

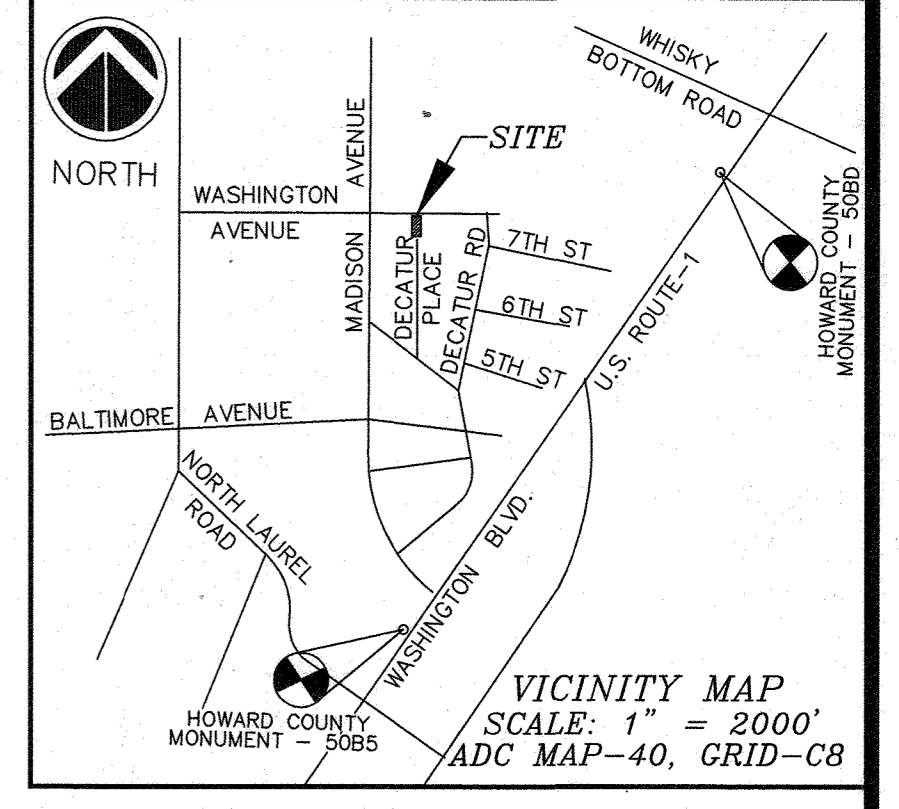
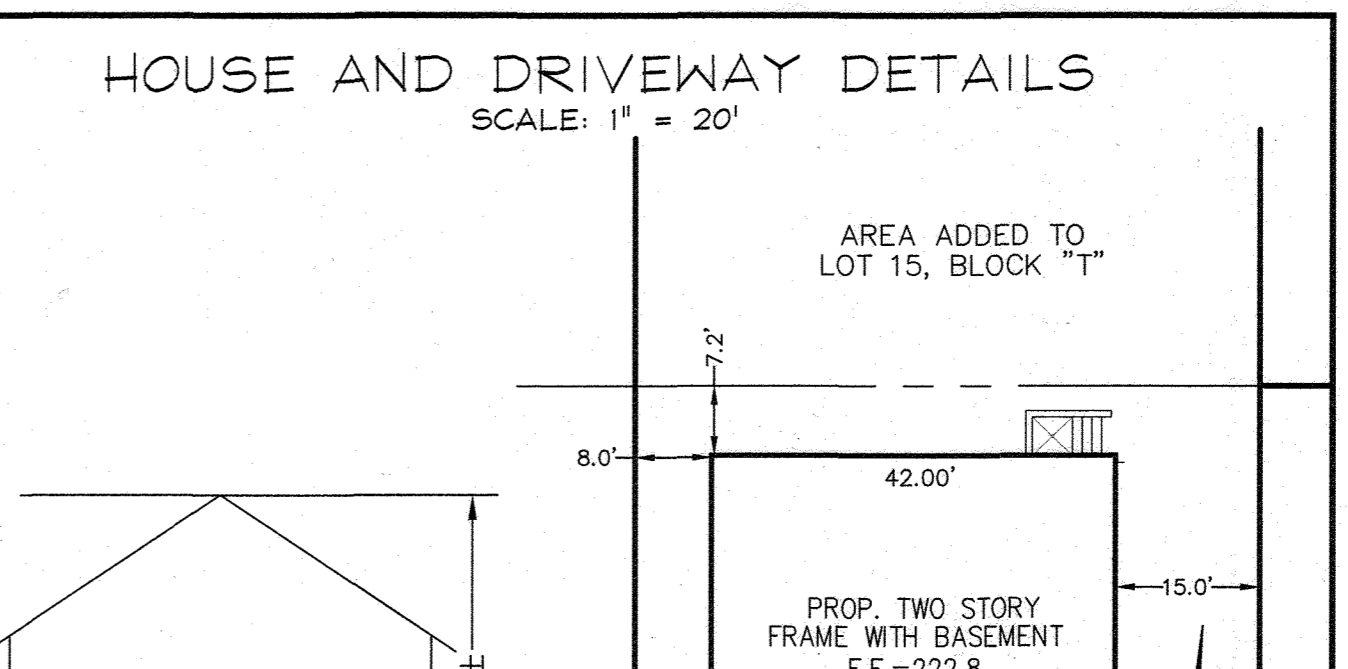
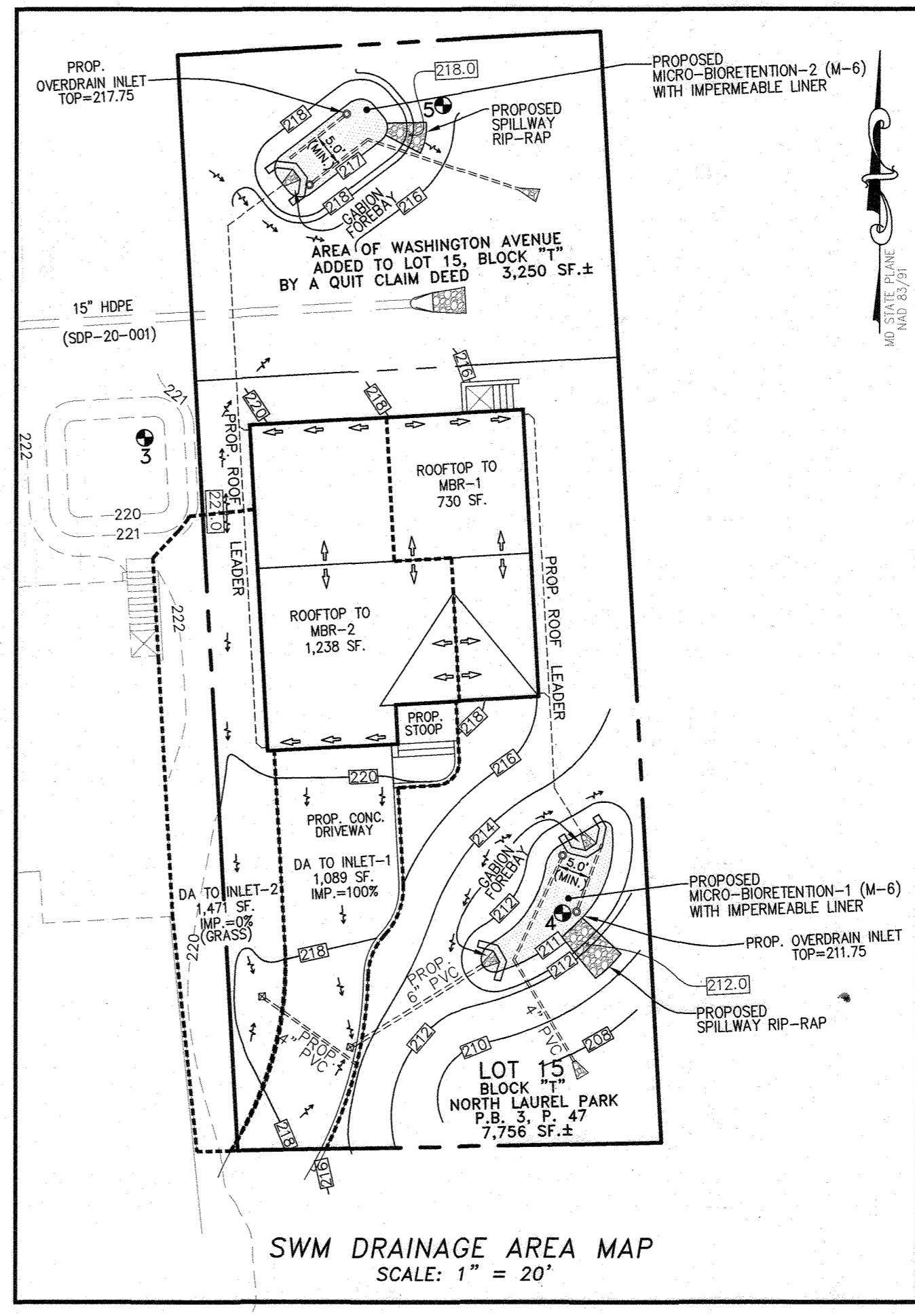
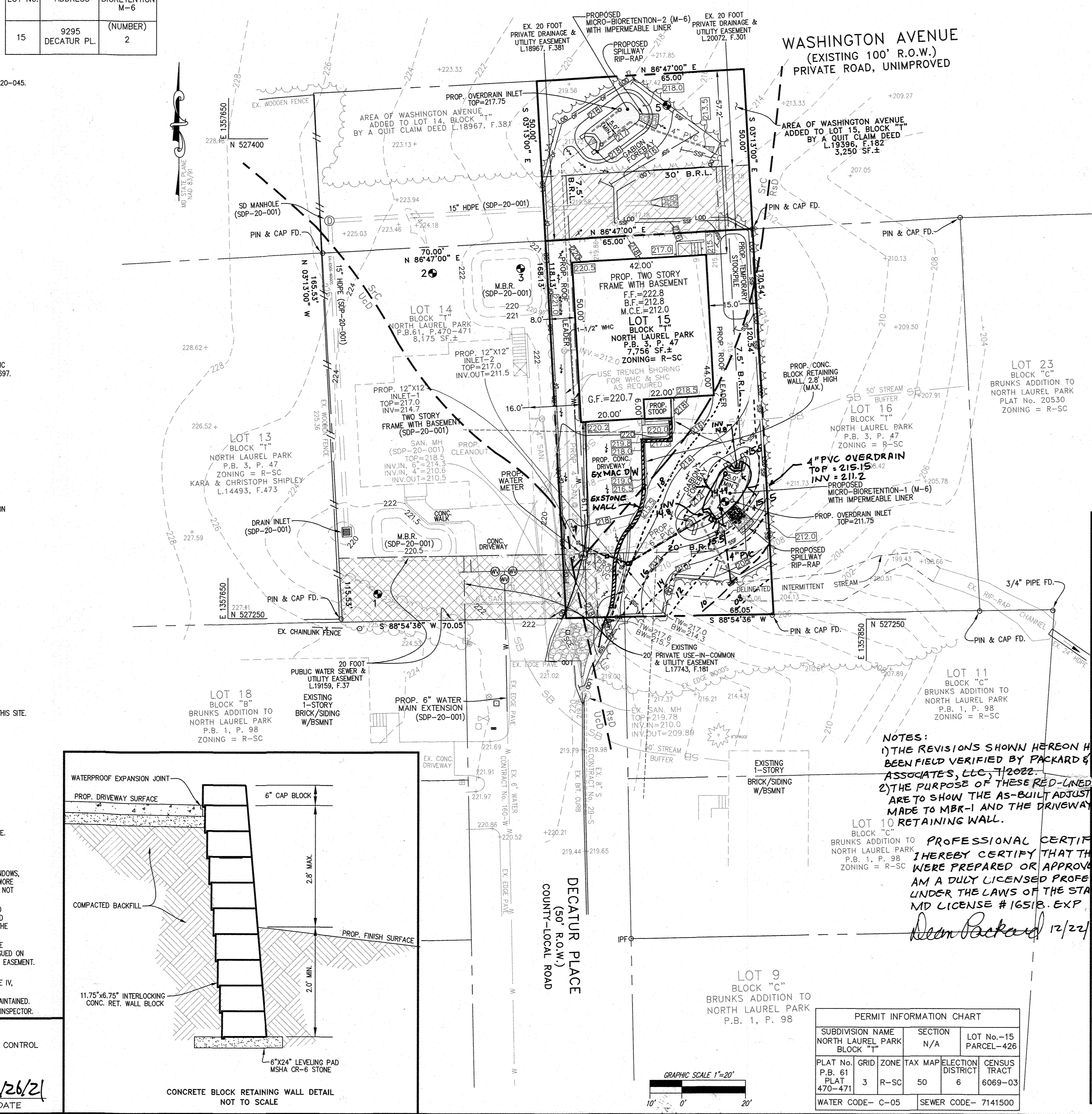
GENERAL NOTES

- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY STANDARDS AND SPECIFICATIONS. ALL WORK AND MATERIALS SHALL COMPLY WITH O.H.S.A. STANDARDS.
- THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK.
- THE CONTRACTOR IS TO NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST FIVE DAYS BEFORE STARTING WORK ON THESE DRAWINGS:
 MISS UTILITY: 1-800-257-7777
 VERIZON: 1-800-745-0033
 BUREAU OF UTILITIES: 410-313-4900
 A.T. & T.: 1-800-252-1133
 B.G.A.E. (EMERGENCY): 410-685-0103
 B.G.A.E. (CONSTRUCTION SERVICES): 410-637-8713
 STATE HIGHWAY ADMINISTRATION: 410-531-5533
 COLONIAL PIPELINE CO.: 410-795-1390
- SITE ANALYSIS:**
 TOTAL PROJECT AREA: 0.253 AC.
 PRESENT ZONING: R-SC
 USE OF STRUCTURE: RESIDENTIAL
 BUILDING COVERAGE: 1,968 SF (0.05 AC)
 PAVED AREA ON SITE: 1,126 SF (0.03 AC)
 LIMIT OF DISTURBANCE AREA: 0.223 AC
 CUT: 350 CY FILL: 180 CY

SOIL TABLE					
SYMBOL	NAME/DESCRIPTION	TYPE	HYDROLOGIC K VALUE	HIGHLY ERODIBLE	
SrC	Sassafras & Croom 5 to 10% slopes	B	YES	0.28	NO
UcD	Urban land-Chillum-Beltsville Complex, 5 to 15% slopes	C	YES	0.37	YES
RsD	Russett Fine Sandy Loom 10 to 15% slopes	C	NO	0.43	NO

STORMWATER MANAGEMENT PRACTICES CHART		
LOT No.	ADDRESS	MICRO-BIORETENTION (NUMBER)
15	9295 DECATUR PL	2

SITE DEVELOPMENT PLAN NORTH LAUREL PARK LOT 15 BLOCK "T" SARAH A. ABRAHIM PROPERTY 9295 DECATUR PLACE



- LEGEND**
- EX. SANITARY SEWER MANHOLE
 - EX. WATER VALVE
 - EX. LIGHT POLE
 - EX. WOOD POST
 - EX. TELEPHONE/CABLE PEDESTAL
 - EX. MAILBOX
 - EX. GAS VALVE
 - EX. EVERGREEN TREE
 - PROP. WATER VALVE
 - PROP. WATER METER
 - PROP. SANITARY SEWER CLEANOUT
 - PROP. SPOT ELEVATION
 - EX. CONTOUR
 - PROP. CONTOUR
 - EX. EDGE WOODED AREA
 - EX. EDGE WOODED AREA
 - PROP. SUPER SILT FENCE
 - PROP. SILT FENCE
 - PROP. LIMIT OF DISTURBANCE
 - PROP. DRAINAGE DIVIDE
 - EX. WOOD FENCE
 - EX. CHAINLINK FENCE
 - EX. SOIL TYPE DIVISION LINE
 - EX. DELINEATED INTERMITTENT STREAM LINE
 - EX. 50' STREAM BUFFER LINE
 - DRAINAGE AREA LIMITS
 - PUBLIC SEWER AND UTILITY EASEMENT
 - PROP. STABILIZED CONSTRUCTION ENTRANCE
 - PRIVATE DRAINAGE AND UTILITY EASEMENT
 - SOIL BORING LOCATION

PROPOSED IMPERVIOUS AREA ON LOT	
BUILDING	1,968 SF.
DRIVEWAY	968 SF.
WALK & STOOP	121 SF.
AREAWAY	37 SF.
TOTAL	3,094 SF.

SITE ANALYSIS DATA CHART	
AREA OF LOT 15	= 0.178 ACRES (7,756 SF.)
AREA ACQUIRED BY QUITCLAIM	= 0.075 ACRES (3,250 SF.)
TOTAL PROPERTY AREA	= 0.253 ACRES (11,006 SF.)
TOTAL AREA WITHIN THE LIMIT OF DISTURBANCE	= 0.223 ACRES (9,718 SF.)
OFFSITE AREA WITHIN LIMIT OF DISTURBANCE	= 0.007 ACRES (309 SF.)
PROPERTY AREA WITHIN LIMIT OF DISTURBANCE	= 0.216 ACRES (9,409 SF.)
TOTAL PROPERTY IMPERVIOUS AREA PROPOSED	= 0.071 ACRES (3,094 SF.)
PROPOSED GREEN/OPEN AREA	= 0.145 ACRES (6,315 SF.)
SITE USE	= SINGLE FAMILY DETACHED
SITE AREA WITHIN WETLAND	= 0 ACRES
SITE AREA WITHIN 25' WETLAND BUFFER	= 0 ACRES
SITE AREA OF STEEP SLOPES (15% or greater)	= 0.096 ACRES
SITE AREA OF ERODIBLE SOILS	= 0 ACRES
SITE AREA WITHIN 100-YR FLOODPLAIN	= 0 ACRES
SITE AREA WITHIN STREAM BUFFER	= 0.088 ACRES

ADDRESS CHART	
LOT NUMBER	STREET ADDRESS
15	9295 DECATUR PLACE

SHEET INDEX		
DESCRIPTION	SHEET No.	
SITE LAYOUT, GRADING, SOIL EROSION AND SEDIMENT CONTROL PLAN	1 OF 3	
SITE DETAILS AND NOTES	2 OF 3	
LANDSCAPE PLAN, DETAILS AND NOTES	3 OF 3	

NOTES:

- THE REVISIONS SHOWN HEREON HAVE BEEN FIELD VERIFIED BY PACKARD & ASSOCIATES, LLC, 1/2022.
- THE PURPOSE OF THESE RED-LINED REVISIONS ARE TO SHOW THE AS-BUILT ADJUSTMENTS MADE TO MBR-1 AND THE DRIVEWAY RETAINING WALL.

PROFESSIONAL CERTIFICATION
 I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND. MD LICENSE # 16518. EXP 6/10/2023.
Dean Packard 12/22/2022

PERMIT INFORMATION CHART			
SUBDIVISION NAME	SECTION	LOT No.-15	PARCEL-426
NORTH LAUREL PARK BLOCK "T"	N/A		
PLAT No. 61	GRID ZONE TAX MAP ELECTION DISTRICT		
P.B. 61	3 R-SC 50	6	6069-03
PLAT 470-471			
WATER CODE- C-05	SEWER CODE- 7141500		

APPROVED: HOWARD SOIL CONSERVATION DISTRICT
 THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Alexander Butchko 02/26/21
 HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 CHIEF, DEVELOPMENT ENGINEERING DIVISION 3/18/21 DATE
 CHIEF, DIVISION OF LAND DEVELOPMENT 3/19/21 DATE
 DIRECTOR 3/22/21 DATE

REVISIONS	
No.	DATE
1	02/26/21
2	3/18/21
3	3/19/21
4	3/22/21

PLAN PREPARED BY:
NJR & ASSOCIATES
 Land Surveying and Planning
 2770 STATE ROUTE 32
 WEST FRIENDSHIP, MD 21794
 TEL: (240) 608-3200

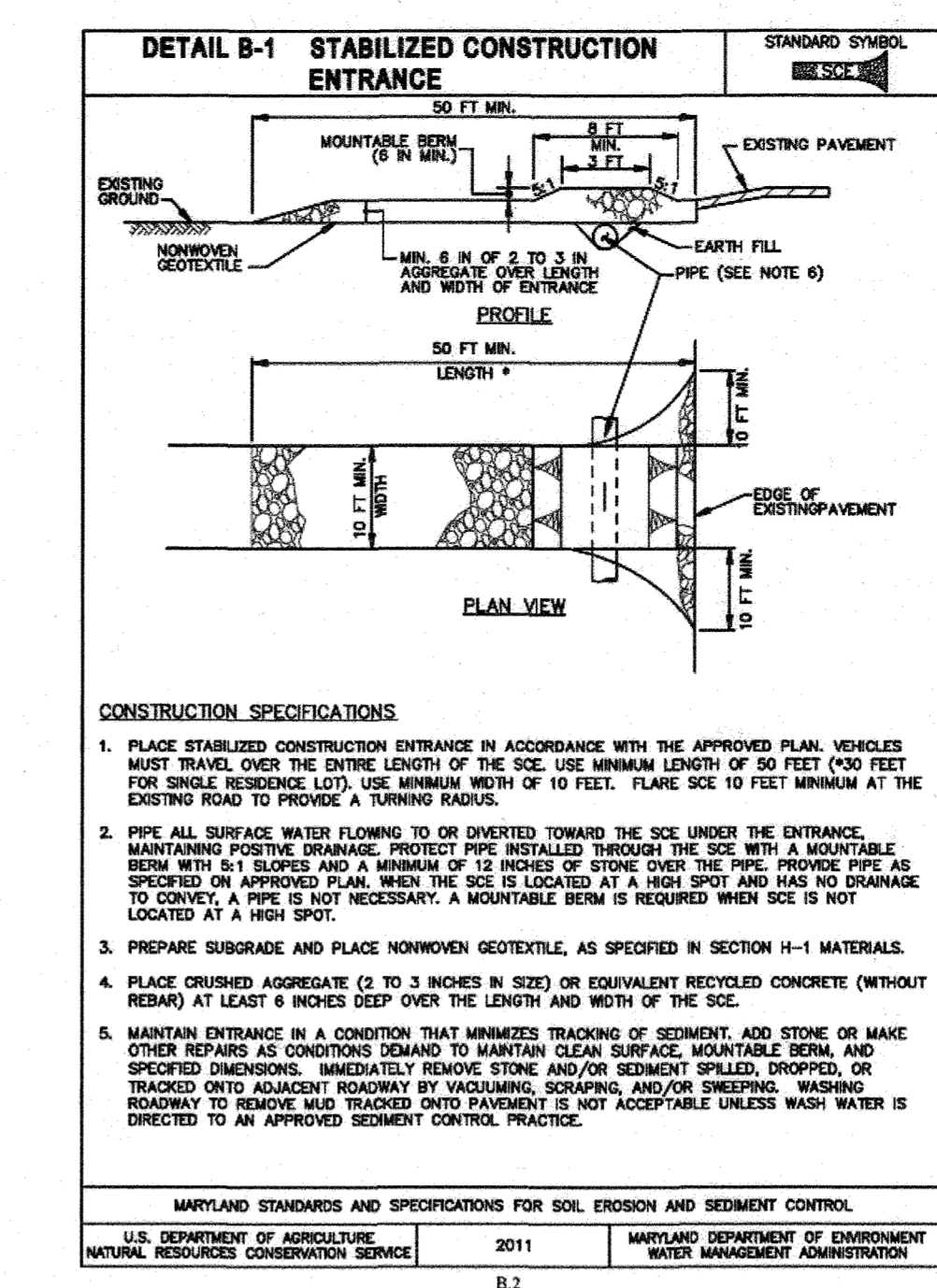
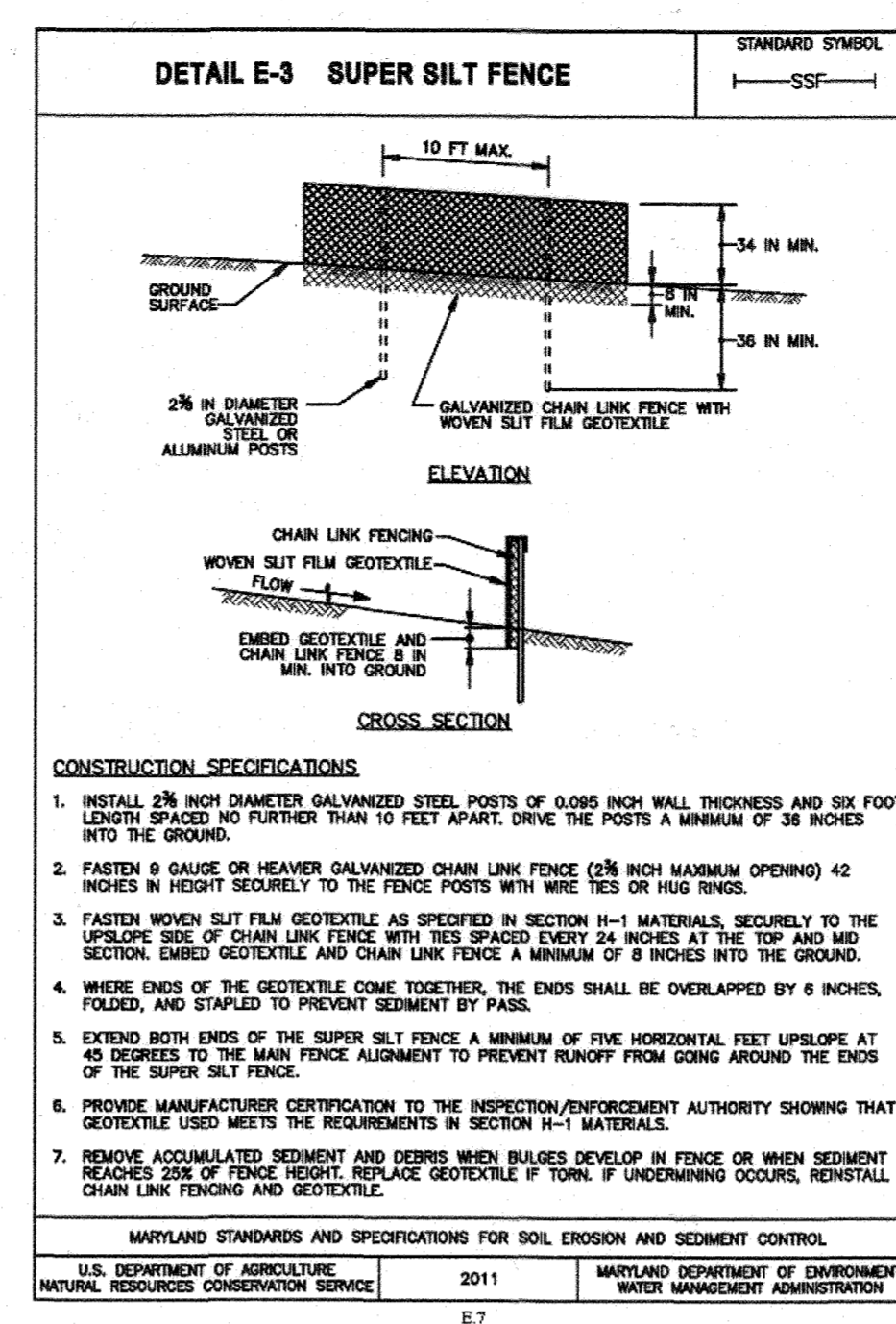
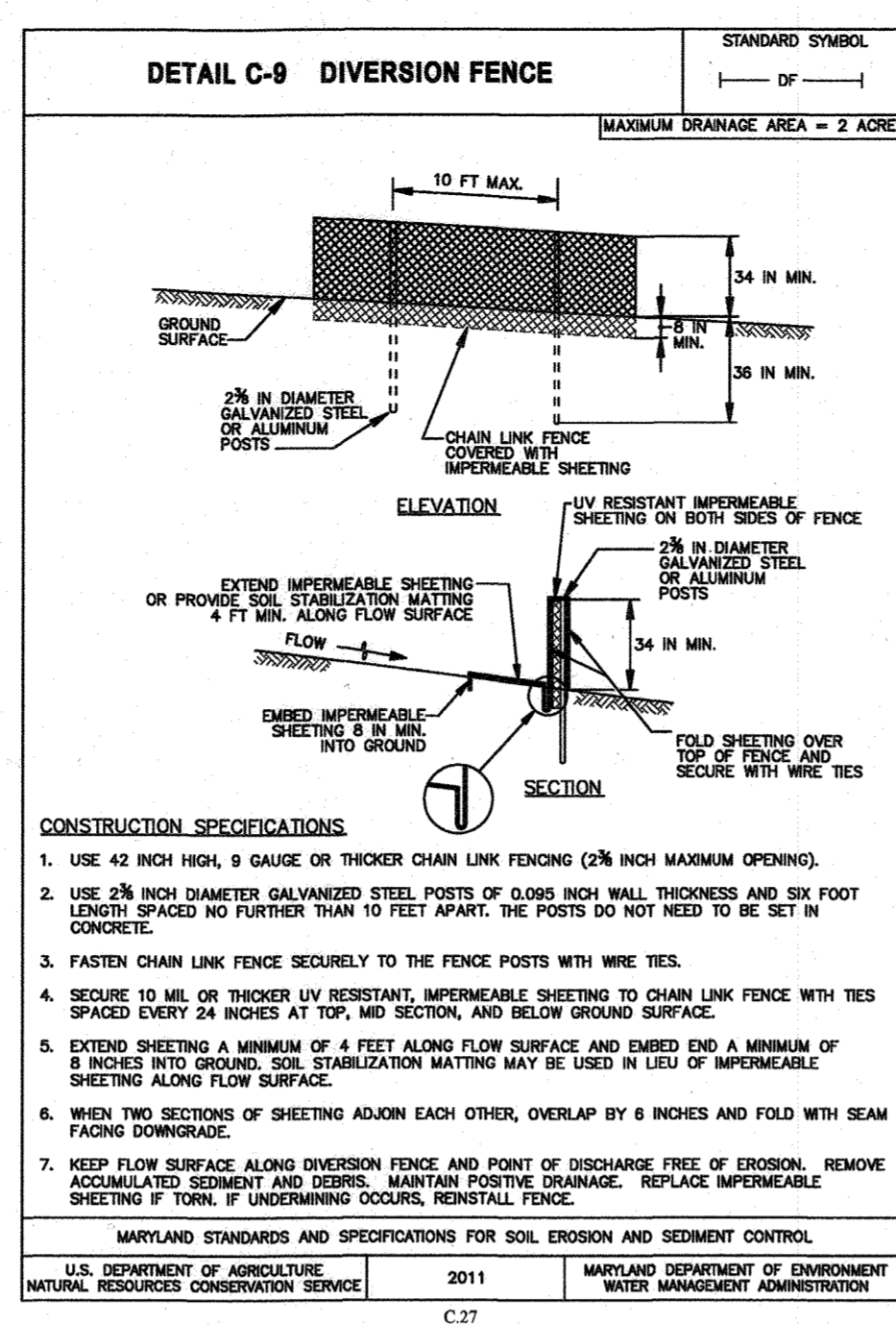
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND. LICENSE # 11049. EXPIRATION DATE: 2/10/2023.
02/26/2021

DEVELOPER'S CERTIFICATE
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL 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."
Nice Collins 02-26-2021
 SIGNATURE OF DEVELOPER DATE

DEVELOPER
 THE LEGENDS GROUP
 307 COMPTON AVENUE
 LAUREL, MD 20707
 (301) 490-3651
OWNER
 SARAH A. ABRAHIM
 9609 OVERTON DRIVE
 LAUREL, MD 20723
 (513) 410-6171

SITE LAYOUT, GRADING, SOIL EROSION AND SEDIMENT CONTROL PLAN
 NORTH LAUREL PARK
 LOT 15
 BLOCK "T"
 SARAH A. ABRAHIM PROPERTY
 9295 DECATUR PLACE
 PLAT BOOK 61, PLAT 470-471 TAX MAP 50, GRID 3, PARCEL 426
 ZONING: R-SC 6TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' JOB NO.: 3404 DATE: SEP. 20, 2020 SHEET: 1 OF 3

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)		
Mulch	shredded hardwood		aged 6 months, minimum; no pine or wood chips
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 underdrain 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 ACTI Code 350.R/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 carbide or dolomitic sand substitutions are acceptable. No "rock dust" can be used for sand.



B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION

To stabilize disturbed soils with permanent vegetation.

Use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils.

Conditions Where Practice Applies

Exposed soils where ground cover is needed for 6 months or more.

Criteria

A. Seed Mixtures

- General Use
 - Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.
 - Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in US&A-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.
- Turfgrass Mixtures
 - Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.
 - Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.
 - For sites having disturbed areas over 5 acres, use and show the rates recommended by the soil testing agency.
 - For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 1/4 pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary.

1. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the absence of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky Bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

2. Kentucky Bluegrass/Perennial Ryegrass: Full Sun Mixture: For use in fill sun areas where rapid establishment is necessary and turf will receive medium to intensive management. Certified Perennial Ryegrass/Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky Bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

3. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes: Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 5 pounds per 1000 square feet. One or more cultivars may be blended.

4. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes: Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 11/4 to 3 pounds per 1000 square feet.

5. Tall Fescue: Turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland." Choose certified material in the certification program of the Maryland Department of Agriculture. Turfgrass Section, provides a reliable means of consumer protection and assures a pure genetic line.

6. Ideal Times of Seeding for Turf Grass Mixtures

Western MD: March 15 to June 1, August 1 to October 1 (Hardness Zones: 5b, 6a)
Central MD: March 1 to May 15, August 15 to October 15 (Hardness Zones: 6b)
Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardness Zones: 7a, 7b)

7. Till areas to receive seed by disk or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1/4 inch in diameter. The resulting seedbed must be in such condition that future mowing of grasses will cause no difficulty.

8. Soil moisture is deficient, supply new seedlings with adequate water for plant growth (1/4 to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedlings hot seasons, or on adverse sites.

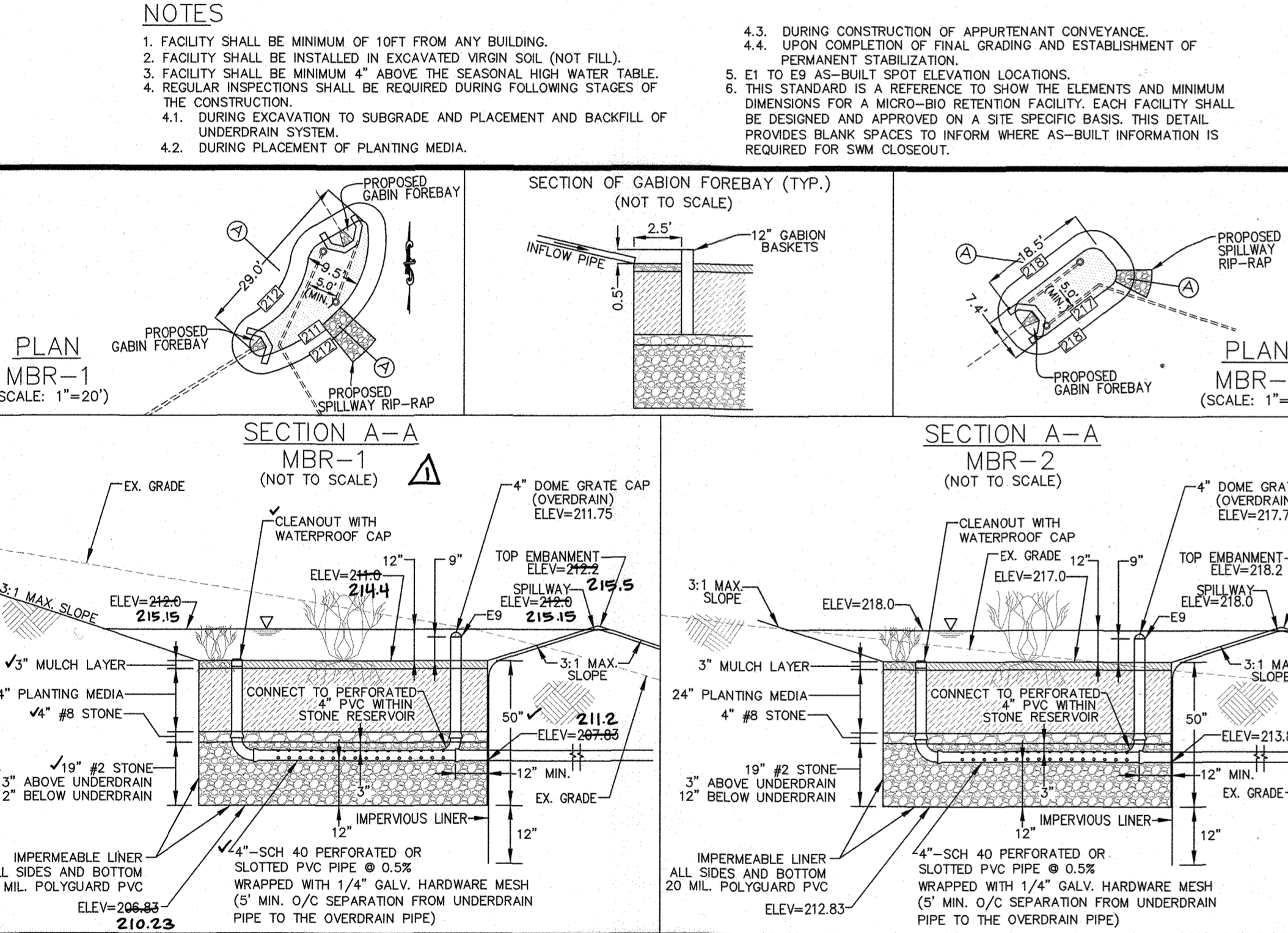
Permanent Seeding Summary

Seed Mixture (from Table B.3):	ZONE 6b		Fertilizer Rate (10-20-20)		Lime Rate
	Application Rate (lb/oc)	Seeding Date	N	P ₂ O ₅	
1 Cool Season Kentucky Bluegrass or equal	T.F. 60 lb/oc	May 1 to May 15	45	90	2 tons/oc
2 Warm Season Tall Fescue or equal	K.B. 40 lb/oc	Aug. 15 to Oct. 15	45	90	2 tons/oc

B. Sod: To provide quick cover on disturbed areas (21 grade or flatter).

- General Specifications
 - Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.
 - Sod must be machine cut to a uniform soil thickness of 3/4 inch, plus or minus 1/4 inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pieces and torn or uneven edges will not be acceptable.
 - Standard size sections of sod must be strong enough to support their own weight and retain their size and shape when suspended vertically with a firm grasp of the upper 10 percent of the section.
 - Sod must not be harvested or transported when moisture content is excessively dry or wet; it will adversely affect its survival.
 - Sod must be harvested, delivered, and installed within a period of 36 hours. Sod not transported within this period must be approved by an agronomist or soil scientist prior to its installation.
- Sod Installation
 - During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the sod immediately prior to laying the sod.
 - Lay the first row of sod in a straight line with subsequent rows placed parallel to it and lightly tamped against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are tamped. Do not allow sod to dry out. If sod dries out, it will cause drying of the roots.
 - Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, or otherwise secure the sod to prevent slippage on slopes. Ensure soil contact exists between sod roots and the underlying soil surface.
 - Water the sod immediately following rolling and tamping until the underside of the new sod and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any pieces of sod which are dry.
- Sod Maintenance
 - In the absence of adequate rainfall, water daily during the first week or as often as needed sufficiently to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.
 - After the first week, sod watering is required as necessary to maintain adequate moisture content.
 - Do not mow until the sod is firmly rooted. No more than 1/2 of the grass root must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

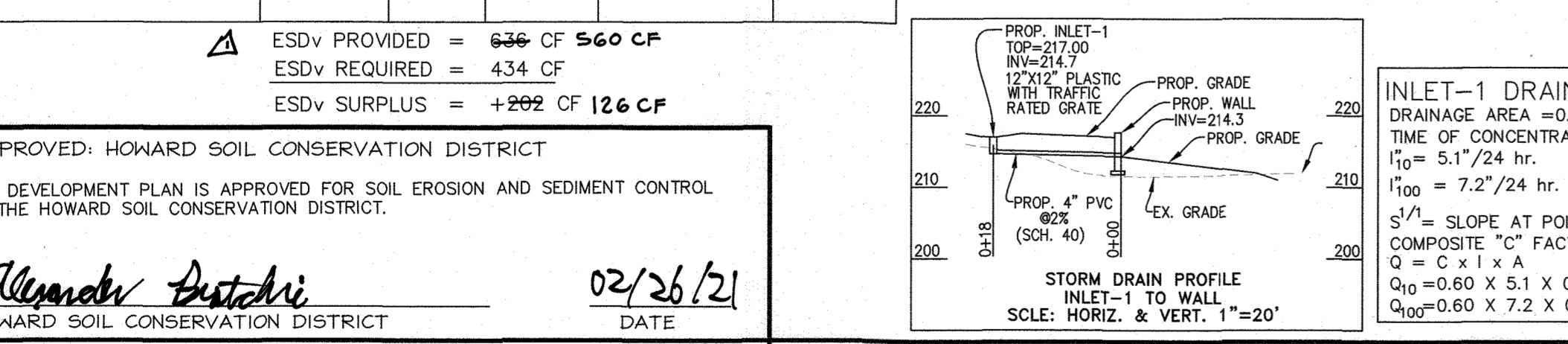
MICRO-BIORETENTION (M-6) DETAIL



STORMWATER MANAGEMENT SUMMARY

FACILITY	ESDv CREDIT	TARGET Pa	REQUIRED Pa	CONTRIBUTING AREA	% IMPERVIOUS
MICRO-BIORETENTION (M-6)-1	2.98	3.77	2.6"	1,819 SF.	100%
MICRO-BIORETENTION (M-6)-2	2.62	1.6"	2.6"	1,275 SF.	100%
TOTAL	5.60	5.37	5.2"	3,094 SF.	

ESDv PROVIDED = 6.36 CF 560 CF
ESDv REQUIRED = 4.34 CF
ESDv SURPLUS = +2.02 CF 126 CF



APPROVED: HOWARD SOIL CONSERVATION DISTRICT

THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

Alexander Butcher 02/26/21
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chad Chisholm 3-18-21
CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

Chad Chisholm 3/16/21
CHIEF, DIVISION OF LAND DEVELOPMENT DATE

Chad Chisholm 3/22/21
DIRECTOR DATE

REVISIONS

No.	DATE	DETAILS
1	12/22/20	REVISED MBR-VERTICAL ELEVATIONS PER FIELD ASBUILT AND VOLUMES IN SWM SUMMARY TABLE

PLAN PREPARED BY:

NJR & ASSOCIATES
Land Surveying and Planning
2770 STATE ROUTE 32
WEST FRIENDSHIP, MD 21794
TEL: (240) 608-3200

I 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 # 11049, EXPIRATION DATE: 2/10/2021.

Mike Collins 02/26/2021
SIGNATURE OF DEVELOPER DATE

DEVELOPER'S CERTIFICATE

I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL AND THAT ALL 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.

Mike Collins 02-26-2021
DATE

I. BIORETENTION AREA SOIL SPECIFICATION

A. PLANTING SOIL:

THE BIORETENTION AREA SHALL CONSIST OF A PLANTING SOIL HAVING A HOMOGENEOUS MIX OF 50% CONSTRUCTION SAND, 20-30% TOPSOIL WITH AN ALLOWABLE 5% MAXIMUM CLAY CONTENT, AND 20-30% ORGANIC COMPOST OR MULCH TO PROVIDE A SOIL MEDIUM WITH HIGH HYDROLOGIC CAPACITY.

THE PLANTING SOIL SHALL BE FREE OF PLANTS OR PLANT PARTS OF BERMUDA GRASS, QUAKE GRASS, JOHNSON GRASS, MUGWART, NUTSEDGE, POISON IVY, CANDIAN THISTLE OR OTHER AS SPECIFIED.

IT SHALL NOT CONTAIN TOXIC SUBSTANCES HARMFUL TO PLANT GROWTH.

THE PLANTING SOIL SHALL BE TESTED AND MEET THE FOLLOWING CRITERIA:

PH RANGE 5.5 - 6.5
ORGANIC MATTER 15 - 30%
THE FOLLOWING TESTING FREQUENCIES SHALL APPLY TO THE ABOVE SOILS:
PH ORGANIC MATTER: 1 TEST PER 90 CUBIC YARDS, BUT NOT MORE THAN 1 TEST PER BIORETENTION AREA.
ONE GRAIN SIZE ANALYSIS SHALL BE PERFORMED PER 90 CUBIC YARDS OF PLANTING SOIL, BUT NO LESS THAN 1 TEST PER BIORETENTION AREA.

B. MULCH LAYER SPECIFICATION:

A MULCH LAYER SHALL BE PROVIDED ON TOP OF PLANTING SOIL. AN ACCEPTABLE MULCH LAYER SHALL INCLUDE SHREDDED HARDWOOD OR SHREDDED WOOD CHIPS OR OTHER SIMILAR PRODUCTS APPROVED BY THE HOWARD COUNTY DEPARTMENT OF ENVIRONMENTAL RESOURCES.

OF THE APPROVED MULCH PRODUCTS, ALL MUST BE WELL AGED, UNIFORM IN COLOR, AND FREE OF FOREIGN MATERIALS, INCLUDING PLANT MATERIAL, WELL AGED MULCH IS DEFINED AS MULCH THAT HAS BEEN STOCK PILED OR STORED FOR AT LEAST TWELVE (12) MONTHS.

C. SAND SPECIFICATION:

THE SAND SHALL BE FREE OF DELETERIOUS MATERIAL AND ROCKS GREATER THAN ONE INCH IN DIAMETER.

D. COMPACTION:

SOIL SHALL BE PLACED IN LIFTS LESS THAN 18 INCHES AND LIGHTLY COMPACTED.

II. BIORETENTION AREA PLANT SPECIFICATION

GENERAL PLANTING:

- ROOT STOCK OF PLANT MATERIAL SHALL BE KEPT MOIST DURING TRANSPORT FROM SOURCE TO THE JOB SITE AND UNTIL PLANTED.
- WALLS OF PLANTING PIT SHALL BE DUG SO THAT THEY ARE VERTICAL.
- DIAMETER OF PLANTING PIT MUST BE A MINIMUM OF SIX INCHES LARGER THAN THE DIAMETER OF THE ROOT BALL.
- THE PLANTING PIT SHALL BE DEEP ENOUGH TO ALLOW 1/4 OF THE BALL TO BE ABOVE THE EXISTING GRADE. LOOSE SOIL AT THE BOTTOM OF THE PIT SHALL BE TAMPED BY HAND.
- THE APPROPRIATE AMOUNT OF FERTILIZER IS TO BE PLACED AT THE BOTTOM OF THE PIT.
- THE PLANT SHALL BE REMOVED FROM THE CONTAINER AND PLACED AT THE BOTTOM OF THE PLANTING PIT BY LIFTING AND CARRYING THE PLANT BY ITS BALL. NEVER LIFT THE PLANT BY THE BRANCHES OR TRUNK.
- SET THE PLANT STRAIGHT AND IN THE CENTER OF THE PIT SO THE CENTER OF THAT THE BALL IS APPROXIMATELY 1/4 ABOVE THE FINAL GRADE.
- BACKFILL PLANTING PIT WITH EXISTING SOIL.
- MAKE SURE PLANT REMAINS STRAIGHT DURING BACKFILLING PROCEDURE.
- NEVER COVER THE TOP OF THE BALL WITH SOIL MOUND SOIL AROUND THE EXPOSED SIDE OF THE BALL.
- MAKE SURE MULCH DOES NOT CONTACT TREE'S TRUNK.
- TREE SHALL BE BRACED USING 2" X 2" WHITE OAK STAKES. STAKES SHALL BE PLACED PARALLEL TO WALKWAYS AND BUILDINGS. STAKES ARE TO BE EQUALLY SPACED ON THE OUTSIDE OF THE TREE BALL. THE TREE IS BRACED TO THE STAKES UTILIZING HOSE AND WIRES.
- FERTILIZER:
 - TREE AND SHRUB FERTILIZER SHALL BE A 21 gm. TIGHTLY COMPRESSED, LONG LASTING, SLOW RELEASE (2-20) FERTILIZER TABLET WITH MINIMUM GUARANTEED ANALYSIS OF 20-10-5:
 - TOTAL NITROGEN (N) 20%
 - WATER SOLUBLE ORGANIC NITROGEN - 7%
 - WATER IN SOLUBLE ORGANIC NITROGEN - 13%
 - AVAILABLE PHOSPHORIC ACID (P2 O5) - 10%
 - SOLUBLE POTASH (K2O) - 5%
- FOR CONTAINERIZED TREES AND SHRUBS, PLACE THE SPECIFIED FERTILIZER TABLET(S) IN THE BOTTOM OF THE PLANTING PIT ACCORDING TO THE FOLLOWING RATES:
 - 1 GAL. CONTAINER 1 ea. 21 gm. TABLETS.
 - 3 GAL. CONTAINER 2 ea. 21 gm. TABLETS.
 - 5 GAL. CONTAINER 3 ea. 21 gm. TABLETS.
 - 7 GAL. CONTAINER 4 ea. 21 gm. TABLETS.

PLANTING NON-GRASS GROUND COVER:

- THE GROUND COVER PLANTING HOLES SHALL BE DUG THROUGH THE MULCH WITH ONE OF THE FOLLOWINGS: HAND TROWEL, SHOVEL, BULB PLANTER, OR HOE (THIS DOES NOT APPLY TO GRASSES OR LEGUMES).
- BEFORE PLANTING BIODEGRADABLE POTS, THEY SHALL BE SPLIT, AND NON BIODEGRADABLE POTS SHALL BE REMOVED. ROOT SYSTEMS OF THE POTTED PLANTS SHALL BE SPLIT OR CRUMBLED.
- THE GROUND COVER SHALL BE PLANTED SO THAT ROOTS ARE SURROUNDED BY THE SOIL BELLOW THE MULCH. POTTED PLANTS SHALL BE SET SO THAT THE TOP OF THE POT IS EVEN WITH THE EXISTING GRADE. THE ROOTS OF BARE-ROOT PLANTS SHALL BE COVERED TO THE CROWN.
- THE MULCH AND PLANTED GROUND COVER BED SHOULD BE SHOULD BE COVERED WITH A PREFER EMERGENT HERBICIDE.
- THE ENTIRE GROUND COVER BED SHALL BE THOROUGHLY WATERED.

NOTES:

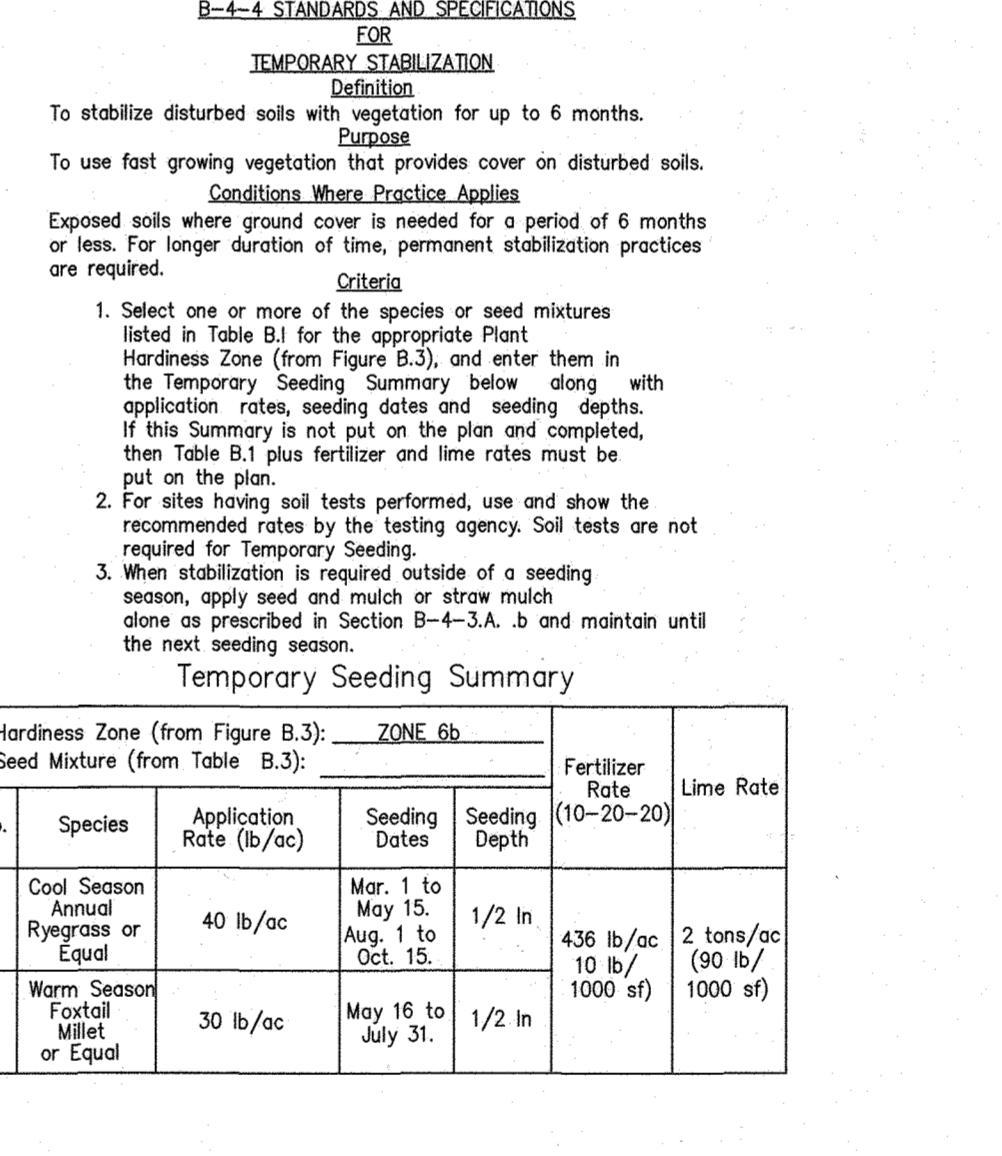
- THE REVISIONS SHOWN HEREON HAVE BEEN FIELD VERIFIED BY PACKARD & ASSOCIATES, LLC, 7/20/22.
- THE PURPOSE OF THESE RED-LINED REVISIONS ARE TO SHOW THE AS-BUILT ADJUSTMENTS MADE TO MBR-1 AND THE DRIVEWAY RETAINING WALL.

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, MD LICENSE #16518, EXP. 6/10/2023.

Dean Packard 12/22/2022.

PACKARD & ASSOCIATES, LLC
ENGINEERS, LAND PLANNERS, SURVEYORS
16220 FREDERICK ROAD # 300
GAITHERSBURG, MD 20877
(301) 208-0250



OPERATION AND MAINTENANCE SCHEDULE FOR MICRO-BIO RETENTION (M-6)

- 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 such 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.
- 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 new layer is applied.
- The Owner shall correct soil erosion on an as needed basis, with a minimum of once per month and after each heavy storm.

DEVELOPER

THE LEGENDS GROUP
307 COMPTON AVENUE
LAUREL, MD 20707
(301) 490-3651

OWNER

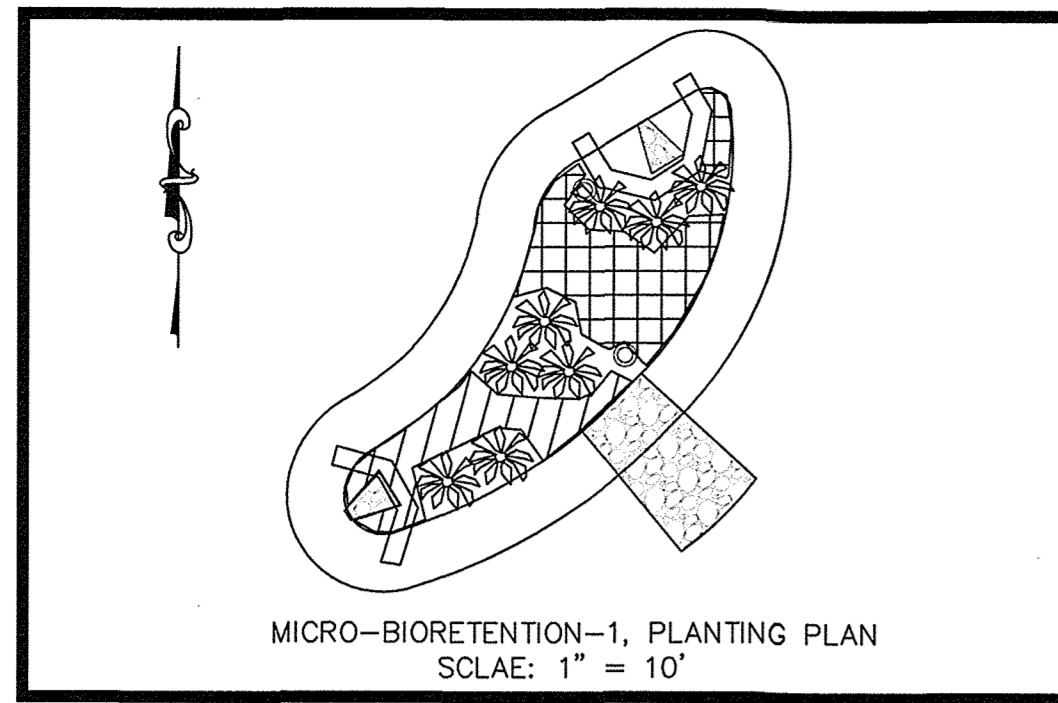
SARAH A. ABRAHAM
9609 ORTON DRIVE
LAUREL, MD 20723
(513) 410-6171

SITE DETAILS AND NOTES

NORTH LAUREL PARK
LOT 15
BLOCK "T"
SARAH A. ABRAHAM PROPERTY
9295 DECATUR PLACE
PLAT BOOK 61, PLAT 470-471 TAX MAP 50, GRID 3, PARCEL 426
ZONING: R-SC 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND

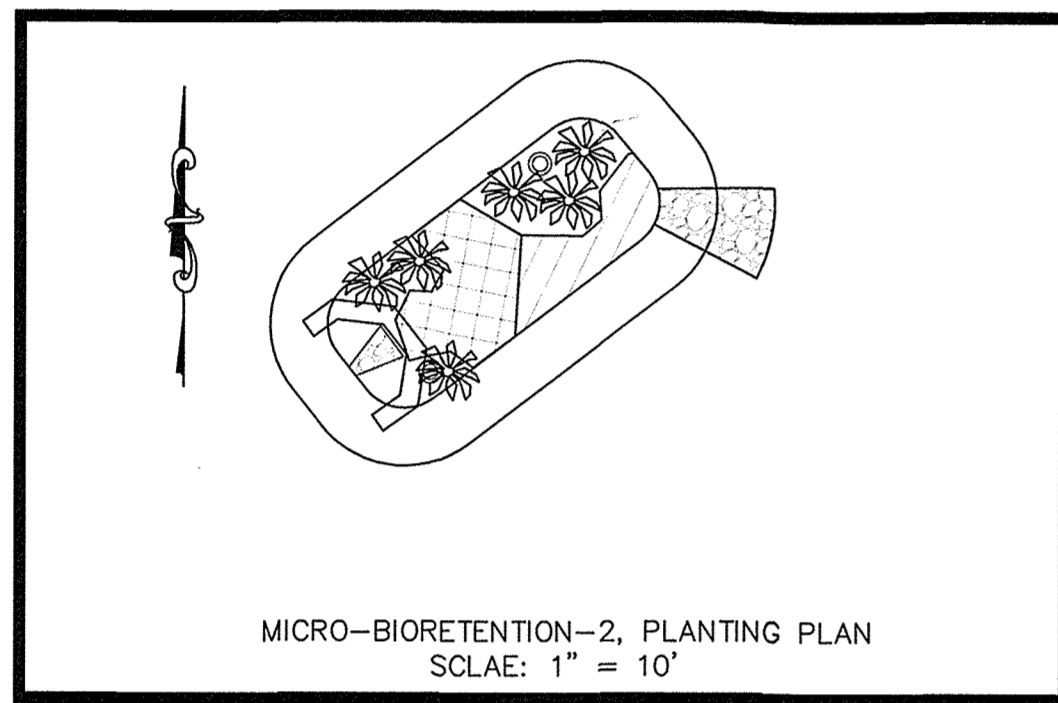
SCALE: 1" = 20' JOB NO.: 3404 DATE: SEP. 20, 2020 SHEET: 2 OF 3

SDP-21-007



MICRO-BIORETENTION-1, PLANTING PLAN
SCALE: 1" = 10'

PLANTING SCHEDULE - RAIN GARDEN-1						
LEGEND	TYPE	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	REMARKS
	SHRUB	ILEX GLABRA 'SHAMROCK'	INKBERRY	12"	6	PLANT 3' APART (MIN.)
	PERENNIAL	IRIS VERSICOLOR	BLUE FLAG	1 qt.	41	PLANT 15" ON CENTER, TRIANGULAR GRID
	PERENNIAL	GERANIUM MACULATUM	CRANESBILL	1 qt.	24	PLANT 15" ON CENTER, TRIANGULAR GRID
						63 sf.
						37 sf.

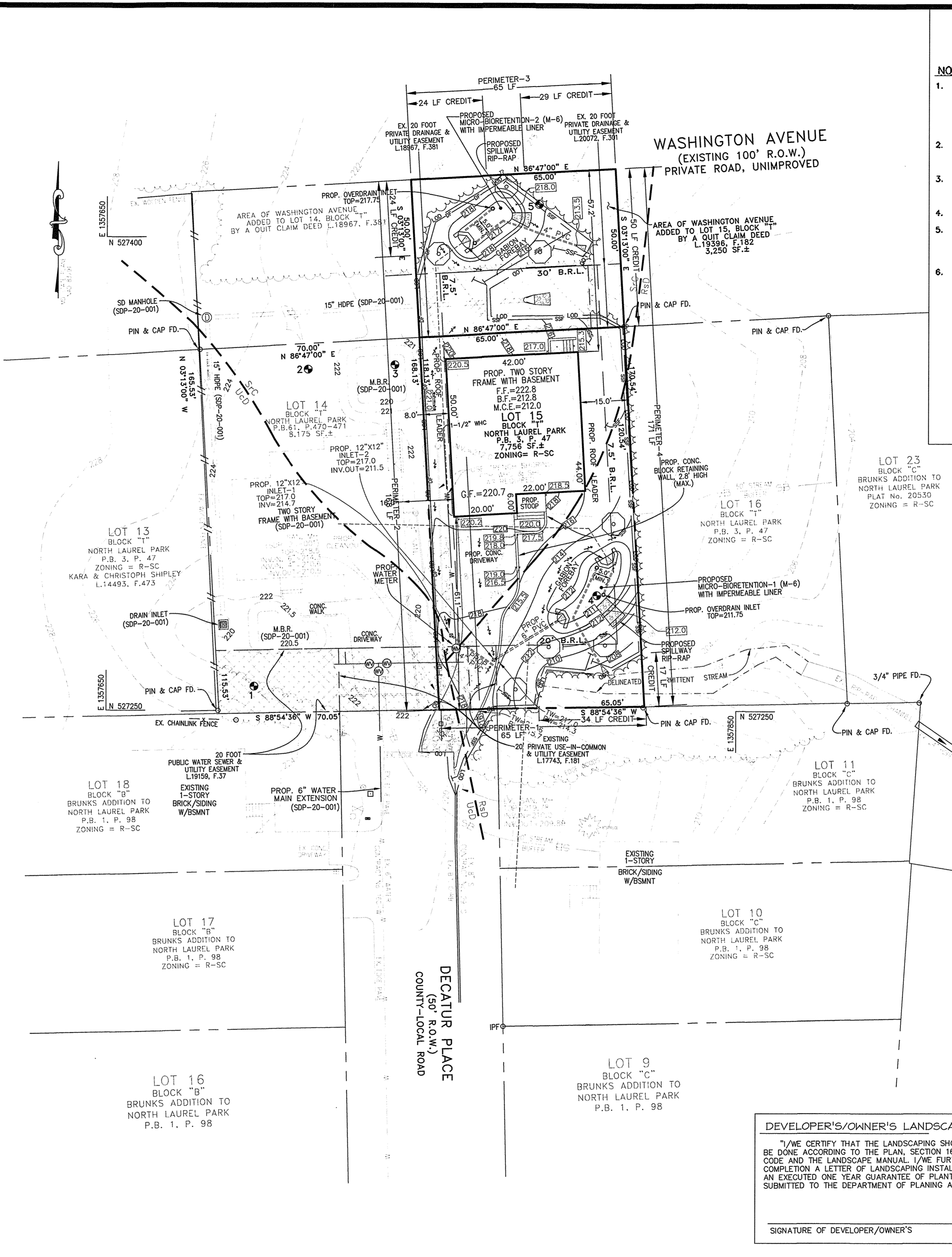


MICRO-BIORETENTION-2, PLANTING PLAN
SCALE: 1" = 10'

PLANTING SCHEDULE - RAIN GARDEN-2						
LEGEND	TYPE	BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY	REMARKS
	SHRUB	ILEX GLABRA 'SHAMROCK'	INKBERRY	12"	6	PLANT 3' APART (MIN.)
	PERENNIAL	IRIS VERSICOLOR	BLUE FLAG	1 qt.	29	PLANT 15" ON CENTER, TRIANGULAR GRID
	PERENNIAL	GERANIUM MACULATUM	CRANESBILL	1 qt.	17	PLANT 15" ON CENTER, TRIANGULAR GRID
						39 sf.
						28 sf.

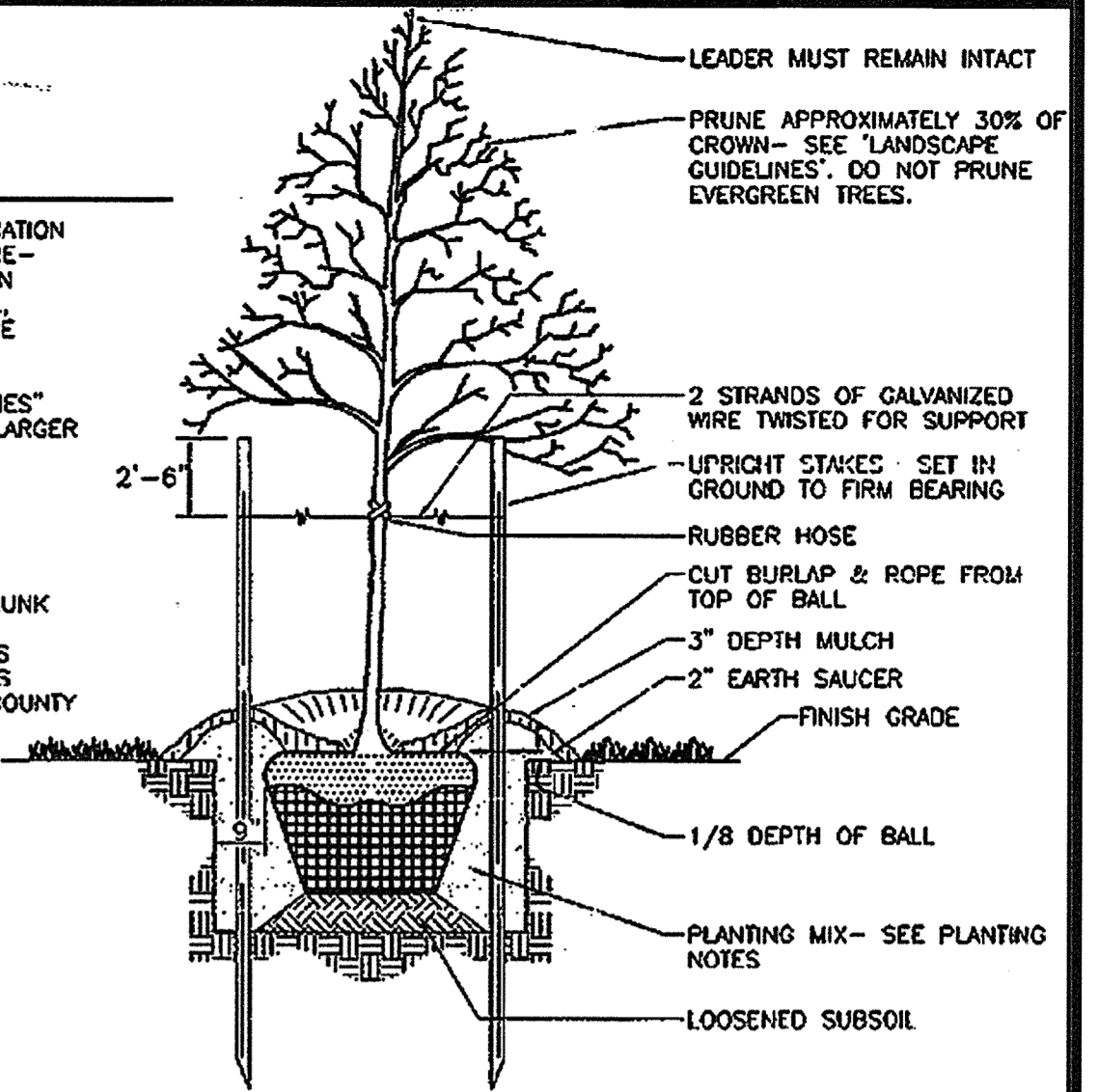
LEGEND

- EX. SANITARY SEWER MANHOLE
- EX. WATER VALVE
- EX. LIGHT POLE
- EX. WOOD POST
- EX. TELEPHONE/CABLE PEDESTAL
- EX. MAILBOX
- EX. GAS VALVE
- EX. EVERGREEN TREE
- PROP. WATER VALVE
- PROP. WATER METER
- PROP. SANITARY SEWER CLEANOUT
- PROP. SPOT ELEVATION
- EX. CONTOUR
- PROP. CONTOUR
- EX. EDGE WOODED AREA
- PROP. EDGE WOODED AREA
- PROP. SUPER SILT FENCE
- PROP. SILT FENCE
- PROP. LIMIT OF DISTURBANCE
- PROP. DRAINAGE DIVIDE
- EX. WOOD FENCE
- EX. CHAINLINK FENCE
- EX. SOIL TYPE DEVISION LINE
- EX. DELINEATED INTERMITTENT STREAM LINE
- EX. 50' STREAM BUFFER LINE
- PUBLIC SEWER AND UTILITY EASEMENT
- PROP. STABILIZED CONSTRUCTION ENTRANCE
- PRIVATE DRAINAGE AND UTILITY EASEMENT
- SOIL BORING LOCATION
- PROP. DECIDUOUS TREE



NOTES

- SEE "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS" FOR ALL MATERIAL, PRODUCT, AND PROCEDURE SPECIFICATIONS.
- SEE "LANDSCAPE GUIDELINES" FOR SUPPORTING TREES LARGER THAN 2-1/2" CALIPER.
- PLACE UPRIGHT STAKES PARALLEL TO WALKS & BUILDINGS.
- KEEP MULCH 1" FROM TRUNK
- SEE ARCHITECTURAL PLANS FOR ADDITIONAL PLANTINGS WHICH EXCEED HOWARD COUNTY MINIMUM REQUIREMENTS.
- TREES ARE NOT TO BE PLANTED OVER PRIVATE SEWAGE EASEMENT.



TREE PLANTING AND STAKING
DECIDUOUS TREES UP TO 2-1/2" CALIPER NOT TO SCALE

NOTES:

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A FINANCIAL SURETY IN THE AMOUNT OF \$1,500.00 FOR THE REQUIRED 5 SHADE TREES SHALL BE POSTED WITH THE GRADING PERMIT FOR THIS PLAN.
- 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 LISTED HEREWITH 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.
- THE REMOVAL OF TREES 30" OR GREATER DBH IS PROHIBITED WITHOUT COUNTY APPROVAL. NO SPECIMEN TREES ARE LOCATED ON-SITE. NO LANDSCAPING TO BE INSTALLED WITHIN ANY PUBLIC EASEMENT FOR WATER, SEWER, OR STORM DRAIN.
- ALL PLANT MATERIALS SHALL BE FULL AND HEAVY, BE WELL FORMED AND SYMMETRICAL, CONFORM TO THE MOST CURRENT MM SPECIFICATIONS AND BE INSTALLED IN ACCORDANCE WITH HRD PLANTING SPECIFICATIONS.
- CONTRACTOR SHALL VERIFY LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO DIGGING.
- FINAL LOCATION OF PLANT MATERIAL MAY NEED TO VARY TO MEET FINAL FIELD CONDITIONS. TREES SHALL NOT BE PLANTED IN THE BOTTOM OF DRAINAGE SWALES.
- CONTRACTOR SHALL VERIFY PLANT QUANTITIES PRIOR TO BIDDING. IF PLAN DIFFERS FROM LANDSCAPE SCHEDULE, THE PLAN SHALL GOVERN.

SCHEDULE A: PERIMETER LANDSCAPE EDGE

CATEGORY	PERIMETER			
	1	2	3	4
PERIMETER DESIGNATION, LANDSCAPE TYPE	A	A	A	A
LINEAR FEET OF PERIMETER	65	168	65	171
CREDIT FOR EXISTING VEGETATION	34	24	53	67
CREDIT FOR WALL, FENCE OR BERM	NO	NO	NO	NO
LINEAR FEET REMAINING	31	144	12	104
NUMBER OF PLANTS REQUIRED:				
SHADE TREES, 1:60 =	1	3	1	2
EVERGREEN TREES =	-	-	-	-
SHRUBS =	-	-	-	-
NUMBER OF PLANTS PROVIDED:				
SHADE TREES, 1:60 =	1	3	1	2
EVERGREEN TREES =	-	-	-	-
SHRUBS =	-	-	-	-

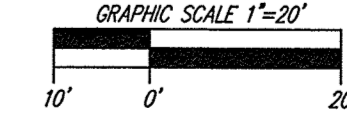
PLANT LIST

KEY	QUANTITY	BOTANICAL NAME	SIZE	REM.
	7	ACER RUBRUM 'OCTOBER GLORY' OCTOBER GLORY RED MAPLE	2 1/2" - 3" Cal.	B & B

DEVELOPER'S/OWNER'S LANDSCAPE CERTIFICATE

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

SIGNATURE OF DEVELOPER/OWNER'S _____ DATE _____



APPROVED: DEPARTMENT OF PLANNING AND ZONING
 [Signature] 3/18/21
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE
 [Signature] 3/19/21
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE
 [Signature] 3/22/21
 DIRECTOR DATE

No.	DATE	REVISIONS DETAILS

PLAN PREPARED BY:
NJR & ASSOCIATES
 Land Surveying and Planning
 2770 STATE ROUTE 32
 WEST FRIENDSHIP, MD 21794
 TEL: (240) 508-3200

I 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 # 11049, EXPIRATION DATE: 2/10/2021.
 [Signature] 02/26/2021
 DATE

DEVELOPER'S CERTIFICATE
 "I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL 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 COUNTY CONSERVATION DISTRICT."
 [Signature] 02-26-2021
 SIGNATURE OF DEVELOPER DATE

DEVELOPER
 THE LEGENDS GROUP
 307 COMPTON AVENUE
 LAUREL, MD 20707
 (301) 490-3651
OWNER
 SARAH A. ABRAHAM
 9609 OVERTON DRIVE
 LAUREL, MD 20723
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LANDSCAPE PLAN, DETAILS AND NOTES
NORTH LAUREL PARK
LOT 15
BLOCK "T"
SARAH A. ABRAHAM PROPERTY
 9295 DECATUR PLACE
 PLAT BOOK 61, PLAT 470-471 TAX MAP 50, GRID 3, PARCEL 426
 ZONING: R-SC 6th ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: 1" = 20' JOB NO.: 3404 DATE : SEP. 20, 2020 SHEET : 3 OF 3