

SHEET INDEX	
SHEET NO.	DESCRIPTION
1	TITLE SHEET
2	EXISTING CONDITIONS & DEMOLITION PLAN
3	ENVIRONMENTAL CONCEPT PLAN
4	EROSION SEDIMENT CONTROL PLAN
5	EROSION SEDIMENT CONTROL NOTES AND DETAILS

Approved: Department Of Planning And Zoning
Paul G. Crannagh
 Chief, Development Engineering Division 485-24
 Chief, Division Of Land Development 4/18/24
 Date

SOILS LEGEND				
SOIL	NAME	CLASS	K _v VALUE	
GcB	Glenelg loam, 0 to 5 percent slopes	B	0.24	
GmC	Glenville Silt Loam, 0 to 5 percent slopes	C/D	0.37	
MAC	Manor Loam, 0 to 5 percent slopes	B	0.28	
MAD	Manor Loam, 15 to 25 percent slopes	B	0.28	

HOWARD COUNTY WEBSOILS SURVEY 05/06/19

STORMWATER MANAGEMENT PRACTICES BY LOT					
AREA ID.	ADDRESS	MICRO-BIO (M-6)	DRYWELLS (M-5)	NON-ROOFTOP DISCONNECT (N-2)	PERMEABLE PAVEMENT (A-2)
LOT 1	13815 BRIGHTON DAM ROAD	Y-1	Y-7	Y-1	N
LOT 2	13821 BRIGHTON DAM ROAD	N	Y-3	Y-1	Y-1

STORMWATER MANAGEMENT DESIGN NARRATIVE

INTRODUCTION:
 THIS REPORT WILL DEMONSTRATE HOW THE CRITERIA SET FORTH IN THE MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I AND II (EFFECTIVE OCTOBER 2000, REVISED MAY 2009) WILL BE SATISFIED FOR THIS PROJECT. THE GOAL OF CREATING HYDROLOGY SIMILAR TO THAT OF "WOODS IN GOOD CONDITION" WILL BE ACCOMPLISHED THROUGH THE USE OF M-5 DRY WELLS, M-6 MICRO BIO-RETENTION, N-2 DISCONNECT OF NON-ROOFTOP RUNOFF, A-2 PERMEABLE CONCRETE AND AS SUGGESTED WITHIN CHAPTER 5 OF PREVIOUSLY MENTIONED MANUAL. THE ACHIEVEMENT OF THIS GOAL WILL REMOVE THE REQUIREMENT OF PROVIDING CHANNEL PROTECTION VOLUME.

GENERAL SITE CONDITIONS:
 THE PROPERTY IS ZONED RR-DEO AND LOCATED ON TAX MAP 34, PARCEL NO. 96 OF THE HOWARD COUNTY, MARYLAND TAX MAP DATABASE SYSTEM. IT IS LOCATED IN THE CLARKSVILLE AREA OF HOWARD COUNTY. THIS PROPERTY CONSISTS OF 9.90 ACRES AND IS RELATIVELY RECTANGULAR IN SHAPE. THE PROPERTY IS BORDERS BY RESIDENTIAL LOTS TO THE EAST, WEST AND SOUTH. THE PROPERTY IS CURRENTLY VACANT AND COVERED IN BY WOODS AND MEADOW. THIS PROJECT PROPOSES TWO (2) LOTS INCLUDING A 12' WIDE CIRCULAR DRIVEWAY FOR LOT 1 AND A 12' PERMEABLE DRIVEWAY FOR LOT 2. THE PROPERTY IS LOCATED WITHIN THE LITTLE PATUXENT RIVER WATERSHED (02131105). THE SITE CURRENTLY DRAINS IN THE WESTERN, SOUTHERN, AND EASTERN DIRECTIONS FROM THE FRONT. THE PROPOSED HOUSES ARE LOCATED NEAR THE NORTH WEST PORTION OF THE MAIN BODY OF THE PROPERTY THE PROPOSED DESIGN MAINTAINS THE NATURAL FLOW PATTERNS OF THE SITE. THE RUNOFF FROM THE ROOFS AND DRIVEWAYS OF THE PROPOSED HOUSES WILL BE TREATED BY ONE (1) MICRO BIORETENTION (M-6) FACILITY, TEN (10) DRYWELLS (M-5), PERMEABLE CONCRETE (A-2), AND FOUR (4) NON-ROOFTOP DISCONNECTS (N-2). THE WEB SOIL SURVEY SHOWS SOILS ON THE SITE CONSIST OF GLENELG LOAM (GcB), MANOR LOAM (MAC & MAD), BOTH TYPE "B" SOILS AND GLENVILLE SILT LOAM (GmC) TYPE "C & D" SOILS.

I. NATURAL RESOURCE PROTECTION:
 THE PROPERTY IS ENTIRELY OCCUPIED WITH WOODS AND MEADOW. THERE ARE SPECIMEN TREES LOCATED PARTIALLY WITHIN THE LIMITS OF THE PROPOSED DISTURBANCE, ACCORDING TO A FOREST CONSERVATION PLAN BY ECHO SCIENCE PROFESSIONALS, INC. ONE SPECIMEN TREE WILL BE REMOVED. THERE IS NO OPPOSITE DRAINAGE AREA DRAINING THROUGH THE MAIN CONSTRUCTION AREA OF THIS SITE. FOREST CONSERVATION EASEMENT HAS BEEN PROPOSED TO PROTECT THE EXISTING NATURAL RESOURCES.

II. MAINTENANCE OF NATURAL FLOW PATTERNS:
 NATURAL TOPOGRAPHY OF THE SITE EXHIBITS RUNOFF SHEET FLOWING GENERALLY IN WESTERN, SOUTHERN, AND EASTERN DIRECTIONS FROM THE FRONT OF THE PROPOSED HOUSES LOCATED NEAR THE NORTH WEST PORTION OF THE MAIN BODY OF THE PROPERTY. THE PROPOSED DESIGN MAINTAINS THE NATURAL FLOW PATTERNS ON SITE. THE POST-DEVELOPED DRAINAGE PATTERNS VERY CLOSELY MIMIC THE EXISTING HYDROLOGY. ALL RUNOFF FROM PROPOSED IMPERVIOUS AREAS AND FROM TREATMENT FACILITIES FLOW DIRECTLY ONTO GRASSSED AREAS, BEFORE BEING CONVEYED TO EXISTING DENSELY VEGETATED AREAS OUTSIDE THE LOD.

III. REDUCTION OF IMPERVIOUS AREAS THROUGH BETTER SITE DESIGN, ALTERNATIVE SURFACES AND NONSTRUCTURAL PRACTICES:
 THIS IS A CONTEMPORARY CUSTOM DESIGN HOUSE WITH PRE-DETERMINED ASSOCIATED PADS, STEPS AND PATIOS. THE PROPOSED DRIVEWAY WIDTH WILL BE WIDENED TO 18', WITH A PERMEABLE PAVEMENT DRIVEWAY TO FEED LOT 2'S ACRES TO A GARAGE. THE REMAINING PORTIONS OF THE DRIVEWAY WILL BE TREATED WITH THE USE OF NON ROOFTOP DISCONNECTS WHILE THE HOUSES AND ASSOCIATED WALKWAYS WILL BE TREATED USING MICRO-BIOS, DRYWELLS, AND NON ROOFTOP DISCONNECTS. THE LIMIT OF DISTURBANCE IS KEPT TO A MINIMUM POSSIBLE FOR THIS SITE.

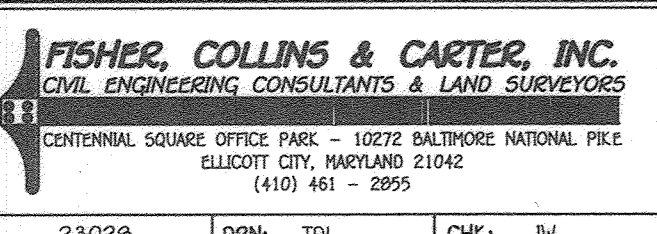
IV. INTEGRATION OF EROSION AND SEDIMENT CONTROLS INTO STORMWATER STRATEGY:
 SUPER SILT FENCE AND SILT FENCE WILL BE INSTALLED ON THE DOWNSTREAM SIDE OF THE LIMIT OF DISTURBANCE TO ELIMINATE SEDIMENT-LADEN RUNOFF DURING CONSTRUCTION. DIVERSION FENCE WILL BE INSTALLED ON UPSTREAM SIDE OF THE PERMEABLE PAVEMENT AND MICRO-BIORETENTION FOOT PRINTS. A STABILIZED CONSTRUCTION ENTRANCE IS USED NEAR SITE ENTRANCE.

V. IMPLEMENTATION OF ESD PLANNING TECHNIQUES AND PRACTICES TO THE MAXIMUM EXTENT PRACTICABLE (MEP):
 ESD PRACTICES, SUCH AS PERMEABLE PAVING MICRO-BIOS, DRYWELLS, AND NON ROOFTOP DISCONNECTS ARE PROPOSED TO TREAT THE FULL ESDV REQUIREMENT; THUS, ESD TECHNIQUES ARE MAXIMIZED.

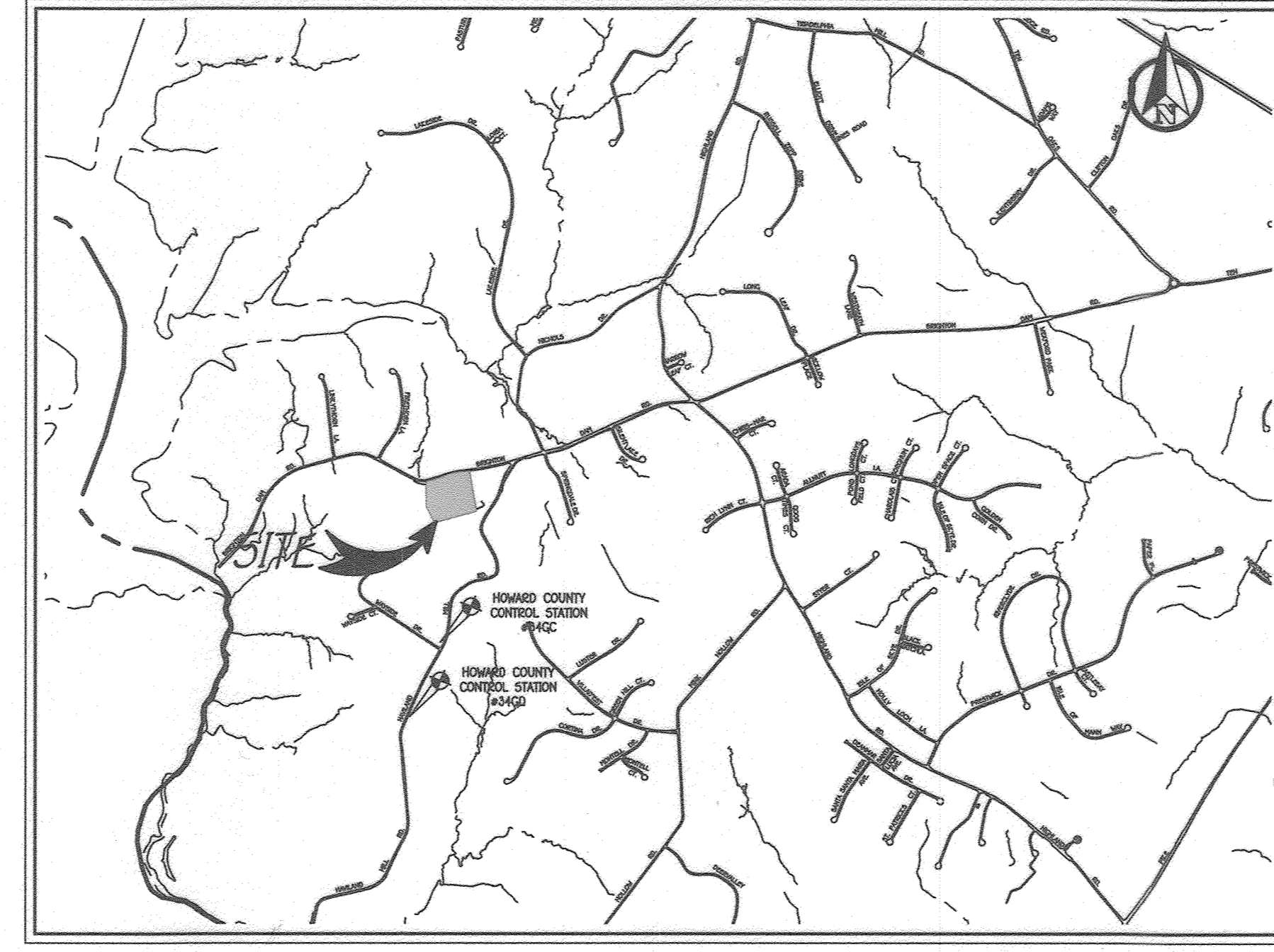
VI. REQUEST FOR DESIGN MANUAL WAIVER:
 NO WAIVERS ARE EXPECTED TO BE REQUESTED ON THIS PROJECT RELATING TO SWM REQUIREMENTS. AN ACA WILL BE REQUIRED FOR SPECIMEN TREE REMOVAL.

STORMWATER MANAGEMENT NOTES

- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, EFFECTIVE MAY 4, 2010.
- MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 500 SQ. FT. OR LESS.
- FINAL GRADING SHALL BE PROVIDED WITH THE GRADING PLAN.

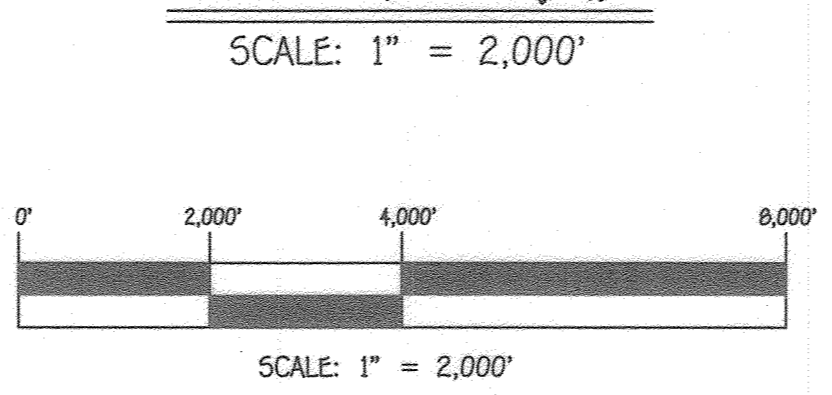


LEGEND	
SYMBOL	DESCRIPTION
-----	EXISTING CONTOUR 2' INTERVAL
-----	EXISTING CONTOUR 10' INTERVAL
-----	PROPOSED CONTOUR 10' INTERVAL
-----	PROPOSED CONTOUR 2' INTERVAL
-----	PROPOSED PERMEABLE CONCRETE
x 448.5	SPOT ELEVATION
18" x 18" x 18"	EXISTING STORM DRAIN
-----	EXISTING WATER LINE
-----	AREA OF NON ROOFTOP DISCONNECT
-----	EXISTING FENCE WOOD
x x x	EXISTING FENCE WIRE
-----	PROPOSED PAVING
-----	EXISTING WELL RESERVE AREA
-----	FOREST CONSERVATION EASEMENT
-----	PROPOSED SEPTIC FIELD AREA
-----	LIMIT OF DISTURBANCE
-----	SUPER SILT FENCE/TREE PROTECTION FENCE
-----	SILT FENCE
-----	DIVERSION FENCE
-----	EXISTING PASSING PERCOLATION TEST
-----	EXISTING SOIL BORING
-----	EXISTING TREE LINE
-----	PROPOSED TREE LINE
-----	DRAINAGE ONDIE
-----	PERMANENT SOIL STABILIZATION CONTROL MATTING
Ghb	SOIL LINES AND TYPES
-----	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
-----	PROPOSED ROOF LEADER
-----	DENOTES EXISTING TREES TO BE REMOVED
-----	DENOTES EXISTING TREES TO REMAIN
-----	SPECIMEN TREE
-----	CRITICAL ROOT ZONE
-----	CRZ IMPACT AREA
-----	STEEL SLOPES 15-25%
-----	STEEL SLOPES > 25%



HOWARD COUNTY GEODETIC SURVEY CONTROL NO. 34QC N 554,882.952 E 1,314,248.736 ELEVATION: 482.880'
 HOWARD COUNTY GEODETIC SURVEY CONTROL NO. 34GD N 553,733.738 E 1,313,736.647 ELEVATION: 465.294'
 REFER TO HOWARD CO. ADC MAP 30-03

VICINITY MAP



GENERAL NOTES

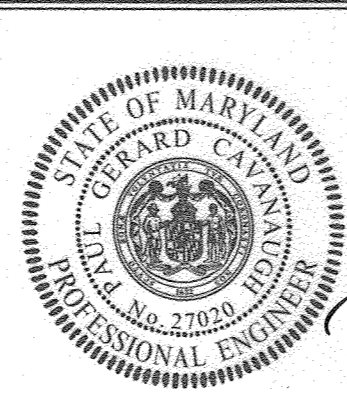
- THE SUBJECT PROPERTY IS ZONED RR-DEO (PER 10/06/13 COMPREHENSIVE ZONING PLAN).
- BOUNDARY IS BASED ON A FIELD RUN SURVEY PERFORMED BY NJR & ASSOCIATES ON OR ABOUT APRIL, 2022.
- CONTOURS ARE BASED ON A TOPOGRAPHIC FIELD RUN SURVEY PERFORMED BY NJR & ASSOCIATES ON OR ABOUT APRIL, 2022.
- COORDINATES BASED ON NAD83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL. STATIONS NO. 34QC AND NO. 34GD: HOWARD COUNTY MONUMENT NO. 34QC N 554,882.952 E 1,314,248.736 ELEV. 482.880' HOWARD COUNTY MONUMENT NO. 34GD N 553,733.738 E 1,313,736.647 ELEV. 465.294'
- STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II, REVISED 2009. THIS PLAN PROPOSES THE USE OF ONE (1) M-6 MICRO-BIORETENTION FACILITY, TEN (10) M-5 DRYWELLS, AND FOUR (4) (N-2) NON-ROOFTOP DISCONNECTS.
- THIS PROJECT WILL UTILIZE PRIVATE WATER AND SEWER.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(S) OR THEIR BUFFERS, FOREST CONSERVATION EASEMENT AREAS AND 100 YEAR FLOODPLAIN.
- THERE ARE NO STREAMS OR THEIR BUFFERS LOCATED WITHIN THE BOUNDARY OF THIS SITE. THERE IS NO 100 YEAR FLOODPLAIN. WETLANDS ARE PRESENT WITHIN THE PROPERTY BUT NOT WITHIN THE LOD.
- FOREST CONSERVATION REQUIREMENTS FOR THIS PROPOSED SUBDIVISION ARE PROVIDED IN ACCORDANCE WITH SECTION 16.1209 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION ACT. AFFORESTATION AND REFORESTATION WILL BE ADDRESSED ONSITE. AN ALTERNATIVE COMPLIANCE TO SECTION 16.1209(4)(iii) FOR LOTS LESS THAN 10 ACRES IN SIZE WILL BE SUBMITTED AT NEXT PLAN STAGE.
- THE FOREST CONSERVATION EASEMENT HAS BEEN PROPOSED TO FULFILL THE REQUIREMENTS OF SECTION 16.1209 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, HOWEVER FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
- SOIL BORING INFORMATION INFO IS PROVIDED WITH THIS DESIGN. BORING AND TEST PIT INFORMATION IS INCLUDED ON THESE PLANS AND THE SWM REPORT.
- APPROVAL OF THIS ECP DOES NOT CONSTITUTE APPROVAL OF SUBSEQUENT OR ASSOCIATED SUBDIVISION OR SITE DEVELOPMENT PLANS OR RED-LINE REVISIONS. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND THE HOWARD COUNTY ZONING REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN, SITE DEVELOPMENT PLAN, OR RED-LINE REVISION PROCESSES. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THE PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.
- AN ACA TO SECTION 16.1209(4)(3) OF THE SUBDIVISION REGULATIONS WILL BE PROVIDED AT THE NEXT PLAN STAGE FOR REMOVAL OF 1 SPECIMEN TREE.
- A CONSTRUCTION ENTRANCE, STOCKPILE, AND SUPER SILT FENCE HAVE BEEN PLACED ON THE SITE, AND NO FURTHER DISTURBANCE ON THE SITE SHALL TAKE PLACE UNTIL GRADING PERMIT IS OBTAINED. THE AFOREMENTIONED ITEMS ARE SHOWN AS EXISTING FEATURES.

SITE ANALYSIS DATA CHART

- TOTAL AREA OF THIS SUBMISSION = 9.90 AC.
- LIMIT OF DISTURBED AREA = 2.67 AC (SWM BASED ON LOD)
- PRESENT ZONING DESIGNATION = RR-DEO (PER 10/06/2013 COMPREHENSIVE ZONING PLAN)
- PROPOSED USE: RESIDENTIAL SINGLE FAMILY DETACHED
- PREVIOUS HOWARD COUNTY FILES: N/A
- TOTAL AREA OF FLOODPLAIN LOCATED ON-SITE = 0 AC
- TOTAL AREA OF STEEP SLOPES IN EXCESS OF 15% TO 25% = > 1.46 AC
- TOTAL AREA OF STEEP SLOPES IN EXCESS OF 25% = > 0.37 AC
- TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0.06 AC
- TOTAL AREA OF STREAM (INCLUDING BUFFER) = 0 AC
- TOTAL AREA OF EXISTING FOREST = 8.70 AC
- TOTAL AREA OF FOREST TO BE RETAINED = 5.289 AC (LOT 1 = 4.264 AC, LOT 2 = 0.664 AC)
- TOTAL AREA OF LOTS / BUILDABLE PARCELS = 9.90 AC
- TOTAL GREEN OPEN AREA (PERVIOUS) = 9.32 AC
- TOTAL IMPERVIOUS AREA = 0.58 AC (WITHIN LOD, EXCLUDES EXISTING IMPERVIOUS)
- TOTAL AREA OF ERODIBLE SOILS = 0.63 AC

STORMWATER MANAGEMENT PRACTICES						
AREA ID	LOCATION	ADDRESS	DRAINAGE AREA SF.	% IMPERVIOUS	ESDV REQUIRED Cuft.	ESDV PROVIDED Cuft.
A-2 PERMEABLE PAVING	LOT 2	13821 BRIGHTON DAM ROAD	1,514	83.5%	43.54	222
N-2 DISCONNECT OF NON-ROOFTOP RUNOFF #1	LOT 2	13821 BRIGHTON DAM ROAD	2,635	100%	125.00	125
N-2 DISCONNECT OF NON-ROOFTOP RUNOFF #2	LOT 1	13815 BRIGHTON DAM ROAD	2,928	94.0%	200.00	200
N-2 DISCONNECT OF NON-ROOFTOP RUNOFF #3	LOT 2	13821 BRIGHTON DAM ROAD	420	100%	33	33
N-2 DISCONNECT OF NON-ROOFTOP RUNOFF #4	LOT 1	13815 BRIGHTON DAM ROAD	148	100%	12	12
M-6 MICRO-BIO	LOT 1	13815 BRIGHTON DAM ROAD	20,338	47%	2,089	2,089
M-5 DRYWELL #1	LOT 2	13821 BRIGHTON DAM ROAD	1,000	100%	126	126
M-5 DRYWELL #2	LOT 2	13821 BRIGHTON DAM ROAD	1,000	100%	126	126
M-5 DRYWELL #3	LOT 2	13821 BRIGHTON DAM ROAD	1,000	100%	126	126
M-5 DRYWELL #4	LOT 1	13815 BRIGHTON DAM ROAD	799	100%	163	163
M-5 DRYWELL #5	LOT 1	13815 BRIGHTON DAM ROAD	810	100%	167	167
M-5 DRYWELL #6	LOT 1	13815 BRIGHTON DAM ROAD	971	100%	200	200
M-5 DRYWELL #7	LOT 1	13815 BRIGHTON DAM ROAD	915	100%	189	189
M-5 DRYWELL #8	LOT 1	13815 BRIGHTON DAM ROAD	883	100%	182	182
M-5 DRYWELL #9	LOT 1	13815 BRIGHTON DAM ROAD	896	100%	189	189
M-5 DRYWELL #10	LOT 1	13815 BRIGHTON DAM ROAD	918	100%	195	195

GROSS AREA = 9.90 ACRES
 LOD = 2.67 ACRES
 RCN = 56.0
 TARGET Pe = 1.58"
 PROVIDED Pe = 1.79"
 ESDV REQUIRED = 3,789 cf
 ESDV PROVIDED = 4,334 cf
 Rev REQUIRED = 132 cf
 Rev PROVIDED = 1,987 cf



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21702, EXPIRATION DATE: 01/25/26.
Paul G. Crannagh
 PAUL G. CRANNAGH
 APR 17 2024
 DATE

OWNER
 BRIGHTON DAM HOLDINGS
 10050 ROMAN LANE
 LAUREL, MD 20723
 (410) 977-0864

DEVELOPER
 OYL HOMES, LLC
 6100 DAYLONG LANE, SUITE-100
 CLARKSVILLE, MD 21029
 CONTACT: Mr. Scott Hare
 (410) 977-0864

BRIGHTON DAM ROAD
 LOTS 1 & 2
 13815 BRIGHTON DAM RD
 LIBRE: 21299, FOLIO: 61
 TAX MAP NO.: 34 GRID NO.: 13 PARCEL NO.:96
 ZONED RR-DEO
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: FEBRUARY, 2024
 SHEET 1 OF 5

SPECIMEN TREE IMPACT CALCULATOR

Key (X#)	Species	Size (in dbh)	CRZ (feet radius)	Comments	CRZ Area (SF)	CRZ Impact (SF)	Percent CRZ Impact	To Be Retained (Y/N)	Mitigation Requirement (SF)
1	Tulip poplar	30	45		6359	0	0	Y	0
2	Tulip poplar	32	48		7235	0	0	Y	0
3	Tulip poplar	38	57		10262	0	0	Y	0
4	Tulip poplar	31	46.5		6789	0	0	Y	0
5	Tulip poplar	32.5	48.75	Floor, deckback	7462	0	0	Y	0
6	Tulip poplar	32	48		7235	0	0	Y	0
7	Tulip poplar	35.5	53.25		8904	0	0	Y	0
8	Tulip poplar	39	58.5		10746	0	0	Y	0
9	Tulip poplar	35	52.5		8655	0	0	Y	0
10	Tulip poplar	43	64.5		13063	0	0	Y	0
11	Tulip poplar	37.5	56.25		9935	0	0	Y	0
12	Tulip poplar	37	55.5		9672	0	0	Y	0
13	Tulip poplar	38	57		10202	0	0	Y	0
14	Tulip poplar	38	57		10202	0	0	Y	0
15	Tulip poplar	38.5	57.75		10472	0	0	Y	0
16	Tulip poplar	33.5	50.25	Floor, major rot	7929	0	0	Y	0
17	Tulip poplar	39	58.5	Floor, severe deckback	10746	0	0	Y	0
18	Tulip poplar	42	63	Floor, major rot	12463	0	0	Y	0
19	Tulip poplar	31	46.5		6789	0	0	Y	0
20	Tulip poplar	39	58.5		10746	0	0	Y	0
21	Tulip poplar	50.5	75.75	Floor, 3 stems above bh, one with major rot	18018	0	0	Y	0
22	Tulip poplar	37	55.5	Floor, twin stems, rot	9672	366	4	Y	0
23	Tulip poplar	36.5	54.75	Fair, twin stems above bh	9412	1982	21	Y	0
24	Tulip poplar	30.5	45.75	Fair, co-dominant	6572	0	0	Y	0
25	Tulip poplar	32	48		7235	0	0	Y	0
54	Tulip poplar	30	45		6359	1039	16	Y	0
67	Tulip poplar	30	45	Fair, co-dominant at head height	6359	5655	89	N	2
34	Tulip poplar	35.1	49.65	Fair, co-dominant at waist height, weeping crotch, vine pressure	7744	0	0	Y	0
41	Tulip poplar	31.2	46.8		6881	0	0	Y	0
42	Tulip poplar	31.2	46.8	Co-dominant 40'	6881	0	0	Y	0

24"-30" TREE CHART

Key (X#)	Species	Size (in dbh)	Condition (Good unless otherwise noted)	State Champion (in dbh)	Key (X#)	Species	Size (in dbh)	Condition (Good unless otherwise noted)	State Champion (in dbh)
26	Tulip poplar	26		101.3	58	Tulip poplar	29	Fair, co-dominant ankle height	101.3
27	Tulip poplar	29		101.3	59	Tulip poplar	27.9	Fair, vine pressure, some storm damage	101.3
28	Tulip poplar	27		101.3	60	Tulip poplar	28.1		101.3
29	Tulip poplar	26.8		101.3	61	Tulip poplar	27.4	Fair, co-dominant chest height	101.3
30	Tulip poplar	28.7	Fair, co-dominant with Slippery Elm #32	101.3	62	Tulip poplar	28	Vine pressure	101.3
31	Slippery Elm	28	Fair, co-dominant with Tulip poplar #31	82.8	63	Tulip poplar	28.3	Poor, stress fracture in lower trunk, potentially lightning damage	101.3
32	Tulip poplar	26	Fair, co-dominant at ankle height, vine pressure	101.3	65	Tulip poplar	34.5	Vine pressure, Storm Damage present	101.3
33	Paulownia tomentosa	28.7	Poor, hollow with one living branch	69.4	66	Tulip poplar	27.1		101.3
35	Tulip poplar	29	Fair, co-dominant head height	101.3	68	Tulip poplar	28.7		101.3
36	Tulip poplar	29.3	Bittersweet pressure	101.3	69	Tulip poplar	24.5		101.3
37	Tulip poplar	28		101.3	70	Tulip poplar	28.3		101.3
38	Tulip poplar	27.5	Bittersweet pressure	101.3	71	Tulip poplar	24.5		101.3
39	Tulip poplar	26		101.3	72	Tulip poplar	27.1		101.3
40	Tulip poplar	29		101.3	73	Tulip poplar	25.2		101.3
43	Tulip poplar	28		101.3	74	Tulip poplar	25.5		101.3
44	Tulip poplar	27.4	Co-dominant 30'	101.3	75	Tulip poplar	28.3		101.3
45	Tulip poplar	27		101.3	76	Tulip poplar	26.8		101.3
46	Tulip poplar	26.1	Fair, co-dominant ankle height	101.3	77	Tulip poplar	28.7		101.3
47	Tulip poplar	25.5		101.3	78	Tulip poplar	29		101.3
48	Tulip poplar	24.8		101.3	79	Tulip poplar	28.3		101.3
49	Tulip poplar	27	Fair, co-dominant 40'	101.3	80	Tulip poplar	28		101.3
50	Tulip poplar	26.1		101.3	81	Tulip poplar	26		101.3
51	Tulip poplar	27.4		101.3	82	Tulip poplar	24.8		101.3
52	Tulip poplar	29.9		101.3	83	Tulip poplar	25.2		101.3
53	Tulip poplar	25		101.3	84	Tulip poplar	25		101.3
54	Tulip poplar	25.5		101.3	85	Tulip poplar	27.7		101.3
55	Tulip poplar	24.8		101.3	86	Tulip poplar	25.8		101.3
56	Tulip poplar	24.5	Fair, co-dominant ankle height	101.3	87	Tulip poplar	25.8		101.3
57	Tulip poplar	29.3	Vine pressure	101.3	88	Tulip poplar	26		101.3

FISHER, COLLINS & CARTEE, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 CLUICOTT CITY, MARYLAND 21042
 (410) 441-2899

SOIL	NAME	CLASS	"K" VALUE
GgB	Glenelg loam, 0 to 5 percent slopes	B	0.24
GmC	Glenville Silt Loam, 0 to 5 percent slopes	C/D	0.37
MaC	MAnor Loam, 0 to 5 percent slopes	B	0.28
MaD	MAnor Loam, 15 to 25 percent slopes	B	0.28



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 27028, EXPIRATION DATE: 01/25/26.
 Paul C. Cavanaugh
 DATE: 1/19/24

OWNER
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 CONTACT: Mr. Scott Hare
 (410) 977-0864

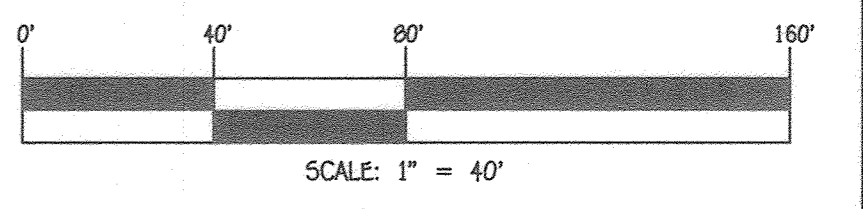
EXISTING CONDITIONS & DEMOLITION PLAN
BRIGHTON DAM ROAD
 LOTS 1 & 2
 13815 BRIGHTON DAM RD
 LIBRE: 21299, FOLIO: 61
 TAX MAP NO.: 34 GRID NO.: 13 PARCEL NO.: 96
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: FEBRUARY, 2024
 SHEET 2 OF 5



Approved: Department Of Planning And Zoning
 Chief, Development Engineering Division
 Chief, Division Of Land Development

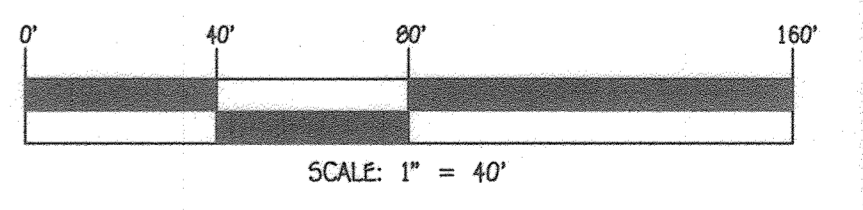
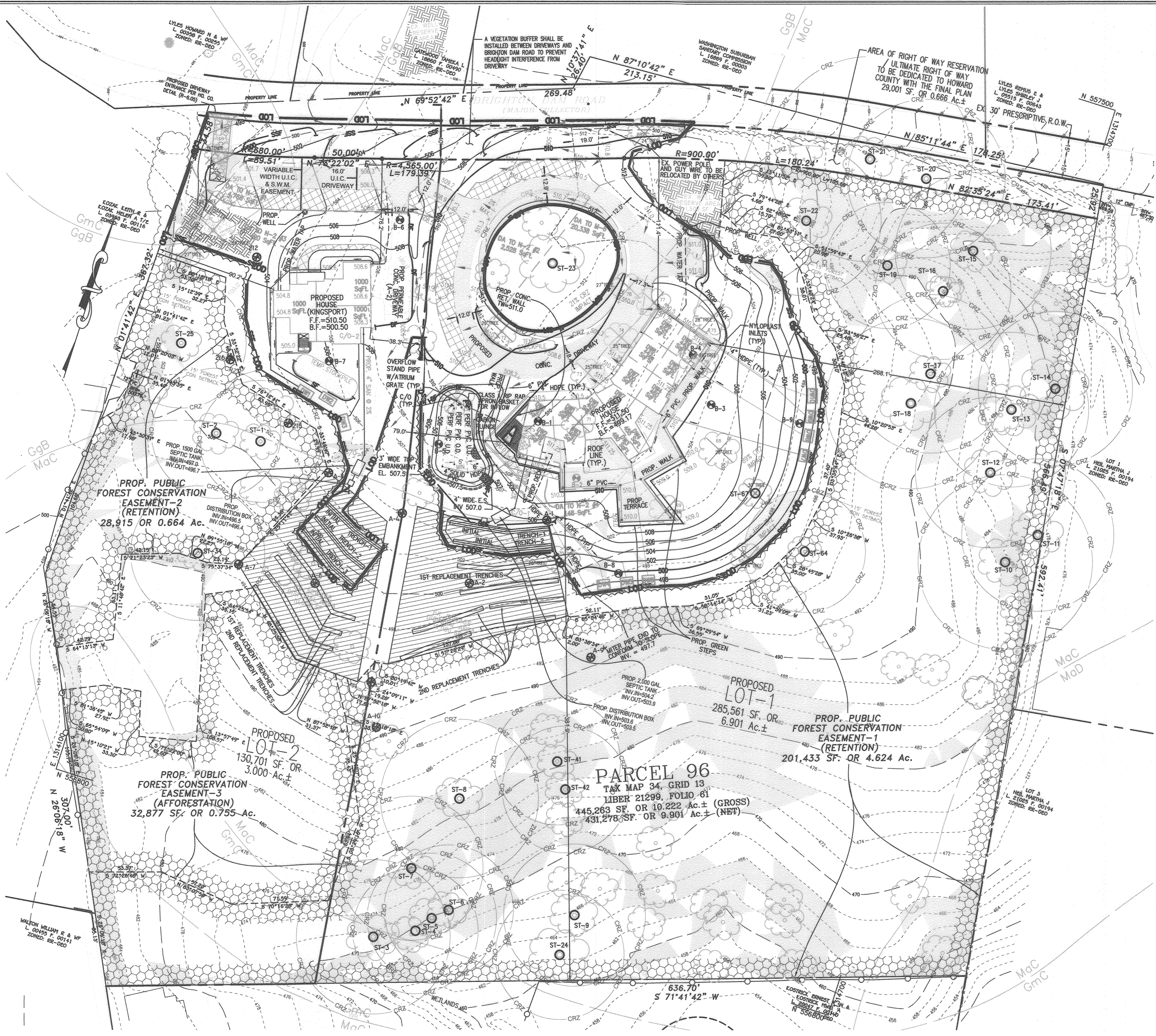
4/25/24 Date
 4/18/24 Date

SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
- - - -	EXISTING CONTOUR 10' INTERVAL
⊕	EXISTING PASSING PERCOLATION TEST
⊙	EXISTING WELL BORING
⊗	EXISTING WELL
---	EXISTING WATER LINE
---	EXISTING SEWER LINE
---	EXISTING FENCE WOOD
---	EXISTING FENCE WIRE
---	EXISTING WELL RESERVE AREA
---	EXISTING PAVING
---	EXISTING TREE LINE
---	SOIL LINES AND TYPES
⊗	DENOTES EXISTING TREES TO BE REMOVED
⊙	DENOTES EXISTING TREES TO REMAIN
⊙	SPECIMEN TREE
---	CRITICAL ROOT ZONE
---	LIMIT OF DISTURBANCE
---	CRZ IMPACT AREA
---	STEEP SLOPES 15-25%
---	STEEP SLOPES > 25%
---	EXISTING SILT FENCE TO BE REMOVED
---	EXISTING SUPER SILT FENCE TO BE REMOVED



PLAN VIEW
 SCALE: 1" = 40'

LEGEND	
SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL
---	EXISTING CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 10' INTERVAL
---	PROPOSED CONTOUR 2' INTERVAL
---	PROPOSED PERMEABLE CONCRETE
x 449.5	SPOT ELEVATION
---	EXISTING STORM DRAIN
---	EXISTING WATER LINE
---	AREA OF NON ROOFTOP DISCONNECT
---	EXISTING FENCE WOOD
---	EXISTING FENCE WIRE
---	PROPOSED PAVING
---	EXISTING WELL RESERVE AREA
---	FOREST CONSERVATION EASEMENT
---	PROPOSED SEPTIC FIELD AREA
---	LIMIT OF DISTURBANCE
55'	SUPER SILT FENCE/TREE PROTECTION FENCE
SF	SILT FENCE
DF	DIVERSION FENCE
A-2	EXISTING PASSING PERCOLATION TEST
B-6	EXISTING SOIL BORING
---	EXISTING TREE LINE
---	PROPOSED TREE LINE
---	DRAINAGE DIVIDE
---	PERMANENT SOIL STABILIZATION CONTROL MATTING
GhB	SOIL LINES AND TYPES
---	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
---	PROPOSED ROOF LEADER
---	DENOTES EXISTING TREES TO BE REMOVED
---	DENOTES EXISTING TREES TO REMAIN
ST-12	SPECIMEN TREE
---	CRITICAL ROOT ZONE
---	CRZ IMPACT AREA
---	STEEP SLOPES 15-25%
---	STEEP SLOPES > 25%

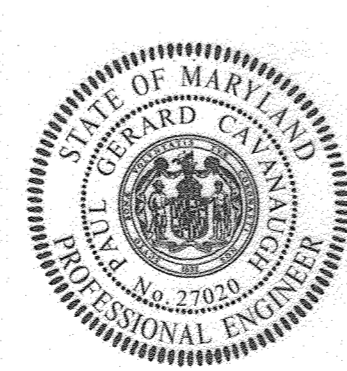


PLAN VIEW
SCALE: 1" = 40'

MINIMUM LOT SIZE CHART	
LOT No.	LOT AREA
1	295,561 Sq.ft.
2	130,701 Sq.ft.

SOILS LEGEND			
SOIL	NAME	CLASS	K-VALUE
GgB	Glenelg loam, 0 to 5 percent slopes	B	0.24
GmC	Glenville Silt Loam, 0 to 5 percent slopes	C/D	0.37
MaC	Manor Loam, 0 to 5 percent slopes	B	0.28
MaD	Manor Loam, 15 to 25 percent slopes	B	0.28

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2895



PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE # 27820 EXPIRATION DATE: 01/25/26.
 Paul G. Cavanaugh
 Date: April 13, 2024

OWNER
 BRIGHTON DAM HOLDINGS
 10050 ROWAN LANE
 LAUREL, MD 21029
 (410) 977-0864

DEVELOPER
 OYL HOMES, LLC
 6100 DAYLING LANE, SUITE-100
 CLARKSVILLE, MD 21029
 CONTACT: Mr. Scott Hare
 (410) 977-0864

ENVIRONMENTAL CONCEPT PLAN
BRIGHTON DAM ROAD
 LOTS 1 & 2
 13815 BRIGHTON DAM RD
 LIBRE: 21299, FOLIO: 61
 TAX MAP NO.: 34 GRID NO.: 13 PARCEL NO.: 96
 ZONED RR-DEO
 FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: FEBRUARY, 2024
 SHEET 3 OF 5

INFILTRATION AND FILTER SYSTEM CONSTRUCTION SPECIFICATIONS

INFILTRATION AND FILTER SYSTEMS EITHER TAKE ADVANTAGE OF EXISTING PERMEABLE SOILS OR CREATE A PERMEABLE MEDIUM SUCH AS SAND FOR WC, AND RE V. IN SOME INSTANCES WHERE PERMEABILITY IS GREAT, THESE FACILITIES MAY BE USED FOR OP AS WELL. THE MOST COMMON SYSTEMS INCLUDE INFILTRATION TRENCHES, INFILTRATION BASINS, SAND FILTERS, AND ORGANIC FILTERS.

WHEN PROPERLY PLANTED, VEGETATION WILL THRIVE AND ENHANCE THE FUNCTIONING OF THESE SYSTEMS. FOR EXAMPLE, PRE-TREATMENT BUFFERS WILL TRAP SEDIMENTS THAT OFTEN ARE BOUND WITH PHOSPHORUS AND METALS. VEGETATION PLANTED IN THE FACILITY WILL AID IN NUTRIENT UPTAKE AND WATER STORAGE. ADDITIONALLY, PLANT ROOTS WILL PROVIDE AERATION FOR STORMWATER TO PERMEATE SOIL FOR GROUNDWATER RECHARGE. FINALLY, SUCCESSFUL PLANTINGS PROVIDE AESTHETIC VALUE AND WILDLIFE HABITAT MAKING THESE FACILITIES MORE DESIRABLE TO THE PUBLIC.

DESIGN CONSTRAINTS:

- > PLANTING BUFFER STRIPS OF AT LEAST 20 FEET WILL CAUSE SEDIMENTS TO SETTLE OUT BEFORE REACHING THE FACILITY, THEREBY REDUCING THE POSSIBILITY OF CLOGGING.
- > DETERMINE AREAS THAT WILL BE SATURATED WITH WATER AND WATER TABLE DEPTH SO THAT APPROPRIATE PLANTS MAY BE SELECTED (HYDROLOGY WILL BE SIMILAR TO BIORETENTION FACILITIES, SEE FIGURE A.5 AND TABLE A.4 FOR PLANTING MATERIAL GUIDANCE).
- > PLANTS KNOWN TO SEND DOWN DEEP TAPROOTS SHOULD BE AVOIDED IN SYSTEMS WHERE FILTER FABRIC IS USED AS PART OF FACILITY DESIGN.
- > TEST SOIL CONDITIONS TO DETERMINE IF SOIL AMENDMENTS ARE NECESSARY.
- > PLANTS SHALL BE LOCATED SO THAT ACCESS IS POSSIBLE FOR STRUCTURE MAINTENANCE.
- > STABILIZE HEAVY FLOW AREAS WITH EROSION CONTROL MATS OR SOO.
- > TEMPORARILY DIVERT FLOWS FROM SEEDING AREAS UNTIL VEGETATION IS ESTABLISHED.
- > SEE TABLE A.5 FOR ADDITIONAL DESIGN CONSIDERATIONS.

BIO-RETENTION

SOIL BED CHARACTERISTICS
THE CHARACTERISTICS OF THE SOIL FOR THE BIORETENTION FACILITY ARE PERHAPS AS IMPORTANT AS THE FACILITY LOCATION, SIZE, AND TREATMENT VOLUME. THE SOIL MUST BE PERMEABLE ENOUGH TO ALLOW RUNOFF TO FILTER THROUGH THE MEDIA, WHILE HAVING CHARACTERISTICS SUITABLE TO PROMOTE AND SUSTAIN A ROBUST VEGETATIVE COVER CROP. IN ADDITION, MUCH OF THE NUTRIENT POLLUTANT UPTAKE (NITROGEN AND PHOSPHORUS) IS ACCOMPLISHED THROUGH ABSORPTION AND MICROBIAL ACTIVITY WITHIN THE SOIL PROFILE. THEREFORE, SOILS MUST BALANCE THEIR CHEMICAL AND PHYSICAL PROPERTIES TO SUPPORT BIOTIC COMMUNITIES ABOVE AND BELOW GROUND.

THE PLANTING SOIL SHOULD BE A SANDY LOAM, LOAMY SAND, LOAM (USDA), OR A LOAM/SAND MIX (SHOULD CONTAIN A MINIMUM 35 TO 50% SAND, BY VOLUME). THE CLAY CONTENT FOR THESE SOILS SHOULD BE LESS THAN 25% BY VOLUME (ENVIROMENTAL QUALITY RESOURCES (EQR), 1996; ENGINEERING TECHNOLOGY INC. AND BIOHABITATS, INC. (ETAB), 1993). SOILS SHOULD FALL WITHIN THE SM, ML, SC CLASSIFICATIONS OR THE UNIFIED SOIL CLASSIFICATION SYSTEM (USCS). A PERMEABILITY OF AT LEAST 1.0 FEET PER DAY (0.5"/HR) IS REQUIRED (A CONSERVATIVE VALUE OF 0.5 FEET PER DAY IS USED FOR DESIGN). THE SOIL SHOULD BE FREE OF STONES, STUMPS, ROOTS, OR OTHER WOODY MATERIAL OVER 1" IN DIAMETER. BRUSH OR SEEDS FROM NOXIOUS WEEDS (E.G., JOHNSON GRASS, MILKWEED, NUTSEDGE, AND CANADA THISTLE OR OTHER NOXIOUS WEEDS AS SPECIFIED UNDER COMAR 15.08.01.05.) SHOULD NOT BE PRESENT IN THE SOILS. PLACEMENT OF THE PLANTING SOIL SHOULD BE IN 12 TO 18 LIFTS THAT ARE LOOSELY COMPACTED (TAPPED LIGHTLY WITH A BACKHOE BUCKET OR TRAVERSED BY DOZER TRACKS). THE SPECIFIC CHARACTERISTICS ARE PRESENTED IN TABLE A.3.

TABLE A.3 PLANTING SOIL CHARACTERISTICS

PARAMETER	VALUE
PH RANGE	5.2 TO 7.00
ORGANIC MATTER	1.5 TO 4.0% (BY WEIGHT)
MAGNESIUM	35 LBS. PER ACRE, MINIMUM
PHOSPHORUS (PHOSPHATE - P2O5)	75 LBS. PER ACRE, MINIMUM
POTASSIUM (POTASH - K2O)	85 LBS. PER ACRE, MINIMUM
SOLUBLE SALTS	500 PPM
CLAY	10 TO 25 %
SILT	30 TO 55 %
SAND	35 TO 60%

MULCH LAYER

THE MULCH LAYER PLAYS AN IMPORTANT ROLE IN THE PERFORMANCE OF THE BIORETENTION SYSTEM. THE MULCH LAYER HELPS MAINTAIN SOIL MOISTURE AND AVOIDS SURFACE SEALING, WHICH REDUCES PERMEABILITY. MULCH HELPS PREVENT EROSION, AND PROVIDES A MICROENVIRONMENT SUITABLE FOR SOIL BIOTA AT THE MULCH/SOIL INTERFACE. IT ALSO SERVES AS A PRETREATMENT LAYER, TRAPPING THE FINER SEDIMENTS, WHICH REMAIN SUSPENDED AFTER THE PRIMARY PRETREATMENT.

THE MULCH LAYER SHOULD BE STANDARD LANDSCAPE STYLE, SINGLE OR DOUBLE SHREDDED HARDWOOD MULCH OR CHIPS. THE MULCH LAYER SHOULD BE WELL AGED (STOCKPILED OR STORED FOR AT LEAST 12 MONTHS), UNIFORM IN COLOR, AND FREE OF OTHER MATERIALS, SUCH AS WEED SEEDS, SOIL, ROOTS, ETC. THE MULCH SHOULD BE APPLIED TO A MAXIMUM DEPTH OF THREE INCHES. GRASS CLIPPINGS SHOULD NOT BE USED AS A MULCH MATERIAL.

PLANTING GUIDANCE

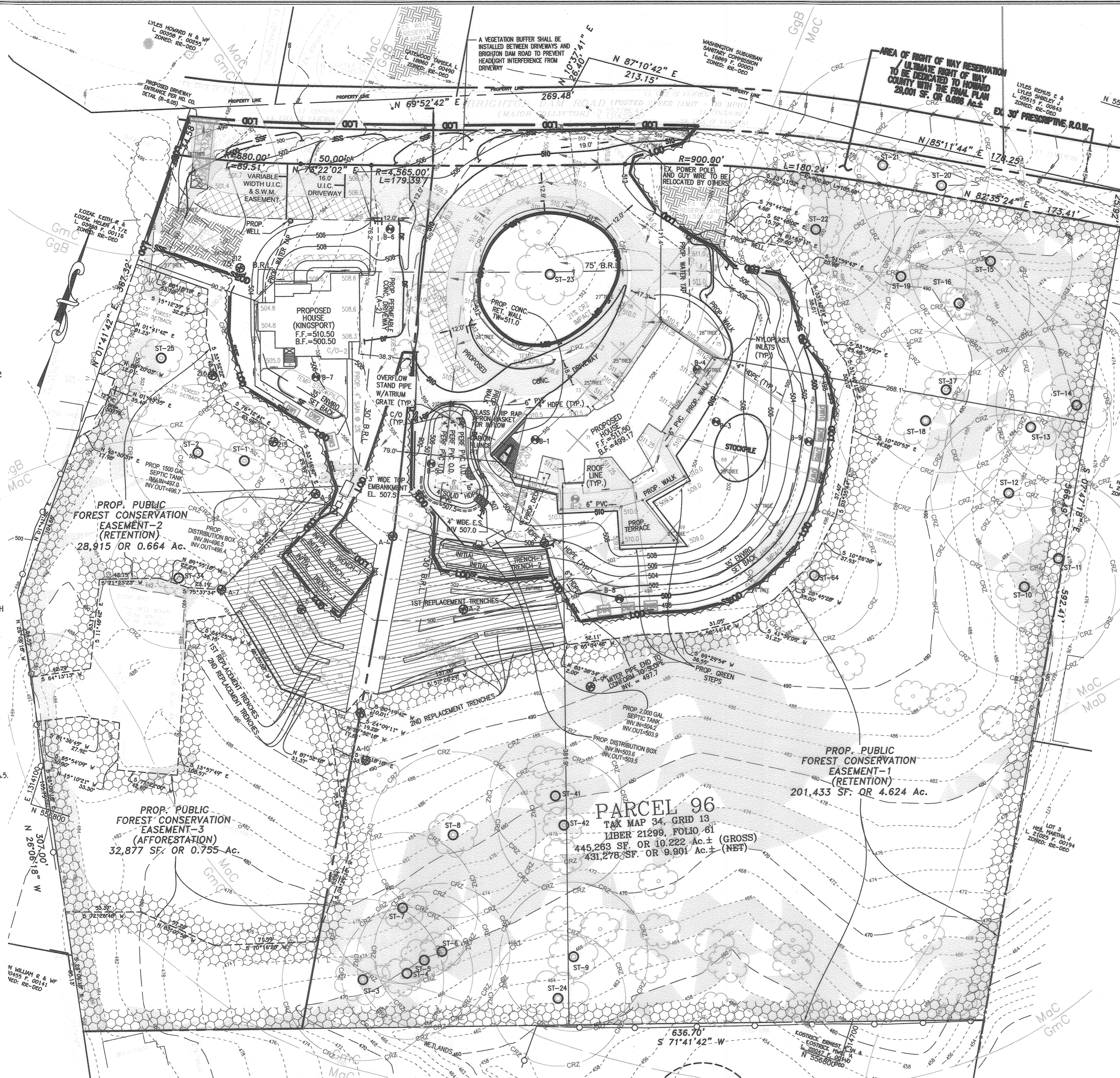
PLANT MATERIAL SELECTION SHOULD BE BASED ON THE GOAL OF SIMULATING A TERRESTRIAL FORESTED COMMUNITY OF NATIVE SPECIES. BIORETENTION SIMULATES AN UPLAND-SPECIES ECOSYSTEM. THE COMMUNITY SHOULD BE DOMINATED BY TREES, BUT HAVE A DISTINCT COMMUNITY OF UNDERSTORY TREES, SHRUBS AND HERBACEOUS MATERIALS. BY CREATING A DIVERSE, DENSE PLANT COVER, A BIORETENTION FACILITY WILL BE ABLE TO TREAT STORMWATER RUNOFF AND WITHSTAND URBAN STRESSES FROM INSECTS, DISEASE, DROUGHT, TEMPERATURE, WIND, AND EXPOSURE.

THE PROPER SELECTION AND INSTALLATION OF PLANT MATERIALS IS KEY TO A SUCCESSFUL SYSTEM. THERE ARE ESSENTIALLY THREE ZONES WITHIN A BIORETENTION FACILITY (FIGURE A.5). THE LOWEST ELEVATION SUPPORTS PLANT SPECIES ADAPTED TO STANDING AND FLUCTUATING WATER LEVELS. THE MIDDLE ELEVATION SUPPORTS PLANTS THAT LIKE DRIER SOIL CONDITIONS, BUT CAN STILL TOLERATE OCCASIONAL INUNDATION BY WATER. THE OUTER EDGE

IS THE HIGHEST ELEVATION AND GENERALLY SUPPORTS PLANTS ADAPTED TO DRIER CONDITIONS. A SAMPLE OF APPROPRIATE PLANT MATERIALS FOR BIORETENTION FACILITIES ARE INCLUDED IN TABLE A.4. THE LAYOUT OF PLANT MATERIAL SHOULD BE FLEXIBLE, BUT SHOULD FOLLOW THE GENERAL PRINCIPALS DESCRIBED IN TABLE A.5. THE OBJECTIVE IS TO HAVE A SYSTEM, WHICH RESEMBLES A RANDOM, AND NATURAL PLANT LAYOUT, WHILE MAINTAINING OPTIMAL CONDITIONS FOR PLANT ESTABLISHMENT AND GROWTH. FOR A MORE EXTENSIVE BIORETENTION PLAN, CONSULT ETAB, 1993 OR CLANTON AND SCHUELER, 1997.

Approved: Department Of Planning And Zoning

[Signature]
Chief, Development Engineering Division
Date: 4/28/24
Chief, Division Of Land Development
Date: 4/18/24



LEGEND

SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL	---	EXISTING TREE LINE
---	EXISTING CONTOUR 10' INTERVAL	---	PROPOSED TREE LINE
---	PROPOSED CONTOUR 10' INTERVAL	---	DRAINAGE DIVIDE
---	PROPOSED CONTOUR 2' INTERVAL	GhB	SOIL LINES AND TYPES
---	PROPOSED PERMEABLE CONCRETE	LoB	PERMANENT SOIL STABILIZATION CONTROL MATTING
X 449.5	SPOT ELEVATION	XXXXXX	BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED
IP 50	EXISTING STORM DRAIN	ST-12	PROPOSED ROOF LEADER
EX PW	EXISTING WATER LINE	---	DENOTES EXISTING TREES TO BE REMOVED
---	EXISTING FENCE WOOD	---	DENOTES EXISTING TREES TO REMAIN
---	EXISTING FENCE WIRE	---	SPECIMEN TREE
---	AREA OF NON ROOFTOP DISCONNECT	---	CRITICAL ROOT ZONE
---	PROPOSED PAVING	---	STEEP SLOPES 15-25%
---	PROPOSED SEPTIC FIELD AREA	---	STEEP SLOPES > 25%
---	FOREST CONSERVATION EASEMENT	---	
---	LIMIT OF DISTURBANCE	---	
---	SUPER SILT FENCE/TREE PROTECTION FENCE	---	
---	SILT FENCE	---	
---	DENOTES MBR OVERLAND FLOWPATH	---	
---	CRZ IMPACT AREA	---	

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTRAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLSWORTH CITY, MARYLAND 21042
(410) 461-2999

SOILS LEGEND

SOIL	NAME	CLASS	Kc VALUE
GgB	Glenelg loam, 0 to 5 percent slopes	B	0.24
GmC	Glenville Silt Loam, 0 to 5 percent slopes	C/D	0.37
MaC	Manor Loam, 0 to 5 percent slopes	B	0.28
MaD	Manor Loam, 15 to 25 percent slopes	B	0.28

HOWARD COUNTY WEBSOILS SURVEY 05/06/19

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 27080, EXPIRATION DATE: 01/25/26.

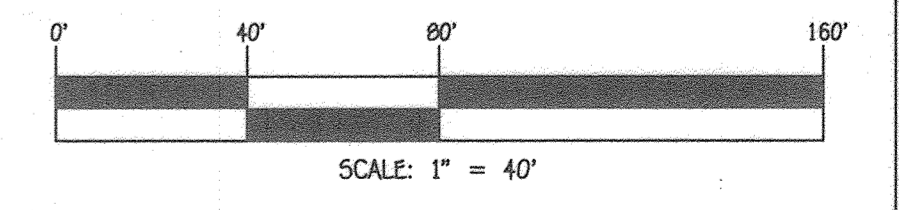
[Signature]
PAUL C. CAVANAGH
DATE: 4/28/24

OWNER
BRIGHTON DAM HOLDINGS
10020 ROMAN LANE
LAUREL, MD 20723
(410) 977-0864

DEVELOPER
OYL HOMES, LLC
6100 DAYLON LANE, SUITE-100
CLARKSVILLE, MD 21029
CONTACT: Mr. Scott Hare
(410) 977-0864

PRELIMINARY EROSION/SEDIMENT CONTROL PLAN
BRIGHTON DAM ROAD
LOTS 1 & 2
13815 BRIGHTON DAM RD
LIBRE: 21299, FOLIO: 61
TAX MAP NO.: 34 GRID NO.: 13 PARCEL NO.:96
ZONED RR-DEO
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: FEBRUARY, 2024
SHEET 4 OF 5

ECP-24-010



PLAN VIEW
SCALE: 1" = 40'

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

A. Soil Preparation

- 1. Temporary Stabilization
a. Seeded preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment...

2. Permanent Stabilization

- a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
i. Soil pH between 6.0 and 7.0.
ii. Soluble salts less than 500 parts per million (ppm).

B. Topsoiling

- 1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable medium for vegetative growth.
2. Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications...

- 3. Topsoiling is limited to areas having 2:1 or flatter slopes where:
a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.

- 4. Areas having slopes steeper than 2:1 require special consideration and design.
5. Topsoil Specifications: Topsoil to be used as topsoil must meet the following criteria:
a. Topsoil must be a loam, sandy loam, clay loam, silty loam, silty clay loam, or loamy sand.

- 6. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
7. Topsoil Application
a. Erosion and sediment control practices must be maintained when applying topsoil.

- 8. Soil Amendments (Fertilizer and Lime Specifications)
1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more...

- 2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment.
3. Lime materials must be ground limestone (hydrated or burnt lime) but substituted except when hydrous lime which contains at least 50 percent total oxide...

- 4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.
5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 6 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

- 6. B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING
Definition
The application of seed and mulch to establish vegetative cover.
Purpose
To protect disturbed soils from erosion during and at the end of construction.

- 7. Seeding
1. Specifications
a. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subjected to re-testing by a recognized seed laboratory...

- 2. Application
a. Dry Seeding: This includes use of conventional drill or broadcast spreaders.
b. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.

- 3. Mulching
1. Mulch Materials (in order of preference)
a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds...

- 2. Temporary Seeding Notes (B-4-4)
Definition
To stabilize disturbed soils with vegetation for up to 6 months.
Purpose
To use fast growing vegetation that provides cover on disturbed soils.
Conditions Where Practice Applies
Exposed soils where ground cover is needed for a period of 6 months or less.

Table with columns: Hardiness Zone, Species, Application Rate (lb/acre), Seeding Dates, Seeding Depths, Fertilizer Rate (10-20-20), Lime Rate (2 tons/acre).

- 3. Permanent Seeding Notes (B-4-5)
A. Seed Mixtures
1. General Use
Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary.

- 2. Turfgrass Mixtures
a. Areas where turfgrasses may be desired include lawns, parks, playgrounds, and commercial sites which will require a medium to high level of maintenance.
b. Select one or more of the species or mixtures listed below based on the site conditions or purpose.

- 3. Sequence of Construction
1. OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (2 WEEKS)
2. NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/ INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK.

- 3. Professional Certification
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21029, EXPIRATION DATE: 01/25/26.

Table with columns: No., Species, Application Rate (lb/acre), Seeding Dates, Seeding Depths, N, P2O5, K2O, Fertilizer Rate (10-20-20), Lime Rate (2 tons/acre).

B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

- 1. General Specifications
a. Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
b. Sod must be machine cut at a uniform soil thickness of 3/4 inch, plus or minus 1/8 inch, at the time of cutting.
c. Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp on the upper 10 percent of the section.

B-4-B STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREAS

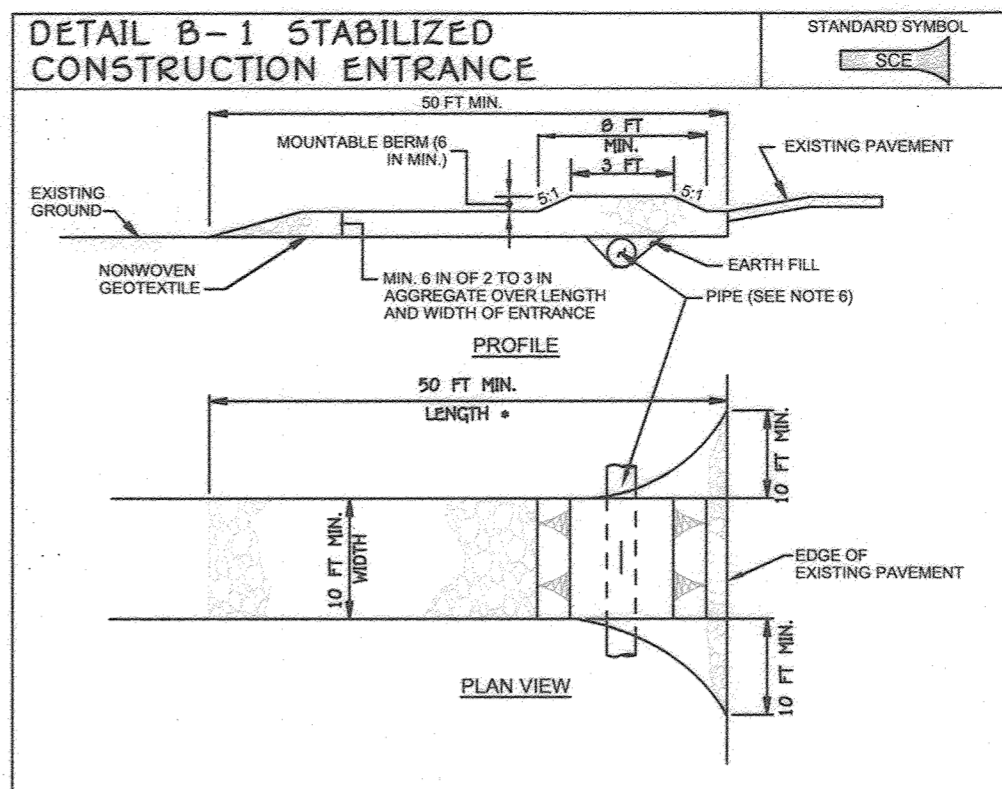
- 1. The stockpile location and all related sediment control practices must be clearly identified on the erosion and sediment control plan.
2. The footprint of the stockpile must be sized to accommodate the total volume of material and based on a side slope ratio no steeper than 2:1.
3. The stockpile area must be stabilized with a suitable sediment control practice.

HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

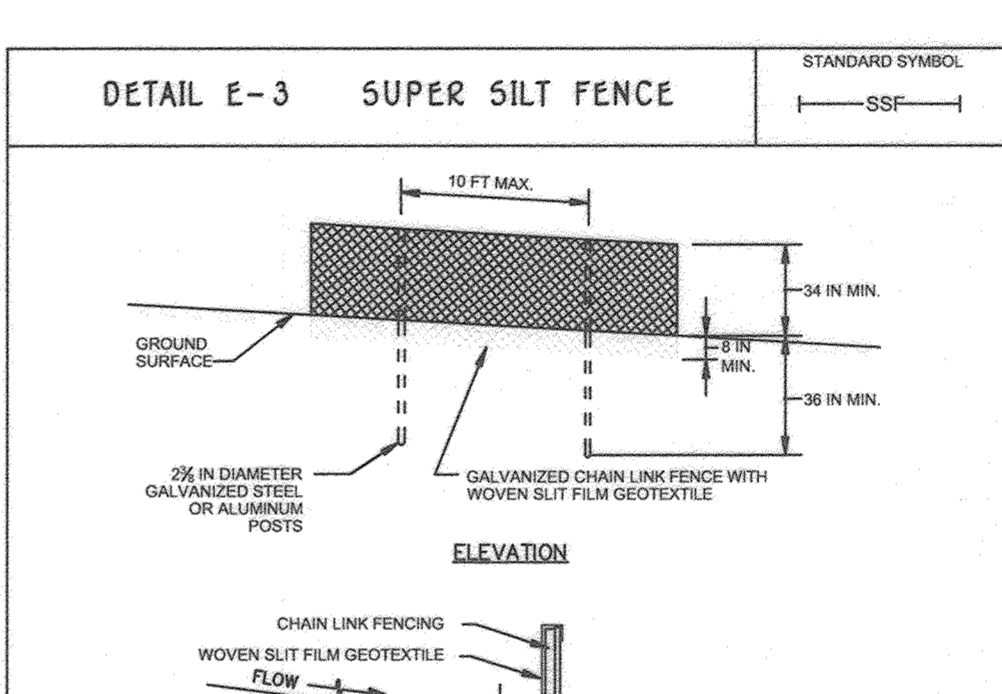
- 1. A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1895).
2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (2 WEEKS)
2. NOTIFY "MISS UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 1-800-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/ INSPECTION AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK.



- CONSTRUCTION SPECIFICATIONS
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (430 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE TO 10 FEET MINIMUM AT THE EXISTING ROAD TO PREVENT TURNING RADIUS.
2. PIPE ALL SURFACE WATERS FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE.



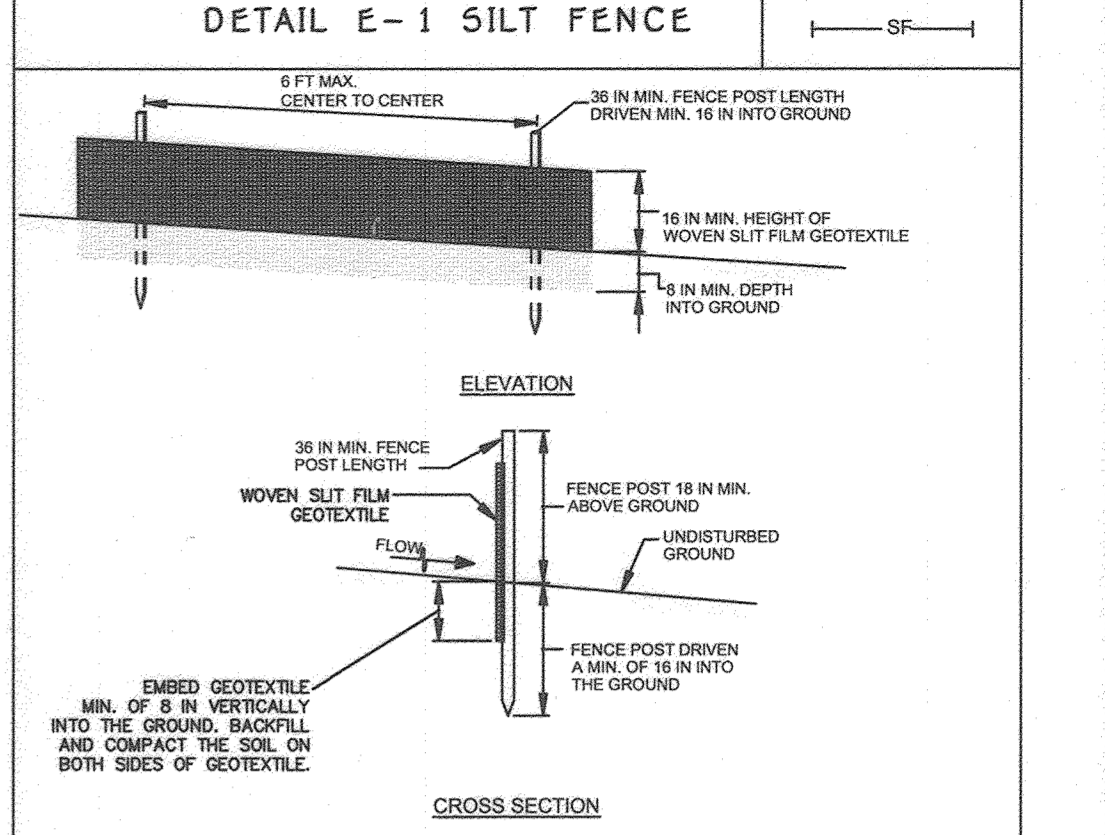
- CONSTRUCTION SPECIFICATIONS
1. INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.285 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.

- 3. FASTEN WOVEN SILT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 6 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAP BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEEDING BY PASS.

- 5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USE MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

- 7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SOIL FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL FENCE AND GEOTEXTILE.

Approved: Department Of Planning And Zoning
Chief, Development Engineering Division
Date: 4/25/24

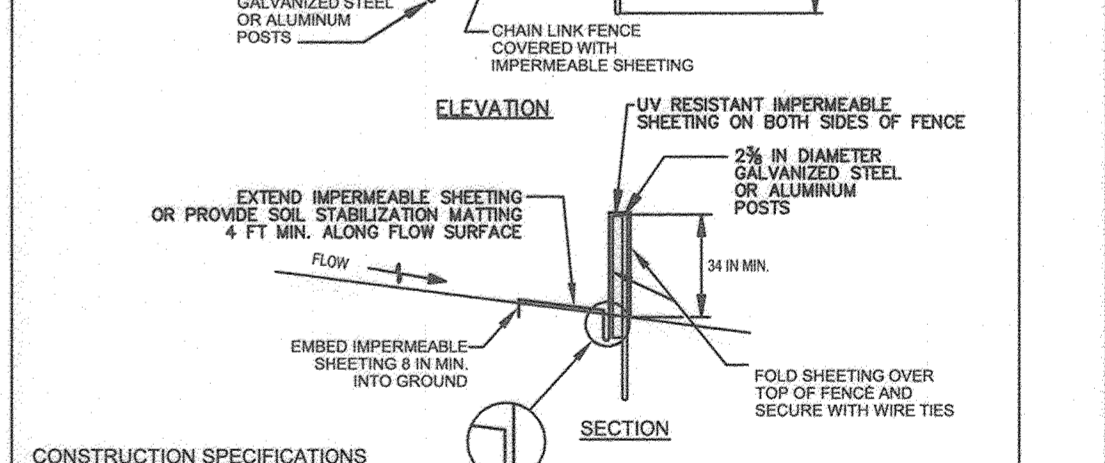


- CONSTRUCTION SPECIFICATIONS
1. USE WOOD POSTS 3/4 X 3/4 X 16 INCH MINIMUM SQUARE CUT OF SOUND QUALITY WOODING, AS AN ALTERNATIVE MATERIALS.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.

- 3. USE WOVEN SILT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USE MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

- 5. EMBED GEOTEXTILE A MINIMUM OF 6 INCHES VERTICALLY INTO THE GROUND, BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN, OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.

- 7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SOIL FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL FENCE.



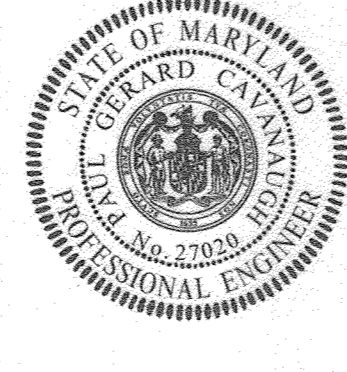
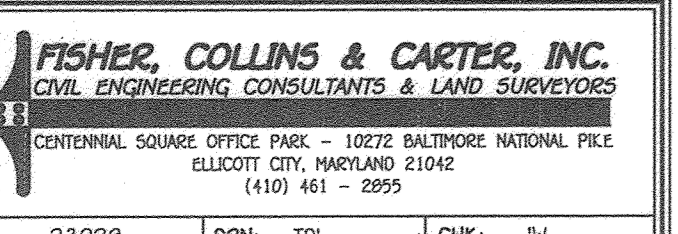
- CONSTRUCTION SPECIFICATIONS
1. INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.285 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.

- 3. FASTEN WOVEN SILT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 6 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAP BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEEDING BY PASS.

- 5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USE MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.

- 7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SOIL FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL FENCE AND GEOTEXTILE.

EROSION + SEDIMENT CONTROL NOTES AND DETAILS
BRIGHTON DAM ROAD
LOTS 1 & 2
13615 BRIGHTON DAM RD
LIBRE: 21299, FOLIO: 61
TAX MAP NO.: 34 GRID NO.: 13 PARCEL NO.:96
ZONED RR-DEO
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: FEBRUARY, 2024
SHEET 5 OF 5



PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21029, EXPIRATION DATE: 01/25/26.

OWNER: BRIGHTON DAM HOLDINGS
10050 ROMAN LANE
LAUREL, MD 20723
(410) 977-0864
DEVELOPER: OYL HOMES, LLC
6100 DAYLING LANE, SUITE-100
CLARKSVILLE, MD 21029
CONTACT: Mr. Scott Hare
(410) 977-0864