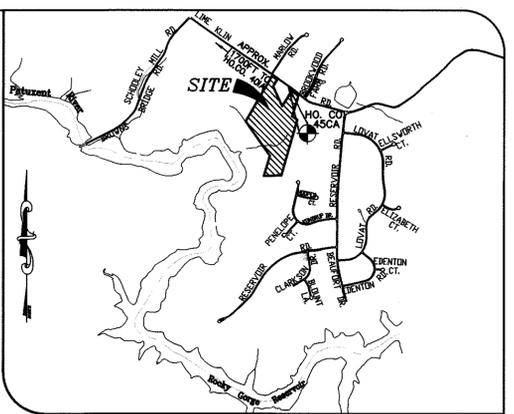
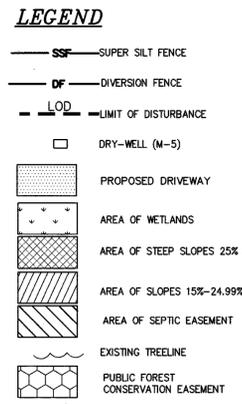


SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR	SOIL MAP
BeB	(B)	BENEVOLE SILT LOAM, 3-8% SLOPES.	.28	22
GgB	(B)	GLENELG LOAM, 3-8% SLOPES.	.20	22
GnB	(C)	GLENVILLE-BAILE SILT LOAM, 0-8% SLOPES	.37	22
MaB	(B)	MANOR LOAM, 3-8% SLOPES	.24	22
MoC	(B)	MANOR LOAM, 8-15% SLOPES	.24	22
MoD	(B)	MANOR LOAM, 15-25% SLOPES	.24	22
MfF	(B)	MANOR-BRINKLOW COMPLEX, 25-65% SLOPES	.24	22
WbB	(C)	WILTSHIRE SILT LOAM, 3-8% SLOPES	.24	22

SPECIMEN TREE CHART

KEY	SPECIES	DBH (INCHES)	HEIGHT (FEET)	COMMENTS
1	RED MAPLE	30	45	FAIR CONDITION, SOME DIEBACK
2	RED MAPLE	31	46.5	POOR CONDITION, MAJOR LIMB DAMAGE
3	SILVER MAPLE	32.5	48.75	POOR CONDITION, TRUNK ROT AND LIMB CANOPY
4	SILVER MAPLE	31	46.5	POOR CONDITION, LIMB FAILURE AND TRUNK ROT
5	SILVER MAPLE	42	63	POOR CONDITION, CANOPY TRIMMED AND TRUNK ROT
6	SILVER MAPLE	37	55.5	FAIR CONDITION, LIMB DIEBACK



- GENERAL NOTES**
- TAX MAP: 45, PARCEL: 59, BLOCK: 5, LOTS: 4, 5, & 7.
 - SUBJECT PROPERTY ZONED RR-DEO PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
 - TOPOGRAPHIC DATA SHOWN HEREON IS BASED ON AERIAL TOPOGRAPHY BY WINGS AERIAL MAPPING CO., INC. DATED NOVEMBER 12, 2002 AND FIELD VERIFIED JUNE 2015.
 - COORDINATES BASED ON NAD '83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 45CA & 40A.
STA. No. 45CA N 540,071.002 ELEV. 426.81
E 1,327,702.745
STA. No. 40A N 541,725.800 ELEV. 360.07
E 1,325,316.89
 - NO CEMETERIES OR BURIAL GROUNDS EXIST ON-SITE.
 - NO HISTORIC STRUCTURES EXIST ON-SITE.
 - EXISTING FLOODPLAIN AND DRAINAGE & UTILITY EASEMENT SHOWN HEREON IS TAKEN FROM PLAT # 8278.
 - WETLANDS SHOWN BASED ON FIELD INVESTIGATION BY ECO-SCIENCE PROFESSIONALS, INC. IN JUNE 2015.
 - FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MARSHAL FOR THIS SUBDIVISION HAS BEEN FULFILLED BY THE RETENTION OF 11.02 ACRES (480,031 SQ. FT.) OF FOREST INTO AN ON-SITE EASEMENT AREA.
 - FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF HOWARD COUNTY CODE. NO CLEARING, GRADING, OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED DRAWING OR SITE DEVELOPMENT PLAN. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OR CONSERVATION EASEMENT ARE ALLOWED.
 - NO SCENIC ROADS ARE ADJACENT TO THIS SITE.
 - DENOTES EXISTING 100 YEAR FLOODPLAIN.
 - DENOTES AN EXISTING OR PROPOSED PRIVATE USE-IN-COMMON DRIVEWAY EASEMENT.
 - THIS AREA DESIGNATES A PRIVATE SEWERAGE EASEMENT OF AT LEAST 10,000 SQ. FT. AS REQUIRED BY THE MARYLAND STATE DEPARTMENT OF ENVIRONMENT FOR INDIVIDUAL SEWER DISPOSAL IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THIS EASEMENT SHALL BECOME NULLED AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT ADJUSTMENTS TO THE PRIVATE SEWERAGE EASEMENT AND RECOGNITION OF A MODIFIED EASEMENT SHALL NOT BE NECESSARY.
 - SITE ANALYSIS DATA:
LOCATION: TAX MAP: 45 PARCEL: 59 GRID 5
ELECTION DISTRICT: FIFTH
ZONING: RR-DEO
TOTAL GROSS SITE AREA: 35.07 AC.±
PREVIOUS DP2 NUMBERS: ECP-16-001, F-79-131, F-89-32, WP-16-090
AREA OF THE SMALLEST LOT = 130,680 SQ.FT (3.00 ACRES).
 - THERE IS AN EXISTING STRUCTURE ON LOT 3 KNOWN AS 12435 S. LIME KILN ROAD. NO NEW BUILDINGS, EXTENSIONS OR ADDITIONS TO THE EXISTING DWELLINGS ARE TO BE CONSTRUCTED AT A DISTANCE LESS THAN THE ZONING REGULATIONS.
 - DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
A) WIDTH - 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE).
B) SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING (1-1/2").
C) GEOMETRY - MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. OF 45 FOOT TURNING RADIUS.
D) STRUCTURES (GULVERTY/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING).
E) DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD PLAN WITH NO MORE THAN 1 FOOT OF DEPTH OVER DRIVEWAY SURFACE.
F) STRUCTURE CLEARANCES - MINIMUM 12 FEET.
G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
 - FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM AND ROAD RIGHT-OF-WAY LINE AND NOT TO THE PIPESTEM LOT DRIVEWAY.
 - STORMWATER MANAGEMENT REQUIREMENTS WILL BE MET ON-SITE VIA ROOFTOP DISCONNECTION, NON-ROOFTOP DISCONNECT, GRASS CHANNEL, AND NATURAL AREA CONSERVATION CREDITS IN ACCORDANCE WITH THE 2000 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL.
 - LANDSCAPING FOR LOTS 1, 2, 4, 5, & 6 HAS BEEN PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED PERMETER LANDSCAPING AND TRASH PAD SCREENING (44 SHADE TREES, 10 EVERGREENS AND 10 SHRUBS) SHALL BE POSTED WITH THE DEVELOPER'S AGREEMENT IN THE TOTAL AMOUNT OF \$15,000.00.
 - NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAMS, OR THEIR BUFFERS AND FOREST CONSERVATION RETENTION CREDIT AREAS.
 - PRIVATE WATER AND PRIVATE SEWERAGE WILL BE UTILIZED.
 - STEEP SLOPES AREA = 15,241 SQ. FT.
GRADING ON STEEP SLOPES WITH A CONTIGUOUS AREA OF 20,000 SQ. FT. OR MORE IS NOT PERMITTED WITHOUT A WAIVER APPROVAL.
 - A PRE-SUBMISSION COMMUNITY MEETING WAS HELD FOR THIS PROJECT ON JULY 7, 2015 AT THE ST PAUL'S EVANGELICAL LUTHERAN CHURCH.
 - A FEE-IN-LIEU OF OPEN SPACE HAS BEEN PAID IN THE AMOUNT OF \$7,500.00 FOR FIVE LOTS.
 - THIS PROJECT IS SUBJECT TO WAIVER PETITION WP-16-090, WHICH WAS APPROVED BY THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING ON FEBRUARY 23, 2016. THIS WAIVER IS TO SECTION 16.1200(a)(7) WHICH REQUIRES THE RETENTION OF SPECIMEN TREES 30" OR MORE IN DIAMETER, TWO SPECIMEN TREES WILL BE REMOVED WITH THIS DEVELOPMENT. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
1. REMOVAL IS APPROVED FOR ST#1 IDENTIFIED AS A 30" RED MAPLE AND ST#2 IDENTIFIED AS A 31" RED MAPLE AS SHOWN ON THE WAIVER PETITION EXHIBIT.
2. THE DEVELOPER PROPOSES MITIGATION FOR THE REMOVAL OF THE TWO SPECIMEN TREES BY PLACEMENT OF APPROXIMATELY 11.02 ACRES OF EXISTING FOREST INTO ON-SITE FOREST CONSERVATION RETENTION EASEMENT AREAS AND BY PERIMETER PLANTINGS. ALL PROPOSED PLANTINGS AND THE CREATION OF THE FOREST CONSERVATION RETENTION EASEMENT WILL SERVE TO MITIGATE AND PROVIDE AN ALTERNATIVE PROPOSAL FOR THE REMOVAL OF THE TWO SPECIMEN TREES.
 - THE PROPERTY IS WITHIN GROWTH TIER III AREA AND PLANNING BOARD APPROVAL IS NOT REQUIRED BECAUSE THE PER-CERT PLAN WAS APPROVED IN NOVEMBER, 2015.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature]
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature]
 CHIEF, DIVISION OF LAND DEVELOPMENT



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. 17942, EXP. DATE 09/03/17.
 R. JACOB HRMAT P.E. 9/1/16 DATE:



MATCH LINE SHEET 2

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 7350-B Grace Drive, Columbia, Maryland 21044
 (410) 997-0296 Tel. (410) 997-0298 Fax.

HILL PROPERTY, LOTS 1-6
 (ZIMMERMAN PROPERTY, LOTS 4, 5, & 7)
 TAX MAP 45 - PARCEL 59 - BLOCK 5
 FIFTH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND

SUPPLEMENTAL PLAN

Project date: SEP. 2016
 engineering illustration: MMT
 scale: 1" = 50'
 approval: RJH

1 OF 3
 F-16-071

SOILS TABLE

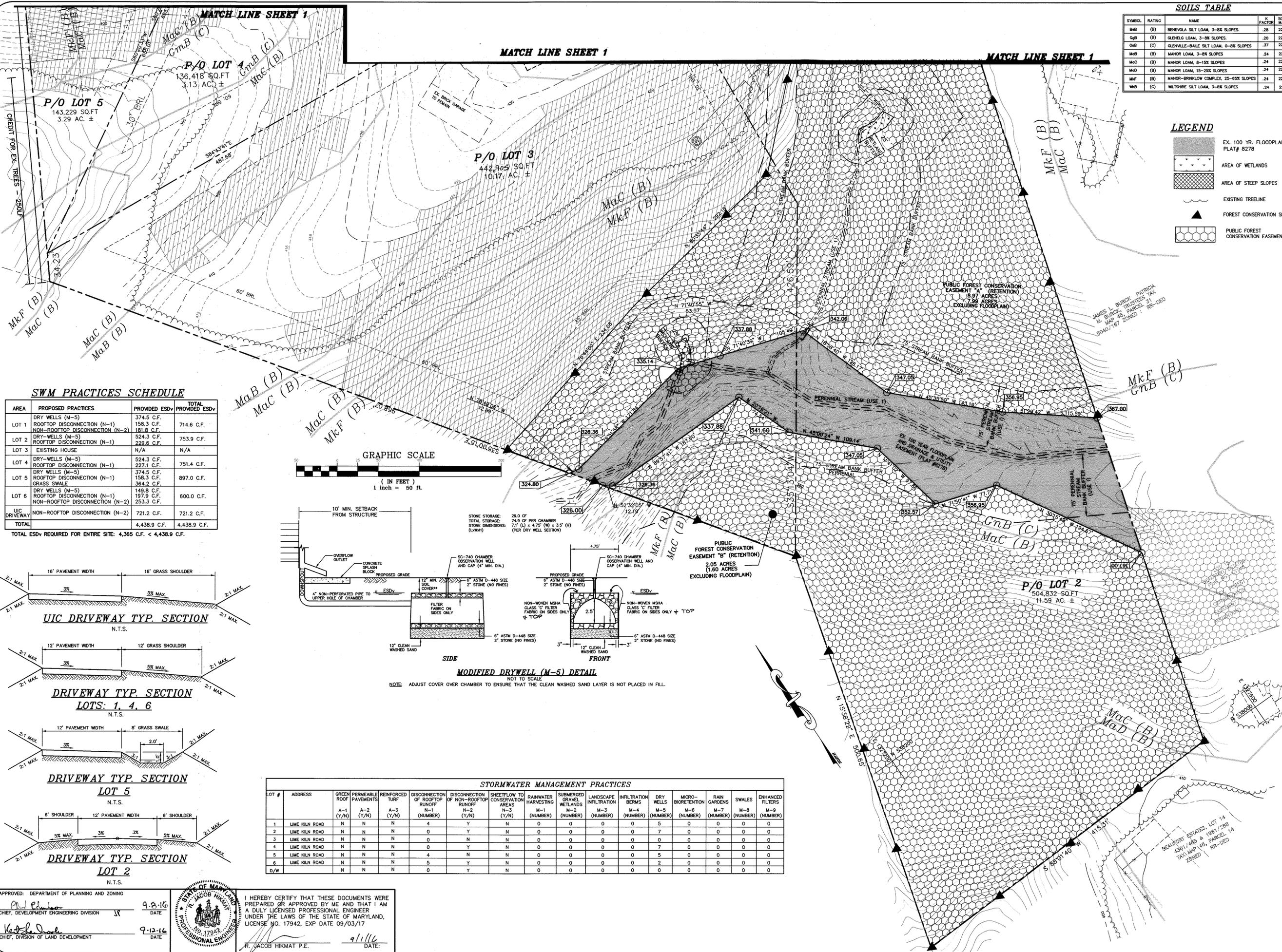
SYMBOL	RATING	NAME	T	S	MAP
BaB	(B)	BENEVOLE SILT LOAM, 3-8% SLOPES	.28	.22	
GnB	(B)	GLENVALE SILT LOAM, 3-8% SLOPES	.20	.22	
GnB	(C)	GLENVALE-SILT LOAM, 0-8% SLOPES	.37	.22	
MaB	(B)	MANOR LOAM, 3-8% SLOPES	.24	.22	
MaC	(B)	MANOR LOAM, 8-15% SLOPES	.24	.22	
MaD	(B)	MANOR LOAM, 15-25% SLOPES	.24	.22	
MkF	(B)	MANOR-BRINKLOW COMPLEX, 25-65% SLOPES	.24	.22	
WnB	(C)	WILTSHIRE SILT LOAM, 3-8% SLOPES	.24	.22	

LEGEND

- EX. 100 YR. FLOODPLAIN PLAT# 8278
- AREA OF WETLANDS
- AREA OF STEEP SLOPES
- EXISTING TREELINE
- FOREST CONSERVATION SIGNAGE
- PUBLIC FOREST CONSERVATION EASEMENT

MATCH LINE SHEET 1

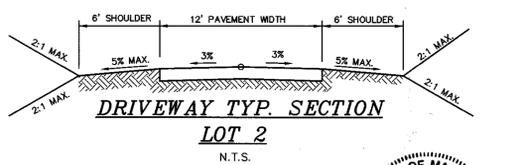
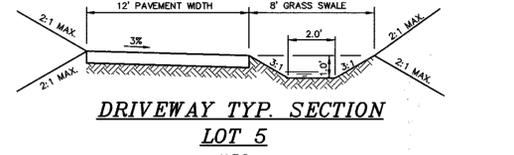
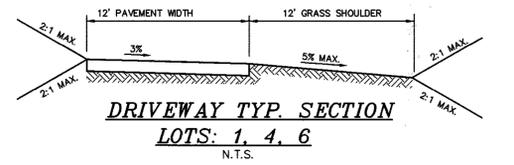
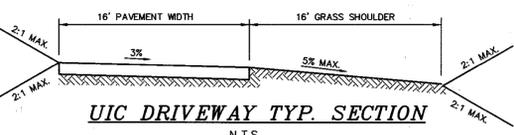
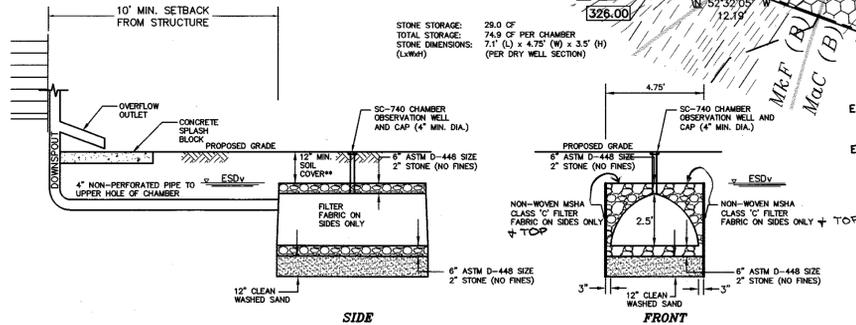
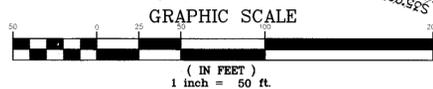
MATCH LINE SHEET 1



SWM PRACTICES SCHEDULE

AREA	PROPOSED PRACTICES	PROVIDED ESDv	TOTAL PROVIDED ESDv
LOT 1	DRY WELLS (M-5) ROOFTOP DISCONNECTION (N-1) NON-ROOFTOP DISCONNECTION (N-2)	374.5 C.F. 158.3 C.F. 181.8 C.F.	714.6 C.F.
LOT 2	DRY WELLS (M-5) ROOFTOP DISCONNECTION (N-1)	524.3 C.F. 529.6 C.F.	753.9 C.F.
LOT 3	EXISTING HOUSE	N/A	N/A
LOT 4	DRY WELLS (M-5) ROOFTOP DISCONNECTION (N-1)	524.3 C.F. 227.1 C.F.	751.4 C.F.
LOT 5	DRY WELLS (M-5) ROOFTOP DISCONNECTION (N-1) GRASS SWALE	374.5 C.F. 158.3 C.F. 384.2 C.F.	897.0 C.F.
LOT 6	DRY WELLS (M-5) ROOFTOP DISCONNECTION (N-1) NON-ROOFTOP DISCONNECTION (N-2)	149.8 C.F. 197.9 C.F. 253.3 C.F.	600.0 C.F.
UIC DRIVEWAY	NON-ROOFTOP DISCONNECTION (N-2)	721.2 C.F.	721.2 C.F.
TOTAL		4,438.9 C.F.	4,438.9 C.F.

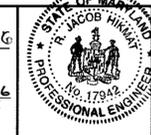
TOTAL ESDv REQUIRED FOR ENTIRE SITE: 4,365 C.F. < 4,438.9 C.F.



STORMWATER MANAGEMENT PRACTICES

LOT #	ADDRESS	GREEN ROOF (Y/N)	PERMEABLE PAVEMENTS (Y/N)	REINFORCED TURF (Y/N)	DISCONNECTION OF ROOFTOP RUNOFF (NUMBER)	DISCONNECTION OF NON-ROOFTOP RUNOFF (NUMBER)	SHEETFLOW TO CONSERVATION AREAS (Y/N)	RAINWATER HARVESTING (NUMBER)	SUBMERGED GRAVEL WETLANDS (NUMBER)	LANDSCAPE INFILTRATION (NUMBER)	INFILTRATION BERMS (NUMBER)	DRY WELLS (NUMBER)	MICRO-BIORETENTION (NUMBER)	RAIN GARDENS (NUMBER)	SWALES (NUMBER)	ENHANCED FILTERS (NUMBER)
1	LIME KILN ROAD	N	N	N	4	Y	N	0	0	0	0	5	0	0	0	0
2	LIME KILN ROAD	N	N	N	0	Y	N	0	0	0	0	7	0	0	0	0
3	LIME KILN ROAD	N	N	N	0	N	N	0	0	0	0	7	0	0	0	0
4	LIME KILN ROAD	N	N	N	0	Y	N	0	0	0	0	7	0	0	0	0
5	LIME KILN ROAD	N	N	N	4	N	N	0	0	0	0	5	0	0	0	0
6	LIME KILN ROAD	N	N	N	5	Y	N	0	0	0	0	2	0	0	0	0
D/W		N	N	N	0	Y	N	0	0	0	0	2	0	0	0	0

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9-2-16 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION
 [Signature] 9-12-16 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT



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. 17942, EXP DATE 09/03/17
 R. JACOB HIKMAT P.E. 9/1/16 DATE

Project: Hill Property, Lots 1-6
 Date: SEP 2016
 Illustration: Engineering
 Scale: 1"=50'
 Revisions: 1
 Approval: RJH

Project: Hill Property, Lots 1-6
 Date: SEP 2016
 Illustration: Engineering
 Scale: 1"=50'
 Revisions: 1
 Approval: RJH

HILL PROPERTY, LOTS 1-6
 (ZIMMERMAN PROPERTY, LOTS 4, 5, & 7)
 TAX MAP 45 - BLOCK 5
 FIFTH ELECTION DISTRICT - PARCEL 59 - HOWARD COUNTY, MARYLAND
SUPPLEMENTAL PLAN

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 7350-B Grace Drive, Columbia, Maryland 21044
 (410) 997-0296 Tel. (410) 997-0298 Fax

SCHEDULE A : PERIMETER LANDSCAPED EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES				ADJACENT TO ROADWAY				ADJACENT TO PERIMETER PROPERTIES				TOTAL
	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	B (PERIMETER 4)	A (PERIMETER 5)	A (PERIMETER 6)	A (PERIMETER 7)	B (PERIMETER 8)	A (PERIMETER 9)	C (TRASH PAD)			
LINEAR FEET OF PERIMETER	475.80 LF	144.72 LF	507.24 LF	227.19 LF	402.73 LF	520.32 LF	180.00 LF	150.48 LF	1224.25 LF	13 LF			
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 475.80 LF OF EX. TREES	YES, 29 LF OF EX. TREES	YES, 335 LF OF EX. TREES	NO	NO	YES, 800 LF OF EX. TREES	NO	NO	YES, 530 LF OF EX. TREES	NO			
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO			
NUMBER OF PLANTS REQUIRED	0 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	2 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	5 SHADE TREES 6 EVERGREEN TREES 0 SHRUBS	7 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	9 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	3 SHADE TREES 4 EVERGREEN TREES 0 SHRUBS	12 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	0 SHADE TREES 1 EVERGREEN TREES 0 SHRUBS	44 SHADE TREES 11 EVERGREEN TREES 0 SHRUBS		
NUMBER OF PLANTS PROVIDED	0 SHADE TREES 0 EVERGREEN TREES 0 OTHER TREES (2:1 SUBSTITUTION) 0 SHRUBS (10:1 SUBSTITUTION)	2 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	5 SHADE TREES 6 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	7 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	9 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	3 SHADE TREES 4 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	12 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	0 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 10 SHRUBS	44 SHADE TREES 10 EVERGREEN TREES 0 SUBSTITUTION TREES 10 SHRUBS		

MINIMUM LOT SIZE CHART

LOT NO.	MINIMUM LOT AREA	PIPESTEM	TOTAL LOT AREA
2	500,955 SQ. FT. (11.50 ACRES)	4,043 SQ. FT. (0.09 ACRES)	504,998 SQ. FT. (11.59 ACRES)
3	440,635 SQ. FT. (10.11 ACRES)	2,470 SQ. FT. (0.06 ACRES)	442,965 SQ. FT. (10.17 ACRES)
4	133,147 SQ. FT. (3.05 ACRES)	3,279 SQ. FT. (0.08 ACRES)	136,426 SQ. FT. (3.13 ACRES)
5	140,850 SQ. FT. (3.23 ACRES)	2,607 SQ. FT. (0.06 ACRES)	143,457 SQ. FT. (3.29 ACRES)
6	186,195 SQ. FT. (4.25 ACRES)	2,892 SQ. FT. (0.07 ACRES)	189,087 SQ. FT. (4.32 ACRES)

LANDSCAPE REQUIREMENT PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
25		ACER RUBRUM 'RED SUNSET'	RED SUNSET RED MAPLE	2 1/2" - 3" CAL.
19		GLEDITSIA TRIACANTHOS INERMIS 'IMPERIAL'	IMPERIAL THORNLESS HONEYLOCUST	2 1/2" - 3" CAL.
10		PINUS STROBUS	WHITE PINE	6' - 8' HT.
10		TAXUS MEDIA 'HICKSI' (TM) (SHRUBS)	HICKS YEW	2 1/2" - 3" HT.
TOTAL				
44 SHADE TREES, 10 EVERGREENS, 10 SHRUBS				

FOREST CONSERVATION DATA

NET TRACT AREA:
 A. Total tract area.....=35.07
 B. Area within 100 year floodplain.....=1.42
 C. Area to remain in agricultural production.....=0.00
 D. Net tract area.....=33.65

LAND USE CATEGORY: (from table 3.2.1, page 40, Manual)
 Input the number "1" under the appropriate land use zoning, and limit to only one entry.

ARA MDR IDA HDR MPD CIA
 0 1 0 0 0 0

E. Afforestation threshold.....20% x D =6.73
 F. Conservation threshold.....25% x D =8.41

EXISTING FOREST COVER:
 G. Existing forest cover (excluding floodplain).....=14.10
 H. Area of forest above afforestation threshold.....=7.37
 I. Area of forest above conservation threshold.....=5.69

BREAK EVEN POINT:
 J. Forest retention above threshold with no mitigation.....=9.55
 K. Clearing permitted without mitigation.....=4.55

PROPOSED FOREST CLEARING:
 L. Total area of forest to be cleared.....=4.55
 M. Total area of forest to be retained.....=9.55

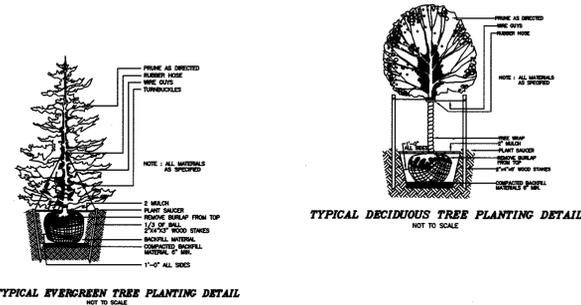
PLANTING REQUIREMENTS:
 N. Reforestation for clearing above conservation threshold.....=1.14
 P. Reforestation for clearing below conservation threshold.....=0.00
 Q. Credit for retention above conservation threshold.....=1.14
 R. Total reforestation required.....=0.00
 S. Total afforestation required.....=0.00
 T. Total reforestation and afforestation required.....=0.00

GENERAL NOTES

- FOREST PROTECTION**
- ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED BLAZE ORANGE PLASTIC MESH FENCING AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRUBBING, OR GRADING ACTIVITIES.
 - THE FOREST PROTECTION DEVICES SHALL BE INSTALLED SUCH THAT THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT OTHERWISE PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES.
 - ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING SILT FENCE BEING USED AS PROTECTIVE FENCING. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY.
 - ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THESE PROTECTED AREAS.
 - INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, SPILLAGE AND DRAINING OF MATERIALS THAT MAY BE HARMFUL TO TREES.
 - THE GENERAL CONTRACTOR SHALL PREVENT PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORING OF BUILDING SUPPLIES OR STOCKPILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS.
 - REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
 - THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL PRESERVATION AREAS, AS NECESSARY.
- PRE-CONSTRUCTION MEETING**
- AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
 - TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIFIC TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS;
 - INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
 - MAKE ALL NECESSARY ADJUSTMENTS;
 - ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.
- CONSTRUCTION MONITORING**
- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
 - THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.



SIGNAGE DETAIL
NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

TYPICAL DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 9-6-16 DATE
 CHIEF, DEVELOPMENT ENGINEERING DIVISION JP
 [Signature] 9-12-16 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT



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. 17942, EXP DATE 09/03/17
 R. JACOB HIKMAT P.E. 9/11/16 DATE

Project: 15-003
 Date: SEP. 2016
 Illustration: MMT
 Scale: 1"=50'
 Approval: RJH

date: _____
 description: _____
 revisions: _____

HILL PROPERTY, LOTS 1-6
 (ZIMMERMAN PROPERTY, LOTS 4, 5, & 7)
 TAX MAP 45 - PARCEL 59 - BLOCK 5
 FIFTH ELECTION DISTRICT - HOWARD COUNTY, MARYLAND
NOTES AND DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 7350-B Grace Drive, Columbia, Maryland 21044
 (410) 997-0296 Tel. (410) 997-0298 Fax