

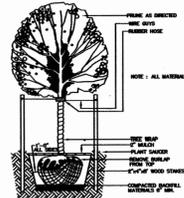
SCHEDULE A - PERIMETER LANDSCAPE EDGE

CATEGORY	ADJACENT TO PERIMETER PROPERTIES	TOTAL
LANDSCAPE TYPE	A (PERIMETER 1) 148.29 LF A (PERIMETER 2)* 298.96 LF	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET)	N/A	CREDIT FOR 1 SHADE TREE
NUMBER OF PLANTS REQUIRED	3 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS	5 SHADE TREES 0 EVERGREEN TREES 0 SHRUBS
NUMBER OF PLANTS PROVIDED	3 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS	9 SHADE TREES 0 EVERGREEN TREES 0 SUBSTITUTION TREES 0 SHRUBS

* CREDIT TAKEN FOR ONE EXISTING TREE 22" MAPLE. TWO ADDITIONAL SHADE TREES HAVE BEEN PROVIDED AS PER CONDITION OF WP-14-116 APPROVAL.

PERIMETER LANDSCAPE REQUIREMENT PLANTING SCHEDULE

QUANTITY	SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
9	○	PRUNUS SARGENTI OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL.	SARGENT CHERRY OR EQUIVALENT AS OUTLINED IN THE HOWARD COUNTY LANDSCAPE MANUAL.	2.5"-3" CAL.
TOTAL	9 TREES (9 SHADE TREES)			

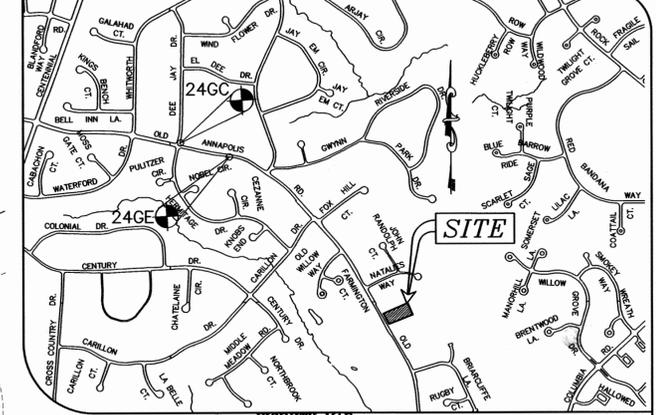
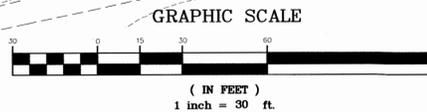
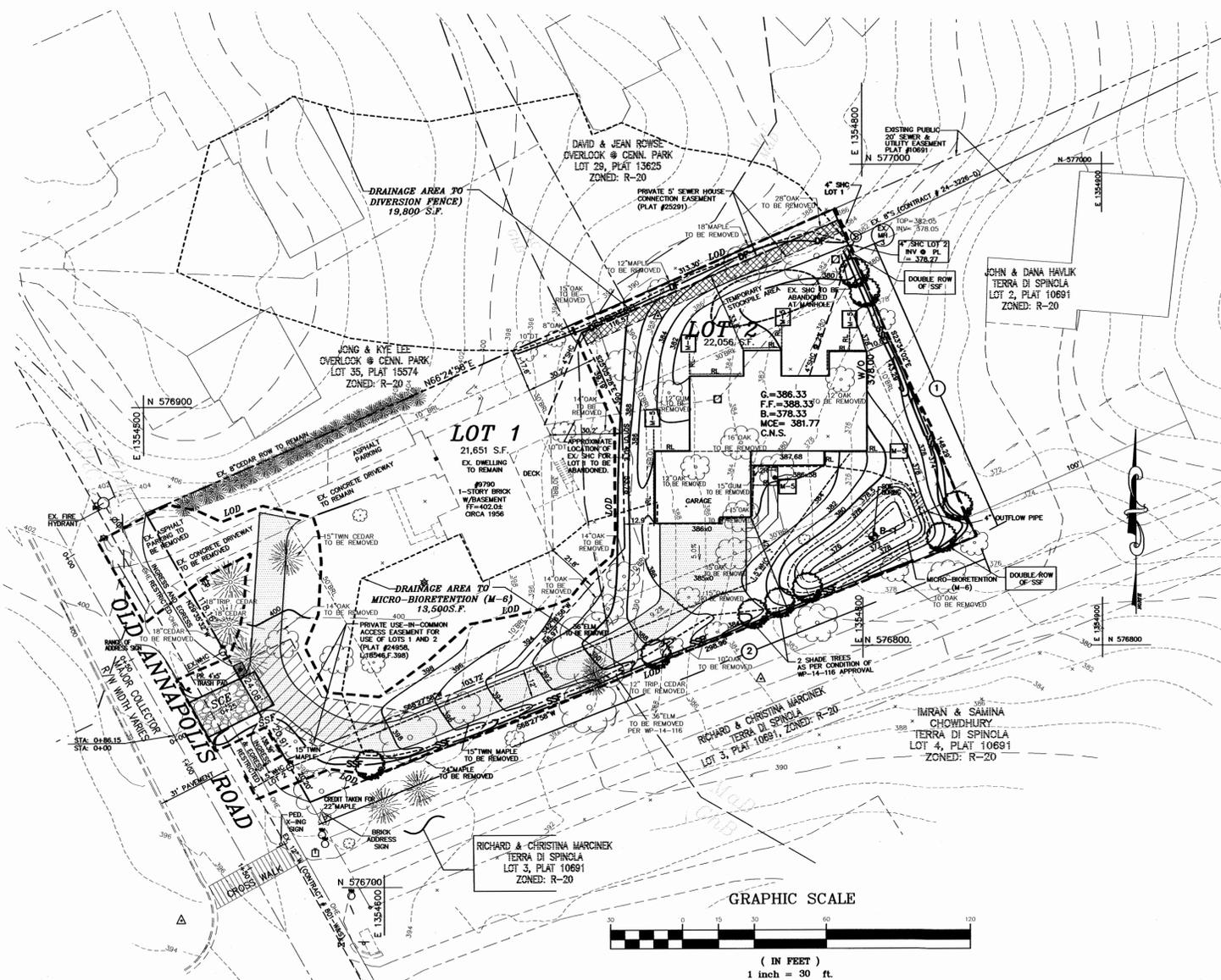


DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE

EXISTING ENTRANCE AND PART OF THE EXISTING DRIVEWAY WILL BE REMOVED PRIOR TO ISSUANCE OF OCCUPANCY PERMIT FOR THE HOUSE ON LOT 2

SOILS TABLE

SYMBOL/RATING	NAME	K FACTOR	MAP #
GhB (B)	GLENELG-URBAN LAND COMPLEX, 8-15% SLOPES	.28	18
MoC (B)	MANOR LOAM, 8-15% SLOPES	.28	18
MoD (B)	MANOR LOAM, 15-25% SLOPES	.28	18



GENERAL NOTES:

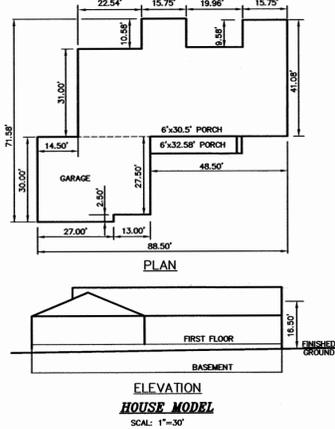
- SUBJECT PROPERTY ZONED "R-20" PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARD AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- SITE ANALYSIS DATA:**
ADDRESS: 9792 OLD ANNAPOLIS RD, ELLICOTT CITY, MD 21042
TAX MAP: 24, PARCEL: 477 GRID: 21, LOT: 2
ELECTION DISTRICT: SECOND
ZONING: R-20
TOTAL AREA: 22,056 S.F.
PROPOSED USE FOR SITE: RESIDENTIAL
TOTAL NUMBER OF LOTS: 2
TYPE OF PROPOSED UNIT: SFD
NUMBER OF PARKING SPACES REQUIRED: 2.5 SPACES (3 IN GARAGE+ 2 DRIVEWAY)
COUNTY FILE NUMBERS: ECP-14-002, F-89-152, F-14-082, WP-14-116, F-20-040.
LIMIT OF DISTURBANCE: 0.70 AC.
- THE EXISTING TOPOGRAPHY IS TAKEN FROM FIELD RUN SURVEY WITH TWO FOOT CONTOUR INTERVALS PREPARED BY MILDENBERG, BOENDER & ASSOC., INC. DATED SEPTEMBER 2013.
- HORIZONTAL AND VERTICAL DATUMS ARE RELATED TO THE MARYLAND STATE PLANE COORDINATE SYSTEM AS PROJECTED FROM HOWARD COUNTY CONTROL STATIONS NO. 240C AND 24GE
STA. 240C N 578,868.875, E 1,352,120.760 EL. 438.772
STA. 24GE N 578,706.500, E 1,352,699.732 EL. 445.609
- IN ACCORDANCE WITH SECTION 12B.0 OF THE HOWARD COUNTY ZONING REGULATIONS, BAY WINDOWS, CHIMNEYS OR EXTERIOR STAIRWAYS NOT MORE THAN 16 FEET IN WIDTH MAY PROJECT NOT MORE THAN 4 FEET INTO ANY SETBACK. PORCHES OR DECKS, OPEN OR ENCLOSED, MAY PROJECT THE FRONT OR REAR YARD SETBACK.
- DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO ENSURE 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 (1-1/2").
C) GEOMETRY-MAX. 15% GRADE, MAX. 10% GRADE CHANGE AND MIN. 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 PLAIN WITH NO MORE THAN 1 FOOT OF DEPTH OVER DRIVEWAY SURFACE.
F) STRUCTURE CLEARANCES - MINIMUM 12 FEET.
G) MAINTENANCE - SUFFICIENT TO ENSURE ALL WEATHER USE.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION ACT FOR THIS SUBDIVISION HAVE BEEN FULFILLED BY PAYMENT OF THE FEE-IN-LIEU IN THE AMOUNT OF \$4,900.00 UNDER F-14-082.
- LANDSCAPING FOR LOT 2 IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. FINANCIAL SURETY FOR THE REQUIRED SHADE TREES (9 SHADE TREES) IN THE AMOUNT OF \$2,700.00 WILL BE POSTED WITH THE GRADING PERMIT.
- THE OWNER, TENANT, AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING, INCLUDING BOTH PLANT MATERIALS AND BERMES, 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 OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO CEMETERIES OR HISTORIC FEATURES/STRUCTURES LOCATED ON THIS SITE.
- NO WETLANDS, FLOODPLAIN, STREAMS AND ITS BUFFERS EXIST ON SITE AS CERTIFIED IN THE ENVIRONMENTAL REPORT PREPARED BY ECO-SCIENCE PROFESSIONALS, INC. ON AUGUST 2014.
- NO AREA OF STEEP SLOPES 15% OR GREATER EXIST ON SITE.
- STORMWATER MANAGEMENT FOR THIS PROJECT HAS BEEN PROVIDED VIA MICRO-BIORETENTION (M-6) FACILITIES, AND DRY WELLS (M-5) WHICH WILL BE PRIVATELY OWNED AND MAINTAINED.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 48 HOURS PRIOR TO EXCAVATION WORK BEING DONE:
MISS UTILITY 800-257-7777
VERIZON TELEPHONE COMPANY (410) 725-9978
HOWARD COUNTY BUREAU OF UTILITIES (410) 313-4900
AT&T CABLE LOCATION DIVISION (410) 393-3533
BALTIMORE GAS AND ELECTRIC (410) 685-0123
STATE HIGHWAY ADMINISTRATION (410) 531-5533
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT (410) 313-1800 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- ANY DAMAGE TO THE COUNTY'S RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- SHC ELEVATION SHOWN IS LOCATED AT THE PROPERTY LINE.
- FOR DRIVEWAY ENTRANCE DETAIL, REFER TO THE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD DETAIL R-6.06.
- THE OPEN SPACE REQUIREMENT, BASED ON THE CREATION OF 1 NEW LOT, HAS BEEN SATISFIED BY PAYMENT OF A FEE-IN-LIEU, IN THE AMOUNT OF \$1,500.00 UNDER F-14-082.
- THIS SUBDIVISION IS IN THE METROPOLITAN DISTRICT. WATER AND SEWER ARE PUBLIC (CONTRACT # 801-WES AND 24-3226-D).
- THIS PROJECT IS SUBJECT TO THE MIHU FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.
- FOR FLAG OR PIPESTEM LOTS, REFUSE COLLECTION, SNOW REMOVAL AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPESTEM LOT AND ROAD RIGHT-OF-WAY LINE AND NOT ON TO THE PIPESTEM LOT DRIVEWAY.
- THIS PLAN IS SUBJECT TO WP-14-116, SEEKING AN ALTERNATIVE COMPLIANCE TO SECTIONS 16.1205(a)(7) WHICH STATES THAT STATE CHAMPION TREES, TREES 75% OF THE DIAMETER OF STATE CHAMPION TREES AND TREES 30" IN DIAMETER OR LARGER SHALL BE LEFT IN AN UNDISTURBED CONDITION DURING CONSTRUCTION. THIS ALTERNATIVE COMPLIANCE WAS APPROVED ON MAY 19, 2014, SUBJECT TO THE FOLLOWING CONDITIONS:
1. ADD REFERENCE TO THIS WAIVER PETITION IN THE GENERAL NOTES.
2. SHOW THE 1 SPECIMEN TREE BEING REMOVED AND LABELED PER WP-14-116 ON THE SUPPLEMENTAL PLAN. THE SPECIMEN TREE REMOVAL WILL BE MITIGATED BY THE PLANTING OF 1 PERIMETER LANDSCAPE TREE OF 3" TO 4" CALIPER IN ADDITION TO THE REQUIRED LANDSCAPING.
- PRE-SUBMISSION COMMUNITY MEETING WAS HELD ON AUGUST 19, 2016 AT 6:00 PM AT THE MILLER LIBRARY.
- EXISTING UTILITIES ARE BASED ON AS-BUILT PLANS FOR WATER AND SEWER CONTRACTS AND ARE VERIFIED BY MILDENBERG, BOENDER & ASSOC., INC.
- A USE-IN-COMMON DRIVEWAY MAINTENANCE AGREEMENT HAS BEEN RECORDED AMONG THE LAND RECORDS FOR HOWARD COUNTY AS LIBER 18546, FOLIO 398.
- GRAVITY SEWER SERVICE, FIRST FLOOR ONLY. BASEMENT SERVICE TO BE PROVIDED BY PRIVATE ON-SITE PUMP.
- THIS PLAN IS SUBJECT TO DESIGN MANUAL DMV2-20-002 TO SECTION 4.3.B.3.b OF DESIGN MANUAL VOLUME I WHICH REQUIRES TO PROVIDE GRAVITY SEWER SERVICE TO THE BASEMENT. APPROVED ON FOLLOWING CONDITION:
- PROVIDE 10' SEWER HOUSE CONNECTION EASEMENT FOR LOT 1.
- ADD NOTE TO THE PLAN (SEE NOTE 28).
- THE ORIGINALS ONLY PLAT, PREPARED UNDER F-20-040, DUNWOODY PROPERTY, WAS RECORDED ON JANUARY 10, 2020 TO CREATE A 5' WIDE PRIVATE SEWER HOUSE CONNECTION AND UTILITY EASEMENT ON LOT 2 FOR THE USE AND BENEFIT OF LOT 1.

LEGEND

- LOD --- LIMIT OF DISTURBANCE
- SSF --- SUPER SILT FENCE
- SF --- SILT FENCE
- SCE --- STABILIZED CONSTRUCTION ENTRANCE
- DRAINAGE AREA TO MICRO-BIORETENTION
- OHE --- EX. OVERHEAD POWER LINE
- DF --- DIVERSION FENCE
- PRIVATE USE-IN-COMMON AND UTILITY EASEMENT
- PROPOSED PAVEMENT
- DW --- DRY WELL (M-5)
- WWC --- WATER HOUSE CONNECTION
- WM --- WATER METER

INDEX OF DRAWINGS

NO.	DESCRIPTION
1	SITE DEVELOPMENT PLAN
2	SWM DETAILS
3	SEDIMENT CONTROL NOTES AND DETAILS



SWM PRACTICE CHART

LOT	ADDRESS	DRY WELLS (NUMBER)	MICRO-BIORETENTION (NUMBER)
2	9792 OLD ANNAPOLIS ROAD	6	1

ADDRESS CHART

LOT	ADDRESS
2	9792 OLD ANNAPOLIS ROAD

MIHU TRACKING CHART

TOTAL NUMBER OF LOTS/UNITS	1
NUMBER OF MIHU REQUIRED	0
NUMBER OF MIHU PROVIDED ON-SITE (EXEMPT FROM APFO ALLOCATIONS)	0
NUMBER OF APFO ALLOCATION REQUIRED (REMAINING LOTS/UNITS)	0
MIHU FEE-IN-LIEU (INDICATED LOT/UNIT NUMBERS)	2

LOT 2 IN THIS PROJECT IS SUBJECT TO THE MODERATE INCOME HOUSING UNIT (MIHU) FEE-IN-LIEU REQUIREMENT THAT IS TO BE CALCULATED AND PAID TO THE DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS AT THE TIME OF BUILDING PERMIT ISSUANCE BY THE PERMIT APPLICANT.

PERMIT INFORMATION BLOCK

SUBDIVISION NAME:	SECTION/AREA:	PARCEL:			
DUNWOODY PROPERTY	N/A	477			
PLAT NO.	BLOCK(S)	ZONING	TAX MAP NO.	ELECTION DISTRICT	CENSUS TRACT
24958	21	R-20	24	SECOND	602304

DEVELOPER'S CERTIFICATE
I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: *Dunwoody* DATE: 2/20/20

ENGINEER'S CERTIFICATE
I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature: *R. Jacob Hikmat P.E.* DATE: 2/27/20

OWNER
AARON DUNWOODY
9794 OLD ANNAPOLIS ROAD
ELlicott CITY, MARYLAND 21042
703-989-7725

Signature: *Aaron Dunwoody* DATE: 4/22/20

APPROVED: DEPARTMENT OF PLANNING AND ZONING
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE: 5-1-20
CHIEF, DIVISION OF LAND DEVELOPMENT DATE: 3/16/2020
DIRECTOR DATE: 5-12-2020

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. 17942 EXP DATE 09/03/20

Signature: *R. Jacob Hikmat P.E.* DATE: 2/29/20

DEVELOPER'S/OWNER'S CERTIFICATE
I/WE CERTIFY THAT THE LANDSCAPING SHOWN ON THIS PLAN WILL BE DONE ACCORDING TO THE PLAN, SECTION 16.124 OF THE HOWARD COUNTY CODE, AND THE HOWARD COUNTY LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION A CERTIFICATION OF LANDSCAPE INSTALLATION, ACCOMPANIED BY AN EXECUTED ONE YEAR GUARANTEE OF PLANT MATERIALS, WILL BE SUBMITTED TO THE DEPARTMENT OF PLANNING AND ZONING.

Signature: *Dunwoody* DATE: 2/26/20

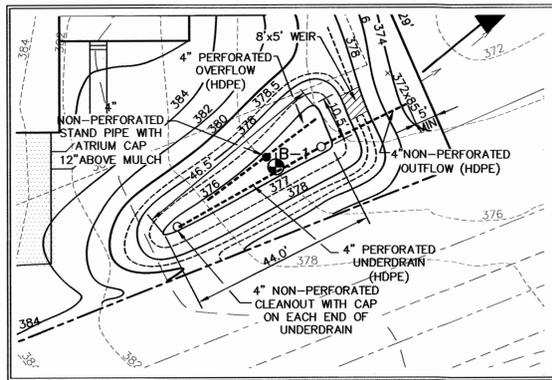
DUNWOODY PROPERTY
SINGLE FAMILY DETACHED
SITE DEVELOPMENT PLAN

2ND. ELECTION DIST. HOWARD COUNTY, MD. TAX MAP 24, GRID 21, PARCEL 477, LOT 2

MILDENBERG, BOENDER & ASSOC., INC.
Engineers, Surveyors, Planners
7860-B Grace Drive, Columbia, Maryland 21044
(410) 997-0288 Fax

DATE: FEB. 2020
PROJECT: 13-022
ILLUSTRATION: MMM
SCALE: 1"=30'
APPROVAL: MMM
REVISIONS: RJH

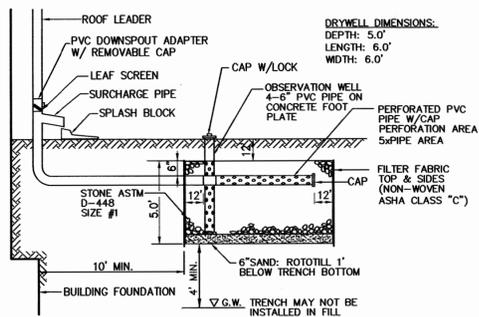
1 OF 3
SDP-20-008



MICRO-BIORETENTION (M-6) PLAN VIEW
SCALE: 1"=20'

MICRO-BIORETENTION (M-6) DESIGN DATA

FACILITY	TOP EL. (SURFACE)	WEIR EL. (PONDING)	BERM EL.	INV. IN.	INV. OUT.	SURFACE AREA	PONDING AREA	PONDING DEPTH	GRAVEL DEPTH BELOW UNDERDRAIN
LOT 2	376.00	378.00	378.50	373.08	372.85	270 S.F.	1,010 S.F.	24"	15"

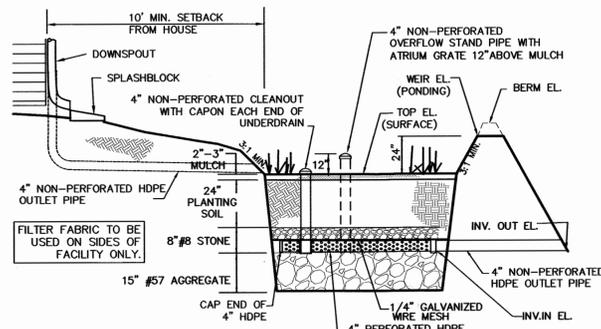


TYP. DRYWELL (M-5) DETAIL
NOT TO SCALE

NOTE: ALL ROOF LEADERS MUST BE CONNECTED TO THE DRYWELLS

OPERATION AND MAINTENANCE SCHEDULE FOR DRY WELLS (M-5)

- THE OWNER SHALL INSPECT THE MONITORING WELLS AND STRUCTURES ON A QUARTERLY BASIS AND AFTER EVERY HEAVY STORM EVENT.
- 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.
- THE OWNER SHALL MAINTAIN A LOG BOOK TO DETERMINE THE RATE AT WHICH THE FACILITY DRAINS.
- WHEN THE FACILITY BECOMES CLOGGED SO THAT IT DOES NOT DRAIN DOWN WITHIN A 72-HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO ENSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.
- 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.

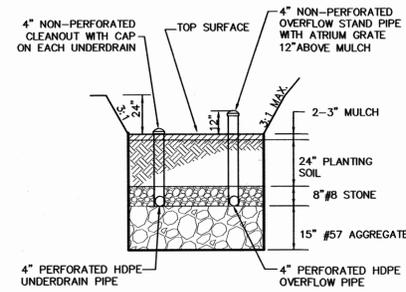


TYP. MICRO-BIORETENTION (M-6) DETAIL
NOT TO SCALE

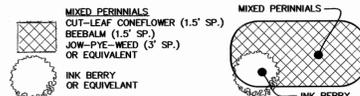
NOTE- THE ENTIRE DRAINAGE AREA MUST BE FULLY STABILIZED BEFORE RUNOFF CAN BE DIRECTED TO THE FACILITY.

NOTE: MICRO-BIORETENTION FACILITY IS DESIGNED TO PROVIDE MAXIMUM VOLUME IN ORDER TO PREVENT ADVERSE IMPACT ON DOWNSTREAM PROPERTIES. PONDING DEPTH AND HEIGHT OF STAND PIPE EXCEEDS REQUIRED STANDARDS.

THE 4" OVERDRAIN PIPE IS NOT CONNECTED TO THE UNDERDRAIN PIPE. THIS OVERFLOW PIPE DELIVERS RUNOFF DIRECTLY TO THE STAGE BELOW THE FACILITY ONCE THE FACILITY HAS FILLED 12" .

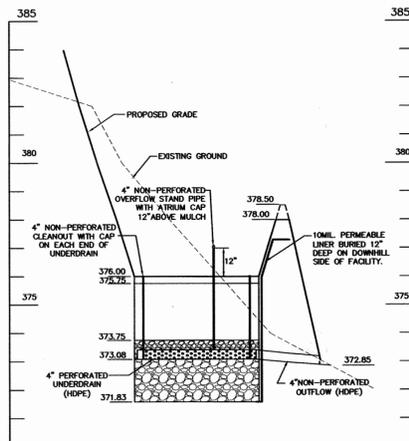


TYP. SECTION MICRO-BIORETENTION (M-6)
NOT TO SCALE



TYP. MICRO-BIORETENTION PLANTING DETAIL
SCALE: 1"=15'

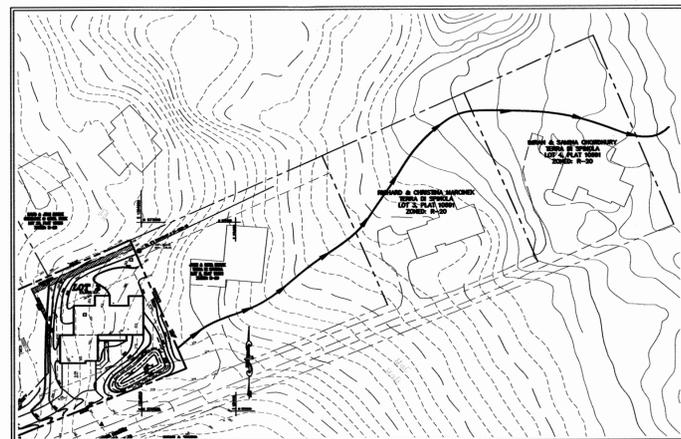
NOTE: PLANT MATERIAL MUST COVER AT LEAST 50% OF THE SURFACE AREA OF THE MICRO-BIORETENTION



CROSS SECTION-MICRO-BIORETENTION (M-6)
SCALE: HOR. 1"=30' VER. 1"=3'

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

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



DOWNHILL FLOW PATTERN
SCALE: 1"=100'

Appendix B.4. Construction Specifications for Environmental Site Design Practices

Material	Specification	Size	Notes
Plantings	see Appendix A, Table A.4	n/a	plantings are site-specific
Planting soil [2' to 4' deep]	loamy sand (60 - 65%) & compost (35 - 40%) or sandy loam (30%), coarse sand (30%) & compost (40%)	n/a	USDA soil types loamy sand or sandy loam; clay content < 5%
Organic content	Min. 10% by dry weight (ASTM D 2974)		aged 6 months, minimum; no pine or wood chips
Mulch	shredded hardwood		
Pea gravel diaphragm	pea gravel: ASTM-D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
Curtain drain	ornamental stone: washed cobbles	stone: 2" to 5"	
Geotextile		n/a	PE Type 1 nonwoven
Gravel (underdrains and infiltration berms)	AASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" TO 3/4")	
Underdrain piping	F 758, Type PS 28 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	Slotted or perforated pipe; 3/8" perf. @ 6" on center, 4 holes per row; minimum of 3" of gravel over pipes; not necessary underneath pipes. Perforated pipe shall be wrapped with 1/4-inch galvanized hardware cloth
Poured in place concrete (if required)	MSHA Mix No. 3; F _c = 3500 psi @ 28 days, normal weight, air-entrained; reinforcing to meet ASTM-615-60	n/a	on-site testing of poured-in-place concrete required: 28 day strength and slump test; all concrete design (cast-in-place or pre-cast) not using previously approved State or local standards requires design drawings sealed and approved by a professional structural engineer licensed in the State of Maryland - design to include meeting ACT Code 350.B.89; vertical loading [H-10 or H-20]; allowable horizontal loading (based on soil pressures); and analysis of potential cracking
Sand	AASHTO-M-6 or ASTM-C-33	0.02" to 0.04"	Sand substitutions such as Diabase and Graystone (AASHTO) #10 are not acceptable. No calcium carbonated or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.

SWM PRACTICES SCHEDULE

AREA	PROPOSED PRACTICES	REQUIRED ESDV	PROVIDED ESDV
LOT 2	M-6, MICRO-BIORETENTION (1 EACH) M-5, DRY WELLS (6 EACH)	540 C.F. 408 C.F.	1,385 C.F. 486 C.F.

GEOTECHNICAL CONSULTANTS, INC.
PRESIDENT: Momin Adnan MSCE, PE. CONSULTANTS: Edward De Smith Eng. C.E., PE. & Dr. Kamal Tamirji Ph.D., PE.

February 9th, 2014

Mildenberg, Boender & Associates, Inc.
6800 Decrath Road, Suite 150
Elkridge, Maryland 21075

Attn: Ms. Maya M. Mildenberg
Vice President

Ref: Limited Subsurface Exploration
Proposed Development
Dunwoody Property
9790 Old Annapolis Road
Howard County, Maryland
GE&T Project No. G-233

Dear Ms. Mildenberg:

On February 1st, 2014, GE&T Consultants, Inc. utilized a hand auger to bore one (1) soil boring at the location shown on the attached Hand-Auger Location Map. The purpose of the hand auger was to evaluate the presence/absence of bedrock and groundwater at the location shown, within 5'-ft below existing site grades. The number, location, and depth of the boring were determined by others and the boring was staked-out in the field by others.

Our field observations are summarized in Table 1 below:

Boring No.	Depth to Groundwater (in)	Depth to Hand-auger Refusal (in)	Termination Depth (in)
B-1	N/A	N/A	63

Note: All depths are below existing site grades

DEVELOPERS CERTIFICATE

I CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Developer: *James Dunwoody* DATE: 2/26/20
PRINTED NAME OF DEVELOPER: JAMES DUNWOODY

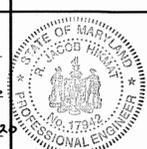
ENGINEER'S CERTIFICATE

I CERTIFY THAT THIS PLAN FOR EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND FEASIBLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Signature of Engineer: *R. Jacob Hikmat* DATE: 2/27/20
PRINTED NAME OF ENGINEER: R. JACOB HIKMAT

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
Signature of Director: *John A. Porter* DATE: 4/22/20
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Signature of Chief: *Elaine* DATE: 5-1-20
CHIEF, DEVELOPMENT ENGINEERING DIVISION
Signature of Chief: *John* DATE: 5/8/2020
CHIEF, DIVISION OF LAND DEVELOPMENT
Signature of Director: *John* DATE: 5-12-2020
DIRECTOR



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. 17942, EXP DATE 09/03/20
Signature: *R. Jacob Hikmat* DATE: 2/27/20
R. JACOB HIKMAT P.E.

DUNWOODY PROPERTY
SINGLE FAMILY DETACHED
2ND. ELECTION DIST. HOWARD COUNTY, MD. TAX MAP 24, GRID 21, PARCEL 477, LOT 2
SWM DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
7860-B Grace Drive, Columbia, Maryland 21044
(410) 997-0296 Tel. (410) 997-0298 Fax.

Project: 13-022
Date: FEB. 2020
Illustration: MAM
Scale: 1"=30'
Approval: RJH

2 OF 3
SDP-20-008

