

SOIL DESCRIPTIONS

SYMBOL	RATING	NAME	Kw FACTOR	MAP #	COMMENTS
ChB	C	CHULLUM-RUSSETT LOAM, 2-5 % SLOPES	0.43	19	ERODIBLE
ChC	C	CHULLUM-RUSSETT LOAM, 5-10 % SLOPES	0.43	19	ERODIBLE
FoaA	C/D	FLSINGTON SANDY LOAM, 0-2 % SLOPES	0.24	19	

ESD NARRATIVE

- THE PROPERTY CONTAINS A PERENNIAL STREAM WHICH IS PROTECTED BY A 75' STREAM BUFFER AND INTERMITTENT STREAM WHICH IS PROTECTED BY A 50' BUFFER. PROPERTY ALSO CONTAINS 100-YEAR FLOODPLAIN AND A WETLANDS AREA WHICH IS PROTECTED BY 25' BUFFER. NO STRUCTURES WILL BE CONSTRUCTED WITHIN ANY ENVIRONMENTALLY SENSITIVE AREA OR ITS BUFFERS. THERE ARE 17 SPECIMEN TREES ON SITE. 10 OF THEM WILL BE REMOVED.
- IMPROVEMENTS AND DEVELOPED AREA WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AS CLOSELY AS POSSIBLE. NO IMPACT IS PROPOSED THAT WOULD ALTER ANY NATURAL FLOW PATTERNS. SEMI-ATTACHED DWELLINGS ARE PROPOSED TO MINIMIZE PROPOSED DRIVEWAYS AND NEW IMPERVIOUS AREAS.
- PRIVATE 26' WIDE ROAD WILL PROVIDE ACCESS FOR ALL UNITS. MICRO-BIORETENTION FACILITIES (M-6) AND DRY WELLS (M-5) WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT.
- THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST MDE STANDARDS AND SPECIFICATIONS UTILIZING SUPER SILT FENCES. NO SEDIMENT TRAPS OR BASINS ARE REQUIRED.
- TABLE 5.2, SUMMARY OF SITE DEVELOPMENT STRATEGIES WAS UTILIZED TO THE EXTENT ALLOWABLE BY THE CURRENT HOWARD COUNTY ZONING AND LAND DEVELOPMENT REGULATIONS BY UTILIZING SHARED DRIVEWAY AND MINIMIZING EARTH DISTURBANCE FOR THE NEW DEVELOPMENT.
- IN DESIGNING THIS PROJECT, AND AFTER WE PLANNED THE PROJECT TO MINIMIZE IMPERVIOUS AREAS, WE UTILIZED ESD MEASURES IN THE FOLLOWING ORDER OF PREFERENCE: (M-6) AND (M-5). TOTAL REQUIRED ESDV IS 14,049 C.F. PROVIDED IS 15,453 C.F.

SWM PRACTICES SCHEDULE

AREA	PROPOSED PRACTICES	REQUIRED ESDV	PROVIDED ESDV
BUILDING 1-28	M-5, DRYWELLS (2 EACH)	7,315 C.F.	7,840 C.F.
P/O ROAD A DRIVEWAYS (UNIT: 1-4, 26-28)	M-6, MICRO-BIORETENTION (MB #1)	1,670 C.F.	1,685 C.F.
P/O ROAD A DRIVEWAYS (UNIT: 6-12, 17-24)	M-6, MICRO-BIORETENTION (MB #2A AND MB #2B)	3,506 C.F.	3,565 C.F.
P/O ROAD A DRIVEWAYS (UNIT: 13-16)	M-6, MICRO-BIORETENTION (MB #3)	1,288 C.F.	1,360 C.F.
PATHWAY	PERVIOUS PAVEMENT	923 C.F.	1,944 C.F.
TOTAL		14,702 C.F.	16,394 C.F.

SPECIMEN TREE CHART

KEY	SPECIES	SIZE (IN.DBH)	CRZ (FEET RADIUS)	COMMENTS
1	RED MAPLE	34	51	FAIR CONDITION, SOME DIEBACK (TO BE REMOVED)
2	WHITE PINE	31	46.5	(TO BE REMOVED)
3	WHITE PINE	30	45	FAIR, DIEBACK
4	WHITE PINE	31	46.5	
5	PIN OAK	38	57	POOR, MAJOR DIEBACK
6	TULIP POPLAR	32	48	
7	RED MAPLE	31	46.5	POOR, MAJOR DIEBACK (OFF SITE)
8	RED MAPLE	52	78	POOR, NOTABLE ROT IN TRUNK
9	WHITE PINE	33.5	50.25	(TO BE REMOVED)
10	WHITE PINE	31.5	47.25	(TO BE REMOVED)
11	WHITE PINE	37	49.5	(TO BE REMOVED)
12	WHITE PINE	30.5	45.75	(TO BE REMOVED)
13	TULIP POPLAR	39.5	59.25	(TO BE REMOVED)
14	TULIP POPLAR	34	51	(TO BE REMOVED)
15	NORWAY MAPLE	39	58.5	NOT NATIVE - FAIR, MULTISTEM (TO BE REMOVED)
16	WHITE PINE	31	46.5	(TO BE REMOVED)
17	RED MAPLE	54	81	VERY POOR, SEVERE DIEBACK THRU TREE

SITE ANALYSIS DATA:

- AREA OF THE SITE = 8.39± AC (GROSS)
- LIMIT OF DISTURBANCE = 221,390 S.F. (3.08 AC±)
- AREA OF ROAD DEDICATION = 3,300 (0.07 AC±)
- AREA OF WETLANDS AND ITS BUFFERS = 110,080 S.F. (2.53 AC±)
- AREA OF 100 YEAR FLOODPLAIN = 55,177 S.F. (1.266 AC±)
- AREA OF STREAM BUFFER = 91,620 S.F. (2.10 AC±)
- AREA OF STEEP SLOPES (25% OR GREATER AT VERTICAL DISTANCE OF 10 FEET OR MORE) = 0
- AREA OF 15%-24.99% SLOPES = 0
- AREA OF SLOPES 20% OR GREATER = 0
- AREA OF FOREST = 0
- TOTAL ENVIRONMENTAL SENSITIVE AREA = 363,108 S.F. (3.20 AC±)
- AREA OF HIGHLY ERODIBLE SOILS = 178,980 S.F. (4.11 AC±)
- AREA OF PROPOSED IMPERVIOUS = 98,990 S.F. (2.28 AC±)
- PROPOSED GREEN OPEN SPACE = 284,520 S.F. (6.07 AC±)
- TWENTY EIGHT (28) NEW SEMI-ATTACHED RESIDENTIAL UNITS ARE PROPOSED.

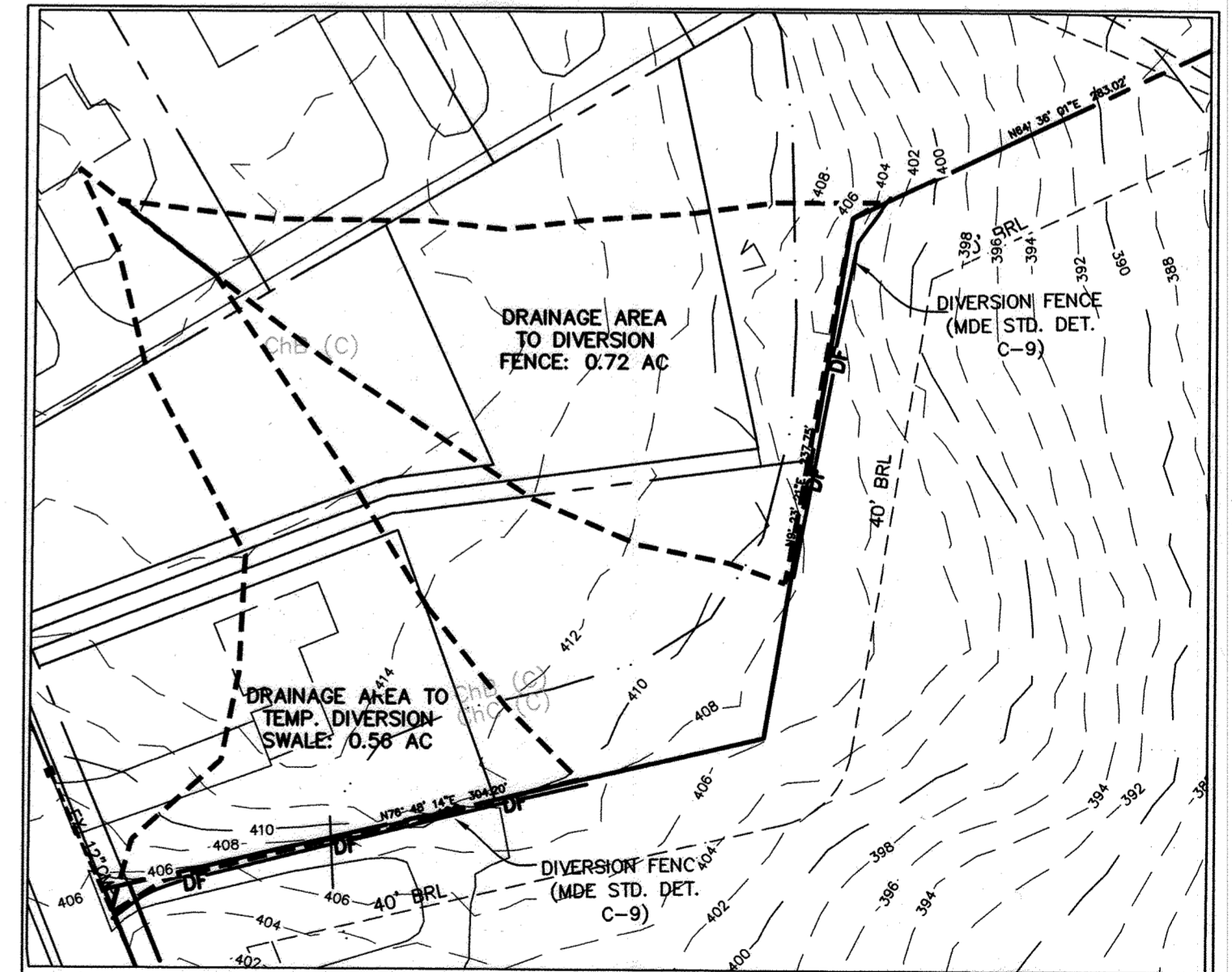
EX POND TO BE RETROFITTED TO MEET CURRENT MDE STANDARDS. POND RETROFITTING DETAILS TO BE PROVIDED AT 50% STAGE. MDE PERMIT AND AN ALTERNATIVE COMPLIANCE APPROVAL BY DP2 ARE REQUIRED.

LEGEND

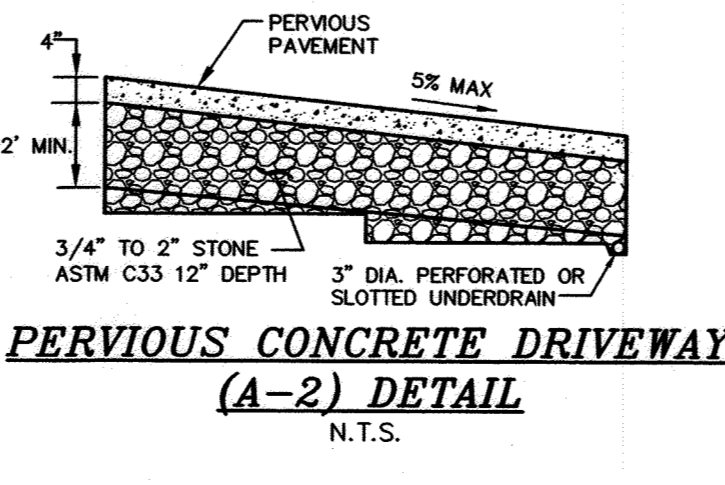
- EX. FLOODPLAIN (APPROX)
- PROPOSED FOREST CONSERVATION EASEMENT (AFFORESTATION)
- EXISTING FOREST CONSERVATION
- AREA OF WETLANDS
- IMPERVIOUS AREA TREATED BY MICRO-BIORETENTION (M-6)
- IMPERVIOUS AREA TREATED BY DRYWELLS (M-5)
- PERVIOUS PAVEMENT (A-2)
- MICRO-BIORETENTION
- DRYWELL
- SUPER SILT FENCE
- CLEAN WATER DIVERSION FENCE
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- EX. TREE TO BE REMOVED

GENERAL NOTES:

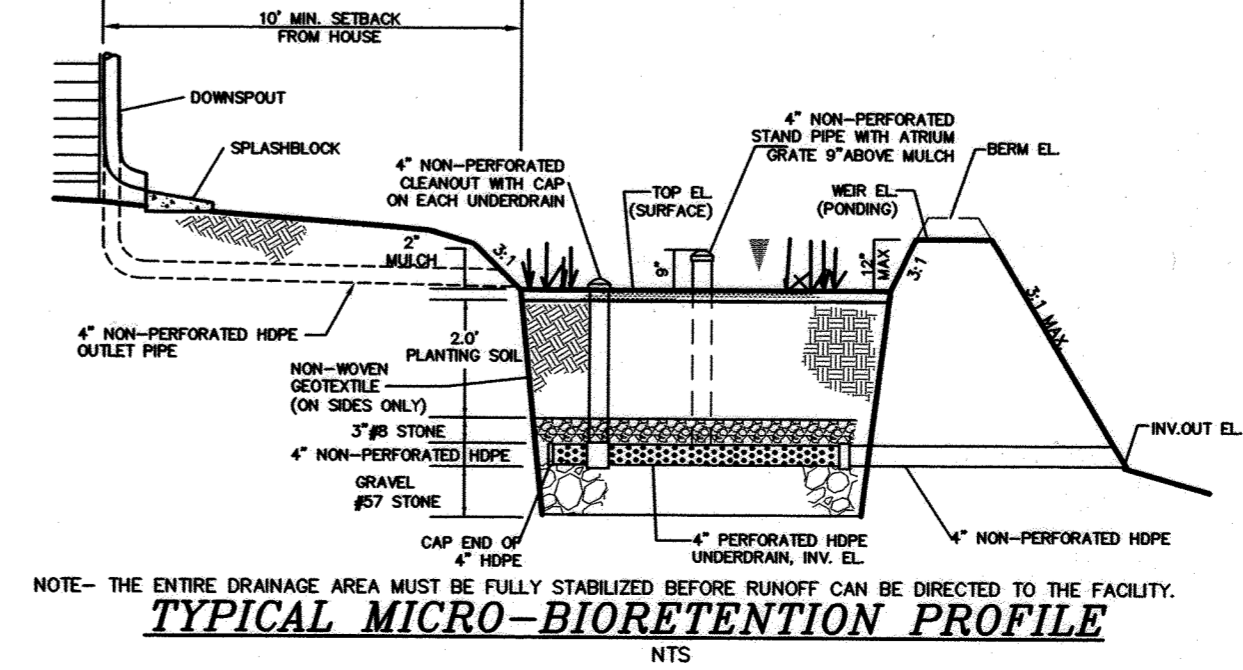
- SITE ANALYSIS DATA: ADDRESS: 2263 KERGER ROAD, ELLICOTT CITY, MD 21043 LOCATION: TAX MAP: 31 PARCEL: 497 GRID: 21 ELECTION DISTRICT: FIRST ZONING: R-20 TOTAL AREA: 8.35 AC± TOTAL NUMBER OF UNITS: 28 TYPE OF PROPOSED UNIT: SINGLE FAMILY SEMI-DETACHED AND DETACHED DWELLINGS. PROPOSED USE FOR SITE: RESIDENTIAL (AGE RESTRICTED).
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 31EA & 31EB STA. No. 31EA EL. 468.877 N 569.641 138 E 1,374.816,086 STA. No. 31EB EL. 452.457 N 568.730,995 E 1,376.273,635.
- PROJECT BOUNDARY IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT OCTOBER 2020 BY MILDBERG, BOENDER & ASSOC., INC.
- TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD RUN SURVEY PERFORMED ON OR ABOUT OCTOBER 2020 BY MILDBERG, BOENDER & ASSOC., INC.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER WILL BE UTILIZED UNDER CONTRACT # 266W (WATER) AND # 10-1215-D (SEWER).
- NO CEMETERIES EXIST ON SITE.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- FOREST STAND AND WETLAND DELINEATION PERFORMED BY ECO-SCIENCE, INC. IN APRIL OF 2021.
- A TOTAL OF 17 SPECIMEN TREES EXIST ON-SITE. TEN TREES ARE PROPOSED TO BE REMOVED. AN ALTERNATIVE COMPLIANCE TO SECTION 16.1205(c)(7) OF THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS HAS BEEN APPLIED FOR TO ALLOW FOR THE REMOVAL OF THE TEN SPECIMEN TREES.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE ANY APPROVAL OF SUBSEQUENT SUBDIVISION OR SITE DEVELOPMENT PLANS. FURTHER COMMENTS WILL BE GENERATED UPON REVIEW OF THE APPLICABLE DEVELOPMENT PLANS IN ACCORDANCE WITH THE SUBDIVISION AND ZONING REGULATIONS. 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.
- THIS PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS (COUNCIL BILL 45-2003). 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/GRADING PERMIT.
- FOREST CONSERVATION OBLIGATION FOR THIS PROJECT WILL BE PROVIDED VIA ON-SITE AFFORESTATION.
- FLOODPLAIN DELINEATION WAS PREPARED BY MILDBERG, BOENDER & ASSOC., INC. IN MAY 2022.
- CONDITIONAL USE APPLICATION (BA #21-025C) WAS GRANTED ON FEBRUARY 23, 2022.



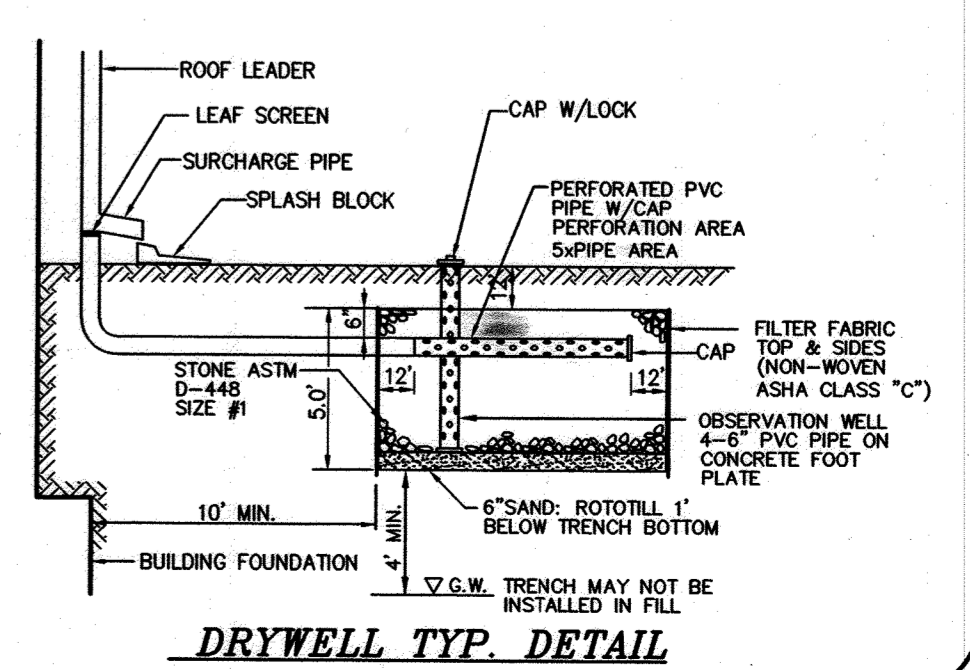
DRAINAGE AREA TO SEDIMENT CONTROL DIVERSIONS
SCALE: 1"=70'



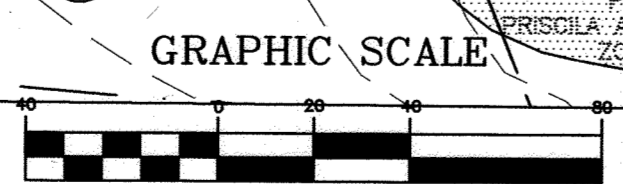
TYP. SECTION MICRO-BIORETENTION (M-6)
NTS



TYPICAL MICRO-BIORETENTION PROFILE
NOTE: THE ENTIRE DRAINAGE AREA MUST BE FULLY STABILIZED BEFORE RUNOFF CAN BE DIRECTED TO THE FACILITY.
NTS



DRYWELL TYP. DETAIL
NTS

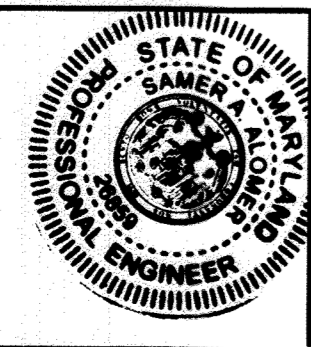


GRAPHIC SCALE
(IN FEET)
1 inch = 40 ft.

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. 26859, EXP DATE 08/08/23

OWNER
THE ESTATE OF THOMAS CHARLES O'CONNOR
C/O JOAN M. BECKER LLC
ATTORNEY OF LAW
15300 CARLS MILL ROAD
WOODBINE, MD 21797
410-442-5000

SAMER A. ALOMER P.E.
DATE: 2.15.2023



APPROVED: DEPARTMENT OF PLANNING AND ZONING

[Signature]
CHIEF, DEVELOPMENT ENGINEERING DIVISION NY
DATE: 2-23-23

[Signature]
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 2/14/23

date	FEB. 2023	engineering	MM	approval	SAA
project	20-031	illustration	MM	score	1"=40'

date		description	revisions
no.			

KERGER POND
TAX MAP: 31 - GRID: 21 - PARCEL: 497
FIRST ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
ENVIRONMENTAL CONCEPT PLAN

MILDBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
8318 FOREST ST. ELLICOTT CITY, MD 21043
(410) 997-0286 Tel. (410) 997-0286 Fax.