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# ENVIRONMENTAL CONCEPT PLAN 5037 DURHAM ROAD EAST

RESUBDIVISION OF BEAVERBROOK SECTION 3 BLOCK B LOT 14 LOTS 14, 15, AND 16

> R-20 (RESIDENTIAL: SINGLE) DISTRICT TAX MAP No. 30 GRID No. 13 PARCEL NO. 150 DIDITE DIADONION DISTRICT HOWARD COUNTY, MARYLAND

### STORMWATER MANAGEMENT DESIGN NARRATIVE

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 AND A-2 PERMEABLE PAVING AS SUGGESTED WITHIN CHAPTER 5 OF PREVIOUSLY MENTIONED MANUAL. THE ACHIEVEMENT OF THIS GOAL WILL REMOVE THE REQUIREMENT OF PROVIDING CHANNEL

THE PROPERTY, LOCATED AT 5037 DURHAM ROAD IS ZONED R-20 AND LOCATED DATABASE SYSTEM. IT IS LOCATED IN THE COLUMBIA AREA OF HOWARD COUNTY THIS PROPERTY CONSISTS OF 1.71 ACRES AND IS RELATIVELY RECTANGULAR IN SHAPE. THE DURHAM PROPERTY PROJECT IS BORDERED BY RESIDENTIAL LOTS TO THE NORTH, EAST (PB13-023) AND SOUTH, DURHAM ROAD BORDERS THIS PROPERTY TO THE WEST. THIS PROJECT PROPOSES THREE (3) LOTS INCLUDING TWO (2) PIPE STEM LOTS USING ONE SHARED DRIVEWAY FOR THE TWO (2) NEW LOTS. THE EXISTING BUILDINGS AND DRIVEWAY ON THIS PROPERTY ARE TO REMAIN THE PROPERTY IS LOCATED WITHIN THE PATUXENT RIVER WATERSHED (02131105), THE SITE CURRENTLY DRAINS TO THE SOUTH EAST. THE RUNOFF FROM THE ROOFS AND DRIVEWAYS OF THE PROPOSED HOUSES WILL BE TREATED BY 7 (M-5) DRYWELLS AND A-2 PERMEABLE PAVING. THE WEB SOIL SURVEY SHOWS SOILS ON THE SITE CONSIST OF URBAN LAND COMPLEX (GfB), TYPE "A" SOILS NATURAL RESOURCE PROTECTION:

NO WETLANDS, STREAMS, THEIR BUFFERS, STEEP SLOPES, FLOODPLAIN, OR FOREST EXIST ON-SITE. NO SPECIAL PROTECTION IS REQUIRED.

II. MAINTENANCE OF NATURAL FLOW PATTERNS: ENVIRONMENTALLY SENSITIVE AREAS DO NOT EXIST ON-SITE.

III. REDUCTION OF IMPERVIOUS AREAS THROUGH BETTER SITE DESIGN. ALTERNATIVE SURFACES AND NONSTRUCTURAL PRACTICES: ONLY THE MINIMUM IMPERVIOUS AREAS HAVE BEEN PROPOSED TO ALLOW ADEQUATE ACCESS TO THE PROPOSED LOTS. THIS DESIGN PROVIDES ONLY A SINGLE SHARED DRIVEWAY FOR ACCESS TO THE TWO NEW LOTS

IV. <u>INTEGRATION OF EROSION AND SEDIMENT CONTROLS INTO STORMWATER STRATEGY</u> THIS PROJECT UTILIZES M-5 DRY WELLS AND A-2 PERMEABLE PAVING IN LOCATIONS THAT WILL BE PROPERLY PROTECTED BY SEDIMENT CONTROL MEASURES.

V. IMPLEMENTATION OF ESD PLANNING TECHNIQUES AND PRACTICES TO THE MAXIMUM EXTENT PRACTICABLE (MEP): THIS SUBMISSION WILL PROPOSE SEVERAL CHAPTER 5 DEVICES TO MEET AND EXCEED ENVIRONMENTAL SITE DESIGN TO THE MAXIMUM EXTENT PRACTICABLE (ESD TO THE MEP). ALL

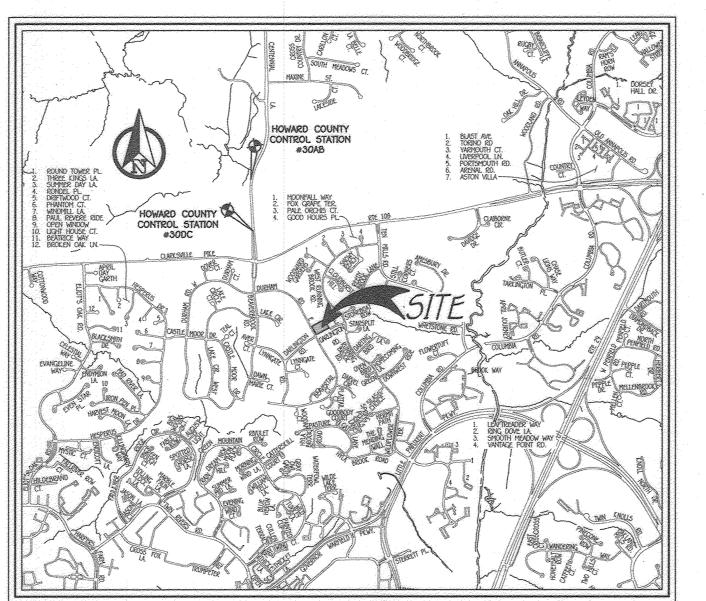
VI. REQUEST FOR DESIGN MANUAL WAIVER: SEE GENERAL NOTES

IMPERVIOUS AREAS WILL RECEIVE FULL TREATMENT.

# 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. 2. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT
- SHALL BE 500 SQ. FT. OR LESS.

3. FINAL GRADING SHALL BE PROVIDED WITH THE SITE DEVELOPMENT PLAN.

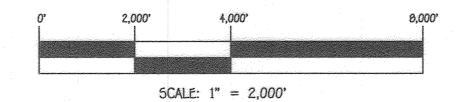


HOWARD COUNTY GEODETIC SURVEY CONTROL NO. 300C GEODETIC SURVEY CONTROL NO. 30AB N 571,937.682 E 1,349,579.155 ELEVATION: 421.400'

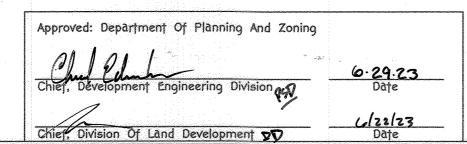
HOWARD COUNTY N 573,239,385 E 1,349,574.846 ELEVATION: 361.900'

REFER TO HOWARD CO. ADC MAP 26-16

5CALE: 1" = 2,000"



# FISHER, COLLINS & CARTER, INC. CML ENGINEERING CONSULTANTS & LAND SURVEYORS SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE





I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARY AND, LICENSE NO. 27020, EXPIRATION DATE: 01/25/24.

#### GENERAL NOTES

. THE SUBJECT PROPERTY IS ZONED R-20 (PER 10/06/13 COMPREHENSIVE ZONING PLAN.) 2. BOUNDARY IS BASED ON GIS. A FIELD RUN SURVEY WILL BE PERFORMED BY FISHER, COLLINS & CARTER IN THE FINAL PLAN STAGE.

3. CONTOURS ARE BASED ON GIS. A TOPOGRAPHIC FIELD RUN SURVEY WILL BE PERFORMED BY COLLINS AND CARTER IN THE FINAL PLAN STAGE. 4. COORDINATES BASED ON NAD'83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNT

STATIONS NO. 30DC AND NO. 30AB: HOWARD COUNTY MONUMENT NO. 30DC N 571,937.682 E 1,349,597.155 ELEV. 421.400'

HOWARD COUNTY MONUMENT NO. 30AB N 573.232.385

E 1,349.547.846 ELEV. 361.900' 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 SIX (6) M-5 DRYWELLS AND ONE 6. THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. PUBLIC WATER AND SEWER !

UTILIZED FOR THIS PROJECT. 7. ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE CONTRACTOR'S EXPENSI 8. 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

9. THERE ARE NO WETLANDS, STREAMS OR THEIR BUFFERS LOCATED WITHIN THE BOUNDARY OF 10. LANDSCAPING WILL BE PROVIDED AT THE FINAL PLAN STAGE OF THIS PROJECT. ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THE PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS. WE ARE

14. THIS LOT IS AN IN-FILL DEVELOPMENT. ADJACENT LOTS ARE ALL DEVELOPED.

19. AN ALTERNATIVE COMPLIANCE WILL BE REQUIRED FOR REMOVAL OF SPECIMEN TREES

15. A PRE-SUBMISSION COMMUNITY MEETING WILL BE HELD AFTER THE ECP SUBMISSION FOR THIS 16. FOREST CONSERVATION REQUIREMENTS FOR THIS PROPOSED SUBDIVISION WILL BE PROVIDED AT THE

FINAL PLAN STAGE OF THIS PROJECT IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION ACT. 17. PREVIOUSLY APPROVED PLANS: PB06-069, F-84-154, AND WATER AND SEWER CONTRACTS: 356-5,

18. NO WAIVERS ARE EXPECTED TO BE REQUESTED ON THIS PROJECT RELATING TO SWM REQUIREMENTS.

#### SITE ANALYSIS DATA CHART

O. TOTAL AREA OF ERODIBLE SOILS

A. TOTAL AREA OF THIS SUBMISSION =  $1.7 \text{ AC.} \pm 1.00$ LIMIT OF DISTURBED AREA = 0.86 Ac. ± (5WM BASED ON LOD) PRESENT ZONING DESIGNATION = R-20 (PER 10/06/2013 COMPREHENSIVE ZONING PLAN) PROPOSED USE: MINOR RESIDENTIAL SUBDIVISION OF 3 SINGLE FAMILY DETACHED HOMES PREVIOUS HOWARD COUNTY FILES: PLAT LOG F68 TOTAL AREA OF FLOODPLAIN LOCATED ON-SITE = 0 AC TOTAL AREA OF SLOPES IN EXCESS OF 25% = 0 AC+ TOTAL AREA OF WETLANDS (INCLUDING BUFFER) = 0 AC. ± TOTAL AREA OF STREAM (INCLUDING BUFFER) = 0 AC. \* TOTAL AREA OF EXISTING FOREST TOTAL AREA OF FOREST TO BE RETAINED = 0 AC±
TOTAL AREA OF LOTS / BUILDABLE PARCELS = 1.70 AC± TOTAL GREEN OPEN AREA (PERVIOUS) = 0.23 AC\* (WITHIN LOD) I. TOTAL IMPERVIOUS AREA (EXCLUDES EXISTING IMPERVIOUS)

= 0 AC±

OWNER/DEVELOPER

BARRY MEHTA 5551 OAKLAND MILLS ROAD COLUMBIA, MARYLAND 21045

5037 DURHAM ROAD EAST RE-SUBDIVISION OF BEAVERBROOK SECTION THREE BLOCK B LOT 14

TAX MAP NO.: 30 LOTS: 14, 15 AND 16 PARCEL NO.: 150 ZONED R-20

FIFTH DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: JUNE, 2023

SHEET 1 OF 4

ECP-23-001

	5PECI	MEN TR	EES	
TREE #	DISCRIPTION	C.R.Z. IMPACT	CONDITION	TO BE REMOVED
1	40" BLACK CHERRY	17%	GOOD	NO
2	45" SILVER MAPLE	25%	GOOD	NO
3	35" SILVER MAPLE	52%	GOOD	YE5
8	41" WHITE PINE	14%	GOOD	NO
10	31" WHITE PINE	15%	GOOD	NO .
11	33" SILVER MAPLE	20%	GOOD	NO
7	30" SILVER MAPLE	22%	GOOD	NO

	TREES	24"-3	0"	
TREE #	DISCRIPTION	STATE CHAMPION TREE (IN DBH)	CONDITION	TO BE REMOVED
4	24" WHITE PINE	53.5"	GOOD	YE5
5	26" NORWAY MAPLE	66.6"	GOOD	NO
6	23" RED MULBERRY	44.6"	FAIR	NO
9	29" WHITE PINE	53.5"	GOOD	NO
12	25" SILVER MAPLE	93.9"	POOR	NO -

'K'VALUE
0.28



PROFESSIONAL CERTIFICATION I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY EXCENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARY AND, LYTENSE NO. 27020, EXPIRATION DATE: 01/25/24. OWNER/DEVELOPER

BARRY MEHTA 5551 OAKLAND MILLS ROAD COLUMBIA, MARYLAND 21045

(ALL 50IL5) GfB

PLAN VIEW

5CALE : 1" = 30"

5CALE: 1" = 30' EXISTING CONDITIONS & DEMOLITION PLAN

5037 DURHAM ROAD EAST RE-SUBDIVISION OF BEAVERBROOK SECTION THREE BLOCK B LOT 14 TAX MAP NO.: 30 LOTS: 14, 15 AND 16 PARCEL NO.: 150 ZONED R-20

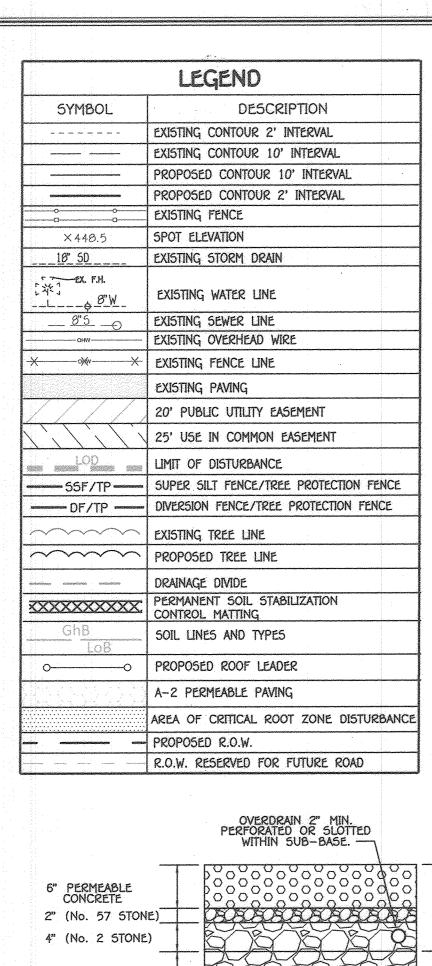
FIFTH DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: JUNE, 2023

SHEET 2 OF 4 ECP-23-001

FISHER, COLLINS & CARTER, INC. 5QUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MARYLAND 21042 (410) 461 - 2055

Approved: Department Of Planning And Zoning

Chief, Division Of Land Development



## OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED PERMEABLE PAVEMENT (A-2)

a. The owners shall periodically sweep (or vacuum porous concrete pavement) the pavement surfaces to reduce sediment accumulation and insure continued surface porosity. Sweeping should be performed at least twice annually with a commercial cleaning unit. Washing or compressed air units should not be used to perform surface cleaning.

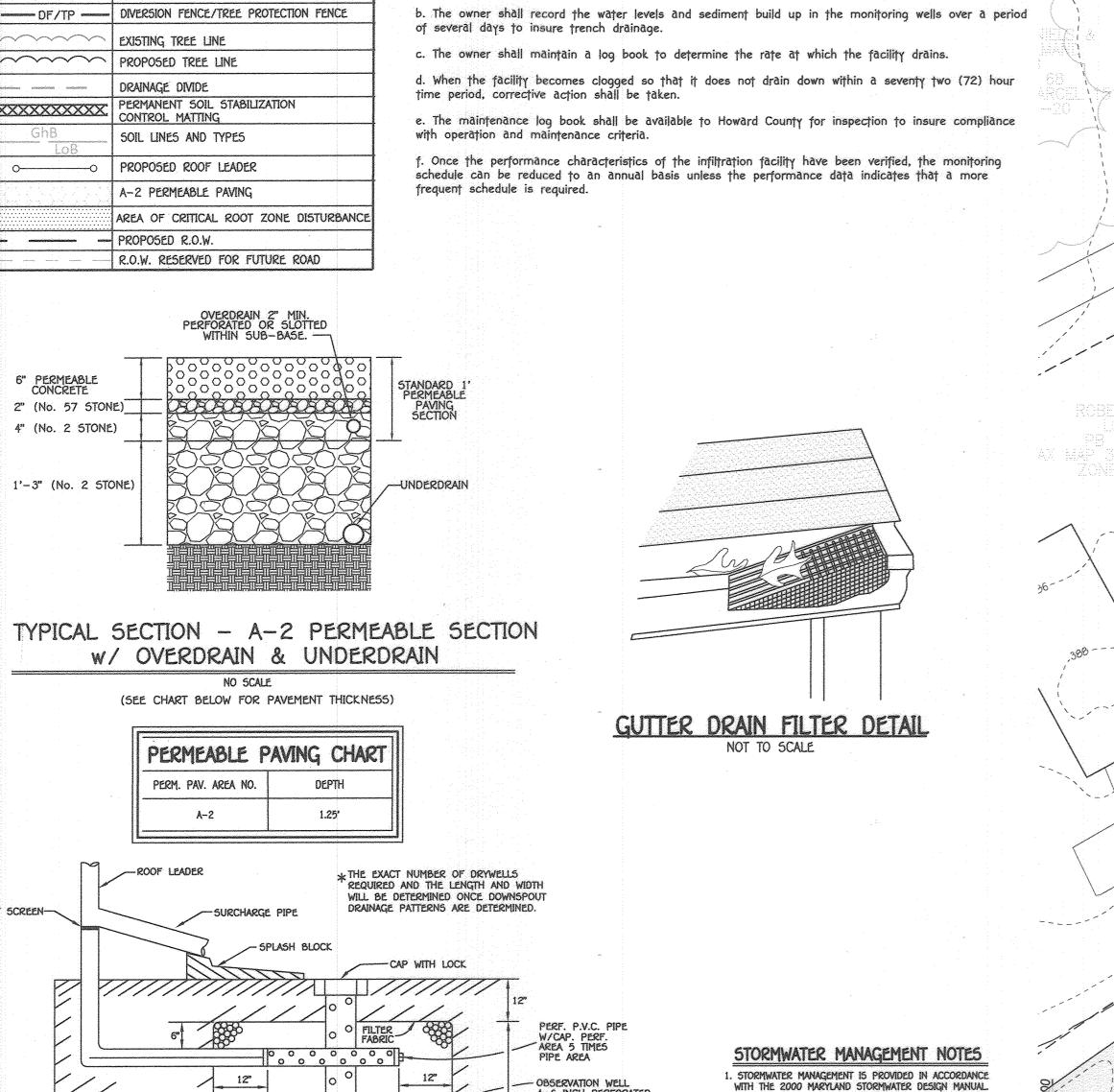
b. The owners shall periodically clean drainage pipes, inlets, stone edge drains and other structures within or draining to the subbase.

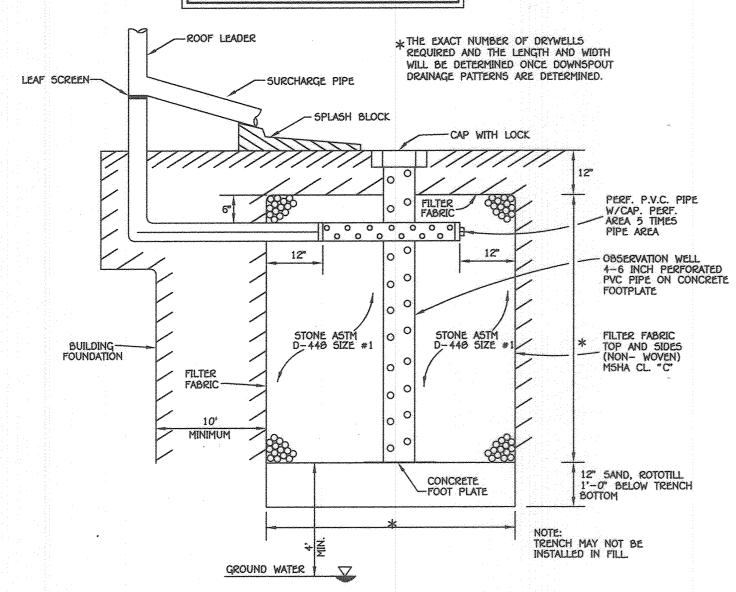
c. The owners shall use deicers in moderation. Deicers should be non-toxic and be applied either as calcium magnesium acetate or as pretreated salt.

d. The owners shall ensure snow plowing is performed carefully with blades set one inch above the surface. Plowed snow piles and snowmelt should not be directed to permeable pavement.

# OPERATION AND MAINTENANCE SCHEDULE FOR DRYWELLS (M-5)

a. The owner shall inspect the monitoring wells and structures on a quarterly basis and after every





DRY WELL DETAIL

NOT TO SCALE

STORMWATER MANAGEMENT PRACTICES % IMPERVIOUS ESDV REQUIRED ESDV PROVIDED CUFT. CUFT. AREA ID LOCATION ADDRESS

2. CREDITS ARE GIVEN FOR DISCONNECTION OF IMPERVIOUS COVERS.
3. MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH

SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE FIGURE 5.2 OF THE MANUAL AND

5. FINAL GRADING IS SHOWN ON THIS SITE DEVELOPMENT PLAN.

DOWNSPOUT SHALL BE LESS THAN 500 SQ. FT. 4. DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5%. THE

THE DETAIL SHOWN ON THIS SHEET.

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT LAM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARY AND, LICENSE NO. 27020, EXPIRATION DATE: 01/25/24.

	50IL5	LEGEND		
501L		NAME	CLA55	'K'VALUE
GfB	Gladstone-Urban Land Complex,	0 to 0 percent slopes	A	0.28
		HOWARD COUNTY WEBSOIL	e ellovey of	106.410

OWNER/DEVELOPER

BARRY MEHTA 5551 OAKLAND MILLS ROAD COLUMBIA, MARYLAND 21045

ENVIRONMENTAL CONCEPT PLAN 5037 DURHAM ROAD EAST

DRY WELL CHART

LOT 15 DW 1 435 SQ.FT. 870 SQ.FT. 140 CF 100% 100% 1 7' x 10' x 5' LOT 15 DW 2 435 SQ.FT. 870 SQ.FT. 140 CF 100% 100% 1 7' x 10' x 5' LOT 15 DW 3 435 SQ.FT. 870 SQ.FT. 140 CF 100% 100% 1 7' x 10' x 5' LOT 15 DW 4 435 SQ.FT. 870 SQ.FT. 140 CF 100% 100% 1 7' x 10' x 5' LOT 15 DW 4 435 SQ.FT. 870 SQ.FT. 140 CF 100% 100% 1 7' x 10' x 5' LOT 16 DW 5 479 SQ.FT. 950 SQ.FT. 126 CF 100% 100% 1 7' x 9' x 5' LOT 16 DW 6 479 SQ.FT. 950 SQ.FT. 126 CF 100% 100% 1 7' x 9' x 5' LOT 16 DW 7 479 SQ.FT. 950 SQ.FT. 126 CF 100% 100% 1 7' x 9' x 5' LOT 16 DW 7 479 SQ.FT. 950 SQ.FT. 126 CF 100% 100% 1 7' x 9' x 5' LOT 16 DW 7 479 SQ.FT. 950 SQ.FT. 126 CF 100% 100% 1 7' x 9' x 5'

RE-SUBDIVISION OF BEAVERBROOK SECTION THREE BLOCK B LOT 14 TAX MAP NO.: 30 LOTS: 14, 15 AND 16 PARCEL NO.: 150 ZONED R-20

> FIFTH DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: JUNE, 2023

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE

(410) 461 - 2055

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

(ALL 501L5)

GfB

-R=25.00' L=39,27'

PLAN VIEW

SHEET 3 OF 4

ECP-23-001

