	SHEET INDEX		
SHEET NO.	DESCRIPTION		
1	TITLE SHEET		
2	EXISTING CONDITIONS & DEMOLITION PLAN	 	
3	CONCEPTUAL SEDIMENT & EROSION CONTROL PLAN		
			- 5%

· · · · · · · · · · · · · · · · · · ·	50ILS LEGEND		
50IL	NAME	CLA55	'K'VALUE
GЬС	Gladstone loam, 0 to 15 percent slopes	В	0.32
GnB	Glenville—Baile silt loams, 0 to 8 percent slopes	В	0.49

STORMWATER MANAGEMENT SUMMARY			
AREA ID. REQUIRED PROVIDED REMARKS CU.FT.		REMARK5	
SITE	1,185	1,345	
TOTAL	1,105	1,345	

GROSS AREA = 1.00 ACRE LOD = 0.47 ACRES (SITE) RCN = 55 TARGET Pe = 1.8

SWM 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 ON THIS PROJECT. THE GOAL OF CREATING HYDROLOGY SIMILAR TO THAT OF "WOODS IN GOOD CONDITION" WILL BE ACCOMPLISHED THROUGH THE USE OF THE PRACTICES CONTAINED WITHIN CHAPTER 5 OF SAID MANUAL. THE ACHIEVEMENT OF THIS GOAL WILL REMOVE THE REQUIREMENT OF PROVIDING CHANNEL PROTECTION VOLUME.

THE LEE PROPERTY IS ZONED R-20 AND IS LOCATED ON TAX MAP 29, PARCEL NO. 51 OF THE HOWARD COUNTY, MARYLAND TAX MAP DATABASE SYSTEM. THE PROPERTY CONSISTS OF 1.00 ACRE OF WHICH NO ACRES ARE ENCUMBERED WITH A PRESERVATION EASEMENT DEDICATED TO HOWARD COUNTY MARYLAND AGRICULTURAL LAND PRESERVATION PROGRAM. THE SITE DRAINS TO THE SOUTHEAST CORNER OF THE PROPERTY INTO A STREAM BUFFER. SOILS ON THE

THE SITE CONTAINS 1 SPECIMEN TREE, WHICH IS TO REMAIN. ALTHOUGH NO STREAM EXISTS ON-SITE A PORTION OF AN OFF-SITE STREAM'S BUFFER IS LOCATED AT THE EASTERN CORNER OF THE SITE.

. MAINTENANCE OF NATURAL FLOW PATTERNS: IT IS THE INTENT OF THE PROPOSED DESIGN TO DISCHARGE RUNOFF SIMILAR TO THE CHARACTERISTICS AND DIRECTION OF THIS SITE PRIOR TO ANY OF THE PROPOSED IMPROVEMENTS. THE COLLECTION OF THE OF THE DRAINAGE AT THE BIO-RETENTION FACILITY WILL CONCENTRATE THE DISCHARGE OF LARGER STORMS WHEN THE FACILITY REACHES CAPACITY. HOWEVER, THESE LARGER STORMS WILL CONTINUE TO DISCHARGE NEAR THE SAME LOCATION AND AT A RATE SIMILAR TO WOODS IN GOOD CONDITION. THE FACILITY DOES INCLUDE AN UNDERDRAIN THAT ALSO DISCHARGES AT THE EASTERN CORNER OF THE SITE AT THE SAME LOCATION WHERE EXISTING DISCHARGE CURRENTLY LEAVES THE PROPERTY. ALTHOUGH THIS DISCHARGE POINT CAN BE CONSIDERED "POINT" DISCHARGE THIS IS A LOW FLOW POINT DEVICE THAT WOULD NOT REASONABLY BE CONSIDERED A SIGNIFICANT

REVISION TO THE NATURAL FLOW CHARACTERISTICS OF THE PROPERTY. III. <u>REDUCTION OF IMPERVIOUS AREAS THROUGH BETTER SITE DESIGN.</u> ALTERNATIVE SURFACES AND NONSTRUCTURAL PRACTICES IMPERVIOUS AREA ON THIS SITE HAS BEEN MINIMIZED BY UTILIZING A USE-IN-COMMON

DRIVEWAY FOR THE PROPOSED HOME.

INTEGRATION OF EROSION AND SEDIMENT CONTROLS INTO STORMWATER STRATEGY:

IF REQUIRED, SEDIMENT TRAPPING WILL BE PLACED IN THE AREA OF BIO-RETENTION FACILITIES

V. IMPLEMENTATION OF ESD PLANNING TECHNIQUES AND PRACTICES TO THE MAXIMUM EXTENT PRACTICABLE (MEP) THE FULL REQUIRED ESD VOLUME IS BEING PROVIDED FOR PROPOSED IMPROVEMENTS TO THE MAXIMUM EXTENT PRACTICABLE.

REQUEST FOR DESIGN MANUAL WAIVER: NO WAIVERS ARE ANTICIPATED ON THIS PROJECT AT THIS TIME.

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED DRY WELLS (M-5)

A. THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.

BUILDING FOUNDATION-

B. THE OWNER SHALL RECORD THE WATER LEVELS AND SEDIMENT BUILD UP IN THE MONITORING WELLS OVER A PERIOD OF SEVERAL DAYS TO ENSURE TRENCH DRAINAGE. C. THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY

D. WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A

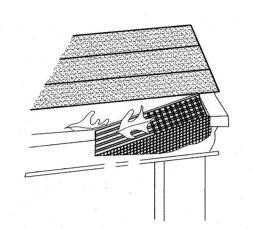
SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN. E. THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO

INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA. F. ONCE THE PERFORMANCE CHARACTERISTICS OF THE INFILTRATION FACILITY HAVE BEEN VERIFIED. THE MONITORING SCHEDULE CAN BE REDUCED TO AN ANNUAL BASIS UNLESS THE PERFORMANCE DATA INDICATES THAT A MORE FREQUENT SCHEDULE IS REQUIRED.

ENVIRONMENTAL CONCEPT PLAN LEE PROPERTY

5405 TROTTER ROAD

ZONING: R-20 (RESIDENTIAL: SINGLE DISTRICT) TAX MAP No. 29 GRID No. 20 PARCEL No. 51 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



GUTTER DRAIN FILTER DETAIL

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, EFFECTIVE MAY 4, 2010.

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

3. DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5%. THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET.

*THE EXACT NUMBER OF DRYWELLS REQUIRED AND THE LENGTH AND WIDTH

DRAINAGE PATTERNS ARE DETERMINED.

WILL BE DETERMINED ONCE DOWNSPOUT

OBSERVATION WELL

12" SAND, ROTOTILL 1'-0" BELOW TRENCH

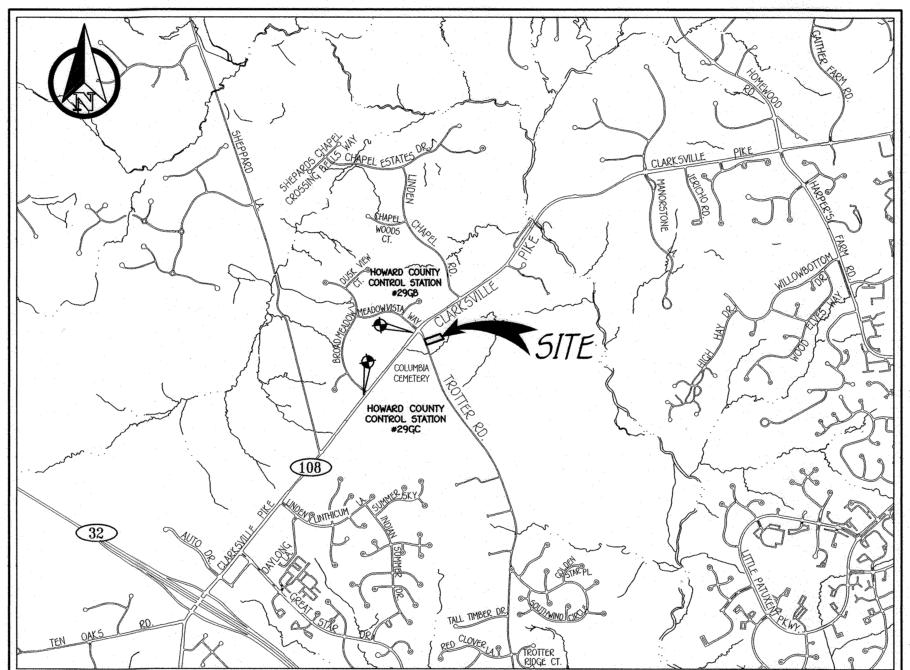
TRENCH MAY NOT BE

INSTALLED IN FILL.

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

GROUND WATER

DRY WELL DETAIL (M-5)



HOWARD COUNTY HOWARD COUNTY GEODETIC SURVEY CONTROL NO. 29GB GEODETIC SURVEY CONTROL NO. 29GC N 566.826.147 E 1.333.265.923 N 565,530.801 E 1,332,248.776 ELEVATION: 455.96

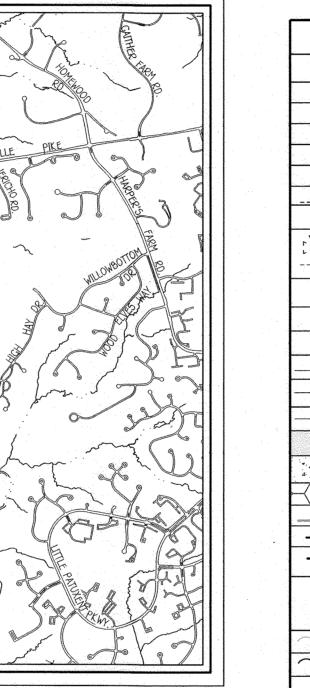
VICINITY MAP 5CALE: 1" = 2,000"5CALE: 1" = 2,000"

LOT		AREA OF ROOF		VOLUME	AREA OF	L	W	D
No.	No.	PER DRYWELL	KEQUIKED	PROVIDED	TREATMENT			
LOT 2	M-5(1)	1,000 SQ.FT.	143 CU.FT.	154 CU.FT.	100%*	11' x	7'	x 5'
LOT 2	M-5(2)	1,000 SQ.FT.	143 CU.FT.	154 CU.FT.	100%*	11' x	7'	x 5'

* AREA OF TREATMENT EXCEEDS THAT REQUIRED.

SYMBOL EXISTING CONTOUR 2' INTERVAL EXISTING CONTOUR 10' INTERVAL PROPOSED CONTOUR 10' INTERVAL PROPOSED CONTOUR 2' INTERVAL SPOT ELEVATION EXISTING STORM DRAIN 15"RCCP PROPOSED STORM DRAIN PIPE EXISTING WATER LINE EXISTING SEWER LINE PROPOSED SEWER PROPOSED WATER EXISTING CABLE LINE EXISTING GAS LINE EXISTING OVERHEAD WIRE PROPOSED PAVING/PATH PROPOSED SIDEWALKS FOREST CONSERVATION EASEMENT (REFORESTATION) LIMIT OF DISTURBANCE ---- SF ---- | SILT FENCE STABILIZED CONSTRUCTION ENTRANCE EXISTING TREE LINE PROPOSED TREE LINE DRYWELL (M-5)-TYPICAL **50IL 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 -CRITICAL ROOT ZONE DENOTES 15%-24.9% SLOPES

LEGEND



REFER TO HOWARD CO. ADC MAP 24E7

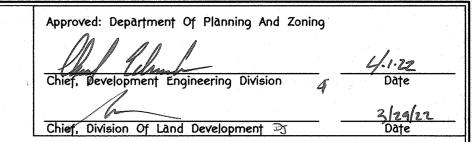
STORMWATER MANAGEMENT PRACTICES LOT NUMBER & ADDRESS ESDV PROVIDED DRAINAGE % IMPERVIOUS | ESDV REQUIRED TYPE LOT 2; 5401 TROTTER ROAD (future) OT 2; 5401 TROTTER ROAD (future)



PROFESSIONAL CERTIFICATION HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/23.

OWNER/DEVELOPER

5405 TROTTER ROAD CLARKSVILLE, MD 21029 410-302-8356



GENERAL NOTES

THE SUBJECT PROPERTY IS ZONED R-20 (PER 10/06/13 COMPREHENSIVE ZONING PLAN.) BOUNDARY IS BASED ON A FIELD RUN SURVEY PERFORMED BY FISHER, COLLINS & CARTER ON OR ABOUT

COORDINATES BASED ON NAD'83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC

STATIONS NO. 29GB AND NO. 35DA: HOWARD COUNTY MONUMENT NO. 29GB N 566,826.147

E 1,333,265.923 ELEV. 455.96 E 1,332,248.776 ELEV. 490.71

STORM WATER MANAGEMENT IS IN ACCORDANCE WITH THE M.D.E. STORM WATER DESIGN MANUAL, VOLUMES I & II,

9. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED

11. NO WETLANDS OR WETLAND BUFFERS EXIST ON SITE. 12. THERE IS A STREAM LOCATED ADJACENT TO THIS PROPERTY, ITS BUFFER EXTENDS INTO THIS PROPERTY. 13. A HOUSE EXISTS ON THIS PROPERTY (LOT 1) AND WILL REMAIN. THE EXISTING SHED WILL BE REMOVED.

14. LANDSCAPING WILL BE PROVIDED AT THE FINAL PLAN STAGE OF THIS PROJECT. 15. THIS PROJECT IS EXEMPT FROM FOREST CONSERVATION BASED ON SECTION 16.1202(b)(vii) OF HOWARD COUNTY

17. THIS PROJECT IS LOCATED ALONG A SCENIC ROAD AND IS SUBJECT TO PLANNING BOARD APPROVAL PER SECTION

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 APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING

ISLAND, PARK, GOLF COURSE OR OTHER TYPE OF USE WHICH DOES NOT REQUIRE A SIDEWALK AND WHERE CONTINUITY IS NOT ESSENTIAL (3) SIDEWALKS WOULD BE DETRIMENTAL TO THE CHARACTER OF A SCENIC ROAD

AND ARE NOT NEEDED TO SERVE SCHOOL, SHOPPING OR ACTIVE RECREATION AREAS. 21. THIS PROJECT WILL BE SUBJECT TO AN OBTAINING APPROVAL FROM THE DEPARTMENT OF PUBLIC WORKS FOR TH USE OF LOW PRESSURE SEWER SERVICE

SITE ANALYSIS DATA CHART

B. LIMIT OF DISTURBED AREA = 0.47 Ac. ±

PRESENT ZONING DESIGNATION = R-20; PROPOSED USE: SINGLE FAMILY DETACHED HOUSING

NET TRACT AREA = 1.00 AC. (TOTAL SITE AREA - FLOODPLAIN - STEEP SLOPES AREA)

 $(1.00 \text{ Ac} - (0.00 \text{ Ac} + 0.00 \text{ Ac})) = 1.00 \text{ AC} \pm$ F. BUILDING COVERAGE OF SITE: 0.067 AC± OR 0.067%

PREVIOUS HOWARD COUNTY FILES: N/A TOTAL AREA OF FLOODPLAIN LOCATED ON SITE 0.0 AC.

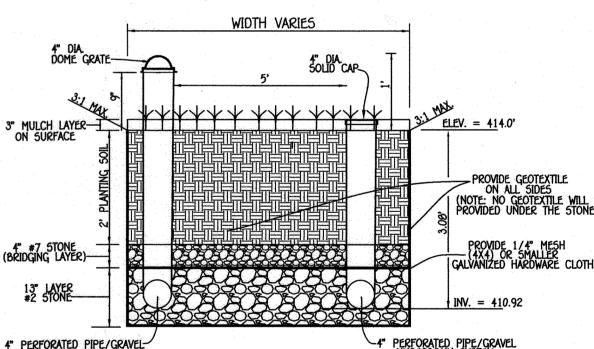
TOTAL AREA OF STREAM BUFFER LOCATED ON SITE: 3,726 SqFt (0.0085 AC)

TOTAL AREA OF SLOPES IN EXCESS OF 15% = 0.00 AC+ (0 AC. 25% OR GREATER) C. TOTAL AREA OF WETLANDS (INCLUDING BUFFER) LOCATED ON SITE = 0.00 AC. ±

TOTAL FOREST 0.00 Ac. ±

M. TOTAL GREEN OPEN AREA = 0.79 Ac. ±

N. TOTAL IMPERVIOUS AREA = 0.21 Ac. ± O. AREA OF ERODIBLE SOILS = 0.20 Ac.



NOTE: THE BOTTOM OF EACH BIO-RETENTION FACILITY (M-6) SHALL BE ROTOTILLED PRIOR TO STONE INSTALLATION.

TYPICAL SECTION MICRO-BIORETENTION FACILITY (M-6) NO NOT SCALE

OPERATION & MAINTENANCE SCHEDULE FOR MICRO-BIORETENTION (M-6)

A. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING. ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE

FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2. B. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS AND REPLACE ALL

DEFICIENT STAKES AND WIRES. THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE

D. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

> TITLE SHEET LEE PROPERTY 5405 TROTTER ROAD L.15778 F. 00419

TAX MAP NO.: 29 GRID NO.: 20 PARCEL NO.:51 ZONED R-20

FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: JANUARY, 2022

SHEET 1 OF 3 ECP-21-047

FISHER, COLLINS & CARTER, INC. ELLICOTT CITY, MARYLAND 21042

