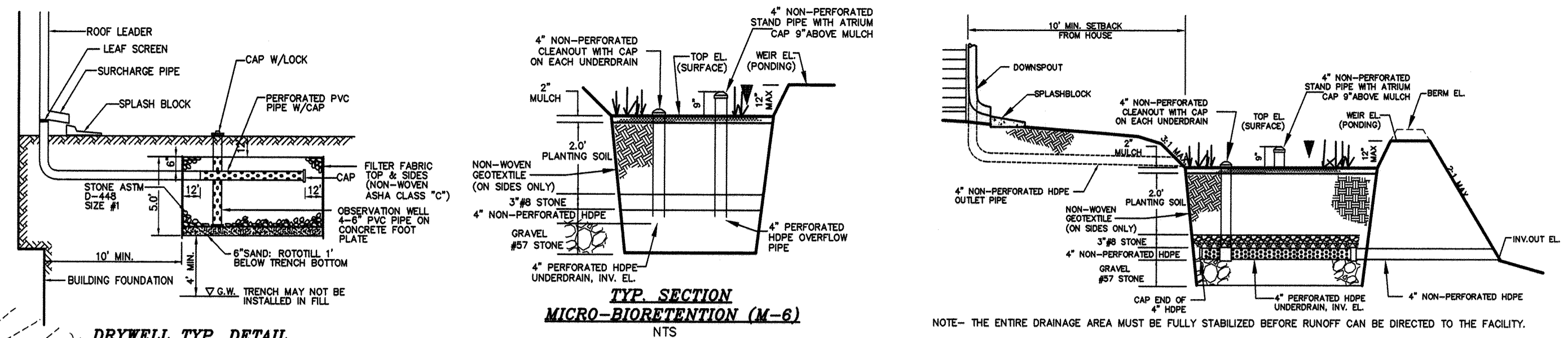


**SOIL DESCRIPTION:**

SYMBOL	RATING	NAME	K FACTOR	MAP NO.	COMMENTS
McD	(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**
- SSP 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
  - 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%-24.9%
  - EXISTING TREELINE
  - EX. TREE TO BE REMOVED
  - CRITICAL ROOT ZONE

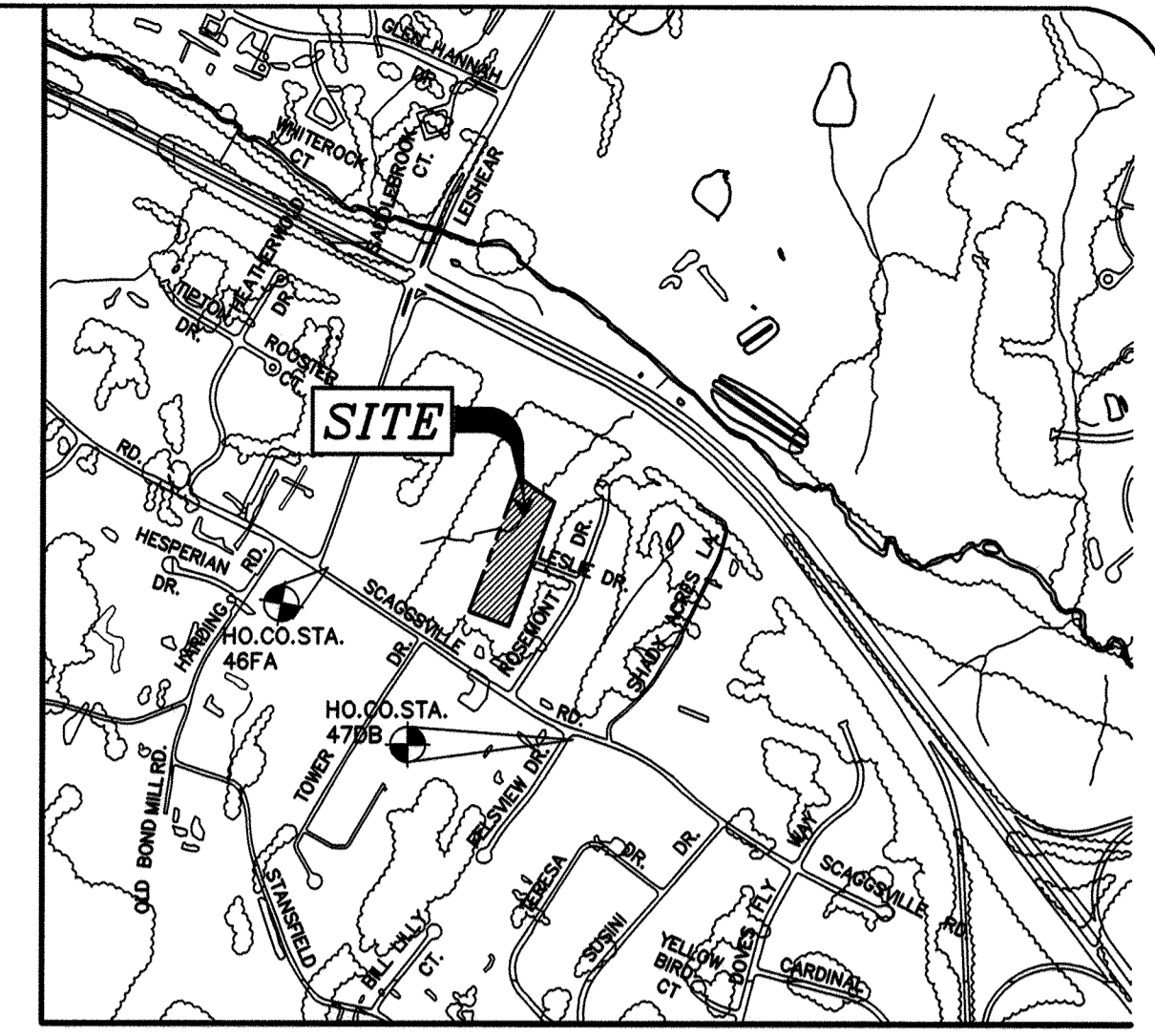


**MICRO-BIORETENTION SCHEDULE**

FACILITY	TOP EL. (SURFACE)	WER EL. (SPONDING)	BERM EL.	INV. IN.	INV. OUT.	SURFACE AREA	PONDING AREA	PONDING DEPTH	GRAVEL DEPTH BELOW UNDERDRAIN
MB-1	358.00	389.00	389.50	254.42	255.00	590 S.F.	900 S.F.	12"	14"

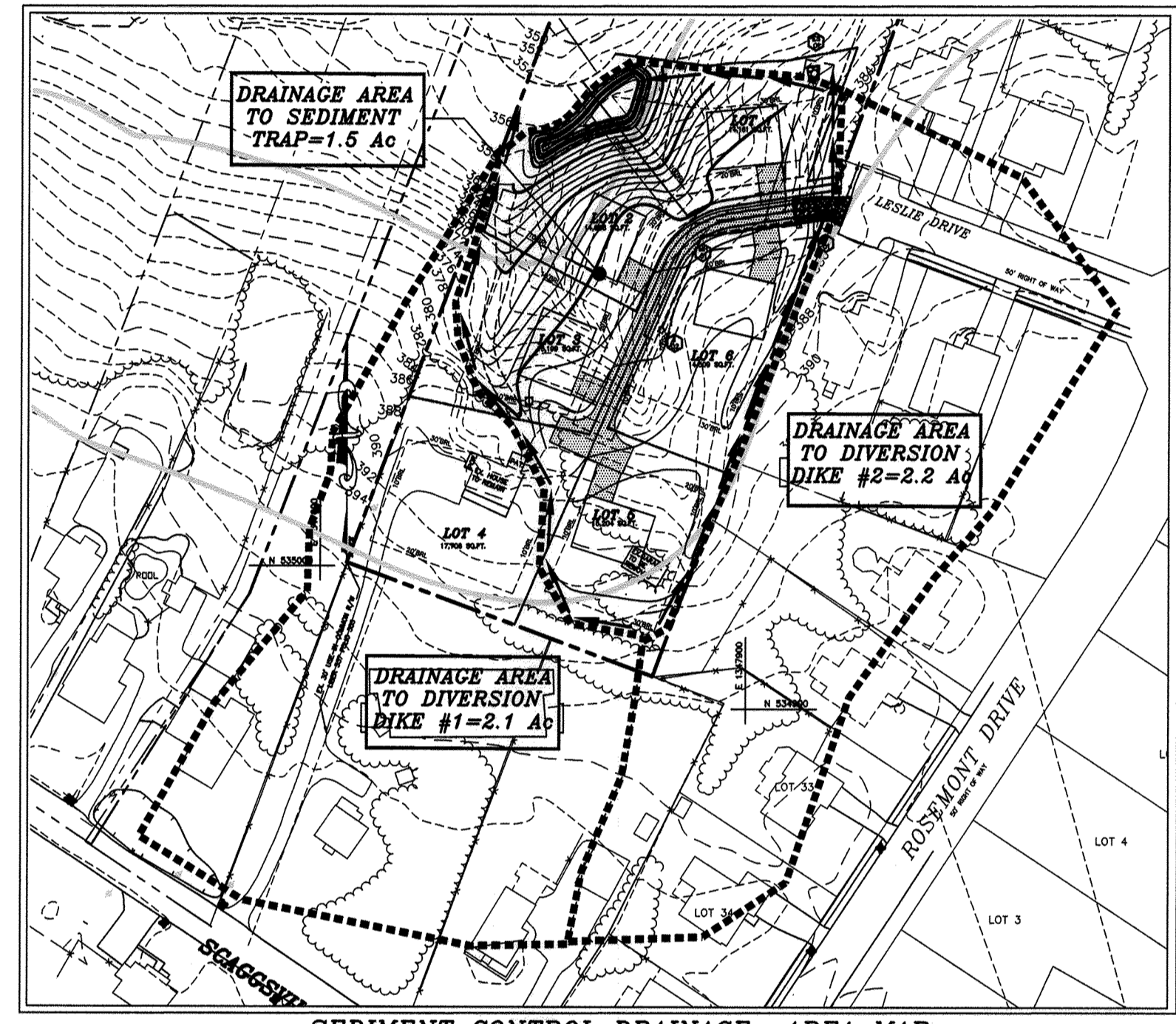
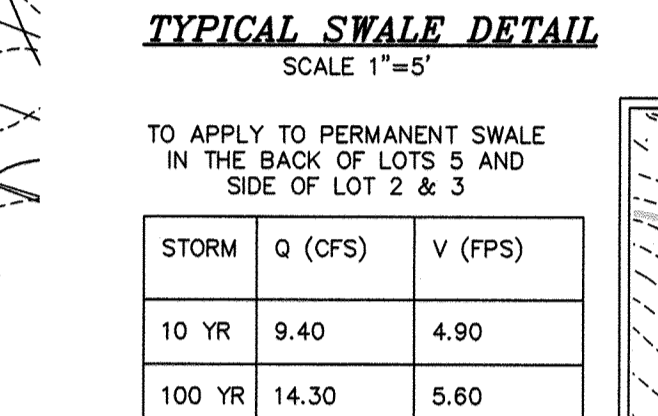
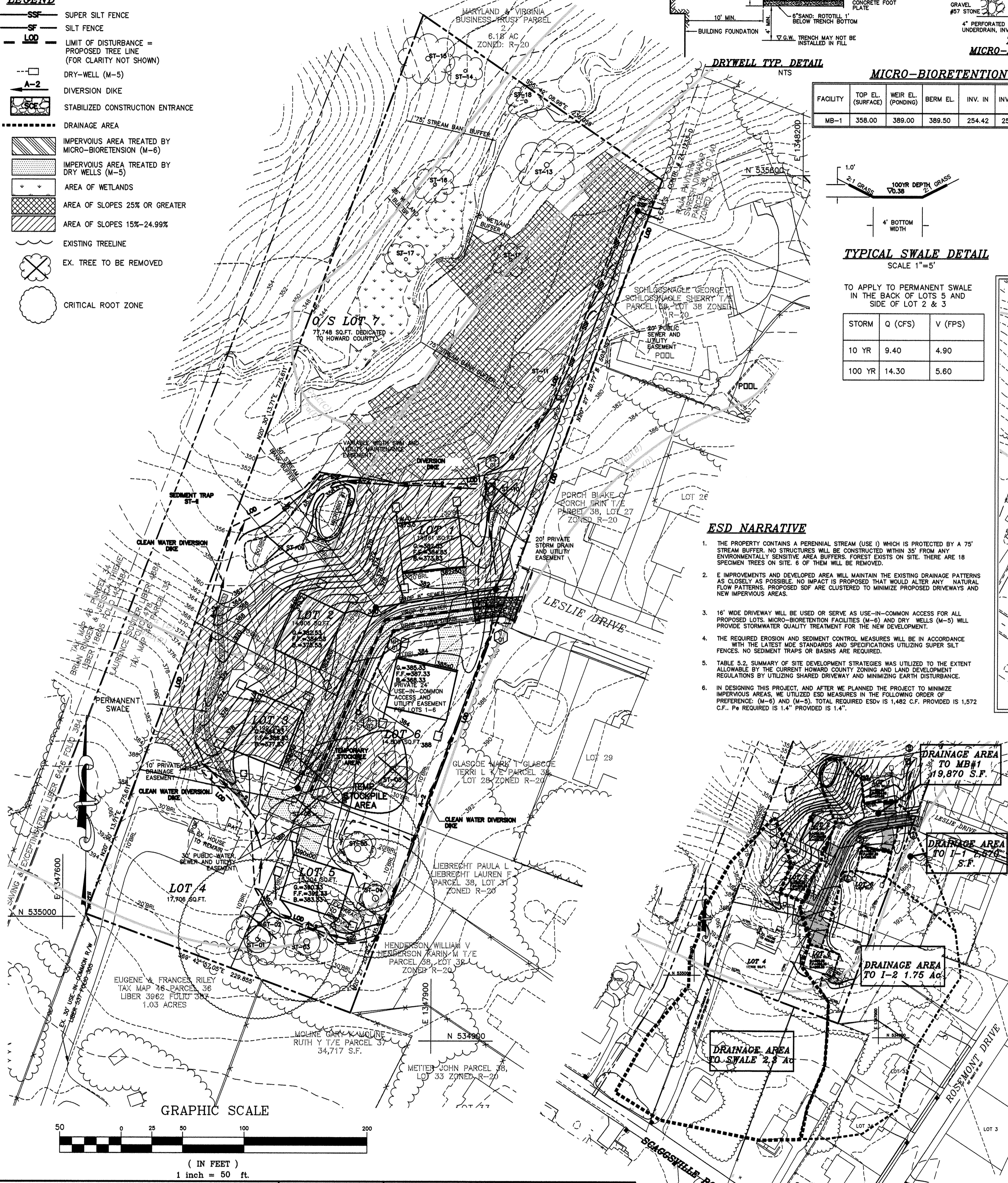
**SWM PRACTICES SCHEDULE**

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.



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

- GENERAL NOTES:**
- SITE ANALYSIS DATA:  
ADDRESS: 10504A SCAGGSVILLE ROAD, LAUREL MD 20723  
LOCATION: TAX MAP: 46 - PARCEL: P/O 277 TRACT 1 & 2 - GRID 12  
ZONING: R-20  
ELECTION DISTRICT: FOURTH  
DEED REFERENCE: 3962/387, 8581/224  
AREA OF TRACT: 3.94 ACRES  
PROPOSED USE: SFD  
PROPOSED BUILDABLE LOTS: 6 (LOTS 1-6)  
PROPOSED OPEN SPACE LOTS: 1 (OPEN SPACE LOT 7)
  - COORDINATES BASED ON NAD83 MARYLAND COORDINATE SYSTEM AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS NO: 46FA & 47DB  
A. STA. No. 46FA N 535,140.866 E 1,348,962.690 EL. 403.650  
STA. No. 47DB N 1,348,131.250 E 1,348,473.250 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.
  - 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.
  - APPROVAL OF THIS ECP DOES NOT CONSTITUTE ANY APPROVAL OF SUBSEQUENT SUBDIVISION OR SITE DEVELOPMENT PLANS. FURTHER COMMENTS WILL BE GENERATED UPON REVIEW OF THE APPLICABLE DEVELOPMENT PLANS IN ACCORDANCE WITH THE SUBDIVISION AND ZONING REGULATIONS. 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.
  - 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 4, GARAGE ON LOT 5 TO BE REMOVED.
  - NO CEMETERIES OR HISTORIC STRUCTURES EXIST ON SITE.
  - SLOPES GREATER THAN 15% HAVE BEEN SHOWN ON SITE.
  - THIS PROJECT IS SUBJECT TO ALTERNATIVE COMPLIANCE WP-20-013 OF SECTION 16.120(C)(2), 16.121(C)(2) AND 16.1205(C)(3). IT WAS APPROVED BY THE DIRECTOR OF THE DEPARTMENT OF PLANNING AND ZONING, DIRECTOR OF THE DEPARTMENT OF RECREATION AND PARKS AND ADMINISTRATOR OF THE OFFICE OF COMMUNITY SUSTAINABILITY ON April 2, 2020. APPROVAL IS SUBJECT TO THE FOLLOWING CONDITIONS:



**SEDIMENT CONTROL DRAINAGE AREA MAP**  
SCALE: 1"=100'

**ESD NARRATIVE**

- THE PROPERTY CONTAINS A PERENNIAL STREAM (USE 1) WHICH IS PROTECTED BY A 75' STREAM BUFFER. NO STRUCTURES WILL BE CONSTRUCTED WITHIN 35' FROM ANY ENVIRONMENTALLY SENSITIVE AREA BUFFERS. FOREST EXISTS ON SITE. THERE ARE 18 SPECIMEN TREES ON SITE & 6 OF THEM WILL BE REMOVED.
- IMPROVEMENTS AND DEVELOPED AREA WILL MAINTAIN THE EXISTING DRAINAGE PATTERNS AS CLOSELY AS POSSIBLE. NO IMPACT IS PROPOSED THAT WOULD ALTER ANY NATURAL FLOW PATTERNS. PROPOSED SSF ARE CLUSTERED TO MINIMIZE PROPOSED DRIVEWAYS AND NEW IMPERVIOUS AREAS.
- 16' WIDE DRIVEWAY WILL BE USED OR SERVE AS USE-IN-COMMON ACCESS FOR ALL PROPOSED LOTS. MICRO-BIORETENTION FACILITIES (M-6) AND DRY WELLS (M-5) WILL PROVIDE STORMWATER QUALITY TREATMENT FOR THE NEW DEVELOPMENT.
- THE REQUIRED EROSION AND SEDIMENT CONTROL MEASURES WILL BE IN ACCORDANCE WITH THE LATEST MDE STANDARDS AND SPECIFICATIONS UTILIZING SUPER SILT FENCES. NO SEDIMENT TRAPS OR BASINS ARE REQUIRED.
- TABLE 5.2, SUMMARY OF SITE DEVELOPMENT STRATEGIES WAS UTILIZED TO THE EXTENT ALLOWABLE BY THE CURRENT HOWARD COUNTY ZONING AND LAND DEVELOPMENT REGULATIONS BY UTILIZING SHARED DRIVEWAY AND MINIMIZING EARTH DISTURBANCE.
- IN DESIGNING THIS PROJECT, AND AFTER WE PLANNED THE PROJECT TO MINIMIZE IMPERVIOUS AREAS, WE UTILIZED ESD MEASURES IN THE FOLLOWING ORDER OF PREFERENCE: (M-6) AND (M-5). TOTAL REQUIRED ESDV IS 1,482 C.F., PROVIDED IS 1,572 C.F., P# REQUIRED IS 1.4, PROVIDED IS 1.4.

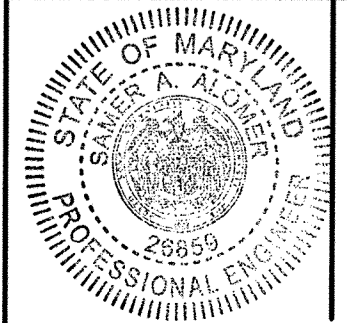
**SPECIMEN TREE CHART**

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	TO REMAIN ON OPEN SPACE LOT 7	22553
ST-12	CHESTNUT OAK	31	46.5	TO REMAIN ON OPEN SPACE LOT 7	6789
ST-13	CHESTNUT OAK	48.5	72.75	TO REMAIN ON OPEN SPACE LOT 7	16619
ST-14	CHESTNUT OAK	30	45	TO REMAIN ON OPEN SPACE LOT 7	6359
ST-15	CHESTNUT OAK	46.5	69.75	TO REMAIN ON OPEN SPACE LOT 7	15276
ST-16	CHESTNUT OAK	33	49.5	TO REMAIN ON OPEN SPACE LOT 7	7694
ST-17	TULIP POPLAR	37	55.5	TO REMAIN ON OPEN SPACE LOT 7	9672
ST-18	TULIP POPLAR	30	45	TO REMAIN 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. ADDITIONAL TREE REPLANTING MAYBE REQUIRED IF THE TREES DESIGNATED TO BE SAVED ON LOT 5 PERISH DURING CONSTRUCTION. THE ADDITIONAL REPLANTING WILL BE DONE A 2:1 RATIO WITH CALIBER OF 3" MIN.
  - 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 SFP PLANS AND TO AERATE THE SOIL.

- TREE PRESERVATION RECOMMENDATIONS**
- AFTER THE LIMIT OF DISTURBANCE (LOD) IS ESTABLISHED, TREES 1 AND 3-5 SHOULD BE PRUNED, THINNED AND THE DEADWOOD REMOVED. ST-02 TO BE 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 20-20-20B NUTRI-LEAF AND APPROXIMATELY 50 LBS. OF POWDER BLUE 38-0-0 SHOULD BE USED. THIS RESULTS IN A 4-4-1 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 APPLIED BY PROJECT MANAGER. NOTE: NOT MORE THAN 50% 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 HAZARD 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.

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 7/23/20  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 7/19/2020



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  
 DATE: 7.9.2020  
 SAMER A. ALOMER P.E.

**DEVELOPER**  
 LAND DESIGN & DEVELOPMENT  
 8318 FORREST STREET - SUITE 200  
 ELLICOTT CITY, MD 21043  
 PHONE 410-707-7054

project	date	description	scale	approval
19-004	APRIL 2019	illustration	SAA	SAH

no.	description	revisions

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

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