#### **GENERAL NOTES** THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS ALTERNATIVE COMPLIANCE HAVE BEEN APPROVED.

THIS ENVIRONMENTAL CONCEPT PLAN IS SUBJECT TO THE FOLLOWING DPZ FILES: F-82-106 THE EXISTING TOPOGRAPHY SHOWN HEREON IS BASED ON A FIELD SURVEY BY VOGEL ENGINEERING + TIMMONS GROUP, DATED JANUARY 2019, AND SUPPLEMENTED BY HOWARD COUNTY GIS. THE PROJECT BOUNDARY IS BASED ON A FIELD RUN BOUNDARY PERFORMED BY VOGEL ENGINEERING

TIMMONS GROUP, DATED APRIL 2020. THE COORDINATES AND ELEVATIONS SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM. HOWARD COUNTY CONTROL STATION 31EF AND 0081 WERE USED FOR THIS PROJECT.

THE SUBJECT PROPERTY IS ZONED R-20 IN ACCORDANCE WITH THE ZONING REGULATIONS EFFECTIVE ON OCT. 06, 2013, AND IS SUBJECT TO SUBDIVISION AND LAND DEVELOPMENT REGULATIONS EFFECTIVE OCT. 07, 2007 PER COUNCIL BILL 47-2007 & 48-2007. DEVELOPMENT OR CONSTRUCTION ON THIS PROPERTY MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE SITE DEVELOPMENT PLAN. ALTERNATIVE COMPLIANCE PETITION APPLICATION OR BUILDING/GRADING PERMIT APPLICATIONS.

THIS PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. - WATER FOR THIS PROJECT SHALL BE FROM AN EXTENSION OF CONTRACT NO. #44-1031 SEWER FOR THIS PROJECT SHALL BE FROM THE PROPOSED EXTENSION OF CONTRACT NO. #14-3503-D.
 WATER AND SEWER SERVICE WILL BE GRANTED UNDER THE PROVISIONS OF SECTION 18.122.B OF THE HOWARD COUNTY CODE. ALLOCATIONS WILL BE GRANTED AT TIME OF ISSUANCE OF BUILDING PERMIT IF CAPACITY

THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT. NO RARE, THREATENED OR ENDANGERED SPECIES OR THEIR HABITATS WERE OBSERVED ON THE PROPERTY. NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, PAVING AND NEW STRUCTURES SHALL BE PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S) OR THEIR REQUIRED BUFFERS, FLOODPLAIN AND FOREST CONSERVATION EASEMENT AREAS.

THERE ARE NO "FLOODPLAIN" AREAS LOCATED WITHIN THE DEVELOPMENT AREA THERE ARE NO 1,103 S.F. OF MDE STEEP SLOPES, 20% OR GREATER ON THIS SITE.

THE PROJECT SITE WAS EVALUATED FOR THE PRESENCE OF ENVIRONMENTAL FEATURES AND A LETTER HAS BEEN

PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. C/O MR. JOHN CANOLES, DATED DECEMBER 1, 2020. MR. CANOLES NOTED THAT THE THE PROPERTY IS CURRENTLY DOMINATED BY LAWN, PASTURE AND SCATTERED YOUNG TREES. NO SPECIMEN SIZED TREES, FOREST OR ANY OTHER REGULATED ENVIRONMENTAL FEATURES WERE FOUND WITHIN THE LIMITS OF THE DEVELOPMENT AREA FOR THIS PROJECT.

THE SUBJECT PROPERTY PROJECT IS SUBJECT TO THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION, INCLUDING THE PROTECTION OF SPECIMEN TREES.

A LANDSCAPE PLAN SHALL BE PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANULAL AT THE SITE DEVELOPMENT PLAN STAGE

AND THE LANDSCAPE MANUAL AT THE SITE DEVELOPMENT PLAN STAGE.

THERE ARE 0 S.F. (0.00 AC.) AREA OF WETLANDS PRESENT WITHIN THE DEVELOPMENT AREA PER SITE EVALUATION BY ECO-SCIENCE PROFESSIONALS, INC., IN NOVEMBER 2020. THERE ARE O S.F. (0.00 AC.) AREA OF DEDICATED OPEN SPACE PRESENT. OPEN SPACE IS NOT REQUIRED FOR

GEOTECHNICAL INVESTIGATIONS SHALL BE COMPLETED PRIOR TO SITE DEVELOPMENT PLAN STAGE. 19. ANY NECESSARY DESIGN MANUAL WAIVERS OR ALTERNATIVE COMPLIANCE APPLICATIONS SHALL BE FILED AT SITE

DEVELOPMENT PLAN STAGE. WHARFF LANE IS CLASSIFIED AS A LOCAL ROAD. SITE ACCESS SHALL BE VIA PRIVATE DRIVEWAYS FROM WHARFF LANE.

A TRAFFIC STUDY IS NOT REQUIRED FOR THIS PROJECT.

AN ADEQUATE ROADS FACILITIES TEST STUDY IS NOT REQUIRED FOR THIS PROJECT.

TO THE BEST OF THE OWNERS KNOWLEDGE, THERE ARE NO BURIAL GROUNDS, HISTORIC STRUCTURES OR

CEMETERIES, LOCATED WITHIN THE DEVELOPMENT AREA. STORMWATER MANAGEMENT FOR THE PROJECT SHALL BE PROVIDED BY MEANS OF RAIN GARDENS (M-7). SEDIMENT AND EROSION CONTROLS WILL BE PROVIDED BY PERIMETER CONTROLS FOR THIS SITE.

THERE ARE 1.46 AC. OF HIGHLY ERODIBLE SOILS ON THIS PROJECT SITE, 0.91 AC. OF WHICH IS WITHIN THE

DEVELOPMENT AREA. DRIVEWAY ACCESS SHALL BE PROVIDED PRIOR TO ISSUANCE OF A USE AND OCCUPANCY PERMIT FOR ANY NEW

DWELLINGS TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES PER THE FOLLOWING MINIMUM REQUIREMENTS: A) WIDTH- 12 FEET (16 FEET SERVING MORE THAN ONE RESIDENCE). B) SURFACE — 6 INCHES OF COMPACTED CRUSHER RUN BASE WITH TAR AND CHIP COATING.

C) GEOMETRY - MAXIMUM 15% GRADE, MAXIMUM 10% CHANGE AND MINIMUM OF 45-FOOT TURNING RADIUS. D) STRUCTURES (CULVERT/BRIDGES) - CAPABLE OF SUPPORTING 25 GROSS TONS (H25 LOADING). E) DRAINAGE ELEMENTS-CAPABLE OF SAFELY PASSING 100-YEAR FLOOD WITH NO MORE THAN 1 FOOT DÉPTH OVER DRIVEWAY SURFACE. F) STRUCTURE CLEARANCES-MINIMUM 12 FEET.

) MAINTENANCE – SUFFICIENT TO INSURE ALL WEATHER USE. 28. A PRE-SUBMISSION COMMUNITY MEETING SHALL BE REQUIRED AT SITE DEVELOPMENT PLAN STAGE. 29. MIHU'S ARE REQUIRED FOR THIS PROJECT. THE DEVELOPER WILL PAY A FEE-IN-LIEU TO ADDRESS THIS

30. DECLARATION OF COVENANTS SHALL BE RECORDED WITH THE SITE DEVELOPMENT PLAN AND SIMULTANEOUSLY WITH THE PRIVATE STORMWATER DEVICES LOCATED ON THESE LOTS. ALL STORMWATER DEVICES SHALL BE PRIVATE. LOTS, AND OWNED AND MAINTAINED

BY THE HOMEOWNER. APPROVAL OF THIS ECP DOES NOT CONSTITUTE AN APPROVAL OF ANY SUBSEQUENT AND ASSOCIATED SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN AND/OR RED-LINE REVISION PLAN. REVIEW OF THIS PROJECT FOR COMPLIANCE WITH THE HOWARD COUNTY SUBDIVISION AND LAND DEVELOPMENT REGULATIONS SHALL OCCUR AT THE SUBDIVISION PLAN/PLAT AND/OR SITE DEVELOPMENT PLAN STAGES AND/OR RED-LINE REVISION PROCESS. THE APPLICANT AND CONSULTANT SHOULD EXPECT ADDITIONAL AND MORE DETAILED REVIEW COMMENTS (INCLUDING COMMENTS THAT MAY ALTER THE OVERALL SITE DESIGN) AS THIS PROJECT PROGRESSES THROUGH THE PLAN REVIEW PROCESS.

# ENVIRONMENTAL CONCÉPT PLAN WHARFF LANE

L.17968 / F.00281 ECP-21-027

LOT 5

PARCEL 150

ILCHESTER LANDING - PLAT 9018

JAE WOOK SHIN

(AS NOW SURVEYED 63,467.51 SQ.FT. OR 1.4570 ACRES)

EX. 1 STORY

SEWAGE DISPOSAL AREA -(TO BE ABANDONED)

FRAME DWELLING

LOT 1

19,778.35 SF

0.4540 AC

EX. WELL (TO

UNDISTURBED

BE ABANDONED

FFE = 463.00?

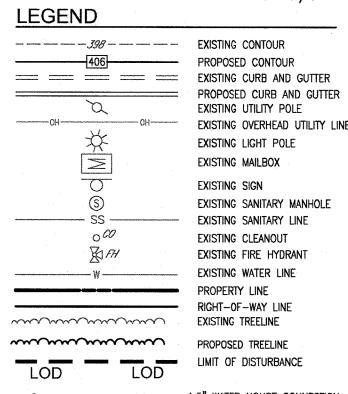
LOT 3

19,805,63 SF

0.4547 AC

## **BENCHMARKS** 31EF: N 571,267.917 E 1,376,907.417 ELEV. 469.471' CONC. MON AT THE INTERSECTION OF ILCHESTER RD AND WHARFF LANE 31EM1 : ELEV. 471.694' 3/4" REBAR AT THE CORNER OF ILCHESTER RD AND LANDING RD. 0081 : N 572,335.338 E 1,377,504.092 ELEV. 477.919' CONC. MON ILCHESTER RD SOUTH OF BEECHWOOD RD.

#### **VICINITY MAP** SCALE: 1"=2000' ADC MAP 16 GRID B/3



1.5" WATER HOUSE CONNECTION ROOF DRAIN / UNDER DRAIN PUBLIC SEWER PRIVATE 1.25" LPS AND GRINDER PUMI

RAIN GARDEN (M-7)

## SITE DATA

EX. DWELLING

SHED ,

PARCEL 430

PAUL W. WOLFGANG &

MARY J. WOLGANG DATED DEC. 1985

(ORIGINAL DESC. L326/F201 - DEC. 1958)

TAX MAP 31, BLOCK 10, PARCEL 401 1ST ELECTION DISTRICT PRESENT ZONING: R-20 RESIDENTIAL TOTAL AREA OF PROPERTY: 1.457 AC DPZ REFERENCES: F-82-106 DEED/PLAT REFERENCES: L.17968 / F.00281

PLAT NO. N/A AREA MANAGED BY ESDV : 39,820 S.F./0.91 AC. (THIS PLAN) \*DEVELOPMENT AREA EXTENDS OUTSIDE LIMITS OF PARCEL USE OF PROPOSED STRUCTURES (THIS PLAN): SINGLE FAMILY RESIDENTIAL \*TOTAL BUILDING COVERAGE WITHIN THE DEVELOPMENT AREA:

4,675 SF (0.107 AC. OR 11.74%) \*PAVED AREA WITHIN THE DEVELOPMENT AREA: 4,551 SF (0.105 AC. OR 11.43%) LIMIT OF DISTURBED AREA (INCLUDING ROW): 43,074 S.F. / 0.99 AC \*WETLANDS ON SITE: 0.00 AC. \*WETLAND BUFFERS ON SITE: 0.00 AC.

\*STREAMS AND THEIR BUFFERS ON SITE: 0.00 AC. \*AREA OF 100 YEAR FLOODPLAIN: 0.00 AC. \*AREA OF EXISTING FOREST ON SITE: 0.00 AC. \*AREA OF MDE STEEP SLOPES (20% OR GREATER)

AREA OF ERODIBLE SOILS: 1.457 AC. ON PROJECT SITE 0.91 AC. WITHIN DEVELOPMENT AREA \*IMPERVIOUS AREA: 9,226 S.F. ( 0.2118 AC. OR 23.17%) \*GREEN/OPEN AREA: 30,594 S.F. (0.702 AC. OR 76.83%) NOTE \*WITHIN LIMITS OF DEVELOPMENT AREA ONLY

## OWNER/DEVELOPER

JAE WOOK SHIN 4935 WHARFF LANE ELLICOTT CITY, MD 21043 (202) 415-7414

ENVIRONMENTAL CONCEPT PLAN

COVER SHEET, LAYOUT, GRADING AND SEDIMENT CONTROL

WHARFF LANE MINOR SUBDIVISION TAX MAP 31 GRID 10 1ST ELECTION DISTRICT

4935 WHARFF LANE ZONED: R-20 L.17968 / F.00281

**VOGEL ENGINEERING** 

## **TIMMONS GROUP**

#### 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043 P: 410.461.7666 F: 410.461.8961 www.timmons.com

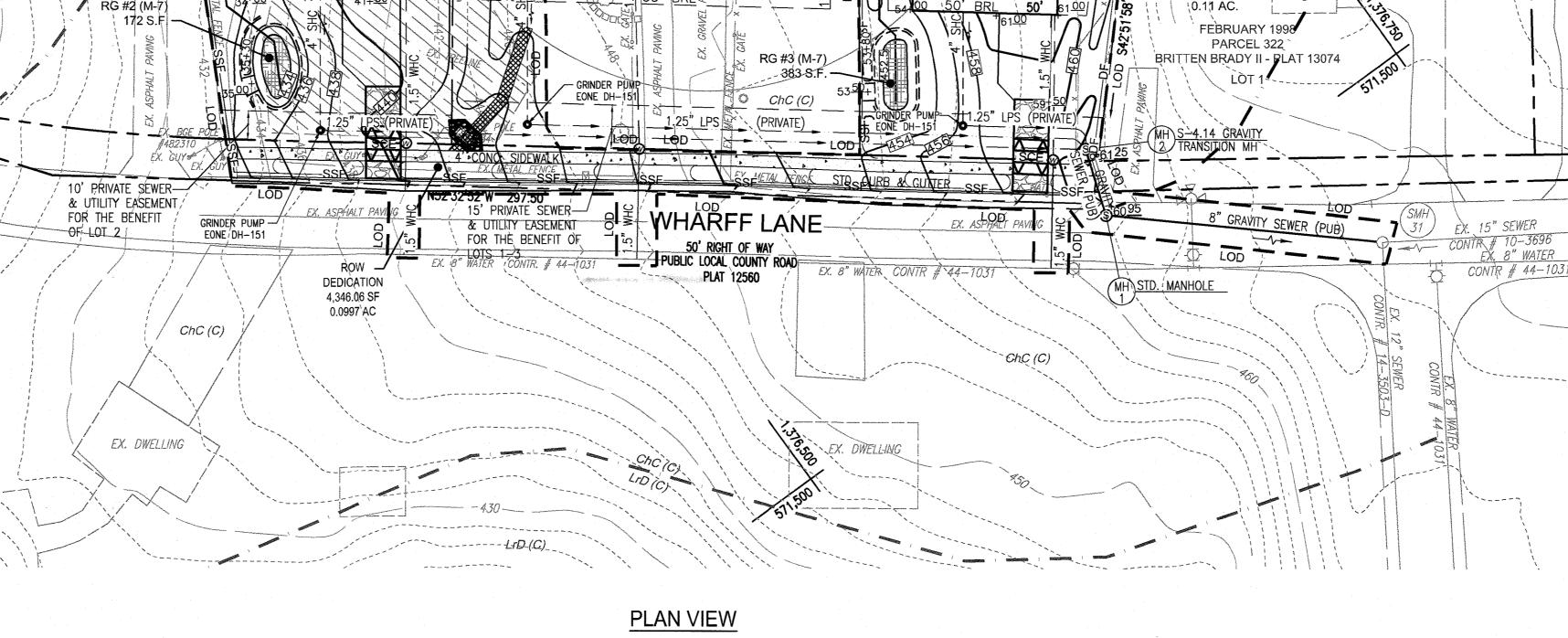
CHECKED BY:

I HEREBY CERTIFY THAT THESE DOCUMENTS
WERE PREPARED OR APPROVED BY ME, AND
THAT I AM A DULY LICENSED PROFESSIONAL
ENGINEER UNDER THE LAWS OF THE STATE
OF MARYLAND, LICENSE NO. 16193
EXPIRATION DATE: 09-27-2022 SHEET \_ OF

HOWARD COUNTY, MARYLANI

## 230/S.F PARCEL 473 BFF=434.00 CAHILL PROPERTY - PLAT 11161/ FFE=443.00< 19,717.48 SF RG #2 (M-7) 10' PRIVATE SEWER—/ & UTILITY EASEMENT/ FOR THE BÉNEFIT GRINDER PUMP -OF-LOT 2 EONE/DH-151 DEDICATION 4,346.06 SF 0.0997 AC

 $L_{f}D(C)$ 



### **ENVIRONMENTAL SITE DESIGN NARRATIVE:** IN ACCORDANCE WITH THE DEVELOPMENT ENGINEERING DIVISION ECP CHECKLIST ITEM III.K.

THERE ARE NO NATURAL AREAS LOCATED ON THE PROJECT SITE. THERE ARE NO STREAMS, FOREST, STEEP SLOPES, WETLANDS OR THEIR BUFFERS ON SITE AND NO DISTURBANCE TO ANY SUCH NATURAL

2. NO DISTURBANCE TO THE NATURAL DRAINAGE PATTERNS IS PROPOSED.

THE CONCEPTUAL REDUCTION IN IMPERVIOUS AREA THROUGH BETTER SITE DESIGN IS ACHIEVED THROUGH THE ENVIRONMENTAL SITE DESIGN (ESD) FOR THE PROJECT. THE ESD CONCEPT INCLUDES THE USE OF MICRO-SCALE PRACTICES TO INCLUDE RAIN GARDEN FACILITIES (M-7).

SEDIMENT CONTROL FOR THIS SPECIFIC SITE PLAN WILL BE PROVIDED THROUGH THE USE OF PERIMETER

ACCORDANCE WITH CURRENT REQUIREMENTS AND SHALL BE APPROVED BY THE HOWARD SOIL CONSERVATION STORMWATER MANAGEMENT FOR THE PROJECT HAS BEEN CONCEPTUALLY MET THROUGH THE USE OF FOUR (4) RAIN GARDEN FACILITIES (M-7). THE RESULTS OF THE ENVIRONMENTAL SITE DESIGN FOR THIS PROJECT

TARGET ESDv = 1029 CU.FT.

WILL REFLECT "WOODS IN GOOD CONDITION".

CHIEF. DIVISION OF LAND DEVELOPMENT MA

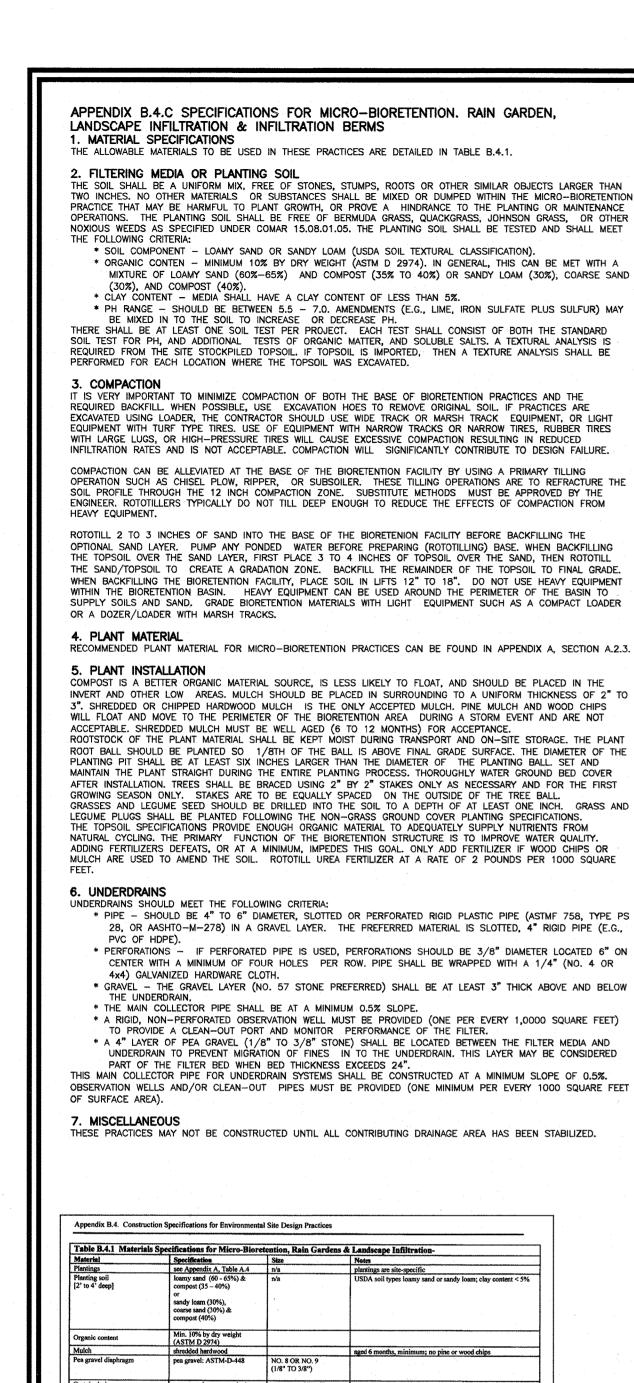
PROVIDED PE = 1.2" PROVIDED = 1043 CU.FT.

CONTROLS INCLUDING DIVERSION FENCE AND SUPER SILT FENCE. SEDIMENT CONTROL SHALL BE IN

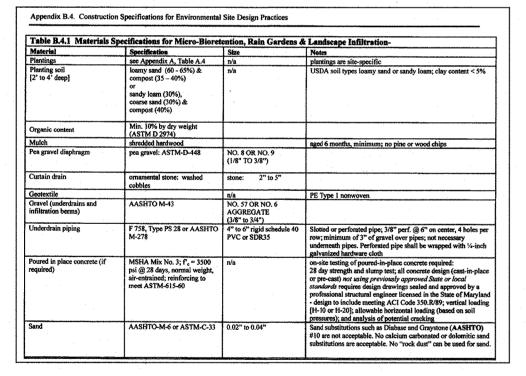
6. AT THIS CONCEPT STAGE OF DEVELOPMENT, NO WAIVER PETITIONS FOR THE STORMWATER MANAGEMENT DESIGN ARE REQUIRED.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION 19

NO.



THESE PRACTICES MAY NOT BE CONSTRUCTED UNTIL ALL CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED.



NOTE: - SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR. - SILT FENCE SHALL BE CURLED UPHILL NO MORE THAN 35 FEET APART - DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

EITHER PERMANENT OR TEMPORARY STABILIZATION IS TO BE APPLIED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR REGARDLESS OF DAYS/DATES IN THE STANDARD SEDIMENT CONTROL NOTES AND/OR SEEDING SPECIFICATIONS.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING CHIEF, DEVELOPMENT ENGINEERING DIVISION CHIEF, DIVISION OF LAND DEVELOPMENT NO

ELEV. C

TO OUTFALL

ChC | CHILLUM-RUSSETT LOAMS, 5-10 PERCENT SLOPES

TAKEN FROM: USDA, SCS-WEB SOIL SURVEY, HOWARD COUNTY

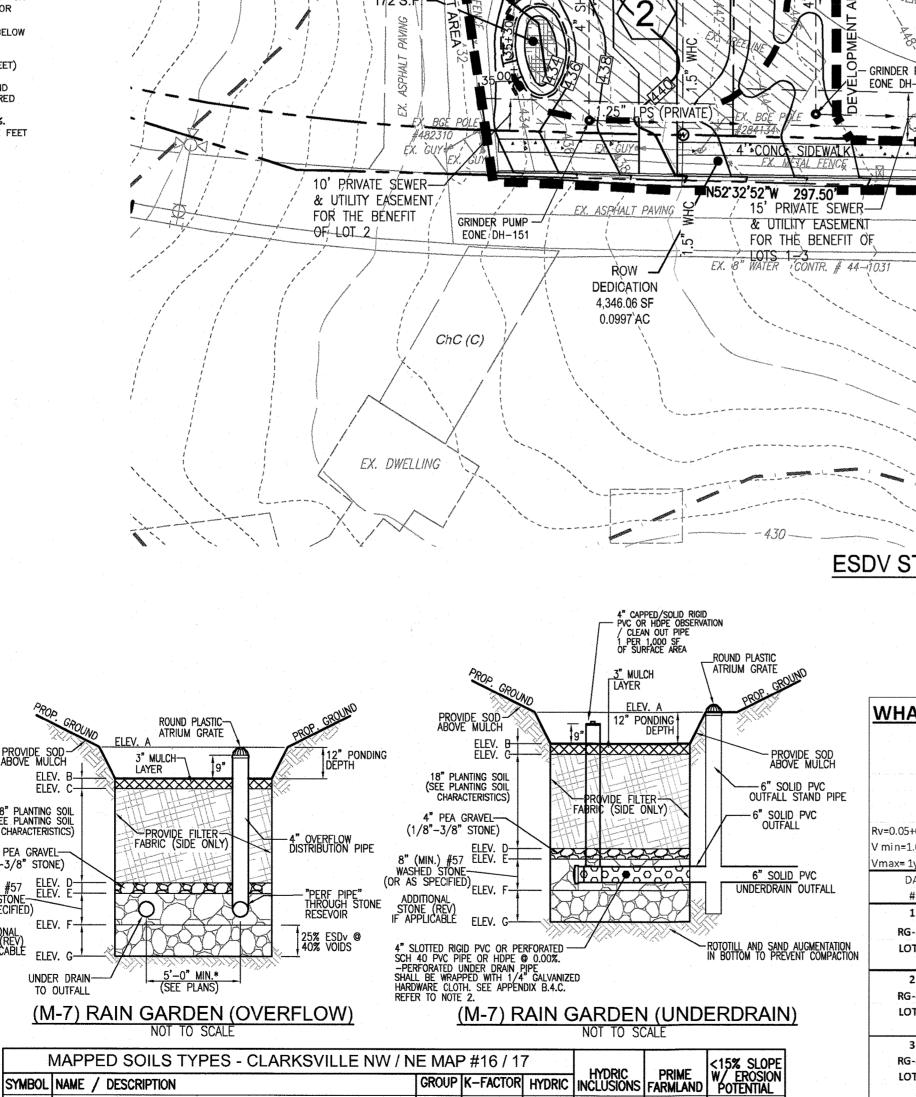
LrD | LEGORE-RELAY GRAVELLY LOAMS, 15 TO 25 PERCENT SLOPES

18" PLANTING SOIL (SEE PLANTING SOIL CHARACTERISTICS)

4" PEA GRAVEL-

NOTES:

(1/8"-3/8" STONE)



.43

.64

HIGHLY ERODIBLE SOILS ARE THOSE SOILS WITH A SLOPE GREATER THAN 15 PERCENT OR THOSE SOILS

ALL SOILS WITHIN THE DEVELOPMENT AREA ARE CONSIDERED HIGHLY ERODIBLE SOILS.

WITH A SOIL ERODIBILITY FACTOR K GREATER THAN 0.35 AND WITH A SLOPE GREATER THAN 5 PERCENT.

NO

NO

\*FARMLAND OF STATEWIDE IMPORTANCE

NO

NO

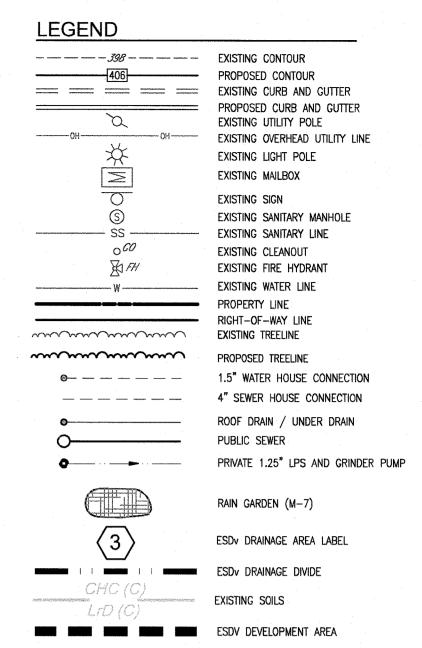
\*YES

NO

YES

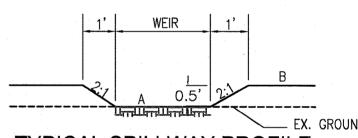
EX- DWELLING **APRIL 1989** PARCEL 150 **ILCHESTER LANDING - PLAT 9018** SHED , PARCEL 430 PAUL W. WOLFGANG & MARY J. WOLGANG DATED DEC. 1985 ChC (C) (ORIGINAL DESC. L326/F201 - DEC. 1958) PARCEL 401 MDE /STEEP/ SLOPES-JAE WOOK SHIN (1,103/S.F.) (AS NOW SURVEYED 63,467.51 SQ.FT. OR 1.4570 ACRES EX. WELL (TO BE ABANDONED) RG #1 (M-7) /230/S.F DECEMBER 1993 LOT 1 EX. 1 STORY PARCEL 473 BFE=434.00 FRAME DWELLING 19,778.35 SF CAHILL PROPERTY - PLAT 11161) FFE=443.00 BFE=454.00<sup>5</sup> 0.4540 AC APPROX. LOCATION OF FFE=463.00 SEWAGE DISPOSAL AREA 19.717.48 SF LOT 3 0.4526 AC 19,805.63 SŘ 0.4547 AC FEBRUARY 1998 PARCEL 322 RG #3 (M-7) BRITTEN BRADY II - PLAT 13074 383-S.F. LOT 1-- GRINDER PUMP ChC (C) DEVELOPMENT AREA EX. 8" WATER PUBLIC LOCAL COUNTY ROAD CONTR # 44-1031 EX. 8" WATER CONTR # 44-1031 PLAT 12560 MH STD. MANHOLE ChC (C) **ESDV STORMWATER DRAINAGE AREA MAP** 

VHARFF LANE LOTS 1-3					ESDv COMPUTATIONS											
	SITE DEVELO TARGET Pe: SITE IMPER' SITE RV: SITE ESDV R	VIOUS:			1.20 23.17 0.2585	AC IN PERCENT CF+/-		39820	SF					Designed by: gah Date: 12/3/20 Checked by: rhv Date:		
r=0.05+0.009XI min=1.0" rainf max= 1yr rainf	fall all=2.6"			(1.0x0.95xA (2.6x0.95xA	A)/12 A)/12											
DA #	% IMPERV	Rv	DA (SF)	DA (AC)	MINIMUM VOLUME	MAXIMUM VOLUME		VOLUME PROVIDED*	IMPERV (SF)	IMPERV (AC)	GREEN AREA	Recharge Required	Recharge Provided	REMARKS		
1 RG-#1 LOT2	19.14	0.2223	6468	0.15	120	311	144	307	1238	0.03	0.12	77	77	MICROSCALE MICRO-BIO RETENTION (M-6)  307 230 SF MBR @ 1.0 PONDING  0 ADDITIONAL STONE 0.00 x 0.3		
2 RG-#2	37.47	0.3872	5386	0.12	174	452	209	229	2018	0.05	0.08	57	57	77 307 Rev Recharge 0.83 x 0.4 MICROSCALE MICRO-BIO RETENTION (M-6) 229 172 SF MBR @ 1.0 PONDING		
LOT 2														0 ADDITIONAL STONE 0.00 x 0.3 57 172 Rev Recharge 0.83 x 0.4		
3 RG-#3 LOT3	20.04	0.2304	5489	0.13	105	274	126	256	1100	0.03	0.01	64	64	MICROSCALE MICRO-BIO RETENTION (M-6)  256		
4 RG-#4 LOT3	30.43	0.3239	5823	0.13	157	409	189	251	1772	0.04	0.01	63	63	MICROSCALE MICRO-BIO RETENTION (M-6) 251 188 SF MBR @ 1.0 PONDING 0 ADDITIONAL STONE 0.00 x 0.3		
TOTALS	26.45	0.2881	23166	0.53	556	1446	667	1043	6128	0.14	0.22	261	261	63 188 Rev Recharge 0.83 x 0.4		

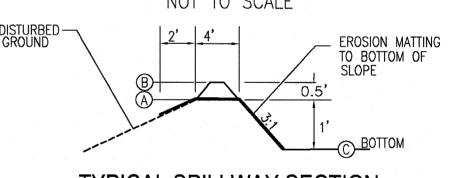


#### **OPERATION & MAINTENANCE SCHEDULE** FOR RAIN GARDENS

- 1. ANNUAL MAINTENANCE OF PLANT MATERIAL, MULCH LAYER AND SOIL LAYER IS REQUIRED. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OF 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.
- 2. SCHEDULE OF PLANT INSPECTION WILL BE TWIST A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DECEASED VEGETATION CONSIDERED BEYOND TREATMENT, TREATMENT OF ALL DEFICIENT STAKES AND WIRES.
- 3. MULCH SHALL BE INSPECTED EACH SPRING, REMOVE PREVIOUS MULCH LAYER BEFORE APPLYING NEW LAYER ONCE EVERY 2 TO 3 YEARS.
- 4. SOIL EROSION TO BE ADDRESSED ON AN AS NEEDED WITH A MINIMUM OF ONCE PER MONTH AND AFTER HEAVY STORM EVENTS.

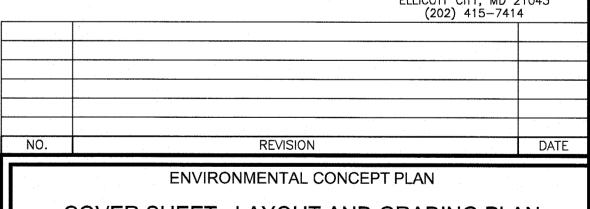


TYPICAL SPILLWAY PROFILE NOT TO SCALE



TYPICAL SPILLWAY SECTION NOT TO SCALE

OWNER/DEVELOPER JAE WOOK SHIN 4935 WHARFF LANE ELLICOTT CITY, MD 21043 (202) 415-7414



COVER SHEET, LAYOUT AND GRADING PLAN

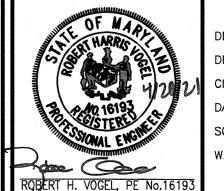
WHARFF LANE X MAP 31 GRID 10

MINOR SUBDIVISION 4935 WHARFF LANE ST ELECTION DISTRICT L.17968 / F.00281

## **VOGEL ENGINEERING**

### **TIMMONS GROUP** 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043

P: 410.461.7666 F: 410.461.8961 www.timmons.com



	DI II / O. L. I
DESIGN BY:	RHV/GAH
DRAWN BY:	GAH
CHECKED BY:	RHV
DATE:	APRIL 2021
SCALE:	AS SHOWN
W.O. NO.: _	42431

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AN A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 09-27-2022 SHEET 2

HOWARD COUNTY, MARYLAND