

GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARD AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- 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.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD).
- STREET LIGHT IS NOT REQUIRED FOR USE IN COMMON ACCESS DRIVE. A MINIMUM SPACING OF 20' SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND ANY TREE.
- THE TOPOGRAPHY SHOWN HEREON IS BASED ON A TOPOGRAPHIC SURVEY PREPARED BY POTOMAC AERIAL SURVEYS, DATED JULY 2006.
- 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. 02HA AND 02HB WERE USED FOR THIS PROJECT.
- WATER AND SEWER FOR THIS PROJECT WILL BE PROVIDED UNDER PRIVATE SEPTIC AND PRIVATE WELL SYSTEM.
- STORM WATER MANAGEMENT IS PROVIDED BY MICRO-BIOTENTIONS TO PROVIDE WQV AND REV FOR THE USE IN COMMON DRIVE AND LOTS 2-4. LOT 1 SHALL UTILIZE A MICRO-BIOTENTION FACILITY, DRYWELLS AND NON-ROOFTOP DISCONNECTION.
- EXISTING UTILITIES LOCATED FROM ROAD CONSTRUCTION PLANS AND AVAILABLE RECORDED 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.
- THE 100-YR FLOODPLAIN DRAINAGE AND UTILITY EASEMENT SHOWN ON-SITE IS BASED ON A "OBVIOUSLY NOT CRITICAL FLOODPLAIN" STUDY PREPARED BY ROBERT H. VOGEL ENGINEERING, INC. DATED JANUARY 11, 2008.
- STREAMS AND WETLANDS SHOWN ONSITE ARE BASED ON A FIELD INVESTIGATION PERFORMED BY ECO-SCIENCE PROFESSIONAL, DATED DECEMBER 2007.
- APPO TRAFFIC STUDY PREPARED BY THE TRAFFIC CONCEPT INC, DATED MARCH, 2007.
- THE PROJECT BOUNDARY IS BASED ON A BOUNDARY SURVEY PREPARED BY ROBERT H. VOGEL ENGINEERING INC., DATED APRIL 2007.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS.

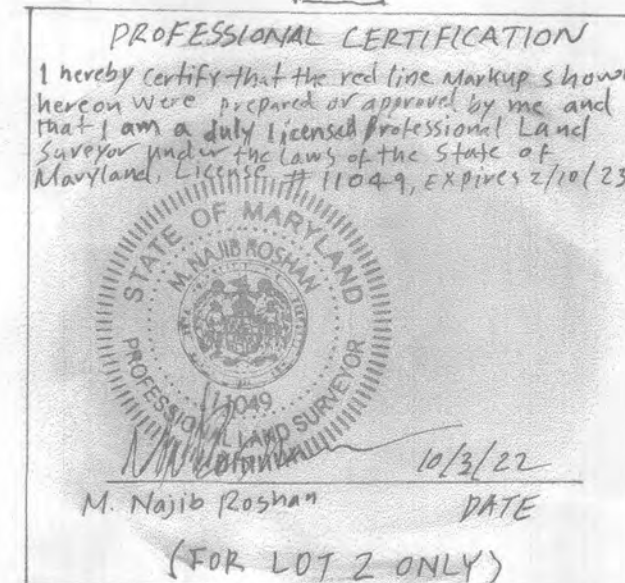
MISS UTILITY	1-800-257-7777
BELL ATLANTIC TELEPHONE CO.	410-954-6281
HOWARD COUNTY BUREAU OF UTILITIES:	410-313-2386
VERIZON CABLE LOCATION DIVISION:	410-393-3553
B.G.E. CO. CONTRACTOR SERVICES:	410-850-4620
B.G.E. CO. UNDERGROUND DAMAGE CONTROL:	410-797-4620
STATE HIGHWAY ADMINISTRATION:	410-531-5533
- ANY DAMAGE TO PUBLIC RIGHT-OF-WAY, PAYING, OR EXISTING UTILITIES WILL BE CORRECTED AT THE CONTRACTOR'S EXPENSE.
- IN ACCORDANCE WITH SECTION 128 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS, OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACKS, PORCHES OR DECKS, OPEN OR ENCLOSED MAY PROJECT NOT MORE THAN 10 FEET INTO THE FRONT OR REAR YARD SETBACK.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS:
 - WIDTH - 12 FEET (16 FEET IF SERVING MORE THAN ONE RESIDENCE)
 - SURFACE - 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING
 - GEOMETRY - MAXIMUM 14% GRADE, MAXIMUM 10% GRADE CHANGE, AND MINIMUM 45 FOOT TURNING RADIUS
 - STRUCTURES (CULVERTS/ BRIDGES) - MUST SUPPORT 25 GROSS TON LOADS (H25 LOADS)
 - DRAINAGE ELEMENTS - CAPABLE OF SAFELY PASSING 100 YEAR FLOOD EVENTS WITH NO MORE THAN 1 FOOT DEPTH OVER DRIVEWAY SURFACE
 - STRUCTURE CLEARANCES - MINIMUM 12 FEET
 - MAINTENANCE - SUFFICIENT TO INSURE ALL WEATHER USE
- ALL ASPECTS OF THE PROJECT ARE IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- DEED REFERENCE: L5125F 672.
- FOREST STAND DELINEATION PLAN PREPARED BY ECO-SCIENCE PROFESSIONALS, INC., DATED DECEMBER, 2007.
- THE FOREST CONSERVATION REQUIREMENTS PER SECTION 16.1202 OF THE HOWARD COUNTY CODE, FOREST CONSERVATION ACT FOR THIS SUBDIVISION HAVE BEEN FULFILLED THROUGH THE CREATION OF A FOREST CONSERVATION RETENTION EASEMENT ON NON-BUILDABLE PRESERVATION PARCEL 'B' IN THE AMOUNT OF \$117,612 TO BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT. THE DEVELOPER'S AGREEMENT WILL BE EXECUTED WITH THE FINAL PLAN.
- TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL/ CEMETERY LOCATIONS ON SITE.
- THE EXISTING HOUSE TRAILER LOCATED ON BUILDABLE PARCEL 'A' IS TO REMAIN AS A NON-LIVING SPACE AND/OR STORAGE.
- A NOISE STUDY IS NOT REQUIRED FOR THIS DEVELOPMENT.
- THE SUBJECT PROPERTY IS ZONED "RC-DEO" IN ACCORDANCE WITH THE 2004 COMPREHENSIVE ZONING PLAN AND THE COMP. LITE ZONING REGULATIONS EFFECTIVE ON 7/28/08, AND IS SUBJECT TO THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE 10/20/03 PER COUNCIL BILL 75-2003.
- ALL SIGN POST USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE RUBER SLEEVE (12 GAUGE-3" LONG. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
- DP2 REFERENCE: SP-08-011.
- WATERSVILLE ROAD IS A SCENIC ROAD.
- REFUSE COLLECTION, SNOW REMOVAL, AND MAINTENANCE FOR LOT 1 & LOTS 3-4 WILL OCCUR AT THE INTERSECTION OF THE USE-IN-COMMON ACCESS EASEMENT AND THE RIGHT-OF-WAY FOR WATERSVILLE ROAD.
- THIS AREA DESIGNATES A PRIVATE SEWAGE EASEMENT OF 10,000 SQUARE FEET AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT FOR INDIVIDUAL SEWAGE DISPOSAL. IMPROVEMENTS OF ANY NATURE IN THIS AREA ARE RESTRICTED UNTIL PUBLIC SEWERAGE IS AVAILABLE. THESE EASEMENTS SHALL BECOME NULL AND VOID UPON CONNECTION TO A PUBLIC SEWERAGE SYSTEM. THE COUNTY HEALTH OFFICER SHALL HAVE THE AUTHORITY TO GRANT VARIANCES FOR ENCROACHMENT INTO THE PRIVATE SEWAGE EASEMENT.
- ALL EXISTING WELLS AND SEPTIC AREAS WITHIN 100' OF THE SITE HAVE BEEN SHOWN TO THE BEST OF OUR KNOWLEDGE.
- ALL WELLS TO BE DRILLED PRIOR TO SUBMITTAL OF FINAL PLAT FOR SIGNATURE.
- A GROUND WATER APPROPRIATION PERMIT MUST BE ISSUED PRIOR TO RECORD PLAT SUBMISSION AND/OR PRIOR TO DRILLING WELLS.
- IT IS THE DEVELOPERS RESPONSIBILITY TO SCHEDULE THE WELL DRILLING PRIOR TO FINAL PLAT SUBMISSION. IT WILL NOT BE CONSIDERED GOVERNMENT DELAY IF THE WELL DRILLING HOLDS-UP THE HEALTH DEPARTMENT SIGNATURE OF THE RECORD PLAT. IF A WELL SUCCESS RATE IS ACCOMPLISHED AT VARIOUS LOCATIONS WITHIN THE SITE, THE DEVELOPER SHALL HAVE THE OPTION TO REQUEST RELIEF FROM DRILLING THE REMAINING WELLS PRIOR TO PLAT RECORDATION.
- THE LOTS SHOWN HEREON COMPLY WITH THE MINIMUM OWNERSHIP WIDTH AND LOT AREA AS REQUIRED BY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT.
- ANY CHANGES TO A PRIVATE SEWER EASEMENT SHALL REQUIRE A REVISED PERCOLATION CERTIFICATION PLAN.
- THE MICRO-BIOTENTION FACILITIES SHOWN ON THESE PLANS TO MAINTAIN 25' DISTANCE FROM SEPTIC EASEMENT & 100' FROM WELL BOX, OR 50' FROM WELL BOX WITH AN IMPERMEABLE LINER.
- NON BUILDABLE PRESERVATION PARCEL 'B' AND BUILDABLE PRESERVATION PARCEL 'A' TO BE PRIVATELY OWNED AND MAINTAINED WITH HOWARD COUNTY AND THE HOME OWNERS ASSOCIATION AS EASEMENT HOLDERS. NON-BUILDABLE BULK PARCEL C TO BE PRIVATELY OWNED. PRESERVATION PARCEL 'B' TO BE ESTABLISHED MAINLY FOR ENVIRONMENTAL PROTECTION OF THE STREAM, FLOODPLAIN, AND FOREST CONSERVATION AREAS. PRESERVATION PARCEL 'A' INCLUDES THE EXISTING HOUSE AND HORSE PASTURE TO ACCOMMODATE HORSES. NON-BUILDABLE BULK PARCEL C TO BE ESTABLISHED FOR FUTURE POTENTIAL DEVELOPMENT.
- STREET TREES ARE REQUIRED FOR THIS SUBDIVISION ALONG WATERSVILLE ROAD IN ACCORDANCE WITH SECTION 16.124(a)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL.
- STREET TREES ARE NOT REQUIRED FOR THE USE-IN-COMMON DRIVE.
- A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS' OWNERS EXPENSE. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES.

GENERAL NOTES CONTINUED:

- THE ARTICLES OF INCORPORATION AND HOME OWNERS ASSOCIATION DOCUMENTS WILL BE RECORDED CONCURRENTLY WITH THE RECORDING OF THE FINAL PLAT.
- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED PERIMETER LANDSCAPING (19 SHADE TREES) IN THE AMOUNT OF \$5,700.00 HAS BEEN POSTED UNDER THE DEVELOPER'S AGREEMENT.
- STREET TREES ARE PROVIDED FOR THIS PROJECT IN ACCORDANCE WITH SECTION 16.124(a)(1) OF THE SUBDIVISION REGULATIONS AND THE LANDSCAPE MANUAL. A FINANCIAL SURETY IN THE AMOUNT OF \$8,400.00 TO BE POSTED AS PART OF THE DEVELOPER'S AGREEMENT FOR THE REQUIRED 28 PUBLIC STREET TREES.
- THE MAINTENANCE AGREEMENT FOR THE PRIVATE USE IN COMMON ACCESS EASEMENTS AND THE PRIVATE USE-IN-COMMON ACCESS AND DRAINAGE EASEMENT SHALL BE RECORDED CONCURRENT WITH THIS PLAT IN THE LAND RECORDS OF HOWARD COUNTY, MARYLAND.

SITE DATA

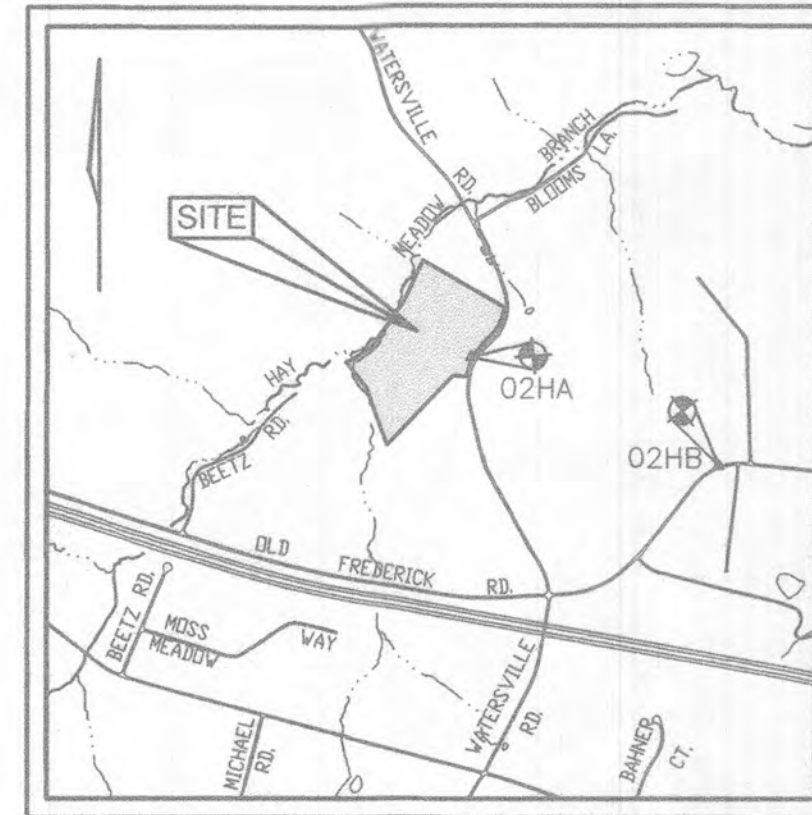
LOCATION: TAX MAP 2, GRID 15, & 21 PARCEL 18
4TH ELECTION DISTRICT
EXISTING ZONING: RC-DEO, AS PERTHIE 02-02-04 COMPREHENSIVE ZONING PLAN AND THE COMP LITE ZONING REGULATION AMENDMENTS EFFECTIVE 07-28-06.
GROSS AREA OF PROJECT: 33.15 AC.
AREA OF 100-YEAR FLOODPLAIN DRAINAGE & UTILITY EASEMENT: 1.1 AC.
AREA OF STEEP SLOPES: 6.50 AC.
NET AREA OF PROJECT: 26.27 AC.
AREA OF PROPOSED BUILDABLE LOTS (LOT 1 TO 4 & BUILDABLE PARCEL 'A') = 8.188 AC.
AREA OF OPEN SPACE REQUIRED: 1 AC.
AREA OF PROPOSED NON-BUILDABLE PRESERVATION PARCEL 'A': 2.69 AC.
AREA OF PROPOSED NON-BUILDABLE PRESERVATION PARCEL 'B': 21.80 AC.
AREA OF PROPOSED RIGHT-OF-WAY DEDICATION: 0.48 AC.
NUMBER OF LOTS/ PARCELS PROPOSED:
4 BUILDABLE LOTS, 1 BUILDABLE PRESERVATION PARCEL, 1 NON-BUILDABLE PRESERVATION PARCEL, AND 1 NON-BUILDABLE BULK PARCEL.



NO.	DESCRIPTION	DATE
3	REVISE THE HOUSE TYPE, GRADING AND SWM ON LOT 1 AND THE GRADING ON LOT 3	2/14/24
2	UPDATED HOUSE TYPE, GRADING, SWM	6/5/22
1	REVISED LOT LINES AND EASEMENTS, NEW SHEET	7/24/18

LEGEND

- VARIABLE WIDTH PRIVATE USE-IN-COMMON ACCESS & DRAINAGE EASEMENT FOR LOTS 1, 2 & 4, PARCEL A AND C
- CREDITED FOREST RETENTION AREA
- NON-CREDITED FOREST RETENTION AREA-1.17 AC.
- PUBLIC SITE DISTANCE EASEMENT
- 100 YR FLOOD PLAIN
- PROP. SWM EASEMENT
- EX. WETLAND



VICINITY MAP
SCALE: 1" = 2000'
ADC COORDINATES 3 B6

DENSITY TABULATION CHART	
TOTAL GROSS AREA OF SUBDIVISION	33.15 ACRES
AREA OF 100 YEAR FLOODPLAIN	1.1 ACRES
AREA OF 25% SLOPES (OUTSIDE FLOODPLAIN)	5.78 ACRES
NET TRACT AREA	26.27 ACRES
NUMBER OF RESIDENTIAL UNITS ALLOWED BY RIGHT	33,154.25 GROSS ACRES = 7
NUMBER OF RESIDENTIAL UNITS PROPOSED	5 (4 NEW AND 1 EXISTING)
NUMBER OF CEO UNITS REQUIRED	0
SENDING PARCEL INFORMATION	N/A

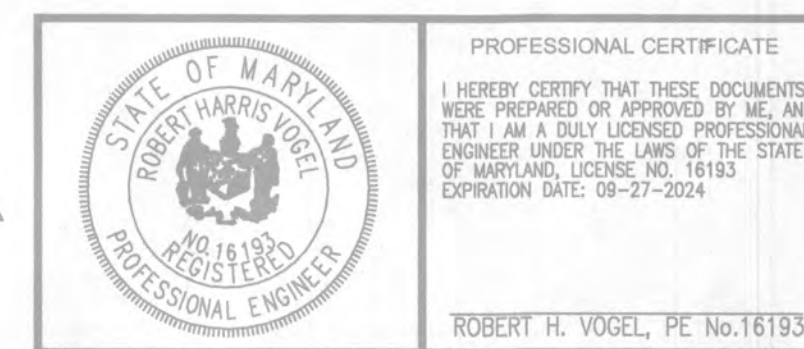
BENCHMARKS				
NO.	NORTHING	EASTING	ELEVATION	TYPE
02HA	N 554251.6	E 772542.8	736.063	
02HB	N 553162.4	E 775155.2	737.120	

MINIMUM LOT SIZE CHART			
LOT NO.	GROSS AREA	MINIMUM LOT SIZE	PIPESTEM AREA
3	54,952 SQ. FT.	54,328.46 SQ. FT.	623.27 SQ. FT.
4	53,617 SQ. FT.	50,872.00 SQ. FT.	2,745.00 SQ. FT.

SHEET INDEX		
DESCRIPTION	SHEET NO.	
COVER SHEET	1 OF 10	
ROAD CONSTRUCTION PLAN, ROAD PROFILES, MOT PLAN AND DETAILS	2 OF 10	
GRADING, SEDIMENT AND EROSION CONTROL PLAN	3 OF 10	
GRADING, SEDIMENT AND EROSION CONTROL PLAN	4 OF 10	
SEDIMENT AND EROSION CONTROL DETAILS	5 OF 10	
DRAINAGE AREA MAP AND STORMWATER MANAGEMENT DATA	6 OF 10	
BIOTENTION PLAN AND DETAILS	7 OF 10	
LANDSCAPE, FOREST CONSERVATION PLAN AND DETAILS	8 OF 10	
LANDSCAPE, FOREST CONSERVATION PLAN AND DETAILS	9 OF 10	
PLOT PLANS	10 OF 10	

STORMWATER MANAGEMENT PRACTICES				
LOT #	ADDRESS	MICRO-BIO (QUANTITY)	DRY WELLS (QUANTITY)	DISCONNECTION OF NON-ROOFTOP RUNOFF (Y/N)
1	540 WATERSVILLE ROAD	1	3	Y
2	530 WATERSVILLE ROAD	1	2	N
3	548 WATERSVILLE ROAD	2	0	N
4	572 WATERSVILLE ROAD	3	0	N

COORDINATE LIST		
POINT	NORTH	EAST
39	614815.05384	1284909.52883
43	615629.54857	1284252.71740
151	614623.41200	1284531.08990
159	614120.01000	1284068.90290
176	614991.59680	1283692.97860
178	615180.15190	1283913.92780
186	616075.57460	1284432.70710
201	615625.06197	1283312.68052
205	614901.88648	1284708.01324
208	615230.08773	1285177.08987
213	615124.43772	1285073.42721
296	614736.29305	1283859.62902



FOR LOT 1 ONLY

OWNER/DEVELOPER

DORSEY CONTRACTORS, INC.
MR. PHILLIP H. DORSEY, PRESIDENT
13080 OLD FREDERICK ROAD
SYKESVILLE, MARYLAND 21784

COVER SHEET

REVISED HAY MEADOW OVERLOOK

LOTS 1-4, BUILDABLE PRESERVATION PARCEL A, NON-BUILDABLE PRESERVATION PARCEL B, AND NON-BUILDABLE BULK PARCEL C

WATERSVILLE ROAD

TAX MAP 2 GRID 15.21
4TH ELECTION DISTRICT

PARCEL 18
HOWARD COUNTY, MARYLAND



SILL ENGINEERING GROUP, LLC
11130 Dovedale, Suite 200
Marriottsville, Maryland 21104
Phone: 443.325.5076
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering for Land Development

DESIGN BY: PS
DRAWN BY: NM
CHECKED BY: PS
SCALE: AS SHOWN
DATE: JUNE 20, 2019
PROJECT #: 17-087
SHEET #: 1 of 10

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. 33025, EXPIRATION DATE: JUNE 20, 2020.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS.

N. M. for J. M.
CHIEF, DIVISION OF LAND DEVELOPMENT
Chad Edwards
CHIEF, DEVELOPMENT ENGINEERING DIVISION

1-23-20
DATE
1-9-20
DATE

Chad Edwards
CHIEF, BUREAU OF HIGHWAYS
MK
DATE
12/30/2019

F-09-110



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. 16193, EXPIRATION DATE: 09-27-2024.
ROBERT H. VOGEL, PE No. 16193
FOR LOT 1 ONLY

- LEGEND**
- PROPERTY LINE
 - EXISTING CONTOUR
 - PROPOSED CONTOUR
 - EXISTING TREELINE
 - PROPOSED TREELINE
 - EX. FENCE
 - EX. UTILITY POLE
 - WELL AREA
 - SEPTIC AREA
 - PROP. 38' PRIVATE USE-IN-COMMON ACCESS & DRAINAGE EASEMENT FOR LOTS 1, 3 & 4
 - FOREST RETENTION AREA
 - PUBLIC SITE DISTANCE EASEMENT
 - 100 YR FLOOD PLAIN
 - PROP. SWM EASEMENT
 - STEEP SLOPES
 - MODERATE SLOPES
 - BORING
 - RAIN GARDEN
 - STABILIZED CONSTRUCTION ENTRANCE
 - EROSION CONTROL MATTING SHEAR STRESS MAX: 5.3028
 - SUPER SILT FENCE
 - LIMIT OF DISTURBANCE
 - SOILS
 - FLOODPLAIN CROSS-SECTION
 - STREET TREES
 - PROPOSED WELL

PROFESSIONAL CERTIFICATION
I hereby certify that the red line marking shown hereon was prepared or approved by me, and that I am a duly licensed professional Land Surveyor under the laws of the State of Maryland, License No. 11049, Expires 2/10/25.
M. Najib Roshen
10/19/22
(FOR LOT 2 ONLY)

SOIL TABLE		
SYMBOL	NAME / DESCRIPTION	GROUP
BID	BRINKLOW CHANNERY LOAM, 15 TO 25 PERCENT SLOPES	B
BIF	BRINKLOW-BLOCKTOWN CHANNERY LOAMS, 25 TO 65 PERCENT SLOPES	B
Co	CODORUS AND HATBORO SILT LOAMS, 0 TO 3 PERCENT SLOPES	C
GcB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B
MKF	MANOR-BRINKLOW COMPLEX, 25 TO 65 PERCENT SLOPES, VERY ROCKY	B
OcB	OCOCOAN LOAM, 3 TO 8 PERCENT SLOPES	B
OC	OCOCOAN LOAM, 8 TO 15 PERCENT SLOPES	B

NOTE:
GRADING FOR THE HOUSES AND THEIR INDIVIDUAL DRIVEWAYS SHOWN FOR INFORMATIONAL PURPOSES ONLY. A SEPARATE PLAN WILL BE SUBMITTED FOR THEIR CONSTRUCTION. ONLY THE GRADING FOR THE USE IN COMMON DRIVEWAY, BIOTENTION FACILITY 1, AND ACCESS TO BIOTENTION FACILITY 1 IS PROPOSED UNDER THIS PLAN.

AT THE TIME OF BUILDING PERMIT SUBMISSION, IF PROPOSED BIOTENTION FACILITIES FOR EACH LOT DO NOT MATCH THOSE SHOWN ON THIS PLAN, THEN A STANDARD PLAN REVISION TO THIS PLAN WILL BE REQUIRED.

OWNER/DEVELOPER

DORSEY CONTRACTORS, INC.
MR. PHILLIP H. DORSEY, PRESIDENT
13390 OLD FREDERICK ROAD
SYKESVILLE, MARYLAND 21164

REVISED GRADING, SEDIMENT & EROSION CONTROL PLAN
HAY MEADOW OVERLOOK

LOTS 1-4, BUILDABLE PRESERVATION PARCEL A, NON-BUILDABLE PRESERVATION PARCEL B, AND NON-BUILDABLE BULK PARCEL C
WATERSVILLE ROAD

TAX MAP 2 GRID 15.21 4TH ELECTION DISTRICT PARCEL 18 HOWARD COUNTY, MARYLAND



SILL ENGINEERING GROUP, LLC
1130 Dovedale, Suite 200
Marriottsville, Maryland 21104
Phone: 443.325.5076
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering for Land Development

DESIGN BY: PS
DRAWN BY: NM
CHECKED BY: PS
SCALE: AS SHOWN
DATE: JUNE 20, 2019
PROJECT #: 17-067
SHEET #: 3 of 70

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. 32925, EXPIRATION DATE: JUNE 20, 2020.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
J. M. ... 1-23-20
CHIEF, DIVISION OF LAND DEVELOPMENT
1-9-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION

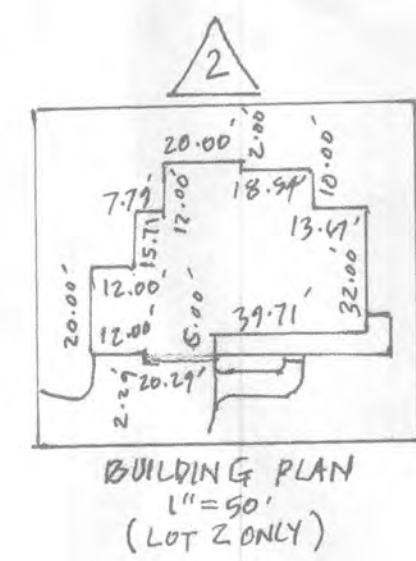
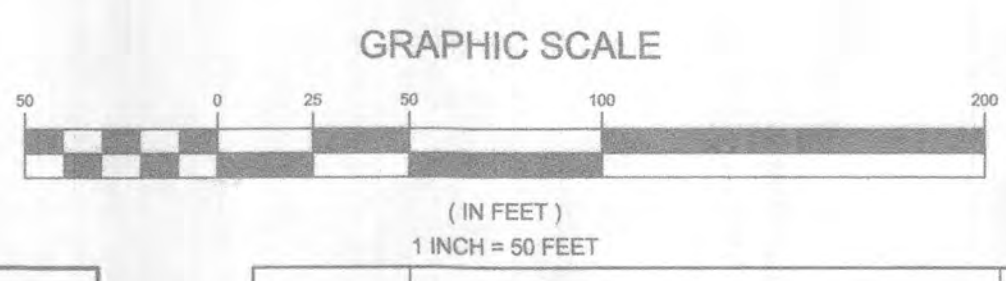
APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
... 12/24/2019
CHIEF, BUREAU OF HIGHWAYS

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT
... 12/24/2019
HOWARD SCD

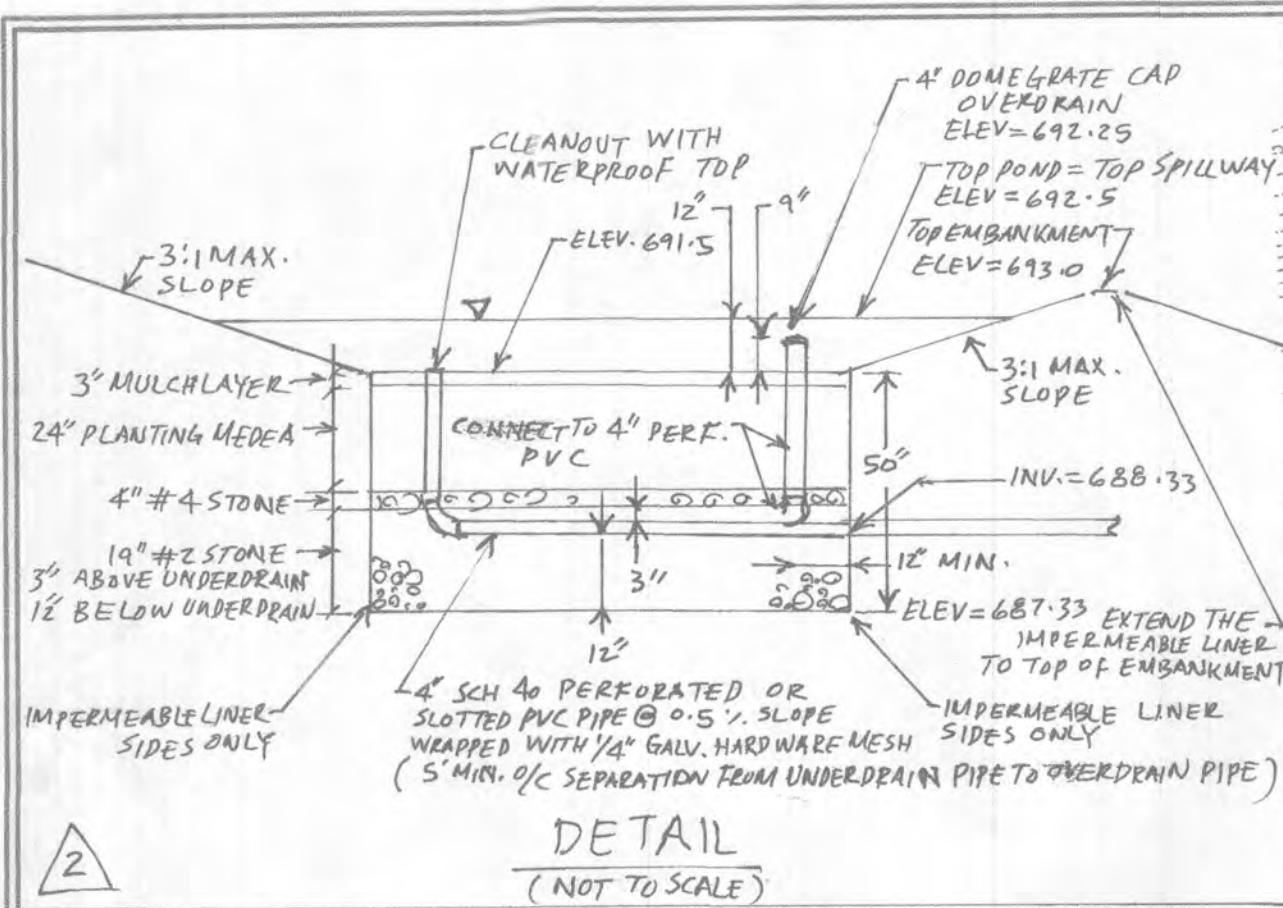
DEVELOPER'S CERTIFICATE
I HAVE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.
... 12/24/2019
SIGNATURE OF DEVELOPER

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
... 12/24/2019
SIGNATURE OF ENGINEER
PAUL M. SILL, P.E.

REVISIONS		
NO.	DESCRIPTION	DATE
3	REVISE THE HOUSE TYPE, GRADING AND SWM ON LOT 1 AND THE GRADING ON LOT 3	2/14/24
2	UPDATED HOUSE TYPE, GRADING, SWM	6/5/22
1	REVISED LOT LINES AND EASEMENTS	7/24/18



MATCHLINE SHEET 4
FOR SWALE TYPICAL SECTION, SEE SHEET 2. DESIGN TO BE CONFIRMED AT BUILDING PERMIT STAGE
PLAN VIEW
SCALE: 1"=50'



TYPICAL MICRO-BIORETENTION (M-6), FOR BUILDING ON LOT 2

STORMWATER MANAGEMENT SUMMARY (LOT 2 ONLY)

LOT SWM PRACTICE CODE	DA	ESV REQUIRED	ESV PROVIDED
2	MBR-4	15,443.3 CF	15,443.3 CF

* SWM has been treated using ESV practices to the maximum extent possible. All impervious areas have been treated.

STORM WATER MANAGEMENT BORING DATA

STORMWATER MANAGEMENT PRACTICE	PERCOLATION TEST #	10' DEEP, HARD BOTTOM
RAIN GARDEN RG 7A	9J	10' DEEP, HARD BOTTOM
RAIN GARDEN RG 7B	9H	11' DEEP, HARD BOTTOM
RAIN GARDEN RG 7C	9F	11' DEEP, NO ROCK OR GROUND WATER
RAIN GARDEN RG 6A	12E	11' DEEP, NO ROCK OR GROUND WATER
RAIN GARDEN RG 6B	103	10' DEEP, NO ROCK OR GROUND WATER
RAIN GARDEN RG 6C	9E	7' DEEP, NO ROCK OR GROUND WATER
SAND FILTER	5G	8' DEEP, HARD BOTTOM
SAND FILTER	105	10.5' DEEP, NO ROCK OR GROUND WATER
SAND FILTER	107	11' DEEP, NO ROCK OR GROUND WATER
SAND FILTER	5H	13' DEEP, NO ROCK OR GROUND WATER
RAIN GARDEN RG 1A MBR-4	141	18' DEEP, HARD BOTTOM
RAIN GARDEN RG 1B MBR-4	1F	14' DEEP, NO ROCK OR GROUND WATER

BASED ON A TYPICAL MICRO-BIORETENTION DETAIL, THE DEPTH OF THE SYSTEM IS 4'. THEREFORE IT IS DESIRABLE TO CHECK TO A DEPTH OF 8' FOR ROCK AND/OR GROUNDWATER. THE SHALLOWEST 'HARD BOTTOM' IS TEST 9J WHICH REVEALED A 'HARD BOTTOM' AT 10'. THIS IS SUFFICIENTLY BELOW THE 4' BUFFER BETWEEN ROCK AND/OR GROUNDWATER AND THE BOTTOM OF THE RAIN GARDEN. IN CONSIDERATION OF THESE TEST RESULTS IT IS OUR PROFESSIONAL OPINION THAT THE RAIN GARDEN AND SAND FILTER WILL FUNCTION EFFECTIVELY AS DESIGNED.

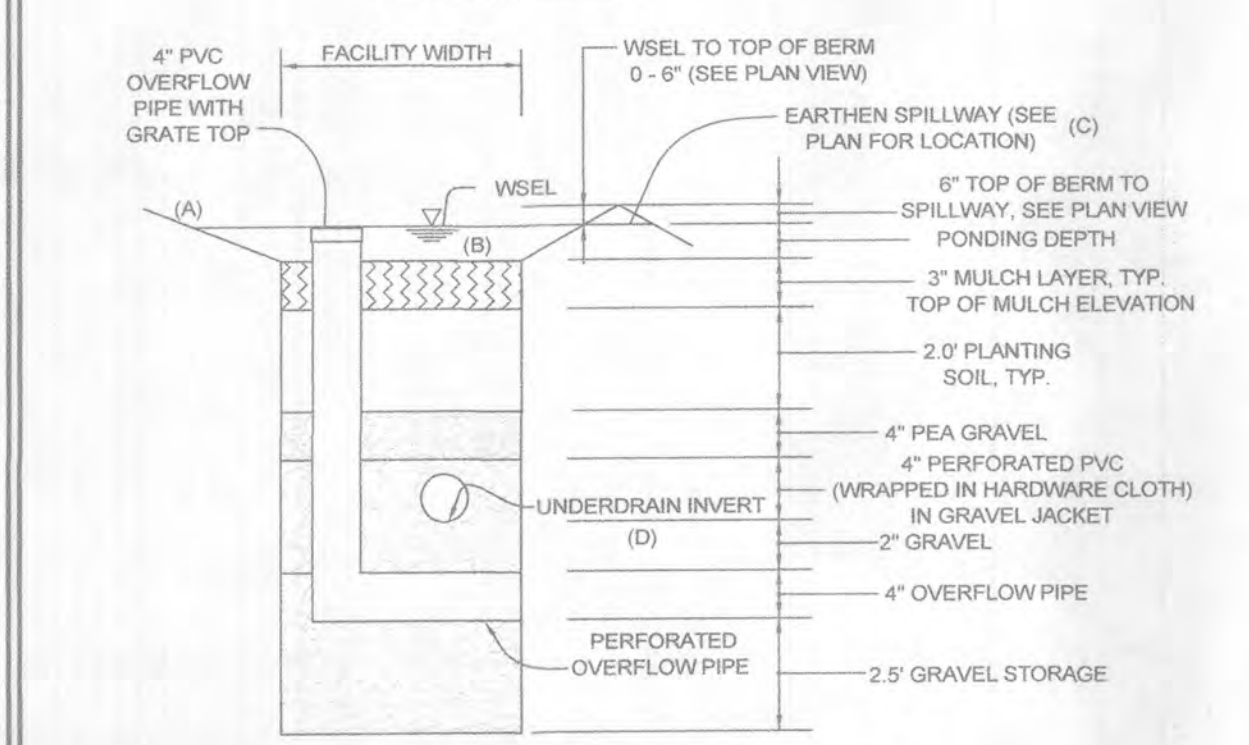
MICRO-BIORETENTION FACILITY PLANT LIST

QUANTITY	BOTANICAL NAME	COMMON NAME	SIZE
2	ILEX GLABRA	INK BERRY	2-3" HT.
6	LOBELIA CARDINALIS	CARDINAL FLOWER LOBELIA	1 GAL. CONTAINER
4	DRYOPTERIS SP.	WOOD FERN	1 GAL. CONTAINER
3	ASTER NOVAE-ANGLIAE	NEW ENGLAND ASTER	1 GAL. CONTAINER

MICRO-BIORETENTION ELEVATIONS

MICRO-BIORETENTION	LOCATION	A	B	C	D	OUT-FAILL
1A	LOT 2	704.0	700.0	704.0	699.0	699.0
1B	LOT 2	694.0	690.0	694.0	689.0	689.0
1C	LOT 2	694.0	690.0	694.0	689.0	689.0
1D	LOT 2	700.0	696.0	700.0	695.0	695.0
6A	LOT 4	705.0	705.0	705.0	703.5	703.5
6B	LOT 4	698.0	697.0	698.0	695.8	695.8
6C	LOT 4	694.0	693.0	694.0	691.5	691.5

FINAL ELEVATIONS WILL BE PROVIDED WITH ASSOCIATED BUILDING PERMIT PLANS. MICRO-BIORETENTION FACILITIES WITHIN 100' OF WELL BOXES MUST HAVE AN IMPERMEABLE LINER. FINANCIAL SURETY FOR THE REQUIRED MICRO-BIORETENTION FACILITIES IN THE AMOUNT OF \$5,500 EACH WILL BE POSTED AS A PART OF THE DEVELOPER'S AGREEMENT.



BIORETENTION FACILITY TYPICAL SECTION (NOT TO SCALE)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

J. Mark L. JM 1.23.20
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE

Chad E. Smith 1.9.20
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE

APPROVED: HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS

James 12/30/2019
CHIEF, BUREAU OF HIGHWAYS MK
DATE



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. 16193, EXPIRATION DATE: 09-27-2024.
ROBERT H. VOGEL, PE No. 16193
FOR LOT 1 ONLY

LEGEND

SYMBOL	DESCRIPTION
○	PROPERTY LINE
---	EXISTING CONTOUR
---	PROPOSED CONTOUR
---	EXISTING TREELINE
---	PROPOSED TREELINE
---	EX. FENCE
---	EX. UTILITY POLE
---	WELL AREA
---	SEPTIC AREA
---	PROP. 38' PRIVATE USE-IN-COMMON ACCESS & DRAINAGE EASEMENT FOR LOTS 1, 3 & 4
---	FOREST RETENTION AREA
---	PROP. SWM EASEMENT

FOR MBR-3 (LOT 1) CONSTRUCTION & PLANTING DETAILS, SEE SHEET 10.

SOIL TABLE

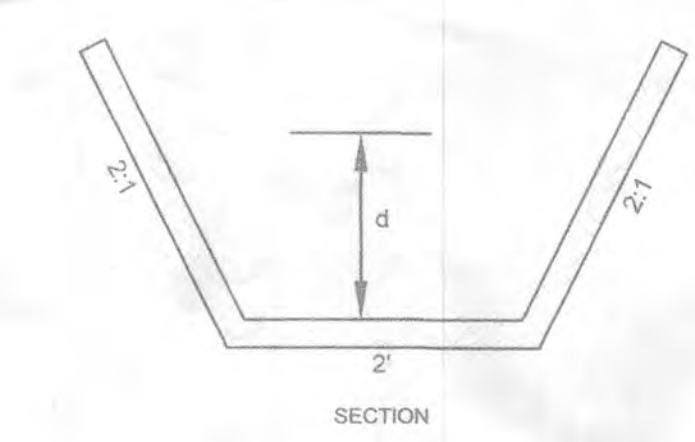
SYMBOL	NAME / DESCRIPTION	GROUP
BdF	BRINKLOW CHANNERY LOAM, 15 TO 25 PERCENT SLOPES	B
BdF	BRINKLOW BLOCKTOWN CHANNERY LOAMS, 25 TO 65 PERCENT SLOPES	B
Co	CODORUS AND HATBORO SILT LOAMS, 0 TO 3 PERCENT SLOPES	C
GgB	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	B
MkF	MANOR-BRINKLOW COMPLEX, 25 TO 65 PERCENT SLOPES, VERY ROCKY	B
OcB	OCOCOQUAN LOAM, 3 TO 8 PERCENT SLOPES	B
OcC	OCOCOQUAN LOAM, 8 TO 15 PERCENT SLOPES	B

DRAINAGE AREA TABULATION

NO.	AREA	RCN	% IMP	SOIL	ZONE
A	0.78 AC	68	20%	B	RC-DED

SWALE

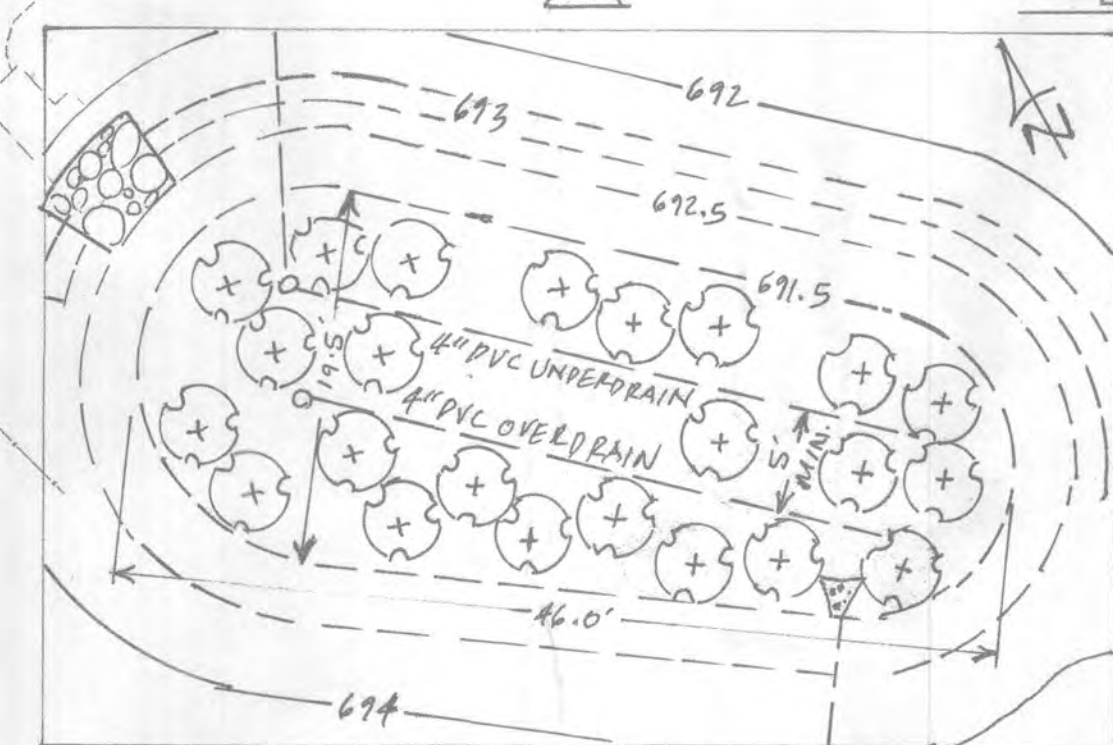
SWALE	A
V1(CFS)	0.46
V1(FPS)	2.34
d	0.09'
S(%)	8.0
n	0.030
Q10	2.14
V10	4.21
d	0.21



PROFESSIONAL CERTIFICATION
I hereby certify that the red line markings shown hereon were prepared or approved by me, and that I am a duly licensed professional Land Surveyor under the laws of the State of Maryland, License # 11049, expires 2/10/23.
M. Najib Roshan 10/3/22
DATE
(FOR LOT 2 ONLY)

AT THE TIME OF BUILDING PERMIT SUBMISSION, IF PROPOSED BIORETENTION FACILITIES FOR EACH LOT DO NOT MATCH THOSE SHOWN ON THIS PLAN, THEN A STANDARD PLAN REVISION TO THIS PLAN WILL BE REQUIRED.

OWNER/DEVELOPER
DORSEY CONTRACTORS, INC.
MR. PHILLIP H. DORSEY, PRESIDENT
13090 OLD FREDERICK ROAD
SYKESVILLE, MARYLAND 21784



PLAN VIEW - LANDSCAPE PLAN MICRO-BIO RETENTION FACILITY #4
SCALE: 1" = 10'
(LOT 2)

REVISED DRAINAGE AREA MAP & STORMWATER MANAGEMENT DATA HAY MEADOW OVERLOOK
LOTS 1-4, BUILDABLE PRESERVATION PARCEL A, NON-BUILDABLE PRESERVATION PARCEL B, AND NON-BUILDABLE BULK PARCEL C
WATERSVILLE ROAD
TAX MAP 2 GRID 15.21
4TH ELECTION DISTRICT
PARCEL 18
HOWARD COUNTY, MARYLAND

3 REVISE THE HOUSE TYPE, GRADING AND SWM ON LOT 1 AND THE GRADING ON LOT 3 2/14/24

2 UPDATED HOUSE TYPE, GRADING, SWM, AND THE GRADING ON LOT 3 6/5/22

1 REVISED LOT LINES AND EASEMENTS, NEW SHEET 7/24/18

NO. DESCRIPTION DATE

REVISIONS

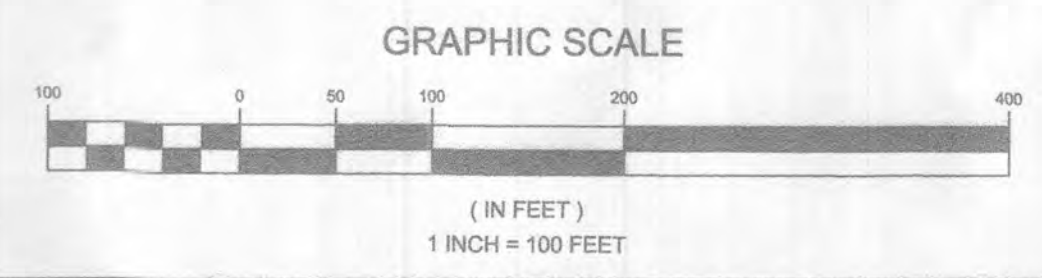
STATE OF MARYLAND
PAUL M. SILL
PROFESSIONAL ENGINEER
No. 32023

11130 Dovedale, Suite 200
Mantoloking, Maryland 21044
Phone: 443.325.5076
Fax: 410.696.2022
Email: info@sillengineering.com
Civil Engineering for Land Development

SILL ENGINEERING GROUP, LLC

DESIGN BY: PS
DRAWN BY: NM
CHECKED BY: PS
SCALE: 1"=100'
DATE: JUNE 20, 2019
PROJECT #: 17-087
SHEET #: 5 of 10

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. 32023, EXPIRATION DATE: JUNE 20, 2020.



PLAN VIEW
SCALE: 1"=100'