	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

	50ILS LEGEND							
50IL	NAME	CLA55	'K'VALUE					
GgB	GgB Glenelg loam, 0 to 5 percent slopes		0.24					
GmC	Glenville Silt Loam, 0 to 5 percent slopes	C/D	0.37					
MaC	Manor Loam, 0 to 5 percent slopes	В	0.28					
MaD	Manor Loam, 15 to 25 percent slopes	В	0.28					

HOWARD COUNTY WEBSOILS SURVEY 05/06/19

		STORMWATER M	ANAGEMENT	PRACTICE	5 BY LOT		
-	AREA ID. ADDRESS LOT 1 13815 BRIGHTON DAM ROAD		AREA ID. ADDRESS MICRO-BIO DRYWELLS NON-ROOFTOP PERIODS (M-6) (M-5) DISCONNECT PAV (N-2) (/				
			Y-1	Y-7	Y-1	N	
	LOT 2	13821 BRIGHTON DAM ROAD	N.	Y-3	Y-1	Y-1	

STORMWATER MANAGEMENT DESIGN NARRATIVE

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 DISCONNECTION 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.

HOWARD COUNTY, MARYLAND TAX MAP DATABASE SYSTEM. IT IS LOCATED IN THE CLARKSVILL PROPOSED DESIGN MAINTAINS THE NATURAL FLOW PATTERNS OF THE SITE. THE RUNOFF 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 (GgB), MANOR LOAM (MaC & MaD), BOTH TYPE "B" SOILS AND GLENVILLE SILT LOAM (GmC) TYPE "C"&"D" SOILS

. 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 OFFSITE 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 GRASSED AREAS, BEFORE BEING CONVEYED TO EXISTING DENSELY VEGETATED AREAS OUTSIDE THE LOD.

<u>III. REDUCTION OF IMPERVIOUS AREAS THROUGH BETTER SITE DESIGN, ALTERNATIVE</u>

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 16', WITH A PERMEABLE PAVEMENT DRIVEWAY TO FEED LOT 2'S ACCESS 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.

V. 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

VI. REQUEST FOR DESIGN MANUAL WAIVER: NO WAIVERS ARE EXPECTED TO BE REQUESTED ON THIS PROJECT RELATING TO SWM REQUIREMENTS.

ARE PROPOSED TO TREAT THE FULL ESDV REQUIREMENT; THUS, ESD TECHNIQUES ARE MAXIMIZED.

AN ACA WILL BE REQUIRED FOR SPECIMEN TREE REMOVAL. STORMWATER MANAGEMENT NOTES

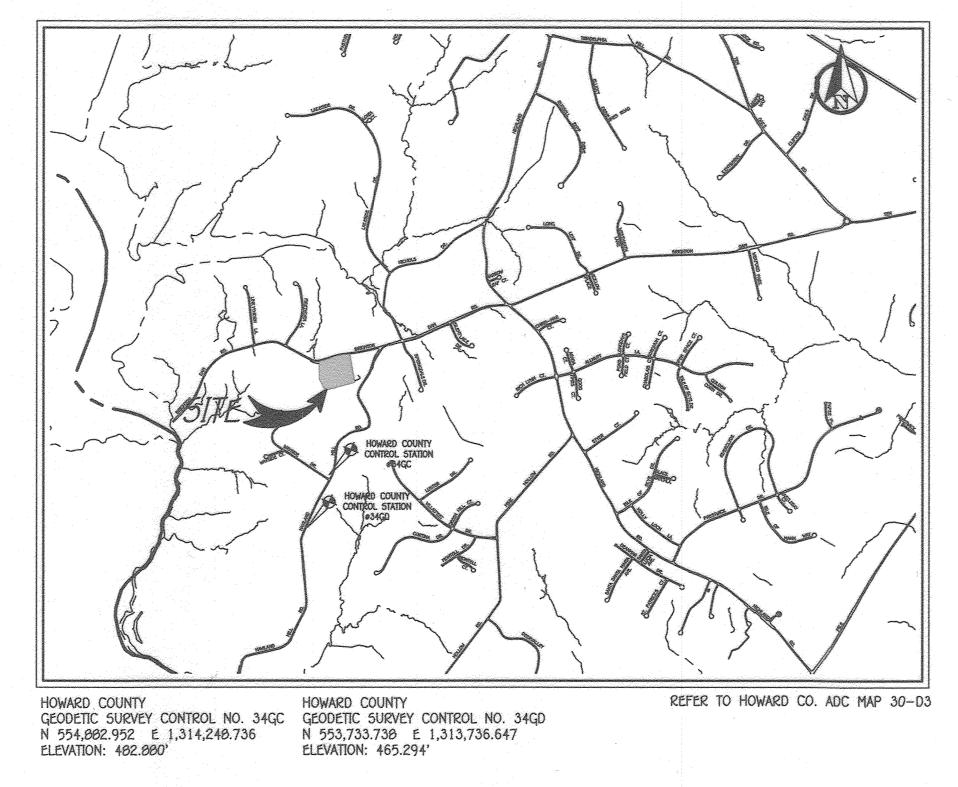
- 1. STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007
- MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, **FFFCTIVE MAY 4, 2010**
- 2. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 500 SQ. FT. OR LESS. 3. FINAL GRADING SHALL BE PROVIDED WITH THE GRADING PLAN.

ENVIRONMENTAL CONCEPT PLAN BRIGHTON DAM ROAD

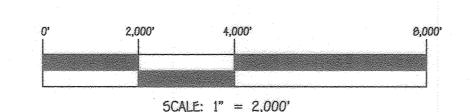
LOTS 1 & 2

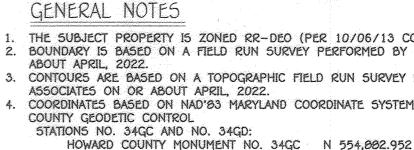
RR-DEO (RESIDENTIAL: SINGLE) DISTRICT TAX MAP No. 34 GRID No. 13 PARCEL NO. 96 DIDINE DECEMBER ON DISTRICT HOWARD COUNTY, MARYLAND

£	LEGEND
SYMBOL	DESCRIPTION
	EXISTING CONTOUR 2' INTERVAL
	EXISTING CONTOUR 10' INTERVAL
	PROPOSED CONTOUR 10' INTERVAL
	PROPOSED CONTOUR 2' INTERVAL
	PROPOSED PERMEABLE CONCRETE
×448.5	SPOT ELEVATION
18" 50	EXISTING STORM DRAIN
EX FH.	EXISTING WATER LINE
	AREA OF NON ROOFTOP DISCONNECT
0-0-0	EXISTING FENCE WOOD
_ x x x	EXISTING FENCE WIRE
	PROPOSED PAVING
	EXISTING WELL RESERVE AREA
	FOREST CONSERVATION EASEMENT
///////////////////////////////////////	PROPOSED SEPTIC FIELD AREA
cer	LIMIT OF DISTURBANCE
55F	SUPER SILT FENCE/TREE PROTECTION FENCE
	SILT FENCE
0F	DIVERSION FENCE
⊕ A-2	EXISTING PASSING PERCOLATION TEST
⊗ B-6	EXISTING SOIL BORING
	EXISTING TREE LINE
~~~	PROPOSED TREE LINE
	DRAINAGE DIVIDE
XXXXXXXXX	PERMANENT SOIL STABILIZATION CONTROL MATTING
GhB	SOIL LINES AND TYPES
LOB	
	BIO RETENTION FACILITY  (F-6) OR (M-6)  AS NOTED
0	PROPOSED ROOF LEADER
XX	DENOTES EXISTING TREES TO BE REMOVED
	DENOTES EXISTING TREES TO REMAIN
ST-12 0	SPECIMEN TREE
31-12	CRITICAL ROOT ZONE
$\times$ $\times$ $\times$	CRZ IMPACT AREA
	STEEP SLOPES 15-25%



SCALE: 1" = 2,000"





1. THE SUBJECT PROPERTY IS ZONED RR-DEO (PER 10/06/13 COMPREHENSIVE ZONING PLAN.) 2. BOUNDARY IS BASED ON A FIELD RUN SURVEY PERFORMED BY NJR & ASSOCIATES ON OR

Approved: Department Of Planning And Zoning

4.25.24

3. CONTOURS ARE BASED ON A TOPOGRAPHIC FIELD RUN SURVEY PERFORMED BY NJR & ASSOCIATES ON OR ABOUT APRIL, 2022.

4. COORDINATES BASED ON NAD'83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO. 34GC AND NO. 34GD:

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' 5. 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 6. THIS PROJECT WILL UTILIZE PRIVATE WATER AND SEWER.

7. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S

8. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE REQUIRED WETLANDS, STREAM(5) OR THEIR BUFFERS, FOREST CONSERVATION FASEMENT AREAS AND 100 YEAR FLOODPLAIN.

9. 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

ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION ACT. AFFORESTATION AND REFORESTATION WILL BE ADDRESSED ONSITE. AN ALTERNATIVE COMPLIANCE TO SECTION 16.120(4)(iii)b FOR LOTS LESS THAN 10 ACRES IN SIZE WILL BE SUBMITTED AT NEXT PLAN STAGE.

11. THE FOREST CONSERVATION EASEMENT HAS BEEN PROPOSED TO FULFIL THE REQUIREMENTS OF SECTION 16.1200 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.

12. SOIL BORING INFORMATION INFO IS PROVIDED WITH THIS DESIGN. BORING AND TEST PI

INFORMATION IS INCLUDED ON THESE PLANS AND THE SWM REPORT. 13. 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 HOWARD COUNTY 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

14. AN ACA TO SECTION 16.1205(a)(3) OF THE SUBDIVISION REGULATIONS WILL BE PROVIDED AT THE NEXT PLAN STAGE FOR REMOVAL OF 1 SPECIMEN TREE.

15. 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

A. 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 = 0.70 AC.

TOTAL AREA OF FOREST TO BE RETAINED = 5.288 AC± (LOT 1 - 4.264 AC. : LOT 2 - 0.664 AC.) TOTAL AREA OF LOTS / BUILDABLE PARCELS = 9.90 AC+ N. TOTAL GREEN OPEN AREA (PERVIOUS)

TOTAL IMPERVIOUS AREA  $= 0.50 \text{ AC} \pm$ (WITHIN LOD, EXCLUDES EXISTING IMPERVIOUS) TOTAL AREA OF ERODIBLE SOILS

5TOI	TAWMS	ER MANAGEMENT	PRACT	ICE5		
AREA ID	LOCATION	ADDRESS	DRAINAGE AREA 5F.	% IMPERVIOUS	ESDV REQUIRED CuF†.	ESDV PROVIDED
A-2 PERMEABLE PAVING	LOT 2	13821 BRIGHTON DAM ROAD	1,514	93.5%	43.54	222
N-2 DISCONNECTION OF NON-ROOFTOP RUNOFF #1	LOT 2	13821 BRIGHTON DAM ROAD	2,635	100%	125.00	125
N-2 DISCONNECTION OF NON-ROOFTOP RUNOFF #2	LOT 1	13015 BRIGHTON DAM ROAD	2,528	94.0%	200.00	200
N-2 DISCONNECTION OF NON-ROOFTOP RUNOFF #3	LOT 2	13821 BRIGHTON DAM ROAD	420	100%	33	33
N-2 DISCONNECTION 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		100%	126	126
M-5 DRYWELL #4	LOT 1	13015 BRIGHTON DAM ROAD	789	100%	163	163
M-5 DRYWELL #5	LOT 1	13815 BRIGHTON DAM ROAD		100%	167	167
M-5 DRYWELL #6	LOT 1	13815 BRIGHTON DAM ROAD	971	100%	200	200
M-5 DRYWELL #7	LOT 1	13015 BRIGHTON DAM ROAD	915	100%	189	189
M-5 DRYWELL #8	LOT 1	13815 BRIGHTON DAM ROAD	993	100%	182	182
M-5 DRYWELL #9	LOT 1	13815 BRIGHTON DAM ROAD	896	100%	185	185
M-5 DRYWELL #10	LOT 1	13815 BRIGHTON DAM ROAD	918	100%	189	189

GROSS AREA = 9.90 ACRES LOD = 2.67 ACRE5RCN = 56.0TARGET Pe =  $1.58^{\circ}$ 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 RENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE 10. 27070, EXPIRATION DATE: 01/25/26.

OWNER

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

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

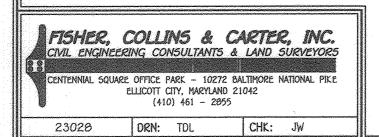
DEVELOPER

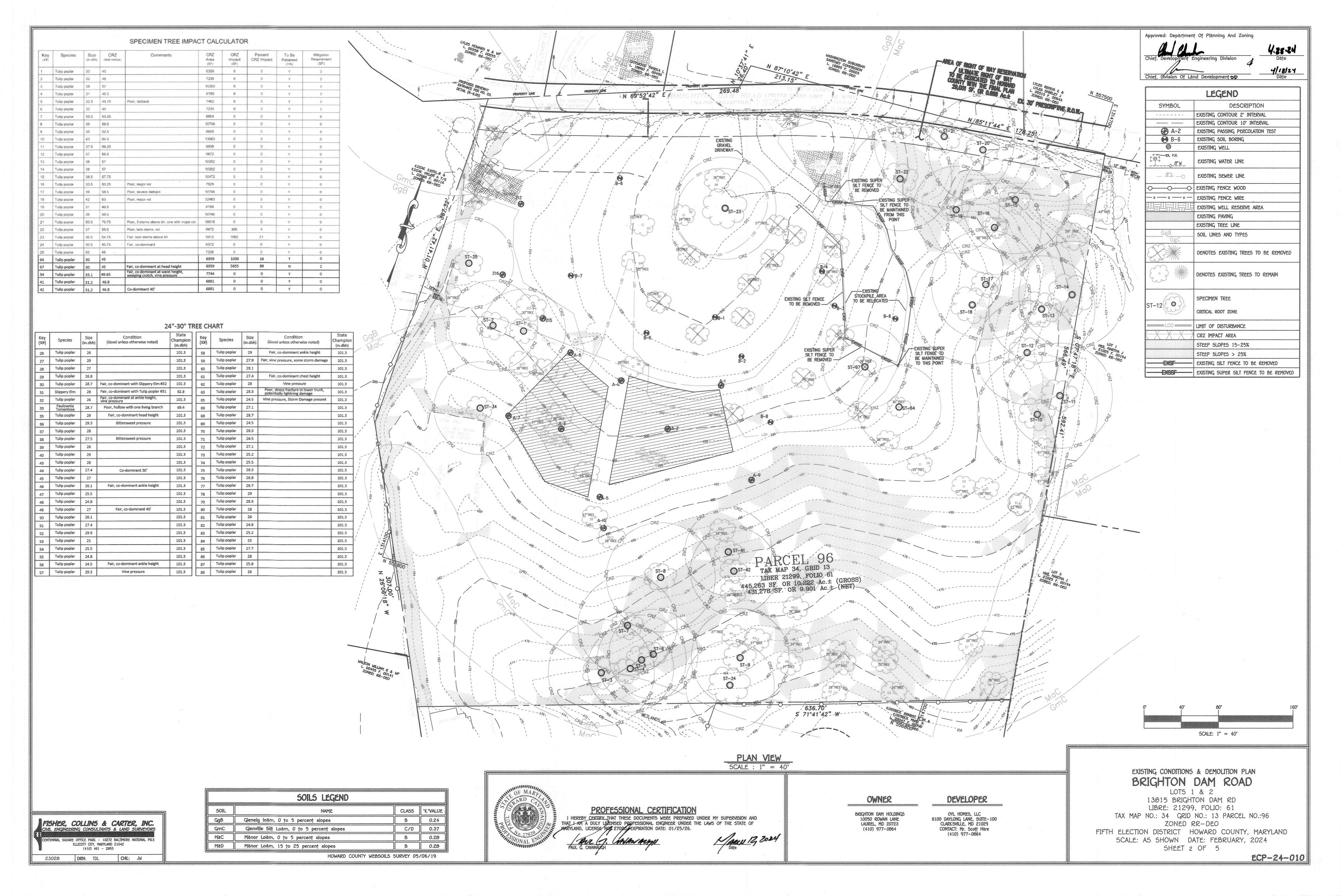
BRIGHTON DAM ROAD

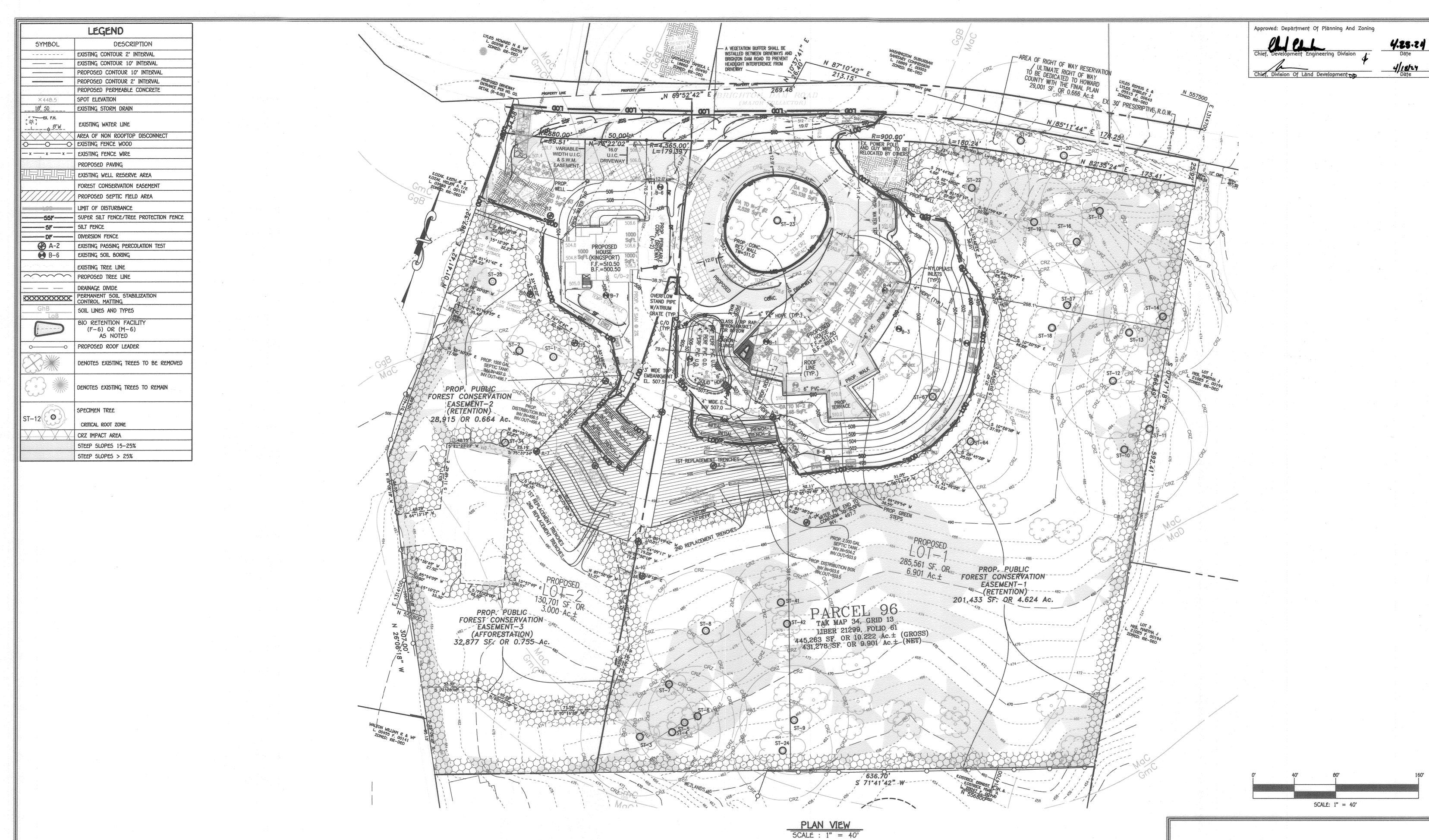
LOTS 1 & 2 13815 BRIGHTON DAM RD LIBRE: 21299, FOLIO: 61 TAX MAP NO.: 34 GRID NO.: 13 PARCEL NO.:96

ZONED RR-DEO FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: FEBRUARY, 2024 SHEET 1 OF 5

ECP-24-010







MINIMUM LOT SIZE CHART

LOT No. LOT AREA

1 205,561 54.ft.
2 130,701 54.ft.

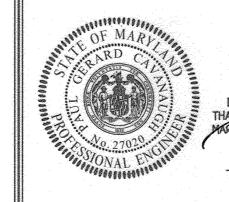
FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2855

23028 DRN: TDL CHK: JW

50IL5 LEGEND						
501L	NAME	CLA55	'K'VALUE			
GgB	Glenelg loam, 0 to 5 percent slopes	8	0.24			
GmC	Glenville Silt Loam, 0 to 5 percent slopes	C/D	0.37			
MaC	Manor Loam, 0 to 5 percent slopes	В	0.28			
MaD	Manor Loam, 15 to 25 percent slopes	В	0.28			

HOWARD COUNTY WEBSOILS SURVEY 05/06/19



PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT TAM A DULY LIDENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE DO 127020, EXPIRATION DATE: 01/25/26.

PAUL G. CAVANAUGH

PAUL G. CAVANAUGH

Date

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

OWNER

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

DEVELOPER

# ENVIRONMENTAL CONCEPT PLAN BRIGHTON DAM ROAD

LOTS 1 & 2

13815 BRIGHTON DAM RD

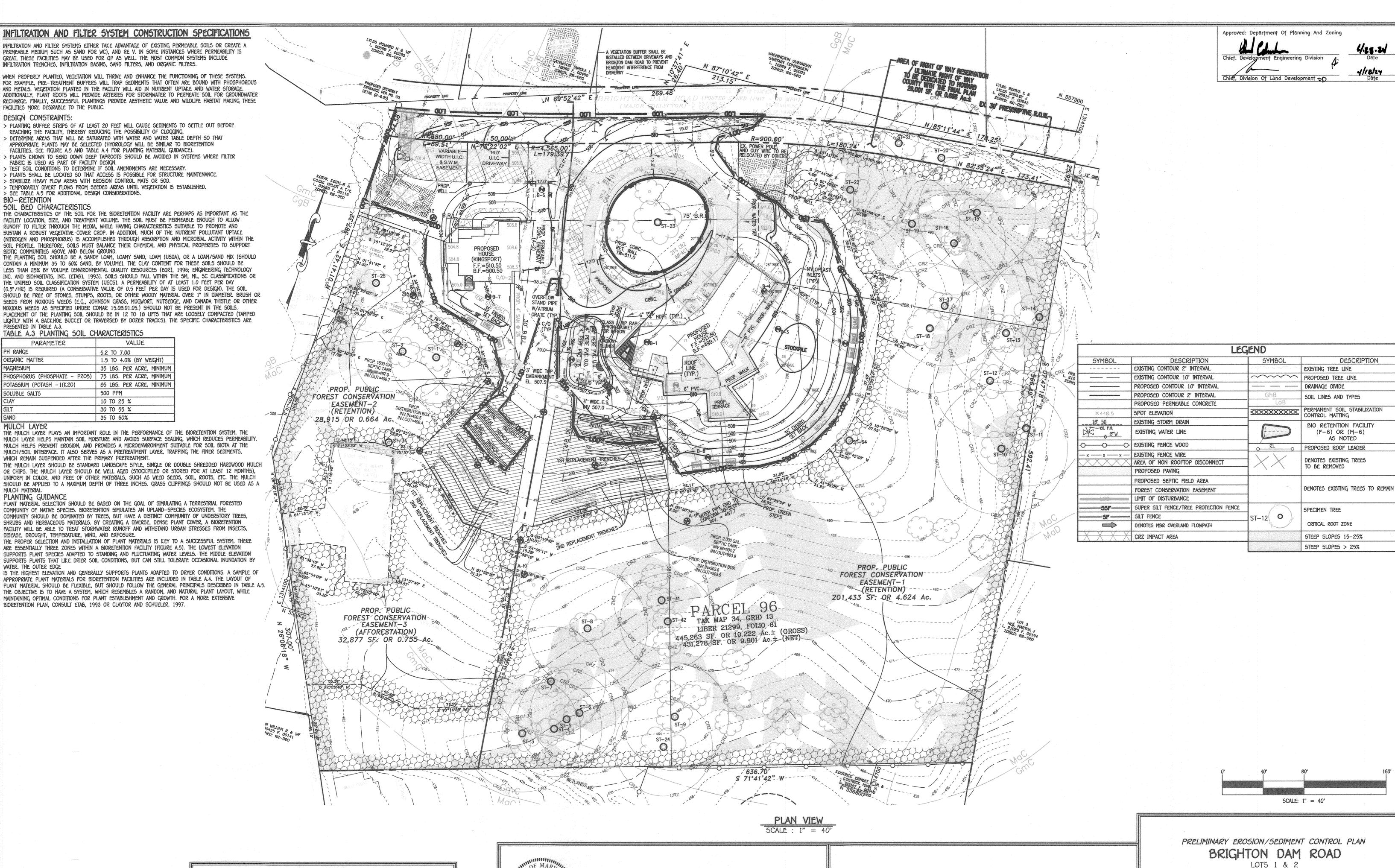
LIBRE: 21299, FOLIO: 61

TAX MAP NO.: 34 GRID NO.: 13 PARCEL NO.:96

ZONED RR-DEO

ZONED RR-DEO
FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: FEBRUARY, 2024
SHEET 3 OF 5

ECP-24-010



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS

CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461 - 2055

CHK: JW

23028 **DRN**: TDL

SOILS LEGENDSOILNAMECLASS'K'VALUEGgBGlenelg loam, 0 to 5 percent slopesB0.24GmCGlenville Silt Loam, 0 to 5 percent slopesC/D0.37MaCManor Loam, 0 to 5 percent slopesB0.28MaDManor Loam, 15 to 25 percent slopesB0.20

HOWARD COUNTY WEBSOILS SURVEY 05/06/19

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT LANT A DULT LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 27020 EXPIRATION DATE: 01/25/26.

PAUL G. CAVANAUGH

PAUL G. CAVANAUGH

PAUL G. CAVANAUGH

OWNER DEVELOPER

BRIGHTON DAM HOLDINGS
10050 ROWAN LANE
LAUREL, MD 20723
(410) 977-0064

BRIGHTON DAM HOLDINGS
0YL HOMES, LLC
6100 DAYLONG LANE, SUITE-100
CLARKSVILLE, MD 21029
CONTACT: Mr. Scott Hare
(410) 977-0864

13815 BRIGHTON DAM RD LIBRE: 21299, FOLIO: 61 TAX MAP NO.: 34 GRID NO.: 13 PARCEL NO.:96 ZONED RR-DEO

ZONED RR-DEO

FIFTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND

SCALE: AS SHOWN DATE: FEBRUARY, 2024

SHEET 4 OF 5

ECP-24-010

# SOIL PREPARATION. TOPSOILING AND SOIL AMENDMENTS (8-4-2)

# A. Soil Preparation

. Temporary Stabilization

a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, such as disc harrows or chisel plows or rippers mounted on construction equipment. After the soil is loosened, it must not be rolled or dragged smooth but left in the roughened condition. Slopes 3:1 or flatter are to be tracked with ridges running parallel to the contour of the slope.

b. Apply fertilizer and lime as prescribed on the plans.

c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means. 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.

Soluble salts less than 500 parts per million (ppm). iii. Soil contains less than 40 percent clay but enough fine grained material (greater than 30 percent silt plus clay) to provide the capacity to hold a moderate amount of moisture. An exception: if lovegrass will be planted, then a sandy soil (less than 30 percent silt plus clay) would be acceptable.

iv. Soil contains 1.5 percent minimum organic matter by weight v. Soil contains sufficient pore space to permit adequate root penetration

b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions. c. Graded areas must be maintained in a true and even grade as specified on the approved plan, then scarified or otherwise loosened to a depth of 3 to 5 inches

d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test. e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake lawn areas to smooth the surface, remove large objects like stones and branches, and ready the area for seed application. Loosen surface soil by dragging with a heavy chain or other equipment to roughen the surface where site conditions will not permit normal seedbed preparation. Track slopes 3:1 or flatter with tracked equipment leaving the soil in an irregular condition with ridges running parallel to the contour of the slope. Leave the top 1 to 3 inches of soil loose and friable. Seedbed loosening may be unnecessary on newly disturbed areas.

1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation

2. Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS

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

c. The original soil to be vegetated contains material toxic to plant growth.

d. The soil is so acidic that treatment with limestone is not feasible.

4. Areas having slopes steeper than 2:1 require special consideration and design. 5. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:

a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1 1/2 inches in diameter

b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified. c. 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. 6. Topsoil Application

a. Erosion and sediment control practices must be maintained when applying topsoil

b. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.

c. Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seedbed preparation. C. 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. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses. 2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be

delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and 3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to

such fineness that at least 50 percent will pass through a #100 mesh sieve and 90 to 100 percent will pass through a #20 mesh sieve.

4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or

5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING

Purpose
To protect disturbed soils from erosion during and at the end of construction

The application of seed and mulch to establish vegetative cover

Conditions Where Practice Applies

To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

# 1. Specifications

- a. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory. All seed used must have been tested within the 6 months immediately preceding the date of sowing such material on any project. Refer to Table B.4 regarding the quality of seed. Seed tags must be available upon request to the inspector to verify type of
- b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen. The appropriate seeding mixture must be applied when the around thaws. c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. Inoculants must not be used later than the date indicated on the container. Add fresh inoculants as directed on the package. Use four times the recommended rate when hydroseeding. Note: It is very important to keep inoculant as
- cook as possible until used. Temperatures above 75 to 80 degrees Fahrenheit can weaken bacteria and make the inoculant less d. Sod or seed must not be placed on soil which has been treated with soil sterilants or chemicals used for weed control until sufficient
- time has elapsed (14 days min.) to permit dissipation of phyto-toxic materials.
- a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
  i. 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. ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with
- weighted roller to provide good seed to soil contact.

  b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil. i. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must
- ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction
- c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer). i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per
- acre total of soluble nitrogen; P O (phosphorus), 200 pounds per acre; K O (potassium), 200 pounds per acre. ii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
- iii. Mix seed and fertilizer on site and seed immediately and without interruption. iv. When hydroseeding do not incorporate seed into the soil.

# Mulch Materials (in order of preference)

of the uniformly spread slurry.

FISHER. COLLINS & CARTER. INC

IVIL ENGINEERING CONSULTANTS & LAND SURVEYOR:

(410) 461 - 2855

23028 | DRN: TDL

NNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE

I CHK: JW

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 as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. Note:

- Use only sterile straw mulch in greas where one species of grass is desired. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into uniform fibrous physical state. i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection
- ii. WCFM, including dye, must contain no germination or growth inhibiting factors.
  iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover
- and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.

  iv. WCFM material must not contain elements or compounds at concentration levels that will by phyto-toxic.

  v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.
- a. Apply mulch to all seeded areas immediately after seeding.
- b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and death so that the soil surface is not exposed. When using a mulch
- anchoring tool, increase the application rate to 2.5 tons per acre. c. Wood cellulose fiber used as mulch must be applied to a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to attain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

# a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of

the following methods (listed by preference), depending upon the size of the area and erosion hazard:

i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.

ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the

wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water. iii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. Use of asphalt binders is strictly prohibited. iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4–15 feet wide and 300 to 3,000 feet long.

# TEMPORARY SEEDING NOTES (8-4-4)

To stabilize disturbed soils with vegetation for up to 6 months.

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. For longer duration of time, permanent stabilization practices are required.

1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure 8.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.

2. For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil

3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3.A.1.b and maintain until the next seeding season.

		Temporary Seedin	g Summary		
Hardiness Zon Seed Mixture	e (from Figure B. (from Table B.1):	Fertilizer Rate (10-20-20)	Lime Rate		
Species	Application Rate (lb/ac)	Seeding Dațes	Seeding Depths		
BARLEY	96	3/1 - 5/15,	1"	436 lb/ac	2 tons/āc
OAT5	72	0/1 - 10/15	1"	(10 lb/ 1000 sf)	(90 lb/ 1000 sf)
RYE	112		123		

# PERMANENT SEEDING NOTES (8-4-5)

### 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. The Summary is to be placed on the plan. b. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.

c. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency, d. For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 1/2 pounds per 1000 square teet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary

a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive 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. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.

i. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight

ii. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight

iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas all Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended. iv. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For

establishment in high quality, intensively managed turf area. Mixture includes; Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1 1/2 to 3 pounds per 1000 saudre feet

Select turfarass varieties from those listed in the most current University of Maryland Publication, Agronomy

Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line

Ideal Times of Seeding for Turf Grass Mixtures Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a) Central MD: March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b) Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15

Memo #77, "Turforass Cultivar Recommendations for Maryland"

d. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1 1/2 inches in diameter The resulting seedbed must be in such condition that future moving of grasses will pose no difficulty. e. If soil moisture is deficient, supply new seedings with adequate water for plant growth ( 1/2 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

# Permanent Seeding Summary

		e (from Figure B (from Table B.3):				Fertiliza	er Rate (10-	-20-20)	Lime Rațe	
No.	Species	Application Rate (lb/ac)	Seedin Dațes	•	Seeding Depths	N	P ₂ O ₅	K ₂ 0		
8	TALL FESCUE	100	Mar. 1-Mar Aug. 1-Oct		1/4-1/2 in.	45 lbs. per acre (1.0 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	2 tons/ac (90 lb/ 1000 sf)	and the second s
										ovinosamonopieses anemonia anemonia

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

### 1. General Specifications

- a. Class of turfarass sod must be Maryland State Certified. Sod labels must be made available to the lob foreman and inspector. b. Sod must be machine cut at a uniform soil thickness to 1/4 inch, plus or minus 1/4 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable 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. d. Sod must not be harvested or transplanted when moisture content (excessively dry of wet) may adversely affect its survival. e. Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transplanted within this period must be approved by an agronomist or soil scientist prior to its installation.
- 2. Sod Installation a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.
- b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that
- all joints are butted tight in order to prevent voids which would cause air drying of the roots. c. Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg of otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil
- d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping, and irrigating for any piece of sod within eight hours.
- a. In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.
- After the first week, sod watering is required as necessary to maintain adequate moisture conten c. Do not mow until the sod is firmly rooted. No more than 1/3 of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

### 8-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREAS

A mound or pile of soil protected by appropriately designed erosion and sediment control measures

To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns

1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.

2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading.

3. Runoff from the stockpile area must drain to a suitable sediment control practice.

4. Access the stockpile area from the upgrade side. 5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence

Provisions must be made for discharging concentrated flow in a non-erosive manner.

6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.

7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard 8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section 8-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section HOWARD SOIL CONSERVATION DISTRICT

# STANDARD SEDIMENT CONTROL NOTES

1) A MINIMUM OF 40 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS.

CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (410-313-1855).

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 THERETO.

3) FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: a) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1, b) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

4) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE

DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
5) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR 6) SITE ANALYSIS: TOTAL AREA OF SITE

AREA DISTURBED
AREA TO BE ROOFED OR PAVED 0.58 ACRES 1.72 ACRES AREA TO BE VEGETATIVELY STABILIZED 800 CU.YD5

OFFSITE WASTE/BORROW AREA LOCATION

N/A

ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON 8) ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL

9) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING, OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE. 10) TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.

11) ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL

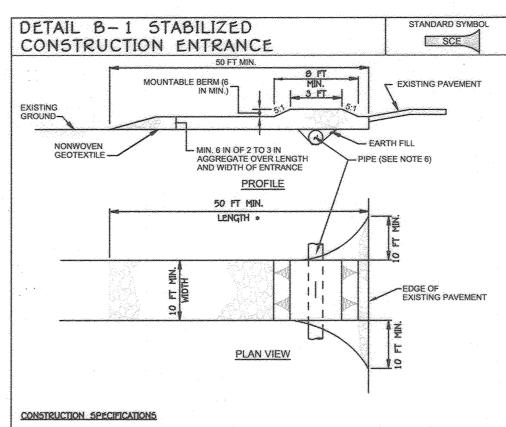
12) A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 ACRE PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PROCEEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY. UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY, NO MORE THAN 30 ACRES CUMULATIVELY MAY BE

- SEQUENCE OF CONSTRUCTION
- 1. OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (2 2. NOTIFY "MISS UTILITY" AT LEAST 40 HOURS BEFORE BEGINNING ANY WORK AT 1-000-257-7777. NOTIFY THE HOWARD COUNTY OFFICE OF CONSTRUCTION/ INSPECTION AT 410-313-1330 AT LEAST
- 24 HOURS BEFORE STARTING WORK. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR: INSTALL STABILIZED CONSTRUCTION
- ENTRANCE, DIVERSION FENCE, SUPER-SILT FENCE, AND SILT FENCE. (1 DAY) WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE NECESSARY VEGETATION AND ROUGH GRADE SITE. NOTE THAT DURING GRADING AND CONSTRUCTION ACTIVITY, THE FOOTPRINTS OF THE PERMEABLE PAVEMENT AND MICRO-BIORETENTION SHALL REMAIN UNDISTURBED AND PROTECTED BY DIVERSION FENCE. CONTRACTOR SHALL CLEARLY MARK THESE AREAS PRIOR TO GRADING /
- CONSTRUCTION (2 DAYS) INSTALL TEMPORARY SEEDING. (1 DAY)

ON A DAILY BASIS.

- CONSTRUCT HOUSES. INSTALL SEPTIC SYSTEMS AND WELLS, AND MAY EXCAVATE
- MICRO-BIORETENTION DOWN TO MINIMUM ONE FOOT ABOVE BOTTOM. (4 MONTHS) UPON COMPLETION OF ALL GRADING AND ONCE THE CONTRIBUTING DRAINAGE AREA TO THE SWM FACILITIES ARE STABILIZED, CONSTRUCT DRYWELLS, MICRO-BIORETENTION, PERMEABLE PAVEMENT
- AND DISCONNECTS, AND ASSOCIATED DRAINAGE (2 DAYS) 8. ALL FINAL GRADES AND STABILIZATION SHOULD BE COMPLETED BEFORE ANY REMOVAL OF CONTROLS. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, THE SEDIMENT CONTROL DEVICES MAY BE REMOVED. (3 DAYS)

NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE EACH RAINFALL AND



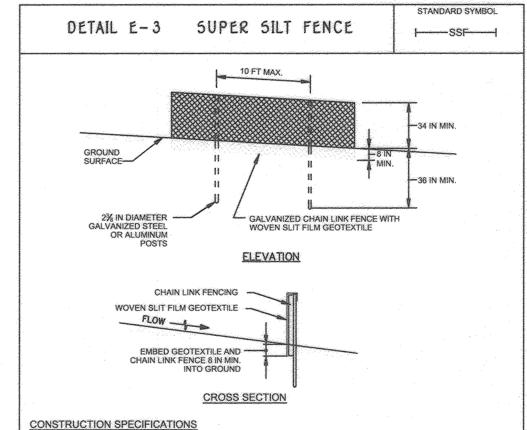
- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE, USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
- PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED

PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.

PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT, ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR

1			
	MARYLAND STANDARDS AND SPECIFICA	TIONS FOR SOIL E	ROSION AND SEDIMENT CONTROL
MATTIC	U.S. DEPARTMENT OF AGRICULTURE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT

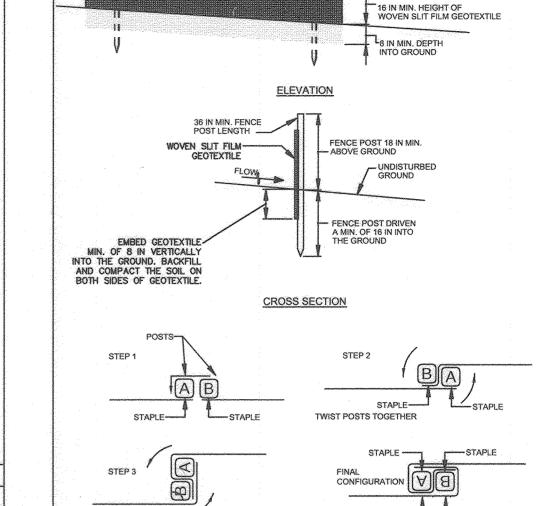
TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.



- INSTALL 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH
- FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2% INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS
- 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 8 INCHES INTO THE GROUND
- WHERE ENDS OF THE GEOTEXTILE COME TOGETHER. THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED.
- 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
- PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES

25% OF FENCE HEIGHT, REPLACE GEOTEXTILE IF TORN, IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCIN.

MARYLAND STANDARDS AND SPECIFICA	TIONS FOR SOIL E	ROSION AND SEDIMENT CONTROL
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONME WATER MANAGEMENT ADMINISTRATION



Approved: Department Of Planning And Zoning

Chief. Division Of Land Development DS

DETAIL E-1 SILT FENCE

CENTER TO CENTER

4.25.24

_36 IN MIN. FENCE POST LENGTH DRIVEN MIN. 16 IN INTO GROUND

# CONSTRUCTION SPECIFICATIONS

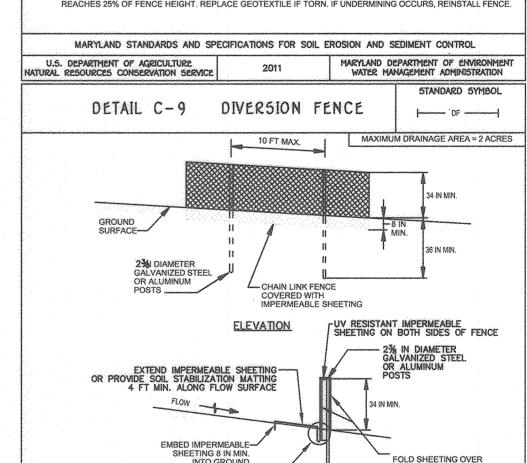
USE WOOD POSTS 1% X 1% ± X6 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN

JOINING TWO ADJACENT SILT

FENCE SECTIONS (TOP VIEW)

STAPLE-

- USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE
- PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN
- EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND, BACKFILL AND COMPACT THE SOIL
- WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH
- 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
- REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT



- CONSTRUCTION SPECIFICATIONS USE 42 INCH HIGH, 9 GAUGE OR THICKER CHAIN LINK FENCING (2% INCH MAXIMUM OPENING) USE 2% INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED
- NO FURTHER THAN 10 FEET APART. THE POSTS DO NOT NEED TO BE SET IN CONCRETE. FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES
- SECURE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EXTEND SHEETING A MINIMUM OF 4 FEET ALONG FLOW SURFACE AND EMBED END A MINIMUM OF
- 8 INCHES INTO GROUND, SOIL STABILIZATION MATTING MAY BE USED IN LIEU OF IMPERMEABLE SHEETING ALONG
- WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION. REMOVE

TORN, IF UNDERMINING OCCURS, REINSTALL FENCE, MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

EROSION + SEDIMENT CONTROL NOTES AND DETAILS 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 5 OF 5

ECP-24-010

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED UNDER MY SUPERVISION AND THAT I AM A DULY INCOMES PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 2700, EXPIRATION DATE: 01/25/26.

OWNER

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

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

DEVELOPER