

LOWER FLOOR PLAN
W/ELEVATION "A"
 1/4" = 1'-0"

UNLESS OTHERWISE NOTED ALL INTERIOR PARTITIONS TO BE 3 1/2"
 UNLESS OTHERWISE NOTED WINDOW HEAD HEIGHT TO BE 8'-0" AS.F.
 UNLESS OTHERWISE NOTED PROVIDE 2x46 POSTS BETWEEN ALL MULTIPLE WINDOWS.

As this lot is limited with a 5 Bedroom limitation, any future building permit for converting all or a portion of the basement into finished living space may be denied by the Health Dept. if the total of proposed bedrooms in the dwelling exceeds 5.

Date	REV.	BY	CHK.
AC. 10/15/07	BEB		
AC. 11/01/07	J1		
AC. 2/01/08	J1		
PS. 2/15/08	J1		
CS. 07/01/11	J1/JC3		
REV. 02/03/11	J1/JC3		
REV. 06/10/11	DG		
REV. 01/02/12	J5		
REV. 02/03/12	J5		
REV. 07/17/12	J5		
REV. 04/15/13	J5		
PS. 06/03/13	J5		
REV. 07/01/13	JR		
REV. 02/03/15	JR		

Project Number: 0706-03

HAWTHORNE
MITCHELL BEST HOMES

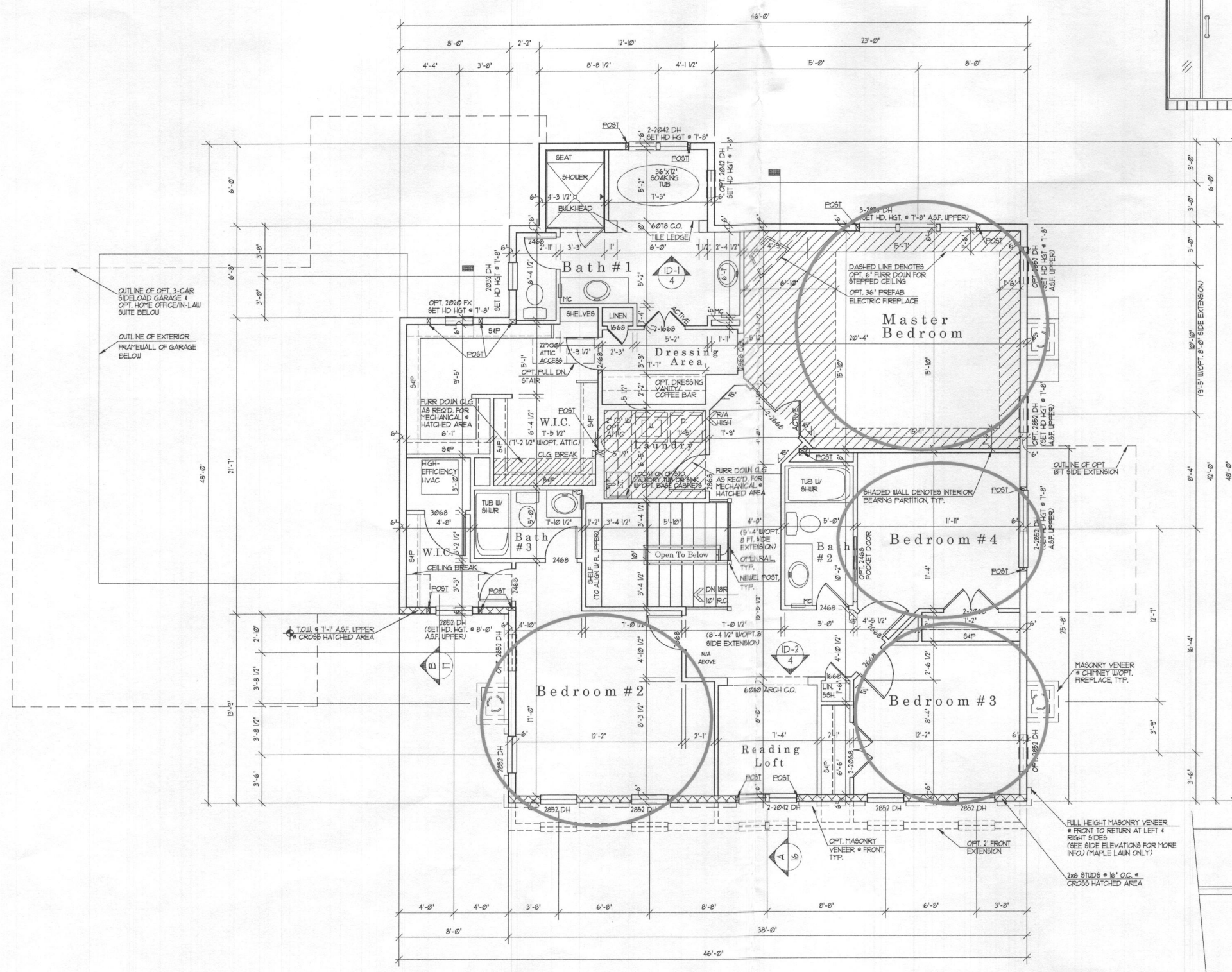
Architect

SUTTON
YANTIS
ASSOCIATES
ARCHITECTS

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Sheet Number

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UPPER FLOOR PLAN

W/ELEVATION "A"

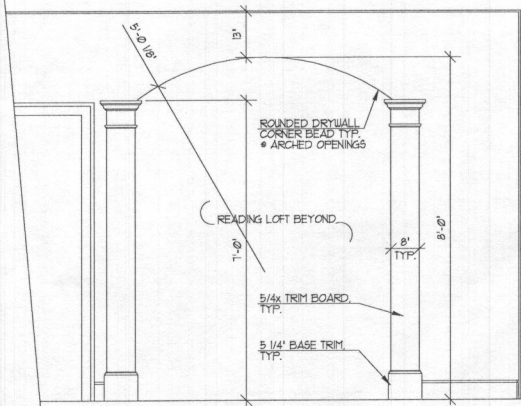
UNLESS OTHERWISE NOTED ALL INTERIOR PARTITIONS TO BE 3/4" UNLESS OTHERWISE NOTED WINDOW HEAD HEIGHT TO BE 1'-0" ASF.
UNLESS OTHERWISE NOTED PROVIDE 2-3/8" POSTS BETWEEN ALL MULTIPLE WINDOWS.

1/4" = 1'-0"



ID-1 Interior Elevation
Master Bath

1/2" = 1'-0"



ID-2 Interior Elevation
Reading Loft Cased Opening

1/2" = 1'-0"

As this lot is limited with a 5 Bedroom limitation, any future building permit for converting all or a portion of the basement into finished living space may be denied by the Health Dept. if the total of proposed bedrooms in the dwelling exceeds 5.

Date	REV.	BY	CHK.
06/10/11	01	DS	AS
06/10/11	02	DS	AS
06/10/11	03	DS	AS
06/10/11	04	DS	AS
06/10/11	05	DS	AS
06/10/11	06	DS	AS
06/10/11	07	DS	AS
06/10/11	08	DS	AS
06/10/11	09	DS	AS
06/10/11	10	DS	AS

Project Number: 0706-04

HAWTHORNE
MITCHELL BEST HOMES

Architect

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Sheet Number

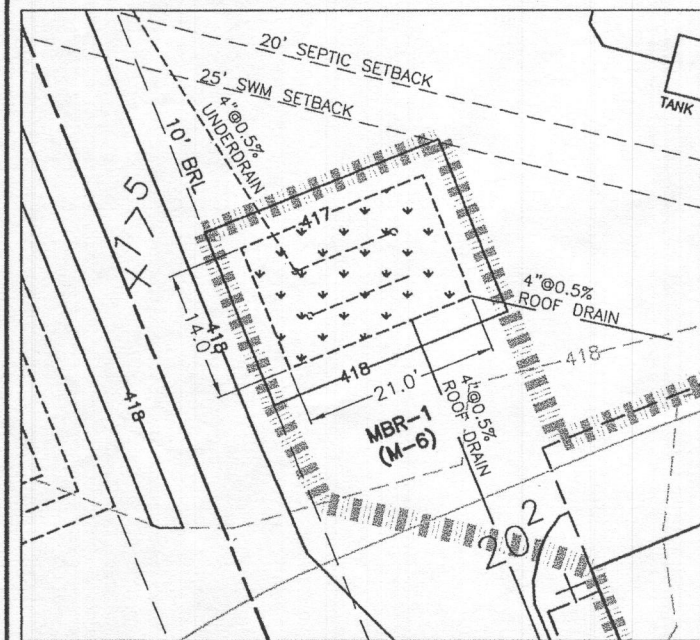
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LEGEND

- SOILS CLASSIFICATION *ChB2*
- SOILS DELINEATION
- EXISTING CONTOURS
- PROPOSED CONTOURS
- LIMIT OF WETLANDS
- 25' WETLANDS BUFFER
- CENTERLINE OF STREAM
- STREAM BUFFER
- PROPOSED STRUCTURE
- SEPTIC RESERVE AREA
- PRIVATE WELL BOX
- NON ROOFTOP DISCONNECT (FILTER AREA)
- NON ROOFTOP DISCONNECT (IMPERVIOUS)
- SWM DRAINAGE DIVIDE

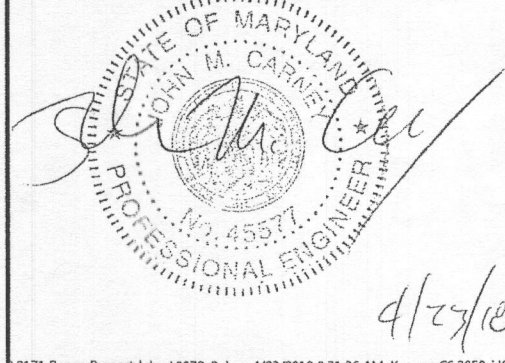
BUILDING PERMIT PLAN NOTES:

1. THE LOT SHOWN HEREON WAS RECORDED ON THE PLAT FOR REGAN PROPERTY, PLAT Nos. 23063-23074. REFER TO THE PLATS FOR LOT DIMENSIONS, LOT AREAS, ALL EASEMENTS AND CONDITIONS.
2. SEDIMENT AND EROSION CONTROLS WERE APPROVED BY HOWARD SOIL CONSERVATION DISTRICT UNDER A GRADING PLAN AND MODIFIED FOR THIS SPECIFIC HOUSE.
3. TOPOGRAPHY SHOWN HEREON IS TAKEN FROM THE APPROVED ROAD CONSTRUCTION PLANS AND TOPOGRAPHIC INFORMATION PROVIDED BY BENCHMARK ENGINEERING, INC., ON OR ABOUT JANUARY, 2012.
4. ALL SEDIMENT AND EROSION CONTROL FEATURES USED ON THIS SITE SHALL COMPLY WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
5. ALL DRAINAGE AND STORMWATER MANAGEMENT FEATURES USED ON THIS SITE MUST COMPLY WITH THE APPROVED ROAD CONSTRUCTION PLANS EXCEPT AS WAIVED.
6. THE EXISTING WELL SHOWN ON THIS PLAN, HO-95-2698, HAS BEEN FIELD LOCATED BY BENCHMARK ENGINEERING, INC., AND IS ACCURATELY SHOWN.
7. THERE ARE NO EXISTING WELLS OR SEPTIC SYSTEMS WITHIN 100' OF THIS PROJECT'S BOUNDARY EXCEPT AS NOTED.
8. ANY CHANGES TO A PRIVATE SEWAGE DISPOSAL AREA OR WELL BOX SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
9. STORMWATER MANAGEMENT FOR THIS LOT WAS DESIGNED AND PROVIDED BY ONE MICRO-BIORETENTION FACILITY (MDE M-6), DRY WELL FACILITY (MDE M-5) AND ONE NON-ROOFTOP DISCONNECTION (MDE N-2).
10. MICRO-BIORETENTION SHALL HAVE EITHER A 4" OR 6" ROOF LEADER DEPENDING ON ROOF-TOP AREA.
11. THE HOUSE IS PLANNED TO BE 5 BEDROOMS.



MBR-1 (M-6) DETAIL
1" = 20'

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. 45577, Expiration Date: 06-08-2018.



Approved for UPT
B18002692
8/10/18



NOTE:
UNLESS OTHERWISE NOTED, THE FIRST RUN OF PVC ROOF LEADER SHALL BE 4" AND SHALL INCREASE TO AT LEAST 6" AFTER ANY CONFLUENCE OF 4" PIPES.

ESD STORMWATER MANAGEMENT SUMMARY TABLE

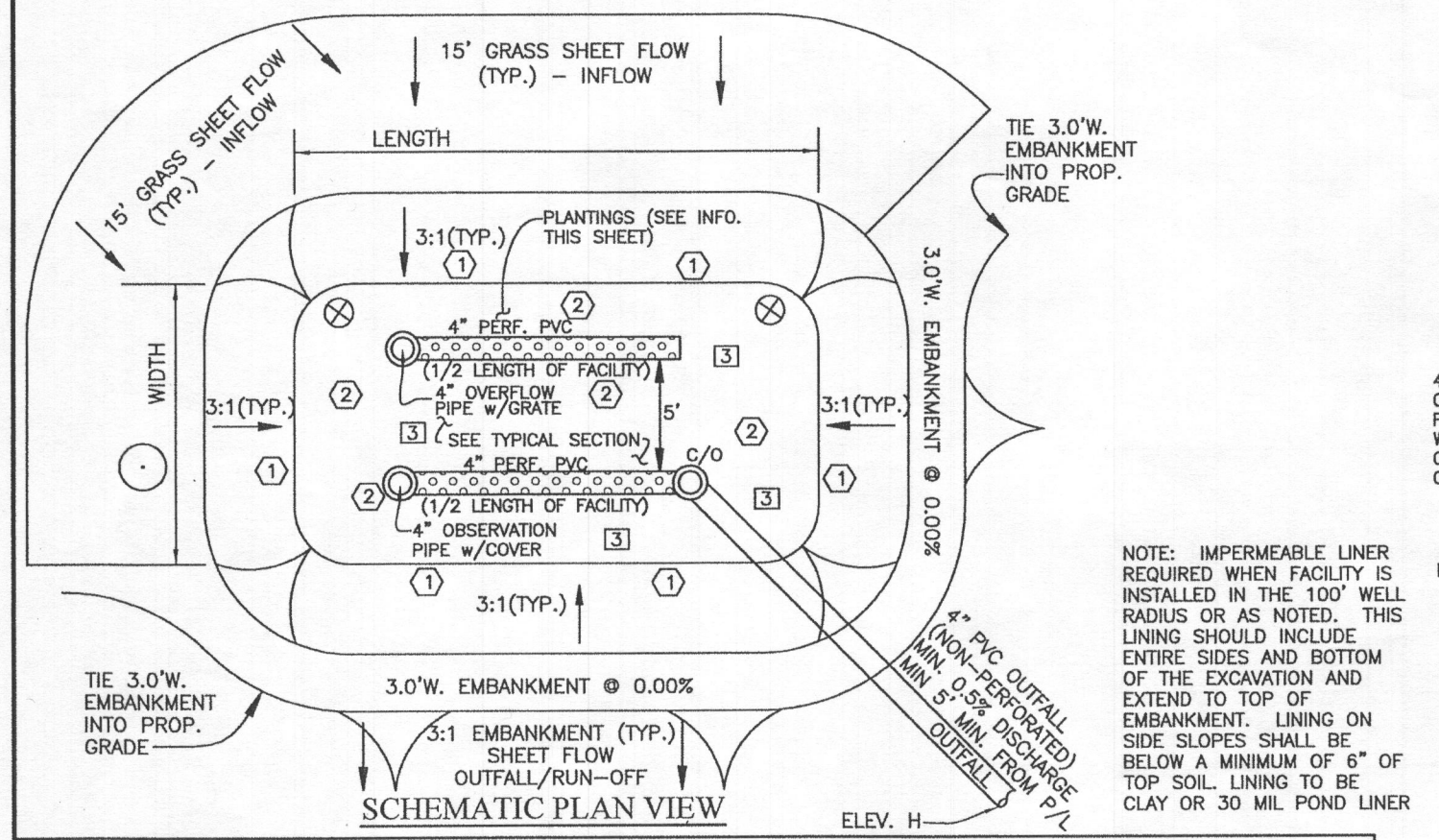
Practice	#	DA to practice	Imp Area to practice	Q _s = 0.17 inches		ESD _v = 631 cfs	R _s = 0.17		HEV	Ownership	
				Required	Provided		Required	Provided			
(M-6) MicroBioretention	1	4.408	3.351	88	294	PASS	270	535	1.0	118	Private
(N-2) Disc. of Non-Rooftop Runoff	1	3.199	1.307					98	1.0	98	Private
Total Treated		7.607	4.658	88	294		631	633	1.0	164	216
Site Total		44.072	5.961								

PLAN VIEW
1" = 50'

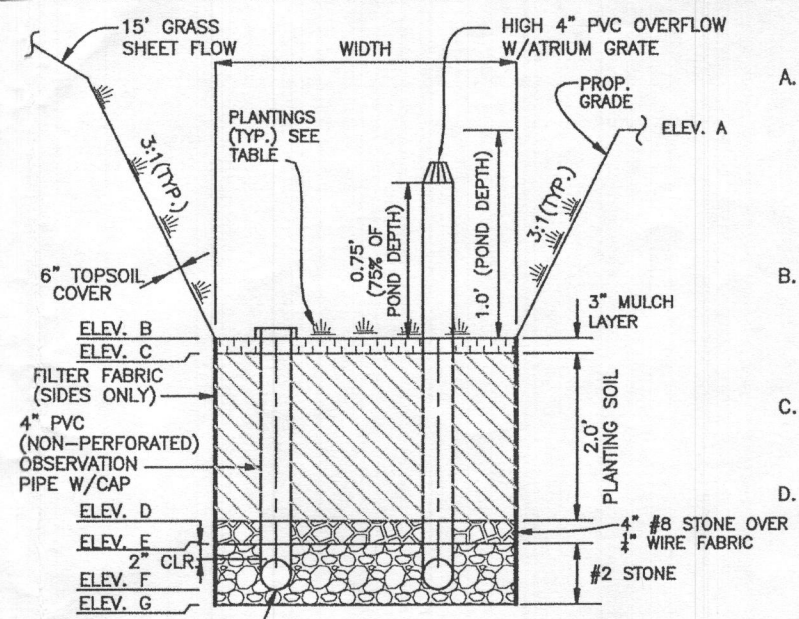
OWNER/BUILDER:	BENCHMARK ENGINEERS & LAND SURVEYORS & PLANNERS ENGINEERING, INC. 8480 BALTIMORE NATIONAL PIKE SUITE 315 ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CVLENGINEERING.COM	
PROJECT:	REGAN PROPERTY LOT 6	
LOCATION:	12349 POINT RIDGE DRIVE HIGHLAND, MD 20777 TAX MAP No. 34 - BLOCK No. 24 - PARCEL No. 200 5TH ELECTION DISTRICT, TAX ID NUMBER: 05 597439	
TITLE:	BUILDING PERMIT PLAN	
HOUSE TYPE:	HAWTHORNE - ELEVATION D	
DATE:	APRIL, 2018	PROJECT NO. 2171
SCALE:	AS SHOWN	DRAWING 1 OF 2

ON-LOT BIORETENTION DIMENSIONS

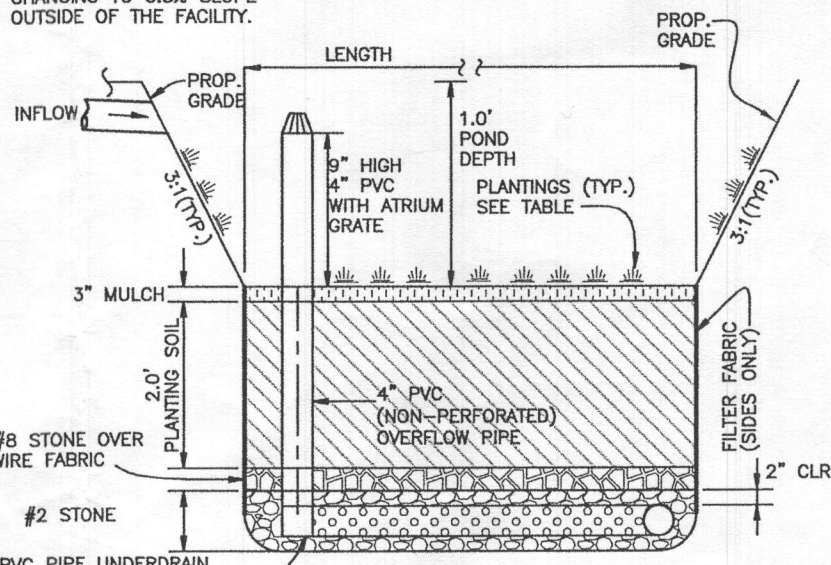
FACILITY	DIMENSIONS								LENGTH	WIDTH	FILTER (Af)	PLANTINGS			LINER
	A	B	C	D	E	F	G	H				1	2	3	
MBR-1	418.00	417.00	416.75	414.75	414.42	413.92	412.62	413.50	14.0	20.0	280	31	31	16	NO



NOTE: IMPERMEABLE LINER REQUIRED WHEN FACILITY IS INSTALLED IN THE 100' WELL RADIUS OR AS NOTED. THIS LINING SHOULD INCLUDE ENTIRE SIDES AND BOTTOM OF THE EXCAVATION AND EXTEND TO TOP OF EMBANKMENT. LINING ON SIDE SLOPES SHALL BE BELOW A MINIMUM OF 6\"/>



TYPICAL PROFILE

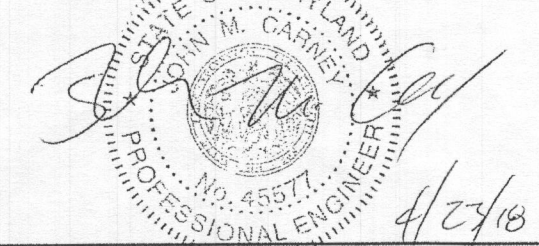


TYPICAL SECTION
MICRO-BIORETENTION DETAILS
NOT TO SCALE

OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

- A. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
- B. THE OWNER SHALL PERFORM A PLANT INSPECTION IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- C. THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
- D. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

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. 45577, Expiration Date: 06-08-2018.



OWNER/BUILDER:
MB HIGHLAND RESERVE, LLC
1686 EAST GUDE DRIVE
ROCKVILLE, MD 20850
301-762-9511

BENCHMARK
ENGINEERS LAND SURVEYORS PLANNERS
ENGINEERING, INC.
8480 BALTIMORE NATIONAL PIKE SUITE 315
ELLCOTT CITY, MARYLAND 21043
(P) 410-465-6105 (F) 410-465-6644
WWW.BEI-CMLENGINEERING.COM

MATERIALS & SPECIFICATIONS FOR MICRO-BIORETENTION

MATERIAL	SPECIFICATION	SIZE	NOTES:
PLANTINGS	SEE APPENDIX A; TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2.0' TO 4.0' DEEP)	LOAMY SAND 60-65% COMPOST 35-40% OR SANDY LOAM 30% COARSE SAND 30% & COMPOST 40%	N/A	USDA SOIL TYPES: LOAMY SAND OR SANDY LOAM; CLAY CONTENT <5%
ORGANIC CONTENT	MIN 10% BY DRY WEIGHT ASTM D 2974		
MULCH	SHREDDED HARDWOOD	N/A	AGED 6 MONTHS, MINIMUM, NO PINE OR WOOD CHIPS
GEOTEXTILE (CLASS "C")		N/A	PE TYPE 1 NONWOVEN
GEOTEXTILE (1/4" WIRE MESH)		1/4" WIRE MESH	1/4" WIRE MESH
UNDERDRAIN GRAVEL	AASHTO M-43	NO. 57 OR NO. 6 0.375" TO 0.750"	
UNDERDRAIN PIPING	F758, TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID SCH.40 PVC, SDR35 OR HDPE	3/8" PERF. @ 6" O/C, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES, NOT NECESSARY UNDERNEATH PIPES. PIPE SHALL BE WRAPPED WITH 1/4-INCH GALVANIZED HARDWARE CLOTH
IMPERVIOUS LINER	ASTM-D-4833 (THICKNESS) ASTM-D-412 (TENSILE STRENGTH 1,100 LB., ELONGATION 200%) ASTM-D-624 (TEAR RESISTANCE - 150 LB./IN) ASTM-D-471 (WATER ADSORPTION: +8 TO -2% MASS)	30 MIL. THICK	LINER TO BE ULTRAVIOLET RESISTANT. A GEOTEXTILE FABRIC SHOULD BE USED TO PROTECT THE LINER FROM PUNCTURE.
GEOTEXTILE (BELOW IMPERV. LINER)	ASTM-D-4833 (PUNCTURE STRENGTH 125LB) ASTM-D-4632 (TENSILE STRENGTH 300 LB.)		

MICROBIORETENTION PLANTING SCHEDULE

- (PLANTING SPECIES AND DENSITY CAN BE CHANGED OR SUBSTITUTED BY A LANDSCAPE ARCHITECT OR QUALIFIED DESIGNER)
- 1 IRIS FULVA (COPPER IRIS) (1 PER SY)
 - 2 LOBELIA CARDINALIS (CARDINAL FLOWER) (1 PER SY)
 - 3 RUDBECKIA SUBTOMENTOSA (SWEET CONEFLOWER) (1 PER 2 SY)
 - 4 CALLUNA VULGARIS (HEATHER) (1 PER FACILITY)
 - 5 ACER GINNALA (ARMUR MAPLE) (1 PER FACILITY)

MICROBIORETENTION PLANTING DATA

- 1. PLANTINGS WITHIN THE PONDING AREA OF THE FACILITY ARE TO BE OF A MEDIUM TO HIGH WATER TOLERANCE
- 2. PLANTINGS ALONG THE PERIMETER (BERM) AREA OF THE FACILITY ARE TO BE OF A LOW TO MEDIUM WATER TOLERANCE
- 3. AVOID PLANTINGS WITH EXCESSIVE ROOT MASS IN POND AREA OF THE RAIN GARDEN NEAR O.B. PIPE AND UNDERDRAIN.

PROJECT:	REGAN PROPERTY LOT 6		
LOCATION:	12349 POINT RIDGE DRIVE HIGHLAND, MD 20777 TAX MAP No. 34 - BLOCK No. 24 - PARCEL No. 200 5TH ELECTION DISTRICT, TAX ID NUMBER: 05 597439		
TITLE:	BUILDING PERMIT & STORMWATER MANAGEMENT NOTES & DETAILS		
HOUSE TYPE:	HAWTHORNE - ELEVATION D		
DATE:	APRIL, 2018	PROJECT NO.	2171
SCALE:	NOT TO SCALE	DRAWING	2 OF 2