

PRELIMINARY EQUIVALENT SKETCH PLAN

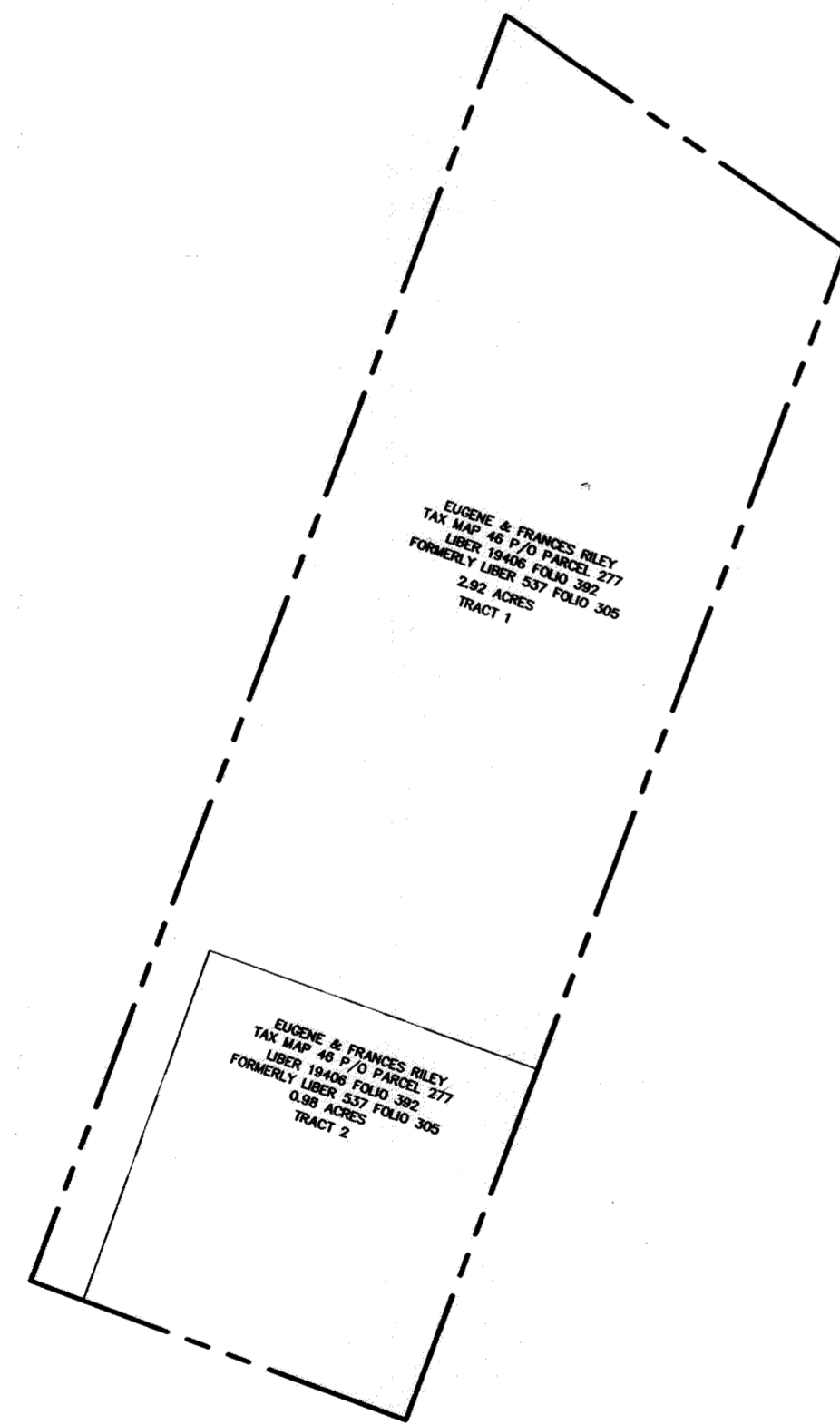
SHEET INDEX

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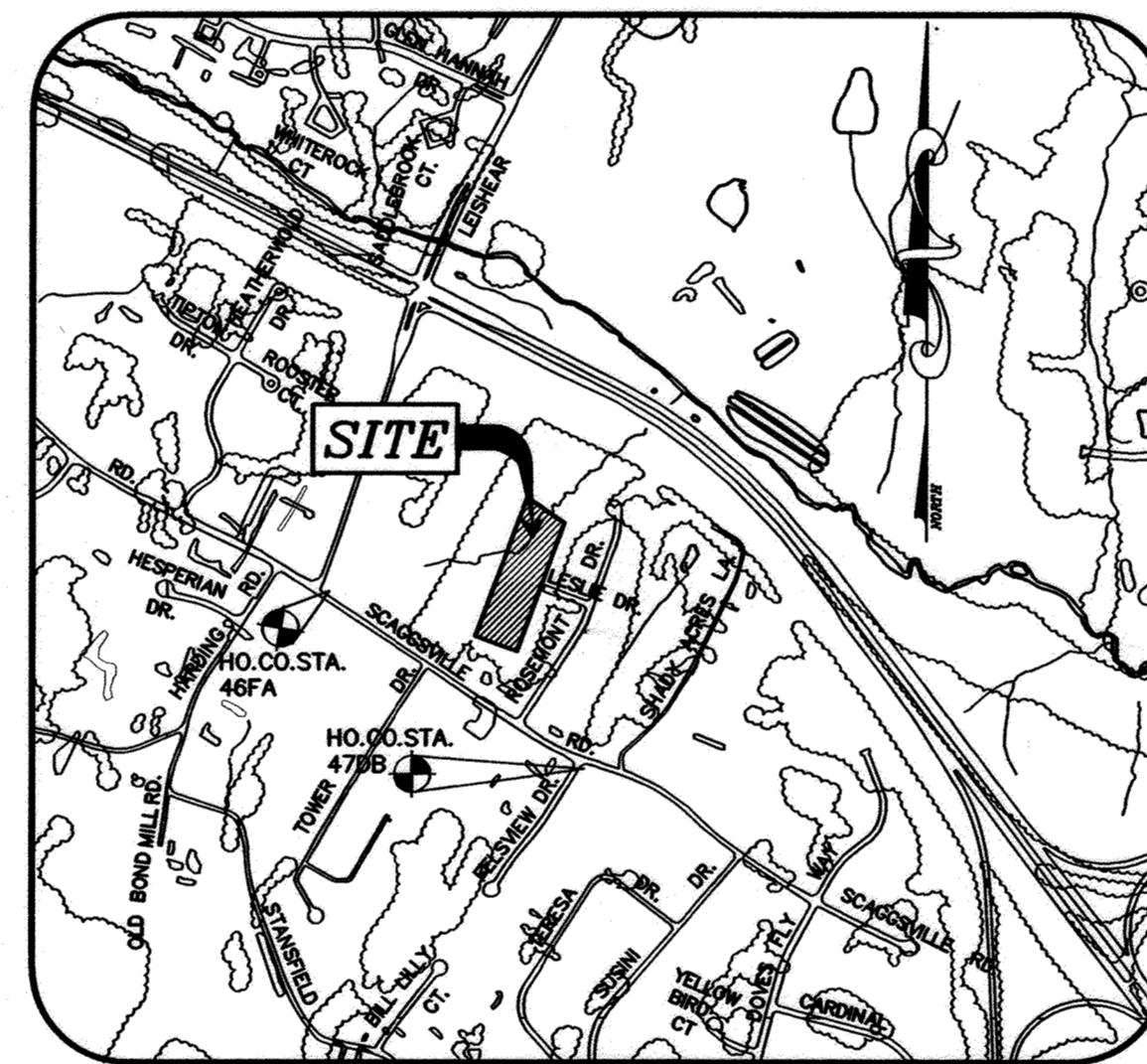
MINIMUM LOT SIZE CHART

LOT NO.	GROSS AREA	PIPESTEM AREA	MINIMUM LOT SIZE
1	14,161 SQ.FT.	103 SQ.FT.	14,058 SQ.FT.
2	14,606 SQ.FT.	510 SQ.FT.	14,096 SQ.FT.
3	15,199 SQ.FT.	842 SQ.FT.	14,357 SQ.FT.
4	18,645 SQ.FT.	1,248 SQ.FT.	17,397 SQ.FT.
5	16,338 SQ.FT.	1,170 SQ.FT.	15,168 SQ.FT.
6	14,776 SQ.FT.	0 SQ.FT.	14,776 SQ.FT.

PIERCE PROPERTY LOTS 1 THROUGH 6 AND OPEN SPACE LOT 7 FOURTH ELECTION DISTRICT HOWARD COUNTY, MARYLAND



TRACT EXHIBIT
SCALE: 1"=100'



VICINITY MAP
ADC MAP: 39, GRID F-4
SCALE: 1"=1000'

GENERAL NOTES:

- SITE ANALYSIS DATA:
ADDRESS: 10504A SCAGGSVILLE ROAD, LAUREL MD 20723
LOCATION : TAX MAP: 46 - PARCEL : 277 TRACT 1 & TRACT 2- GRID 12
ZONING : R-20
ELECTION DISTRICT : FOURTH
DEED REFERENCE : 3962/387, 8581/224
AREA OF TRACT : 3.94 ACRES
PROPOSED USE: SFD.
DPZ FILES: ECP-19-056, WP-20-013.
- COORDINATES BASED ON NAD83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO : 46FA 47DB :
STA. No. 46FA N 535,140.866 E 1,346,962.690 EL. 403.650
STA. No. 47DB N 534,316.917 E 1,348,131.250 EL. 398.560
- TOPOGRAPHIC INFORMATION IS BASED ON AERIAL TOPOGRAPHIC SURVEY BY WINGS AERIAL MAPPING CO., INC. DATED APRIL 10, 2006.
- BOUNDARY INFORMATION IS BASED ON FIELD RUN MONUMENTED SURVEY BY MILDENBERG, BOENDER & ASSOC., INC. DATED APRIL 2019.
- HIS DEVELOPMENT PLAN IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS PER COUNCIL BILL 45-2003 AND THE ZONING REGULATIONS AS AMENDED BY COUNCIL BILL 75-2003. DEVELOPMENT OR CONSTRUCTION ON LOTS MUST COMPLY WITH SETBACK AND BUFFER REGULATIONS IN EFFECT AT THE TIME OF SUBMISSION OF THE BUILDING / GRADING PERMIT.
- A PRE-SUBMISSION COMMUNITY MEETING FOR THIS PROJECT WAS HELD ON APRIL 16, 2019 AT 6:00PM AT THE SAVAGE LIBRARY.
- THE PROJECT IS IN CONFORMANCE WITH THE LATEST HOWARD COUNTY STANDARDS UNLESS WAIVERS HAVE BEEN APPROVED.
- FOREST STAND DELINEATION AND WETLAND DELINEATION STUDY BY ECO-SCIENCE, INC. DATED: APRIL 2019
- APFO ROAD TEST IS NOT REQUIRED FOR THIS SUBDIVISION. THE HOWARD COUNTY ADEQUATE PUBLIC FACILITIES TRAFFIC REQUIREMENTS DO NOT REQUIRE A TRAFFIC IMPACT ANALYSIS FOR DEVELOPMENT GENERATING FEWER THAN 5 PEAK HOUR TRIPS.
- PROPERTY IS LOCATED WITHIN THE METROPOLITAN DISTRICT. WATER AND SEWER ARE PUBLIC. EXTENSION OF WATER AND SEWER CONTRACT #24-1233-D WILL BE PROVIDED.
- STORMWATER MANAGEMENT REQUIREMENTS WILL BE SATISFIED VIA ON-SITE NON-STRUCTURAL PRACTICES.
- EXISTING HOUSE ON LOT 6 TO REMAIN.
- NO CEMETERIES OR HISTORIC STRUCTURES EXIST ON SITE.
- SLOPES GREATER THAN 15% EXIST ON SITE. THE SLOPES ARE SHOWN ON THE PLANS
- THIS PROJECT IS SUBJECT TO ALTERNATIVE COMPLIANCE WP-20-013 OF SECTION 16.120(C)(2), 16.121(G)(2) AND 16.1205(G)(3) - IT WAS APPROVED BY THE DIRECTOR OF PLANNING AND ZONING, THE DIRECTOR OF RECREATION AND PARKS AND THE ADMINISTRATOR OF THE OFFICE OF COMMUNITY SUSTAINABILITY ON April 2, 2020. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:
- APPROVAL OF RELIEF OF SECTION 16.120(C)(2) ONLY APPLIES TO LOT 6 AND THE EXISTING HOUSE. INCLUDE A GENERAL NOTE ON THE FINAL PLAN AND PLAT THAT MANDATES SHOULD THE EXISTING HOUSE BE DEMOLISHED OR DESTROYED, AND A NEW HOUSE BUILT, THE ACCESS THROUGH PARCEL 36 EXPIRES AND THE LOT SHALL GAIN ACCESS TO LESLIE DRIVE VIA THE SHARED DRIVEWAY. INCLUDE THAT A PLAT OF REVISION MAY BE NEEDED TO CHANGE THE HOUSE ORIENTATION AND SETBACKS.
- THE ENVIRONMENTAL FEATURES MUST BE WHOLLY CONTAINED WITHIN AN OPEN SPACE LOT THAT IS DEDICATED TO THE HOWARD COUNTY DEPARTMENT OF RECREATION AND PARKS.
- ALL REMOVED SPECIMEN TREES SHALL BE REPLACED WITH NATIVE TREES OF 2" CALIPER AT A 2:1 RATIO. SHOW THE REPLACEMENT TREES WITH A NOTE REFERENCING WP-20-013 ON FUTURE PLAN SUBMISSIONS.
- ALL FUTURE PLAN SUBMISSIONS SHALL CLEARLY LABEL THE REMAINING SPECIMEN TREES AND INCLUDE A NOTE REQUIRING THE SPECIMEN TREES BE MAINTAINED IN PERPETUITY. FURTHER, SHOULD A SPECIMEN TREE PERISH, REPLACEMENT TREES OF 4" CALIPER OR GREATER SHALL BE PLANTED AT 2:1 AS MITIGATION AND A REDLINE TO THE APPROVED SDP SHALL BE PROCESSED TO REFLECT THE CHANGES.
- INCLUDE THE TREE PRESERVATION METHODS OUTLINED IN THE FEBRUARY 16, 2020 RECOMMENDATIONS LETTER FROM T.D. MATYER CONSULTING ON THE SITE DEVELOPMENT PLANS AND CONSTRUCTION DRAWINGS.
- THE SEQUENCE OF OPERATION SHALL INCLUDE CONTACTING DPZ STAFF TO BE PRESENT TO OBSERVE AND VERIFY ROOT PRUNING, DEEP ROOT FERTILIZATION, AND POST CONSTRUCTION TREE PROTECTIONS
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION WILL BE FULFILLED BY ON-SITE RETENTION OF 1.61 ACRES 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.
- ALL LANDSCAPING REQUIREMENTS SHALL BE FULFILLED AT THE FINAL PLAN STAGE IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL.
- GEOTECHNICAL REPORT WAS PROVIDED BY GEOTECHNICAL ENVIRONMENTAL TESTING CONSULTANTS, INC.
- STORMWATER MANAGEMENT IS PROVIDED BY M-6 MICRO-BIORETENTION FACILITIES AND DRYWEL IN ACCORDANCE WITH THE 2007 MARYLAND STORMWATER DESIGN MANUAL. SWM IS PRIVATELY OWNED AND MAINTAINED.
- THE SEPTIC SYSTEM MUST BE PROPERLY ABANDONED WITH DOCUMENTATION SENT TO THE HEALTH DEPARTMENT PRIOR TO HEALTH DEPARTMENT SIGNATURE OF THE FINAL RECORD PLAT.
- TRAFFIC CONTROL DEVICES:
 - ALL TRAFFIC CONTROL DEVICES AND THEIR LOCATIONS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE 'MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES' (M&MUTCD).
 - ALL SIGN POSTS USED FOR TRAFFIC CONTROL SIGNS INSTALLED IN THE COUNTY RIGHT-OF-WAY SHALL BE MOUNTED ON A 2" GALVANIZED STEEL, PERFORATED ("QUICK PUNCH"), SQUARE TUBE POST (14 GAUGE) INSERTED INTO A 2-1/2" GALVANIZED STEEL, PERFORATED, SQUARE TUBE SLEEVE (12 GAUGE) - 3' LONG. THE ANCHOR SHALL NOT EXTEND MORE THAN 2" "QUICK PUNCH" HOLES ABOVE GROUND LEVEL. A GALVANIZED STEEL POLE CAP SHALL BE MOUNTED ON TOP OF EACH POST.
 - A PRIVATE RANGE OF ADDRESS SIGN ASSEMBLY SHALL BE FABRICATED AND INSTALLED BY HOWARD COUNTY BUREAU OF HIGHWAYS AT THE DEVELOPERS/OWNERS OWN EXPENSE FOR ALL THE USE-IN-COMMON DRIVEWAYS IN THE DEVELOPMENT. CONTACT HOWARD COUNTY TRAFFIC DIVISION AT 410-313-5752 FOR DETAILS AND COST ESTIMATES
- A DESIGN MANUAL WAIVER TO SECTION 1.10.2 OF DESIGN MANUAL VOLUME III HAS BEEN APPROVED ON JULY 28, 2020. SUBJECT TO THE FOLLOWING:
 - THE FEE SHOULD BE IMPROVED TO MEET THE CURRENT STANDARDS OF A PERMANENT TEE TURNAROUND.
 - INCLUDE A SIGNING PLAN FOR "NO PARKING IN TEE TURNAROUND" AS WELL AS WHITE OR BROWN RANGE OF ADDRESS SIGN.
 - IMPROVEMENTS MUST BE MADE WITHIN THE PUBLIC RIGHT-OF-WAY TO APPROPRIATELY CONVEY RUNOFF TO ELIMINATE DISCHARGE FROM THE PUBLIC ROAD FLOWING INTO THE PRIVATE DRIVEWAY.

MIHU TRACKING CHART

TOTAL NUMBER OF LOTS/UNITS	6
NUMBER OF MIHU REQUIRED	1
NUMBER OF MIHU PROVIDED ON-SITE (EXEMPT FROM APFO ALLOCATIONS)	0
NUMBER OF APFO ALLOCATION REQUIRED (REMAINING LOTS/UNITS)	5
MIHU FEE-IN-LIEU	1-3
(INDICATED LOT/UNIT NUMBERS)	5&6

SITE ANALYSIS DATA:

- AREA OF THE SITE = 3.94 AC ±
- AREA OF WETLANDS AND ITS BUFFERS = 0.69 AC ±
- AREA OF FLOODPLAIN = 0.00 AC ±
- AREA OF EXISTING FOREST = 3.30 AC ±
- AREA OF STREAM BUFFER = 1.31 AC ±
- AREA OF STEEP SLOPES 15% OR GREATER = 1.03 AC±
- AREA OF STEEP SLOPES 25% OR GREATER = 0.52 AC±
- NET BUILDABLE AREA = 3.94-0.52 = 3.42 AC±
- NO. OF ALLOWABLE LOTS = 3.42 AC X 2 UNITS PER NET AC = 6.84
- A TOTAL OF 6 BUILDABLE LOTS ARE PROPOSED.
- FIVE NEW SINGLE FAMILY DETACHED DWELLINGS ARE PROPOSED+
- AREA OF BUILDABLE LOTS =
- AREA OF OPEN SPACE REQUIRED = 300X3.94=1.182 AC ±
- AREA OF OPEN SPACE PROVIDED = 1.785 AC ±
- AREA OF ERODIBLE SOILS = 3.13 AC
- LIMIT OF DISTURBANCE AREA = 1.69 AC ±
- GREEN OPEN AREA (PERVIOUS) = 3.53 AC±
- PROPOSED IMPERVIOUS AREA = 0.41 AC±

DEVELOPER/OWNER

TRACT 2
LAND DESIGN & DEVELOPMENT
8318 FORREST STREET - SUITE 200
ELLCOTT CITY, MD 21043
PHONE 410-707-7054

DEVELOPER/OWNER

TRACT 1
HOWARD LAND INVESTORS LLC.
8318 FORREST STREET - SUITE 200
ELLCOTT CITY, MD 21043
PHONE 410-707-7054

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. 26859, EXP DATE 08/0/21

SAMER A. ALOMER P.E.

10/01/2020
DATE:

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR
DATE

project	date	approval
19-004	OCT 2020	SAAS
illustration	engineering	SAAS
scale	AS SHOWN	RH

no.	description	revisions

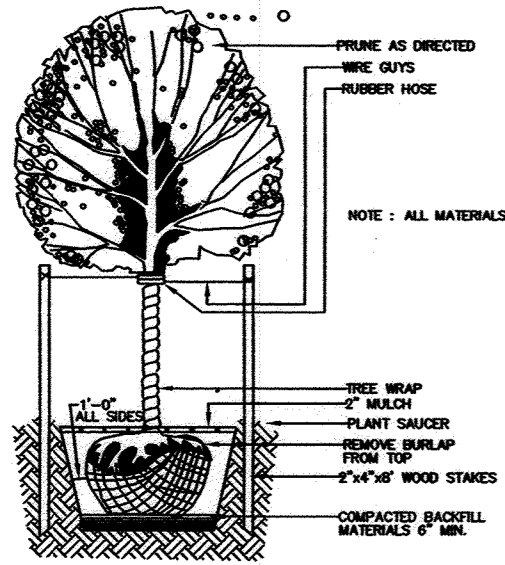
PIERCE PROPERTY
LOTS 1 THRU 6 AND O/S LOT 7
TAX MAP: 46 - PARCEL : P/O 277 TRACT 1 & 2 - GRID 12
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
COVER SHEET

MILDENBERG,
BOENDER & ASSOC., INC.
Engineers
Planners
Surveyors
7350-B Cross Drive, Columbia, Maryland 21044
(410) 997-0286 Tel. (410) 997-0288 Fax.

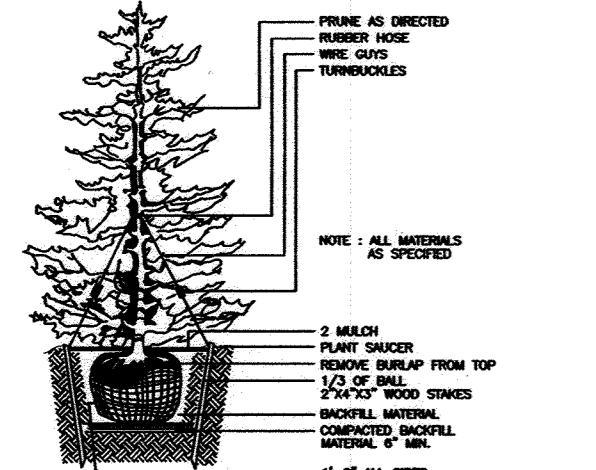
CATEGORY	ADJACENT TO PERIMETER PROPERTIES					TOTAL
	A (PERIMETER 1)	A (PERIMETER 2)	A (PERIMETER 3)	A (PERIMETER 4)	A (PERIMETER 5)	
LANDSCAPE TYPE						
LINEAR FEET OF PERIMETER	775.61 LF	236.06 LF	332.13 LF	336.31 LF	229.85 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	YES, 420.00 LF	YES, 236.06 LF	YES, 263.32 LF	YES, 1 EXISTING SHADE TREE	YES, 2 EXISTING SHADE TREE	
CREDIT FOR WALL, FENCE, OR BERM (YES, NO, LINEAR FEET)	NO	NO	NO	NO	129 LF	
NUMBER OF PLANTS REQUIRED						
SHADE TREES	6 SHADE TREES	0 SHADE TREES	1 SHADE TREES	6 SHADE TREES	4 SHADE TREES	17 SHADE TREES
EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES
SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS
NUMBER OF PLANTS PROVIDED						
SHADE TREES	6 SHADE TREES	0 SHADE TREES	1 SHADE TREES	5 SHADE TREES	2 SHADE TREES	17 SHADE TREES
EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES	0 EVERGREEN TREES
SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS	0 SHRUBS

FOREST CONSERVATION WORKSHEET

Net Tract Area		
A. Total (Gross) Tract Area	A =	3.99
B. Area within 100-year Floodplain	B =	0.00
C. Other Deductions (Identify)	C =	0.00
D. Net Tract Area	D =	3.99
Land Use Category		
Insert the number "1" under the appropriate land use (limit to only one entry)		
Resid. Rural LD	Resid. Rural MD	Resid. Suburban
Inst./Linear	Retail/Office	Mixed Use/PUD
0	0	0
1	0	0
E. Afforestation Threshold (Net Tract Area x 15%)		
E =		0.60
F. Reforestation Threshold (Net Tract Area x 20%)		
F =		0.80
Existing Forest Cover		
G. Existing Forest Cover within the Net Tract Area	G =	3.39
H. Area of Forest above Afforestation Threshold	H =	2.70
I. Area of Forest above Reforestation Threshold	I =	2.50
Break Even Point		
J. Break Even Point	J =	1.63
K. Forest Clearing Permitted without Mitigation	K =	1.67
Proposed Forest Clearing		
L. Total Area of Forest to be Cleared	L =	1.69
M. Total Area of Forest to be Retained	M =	1.60
Planting Requirements Inside Watershed		
N. Reforestation for Clearing above the Reforestation Threshold	N =	0.80
P. Reforestation for Clearing below the Reforestation Threshold	P =	0.00
Q. Credit for Retention above the Reforestation Threshold	Q =	0.80
R. Total Reforestation Required	R =	0.00
S. Total Afforestation Required	S =	0.00
T. Total Afforestation and Reforestation Requirement	T =	0.00
U. 75% of Total Obligation (Retention + Planting)	U =	1.20
V. Planting Required Outside to meet 75% Obligation	V =	0.00
Planting Requirements Outside Watershed		
W. Total Planting within Development Site Watershed	W =	0.00
X. Total Afforestation Required	X =	0.00
Y. Remaining Planting within Watershed for Reforestation Credit	Y =	0.00
Z. Reforestation for Clearing above the Reforestation Threshold	Z =	0.00
AA. Reforestation for Clearing below the Reforestation Threshold	AA =	0.00
BB. Credit for Retention above the Reforestation Threshold	BB =	0.00
CC. Total Reforestation Required	CC =	0.00
DD. Total Afforestation and Reforestation Requirement	DD =	0.00



DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



TYPICAL EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE

LEGEND

- IMPERVIOUS AREA TREATED BY MICRO-BIOTENSION (M-6)
- IMPERVIOUS AREA TREATED BY DRY WELLS (M-5)
- AREA OF WETLANDS
- AREA OF SLOPES 25% OR GREATER
- AREA OF SLOPES 15%-24.99%
- EXISTING TREELINE
- PROPOSED TREELINE
- EX. TREE TO BE REMOVED
- CRITICAL ROOT ZONE
- FOREST CONSERVATION SIGNAGE

DEVELOPER/OWNER
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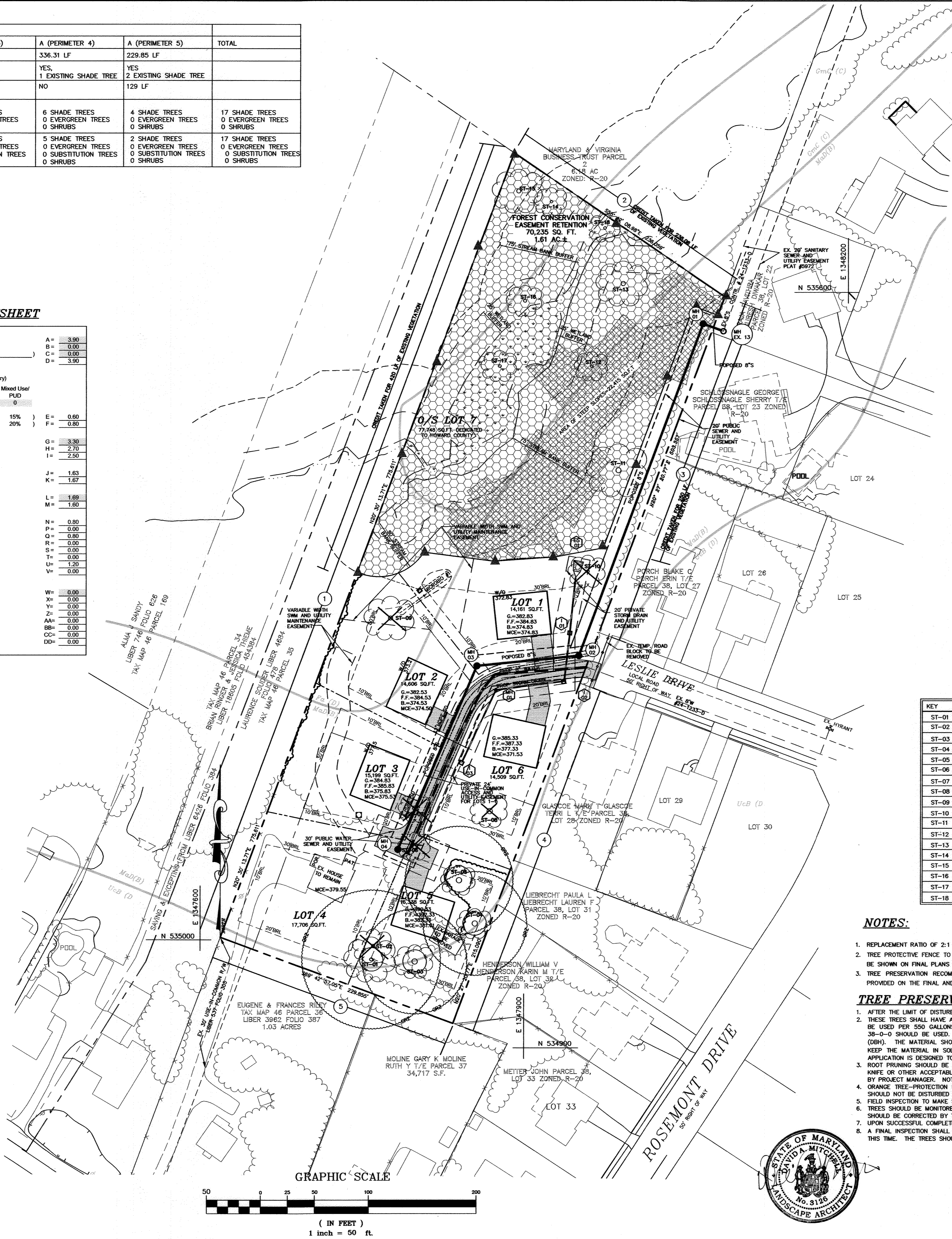
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TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR DATE

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. 26859, EXP DATE 08/0/21

10/01/2020
DATE
SAMER A. ALOMER P.E.



SOIL DESCRIPTION:

SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
MdC	(B)	MANOR LOAM 15-25% SLOPES.	.24	46	HIGHLY ERODABLE
GmC	(C)	GLENVILLE SILT LOAM 8 TO 15 PERCENT SLOPES	.37	46	HIGHLY ERODABLE
Fa	(B)	FALLSINGTON SANDY LOAM 0 TO 2 PERCENT SLOPES	.20	46	
UcB	(D)	URBAN LAND-CHILLIM-BELTSVILLE COMPLEX 0 TO 5 PERCENT SLOPES, MODERATELY ERODED.	.37	46	

- FSD NOTES:**
- NO RARE, THREATENED OR ENDANGERED SPECIES OR THEIR HABITATS WERE OBSERVED ON THE PROPERTY.
 - SURROUNDING LAND USE IS HIGH DENSITY RESIDENTIAL DEVELOPMENT.
 - APPROXIMATELY 1.8 ACRES OF FOREST IS PRESENT WITHIN 100 FEET OF THE SUBJECT PROPERTY.
 - NO 100 YEAR FLOODPLAIN IS PRESENT ON THE SUBJECT PROPERTY.
 - THERE ARE STEEP SLOPES (25% OR GREATER) ON THE PROPERTY.
 - THERE ARE NO KNOWN HISTORIC STRUCTURES OR CEMETERIES ON THE PROPERTY.
 - THERE ARE SPECIMEN TREES, STATE CHAMPION TREES AND/OR TREES 75% OF THE SIZE OF THE STATE CHAMPION TREE ON THE PROPERTY.

- NO CLEARING OF EXISTING VEGETATION IS PERMITTED WITHIN THE LANDSCAPE EDGE FOR WHICH CREDIT IS BEING TAKEN; HOWEVER, LANDSCAPE MAINTENANCE IS AUTHORIZED.
- THE OWNER, TENANT AND / OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, PLANT MATERIALS, BERMS, FENCES, AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN THE RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATES.
- SHOULD ANY TREE DESIGNATED FOR PRESERVATION, FOR WHICH CREDIT IS GIVEN, BE REMOVED OR DIE PRIOR TO RELEASE OF BONDS, THE OWNER WILL BE REQUIRED TO REPLACE THE TREE WITH THE EQUIVALENT SPECIES OR WITH A TREE WHICH WILL OBTAIN THE SAME HEIGHT, SPREAD AND GROWTH CHARACTERISTICS. THE REPLACEMENT TREE MUST BE A MINIMUM OF 3 INCHES IN CALIPER AND INSTALLED AS REQUIRED IN THE LANDSCAPE MANUAL.

SPECIMEN TREE CHART

KEY	SPECIES	SIZE	CRZ	COMMENTS	CRZ AREA SF
ST-01	TULIP POPLAR	42.5	63.75	FAIR CONDITION	12761
ST-02	TULIP POPLAR	44.5	66.75	MULTIPLE STEMS - HOLLOW - TO BE REMOVED	13990
ST-03	WHITE OAK	32	48	FAIR CONDITION	7235
ST-04	TULIP POPLAR	31.5	47.25	FAIR CONDITION	7010
ST-05	RED OAK	33	49.5	FAIR CONDITION	7694
ST-06	TULIP POPLAR	32	48	FAIR CONDITION - TO BE REMOVED	7235
ST-07	RED OAK	30.5	45.75	FAIR CONDITION - TO BE REMOVED	6572
ST-08	CHESTNUT OAK	34.5	51.75	VERY POOR CONDITION - SEVERE ROT AT BASE - TO BE REMOVED	8409
ST-09	RED OAK	49.5	74.25	POOR, 2ND TRUNK DEAD TO BE REMOVED	17311
ST-10	CHESTNUT OAK	34.5	51.75	POOR, 2ND TRUNK DEAD TO BE REMOVED	840912
ST-11	CHESTNUT OAK	56.5	84.75	PRESERVED IN FOREST CONSERVATION ESMNT ON OPEN SPACE LOT 7	22553
ST-12	CHESTNUT OAK	31	46.5	PRESERVED IN FOREST CONSERVATION ESMNT ON OPEN SPACE LOT 7	6789
ST-13	CHESTNUT OAK	48.5	72.75	PRESERVED IN FOREST CONSERVATION ESMNT ON OPEN SPACE LOT 7	16619
ST-14	CHESTNUT OAK	30	45	PRESERVED IN FOREST CONSERVATION ESMNT ON OPEN SPACE LOT 7	6359
ST-15	CHESTNUT OAK	46.5	69.75	PRESERVED IN FOREST CONSERVATION ESMNT ON OPEN SPACE LOT 7	15276
ST-16	CHESTNUT OAK	33	49.5	PRESERVED IN FOREST CONSERVATION ESMNT ON OPEN SPACE LOT 7	7694
ST-17	TULIP POPLAR	37	55.5	PRESERVED IN FOREST CONSERVATION ESMNT ON OPEN SPACE LOT 7	9672
ST-18	TULIP POPLAR	30	45	PRESERVED IN FOREST CONSERVATION ESMNT ON OPEN SPACE LOT 7	6359

- NOTES:**
- REPLACEMENT RATIO OF 2:1 FOR TREES TO BE REMOVED. A TOTAL OF 12 TREES TO BE REPLANTED WITH CALIBER OF 3" MIN. DBH.
 - TREE PROTECTIVE FENCE TO BE INSTALLED AROUND ALL TREES TO REMAIN ON BUILDABLE LOTS DURING ALL PHASES OF CONSTRUCTION. DETAILS TO BE SHOWN ON FINAL PLANS AND SITE DEVELOPMENT PLANS.
 - TREE PRESERVATION RECOMMENDATIONS TO BE PERFORMED IN ACCORDANCE WITH THE GUIDELINES SHOWN ON THIS EXHIBIT. DETAILS WILL BE PROVIDED ON THE FINAL AND SDP PLANS.

- TREE PRESERVATION RECOMMENDATIONS**
- AFTER THE LIMIT OF DISTURBANCE (LOD) IS ESTABLISHED, TREES 1, 3, 4, AND 5 SHOULD BE PRUNED, THINNED AND THE DEADWOOD REMOVED.
 - THESE TREES SHALL HAVE A DEEP ROOT FERTILIZATION TO PROMOTE NEW ROOT GROWTH. THE FOLLOWING MIXTURE OR EQUIVALENT THEREOF SHOULD BE USED PER 500 GALLONS OF WATER. APPROXIMATELY 25 LBS. OF 20-20-20 NUTRI-LEAF AND APPROXIMATELY 50 LBS. OF POWDER BLUE 38-0-0 SHOULD BE USED. THIS RESULTS IN A 4-1-1 RATIO. THE APPLICATION RATE SHOULD BE 5 GALLONS OF MIXTURE FOR EACH INCH OF (DBH). THE MATERIAL SHOULD BE APPLIED WITH AN APPROPRIATE HYDRAULIC SPRAYER AND THE TANK SHALL RECEIVE CONSTANT AGITATION TO KEEP THE MATERIAL IN SOLUTION. THIS MATERIAL SHOULD BE APPLIED AT APPROXIMATELY 150 TO 200 LBS. P.S.I. (PER SQUARE INCH). THIS APPLICATION IS DESIGNED TO DO TWO THINGS: TO PUT THE MATERIAL INTO THE SOIL AT THE APPROPRIATE DEPTH AND TO AERATE THE SOIL.
 - ROOT PRUNING SHOULD BE DONE AT THE LOD TO A DEPTH OF APPROXIMATELY TWO FEET. ROOTS SHOULD BE CLEANLY CUT USING A VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT. THE TRENCH SHOULD BE IMMEDIATELY BACK-FILLED WITH THE SOIL REMOVED OR ORGANIC SOIL APPROVED BY PROJECT MANAGER. NOTE: NOT MORE THAN 30% OF THE CRITICAL ROOT ZONE SHOULD BE DISTURBED AND LESS IF POSSIBLE.
 - ORANGE TREE-PROTECTION FENCING SHOULD BE INSTALLED AT THE LOD AND AROUND THE REMAINING CANOPY OF THE SAVED TREES. THE AREA SHOULD NOT BE DISTURBED BY EQUIPMENT OR USED FOR STORAGE. THE FENCE SHOULD REMAIN AS INSTALLED THROUGHOUT THE ENTIRE PROJECT.
 - FIELD INSPECTION TO MAKE SURE ALL WORK HAS BEEN ACCORDING TO INDUSTRY STANDARDS.
 - TREES SHOULD BE MONITORED DURING CONSTRUCTION OF THE PROJECT. THOSE PROBLEMS THAT ARE FOUND DURING THE COURSE OF CONSTRUCTION SHOULD BE CORRECTED BY THE TREE TRIMMING CONTRACTOR AT THE DIRECTION OF THE PROJECT MANAGER.
 - UPON SUCCESSFUL COMPLETION OF THE PROJECT ALL TREE PRESERVATION MATERIAL SHALL BE REMOVED.
 - A FINAL INSPECTION SHALL BE DONE AND ANY INJURY TO THE TREES (E.G. PRUNING OF DEAD, DYING AND BROKEN LIMBS) SHOULD BE DONE AT THIS TIME. THE TREES SHOULD BE MONITORED FOR A PERIOD OF TWO YEARS BEFORE FINAL RELEASE OF THE PROJECT.

M:\2019\19-004 PIERCE PROPERTY DWG\19-004-PIERCE - PES-ORG.DWG



date	OCT 2020	SA	SA	SA
project	19-004	illustration	SA	SA
scale	1"=50'	approval	SA	SA

date		description	
no.		revisions	

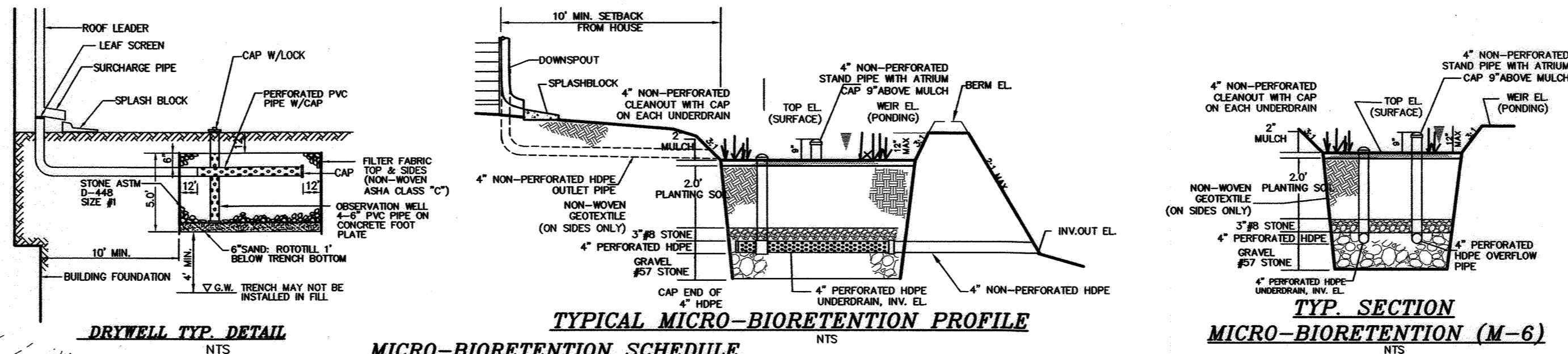
PIERCE PROPERTY
LOTS 1 THRU 6 AND O/S LOT 7
TAX MAP: 46 - PARCEL - P/O 277 - GRID 12
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND
PES, LANDSCAPE & FOREST CONSERVATION PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Surveyors
Planners
Engineers
7350-B Cross Drive, Columbia, Maryland 21044
(410) 997-0296 Tel. (410) 997-0298 Fax.

SOIL DESCRIPTION:

SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
MaD	(B)	MANOR LOAM 15-25% SLOPES,	.24	46	HIGHLY ERODABLE
GmC	(C)	GLENVILLE SILT LOAM 8 TO 15 PERCENT SLOPES	.37	46	HIGHLY ERODABLE
Fa	(B)	FALLSINGTON SANDY LOAM 0 TO 2 PERCENT SLOPES	.20	46	
UcB	(D)	URBAN LAND-CHILLUM-BELTSVILLE COMPLEX 0 TO 5 PERCENT SLOPES, MODERATELY ERODED.	.37	46	

- LEGEND**
- SSF SUPER SILT FENCE
 - SF SILT FENCE
 - LOD LIMIT OF DISTURBANCE = PROPOSED TREE LINE (FOR CLARITY NOT SHOWN)
 - DRY-WELL (M-5)
 - A-2 DIVERSION DIKE
 - SOE STABILIZED CONSTRUCTION ENTRANCE
 - DRAINAGE AREA
 - IMPERVIOUS AREA TREATED BY MICRO-BIORETENTION (M-6)
 - IMPERVIOUS AREA TREATED BY DRY WELLS (M-5)
 - AREA OF WETLANDS
 - AREA OF SLOPES 25% OR GREATER
 - AREA OF SLOPES 15%-24.99%
 - EXISTING TREELINE
 - EX. TREE TO BE REMOVED
 - CRITICAL ROOT ZONE
 - MICRO-BIORETENTION (M-6)
 - PERMANENT SOIL STABILIZATION MATING CHANNEL APPLICATION

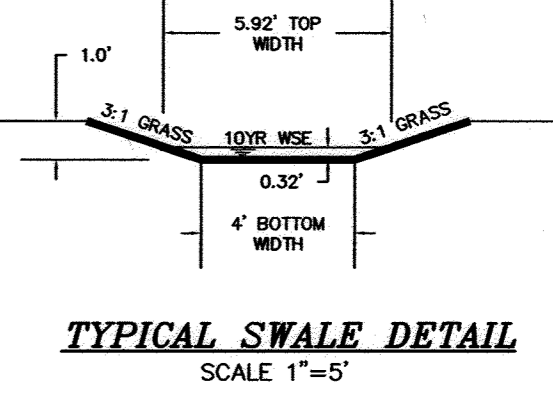


MICRO-BIORETENTION SCHEDULE

FACILITY	TOP EL. (SURFACE)	WDR EL. (PONDING)	BERM EL.	INV. IN.	INV. OUT.	SURFACE AREA	PONDING AREA	PONDING DEPTH	GRAVEL DEPTH BELOW UNDERDRAIN
MB-1	360.00	359.50	359.50	254.42	255.00	590 S.F.	900 S.F.	12"	14"

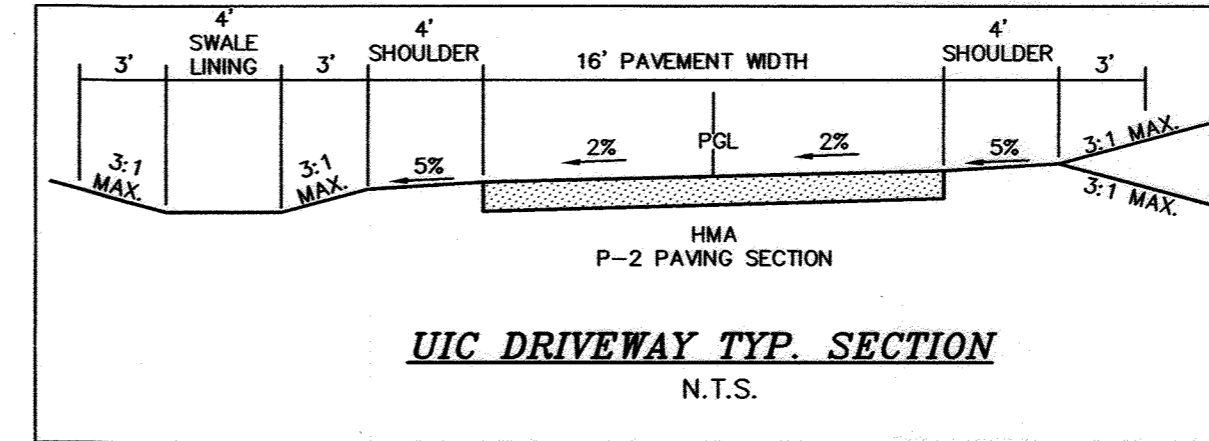
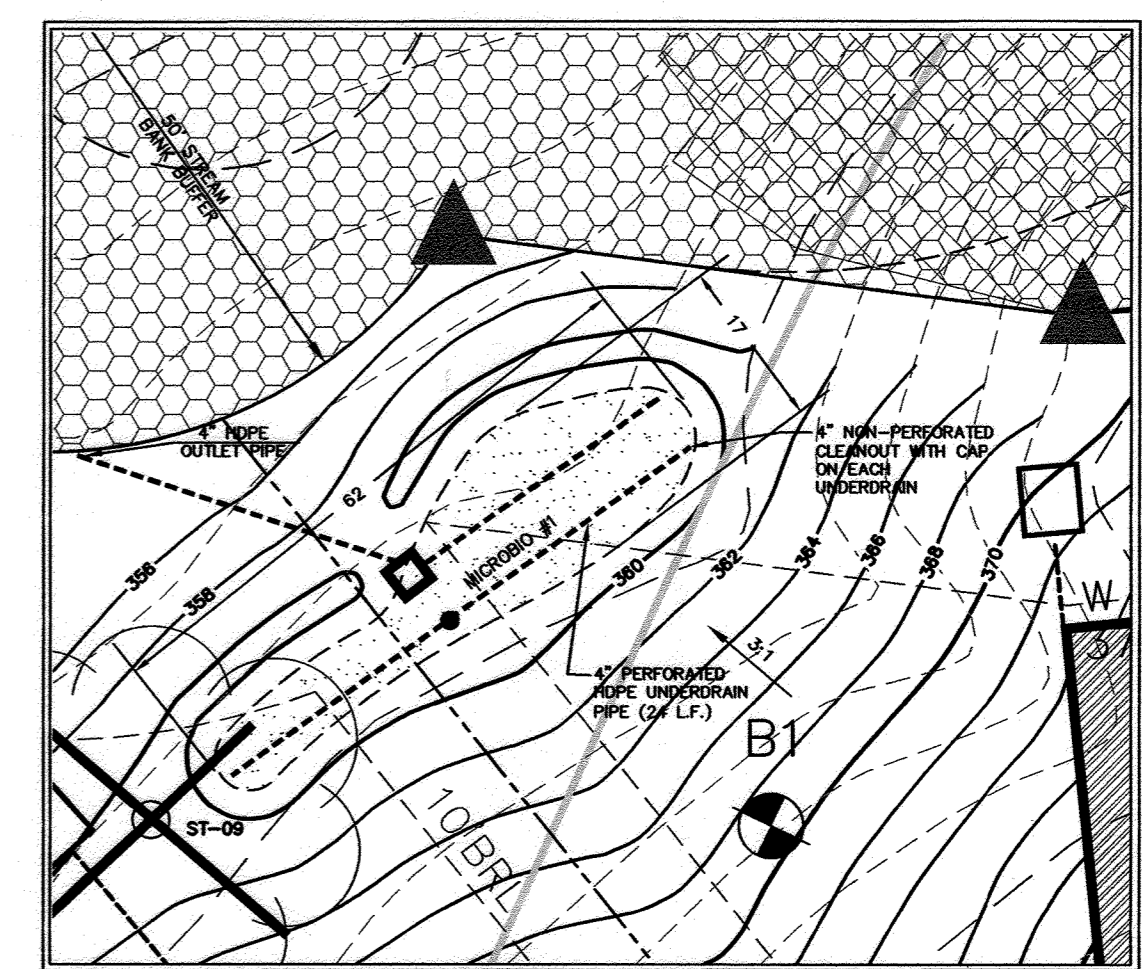
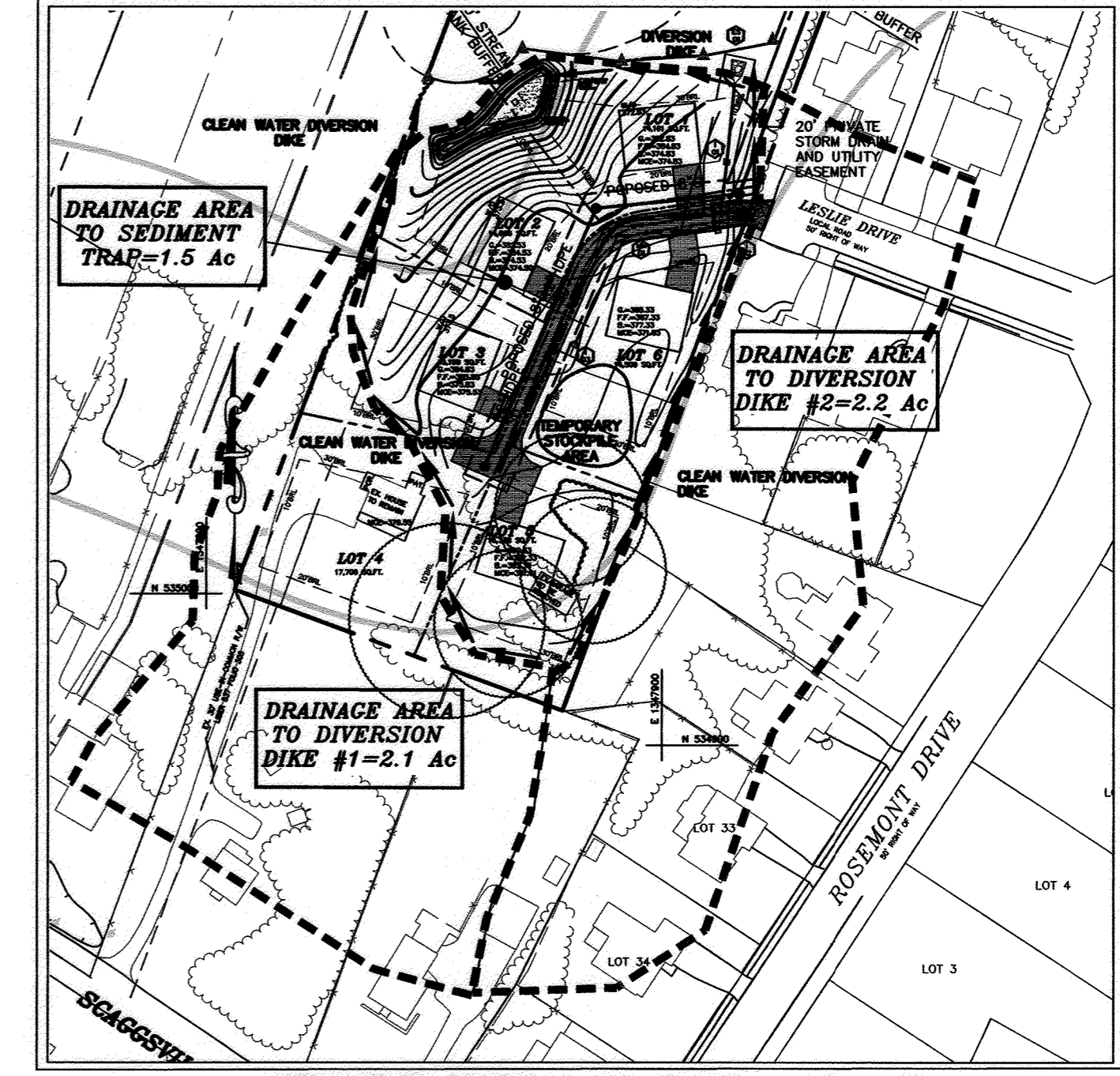
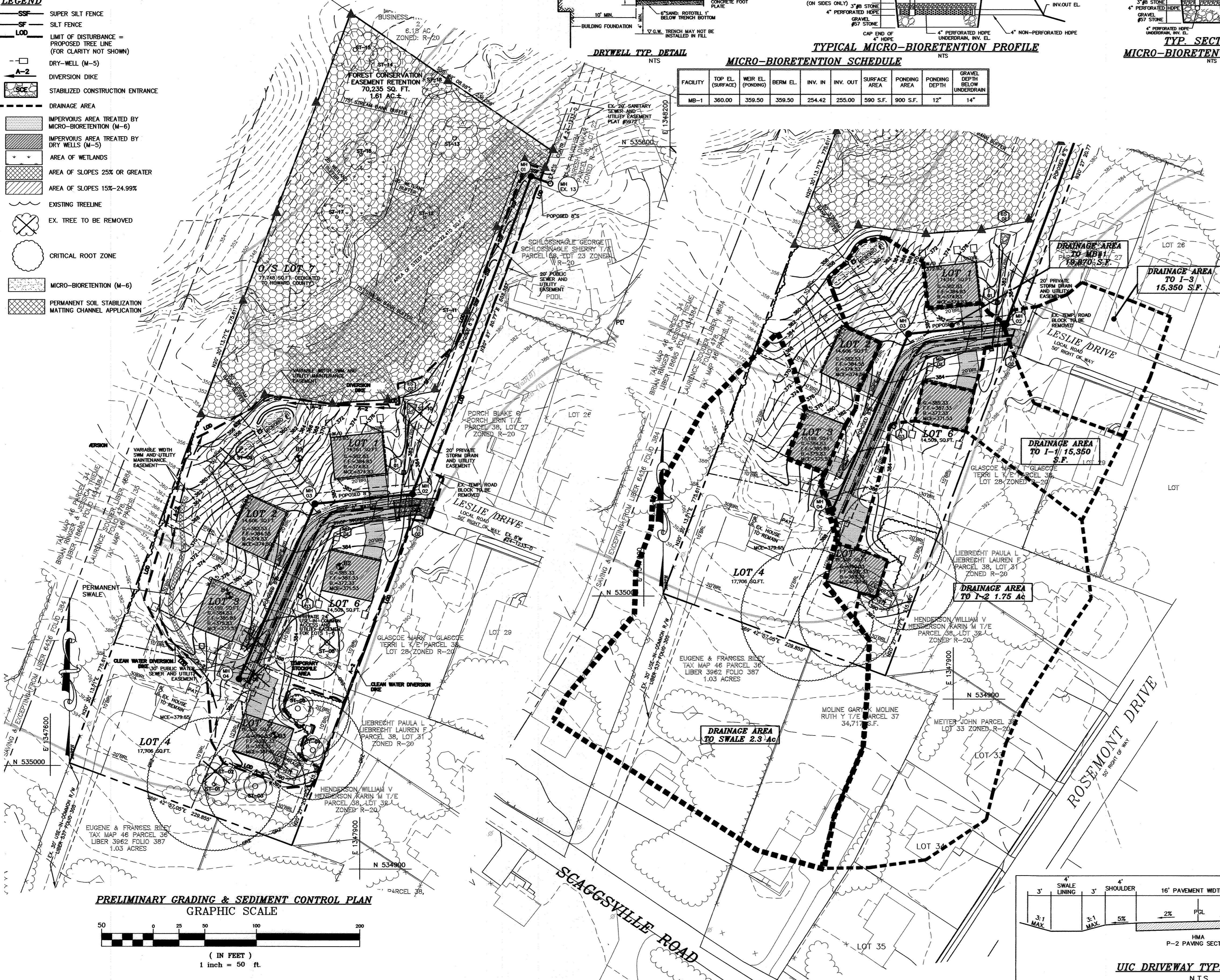
TO APPLY TO PERMANENT SWALE IN THE BACK OF LOTS 5 AND SIDE OF LOT 2 & 3

STORM Q (CFS)	V (FPS)
10 YR 9.40	4.90
100 YR 14.30	5.60



SWM PRACTICES SCHEDULE

AREA	PROPOSED PRACTICES	REQUIRED ESDv	PROVIDED ESDv
LOT 1	M-5, DRYWELLS (3 EACH)	244 C.F.	252 C.F.
LOT 2	M-5, DRYWELLS (3 EACH)	244 C.F.	252 C.F.
LOT 3	M-5, DRYWELLS (3 EACH)	244 C.F.	252 C.F.
LOT 5	M-5, DRYWELLS (3 EACH)	244 C.F.	252 C.F.
LOT 6	M-5, DRYWELLS (3 EACH)	244 C.F.	252 C.F.
DRIVEWAYS	M-6, MICRO-BIORETENTION (MB #1)	1,099 C.F.	1,188 C.F.
TOTAL		2,319 C.F.	2,448 C.F.



- SITE ANALYSIS DATA:**
- AREA OF THE SITE = 3.94 AC ±
 - AREA OF WETLANDS AND ITS BUFFERS = 0.69 AC ±
 - AREA OF FLOODPLAIN = 0.00 AC ±
 - AREA OF EXISTING FOREST = 3.30 AC ±
 - AREA OF STREAM BUFFER = 1.31 AC ±
 - AREA OF STEEP SLOPES 15% OR GREATER = 1.03 AC ±
 - AREA OF STEEP SLOPES 25% OR GREATER = 0.52 AC ±
 - NET BUILDABLE AREA = 3.94 - 0.52 = 3.42 AC ±
 - NO. OF ALLOWABLE LOTS = 3.42 AC X 2 UNITS PER NET AC = 6.84
 - A TOTAL OF 6 BUILDABLE LOTS ARE PROPOSED.
 - FIVE NEW SINGLE FAMILY DETACHED DWELLINGS ARE PROPOSED
 - AREA OF ERODABLE SOILS = 3.13 AC ±
 - LIMIT OF DISTURBANCE AREA = 1.69 AC ±
 - GREEN OPEN AREA (PERVIOUS) = 3.53 AC ±
 - PROPOSED IMPERVIOUS AREA = 0.41 AC ±

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. 26859, EXP DATE 08/01/21

10/01/2020 DATE: SAMER A. ALOMER P.E.

TENTATIVELY APPROVED
DEPARTMENT OF PLANNING AND ZONING
HOWARD COUNTY

PLANNING DIRECTOR DATE

SWM DRAINAGE AREA MAP
SCALE: 1"=100'

DEVELOPER/OWNER
TRACT 2
LAND DESIGN & DEVELOPMENT
8318 FORREST STREET - SUITE 200
ELLCOTT CITY, MD 21043
PHONE 410-707-7054

DEVELOPER/OWNER
TRACT 1
HOWARD LAND INVESTORS LLC
8318 FORREST STREET - SUITE 200
ELLCOTT CITY, MD 21043
PHONE 410-707-7054

date	OCT 2020	approval	SAH	RH
project	19-004	illustration	SAH	AS SHWN

date		description	revisions

PIERCE PROPERTY
LOTS 1 THRU 6 AND O/S LOT 7
TAX MAP: 46 - PARCEL: P/O 277 - GRID 12
FOURTH ELECTION DISTRICT
HOWARD COUNTY, MARYLAND

GRADING, SEDIMENT CONTROL, DAM, SWM AND SOILS PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7850-B Crags Drive, Columbia, Maryland 21044
(410) 997-0296 Tel. (410) 997-0288 Fax.