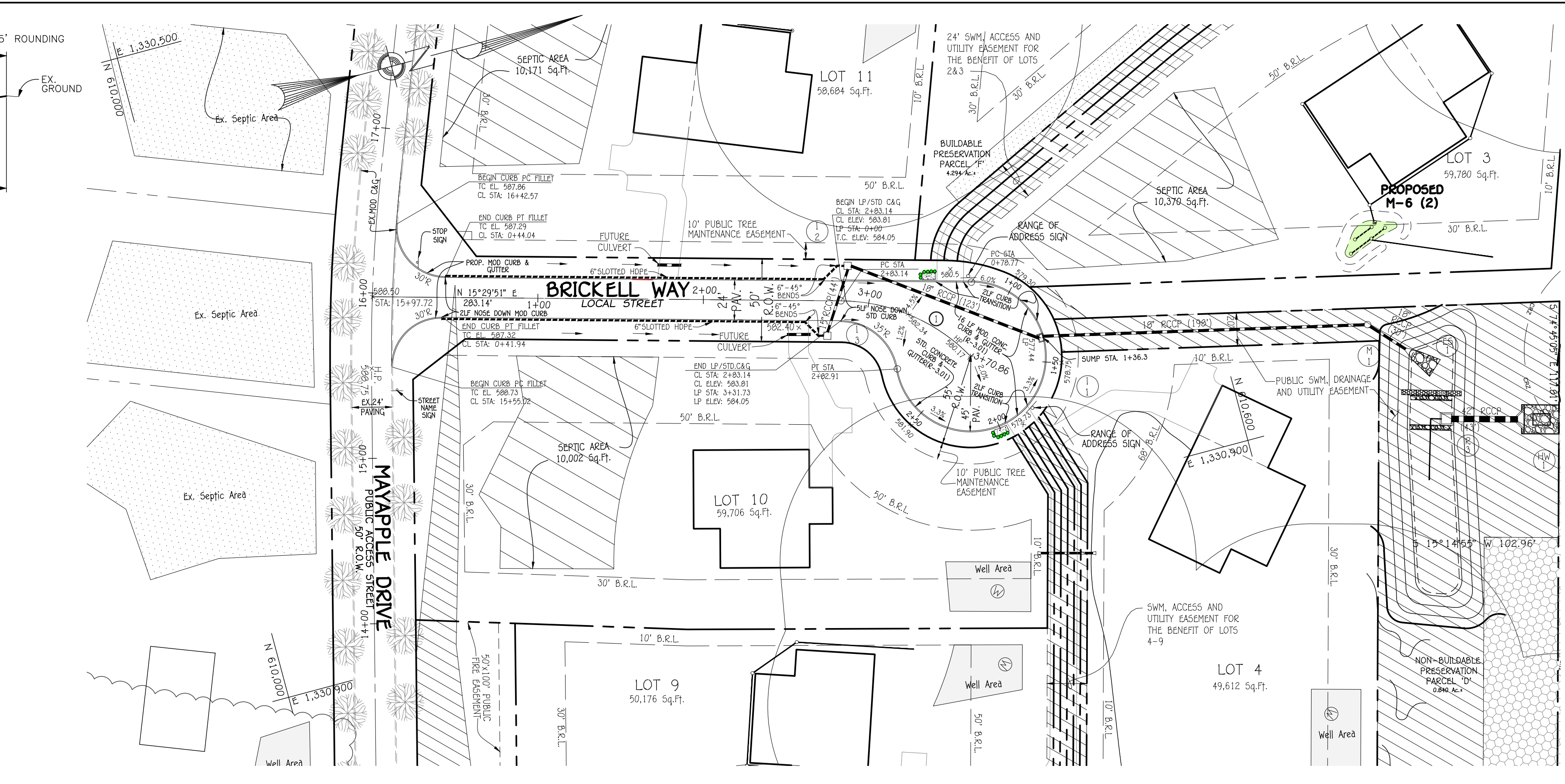
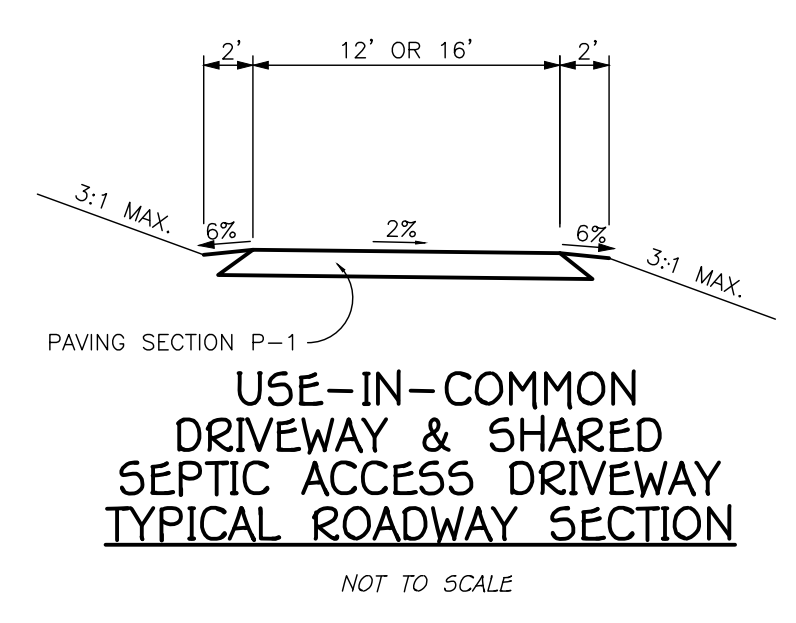


- BRICKELL WAY TYPICAL ROADWAY SECTION**
 NOT TO SCALE
 TYPICAL SECTION FROM CL STA. 0+41.94 TO CL STA. 2+75.00 RIGHT SIDE
 TYPICAL SECTION FROM CL STA. 0+44.04 TO CL STA. 2+83.14 LEFT SIDE
 TRANSITION STA. FROM CL STA. 2+83.14/LP STA. 0+00.00 TO LP STA. 0+15.00
 TRANSITION STA. FROM CL STA. 2+75.00 TO LP STA. 3+25.00
- Profile Grade Line (PGL)
 - Indicates 2" Top Soil, Seed And Mulch.
 - Ditch Cross-Section Slope May Be Flattened to Provide a Swale At Or Near The Crest Of Vertical Curves Where Quantity Of Swale Flow is Small, As Approved By DPW.
 - Install 6" Slotted Flexible HDPE Pipe Within GAB Along Both Sides Of Roadway. See Howard County Standard Detail Sheet 9.

SECTION NUMBER	ROAD AND STREET CLASSIFICATION	CALIFORNIA BEARING RATIO (CBR) (INCHES)	3 TO <5		5 TO <7		≥7	
			MIN	HMA WITH GAB	HMA WITH CONSTANT GAB	MIN	HMA WITH GAB	HMA WITH CONSTANT GAB
P-1	PARKING BAYS: RESIDENTIAL AND NON-RESIDENTIAL	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PG 64-225, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5
	PARKING DRIVE ASSES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 2 HEAVY TRUCKS PER DAY	SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE (N/A)	N/A	N/A	N/A	N/A	N/A	N/A
	LOCAL ROADS: ACCESS PLACE, ACCESS STREET	SUPERPAVE ASPHALT MIX BASE 19.0 MM PG 64-225, LEVEL 1 (ESAL)	2.0	2.0	2.0	3.5	3.0	2.5
P-2	PARKING DRIVE ASSES: RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	GRADED AGGREGATE BASE (GAB)	8.5	7.0	5.0	4.0	4.0	4.0
	LOCAL ROADS: ACCESS PLACE, ACCESS STREET	SUPERPAVE ASPHALT MIX FINAL SURFACE 9.5 MM PG 64-225, LEVEL 1 (ESAL)	1.5	1.5	1.5	1.5	1.5	1.5
	CUL-DE-SACS: RESIDENTIAL	SUPERPAVE ASPHALT MIX BASE 19.0 MM PG 64-225, LEVEL 2 (LOW SEAL)	2.0	2.0	2.0	3.5	2.0	2.0
		GRADED AGGREGATE BASE (GAB)	8.0	4.0	3.0	4.0	4.0	4.0

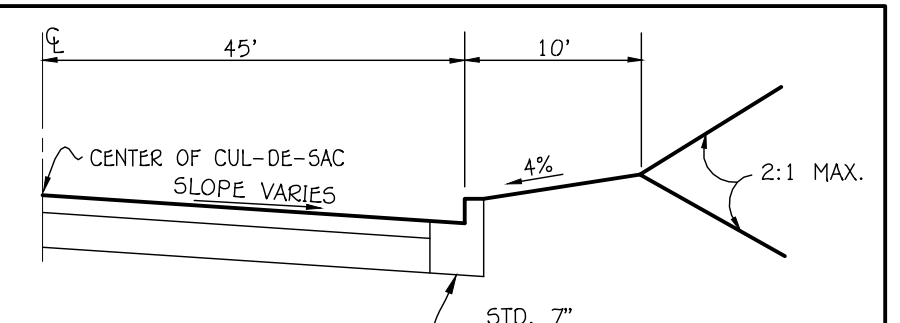


CENTERLINE CURVE DATA

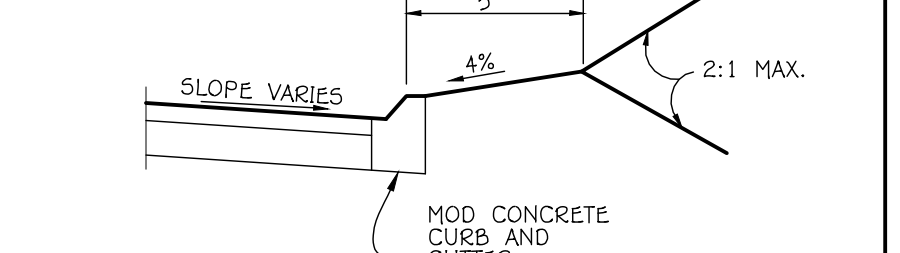
CURVE #	ROAD NAME	STATION	RADIUS	LENGTH	DELTA	TANGENT	BEARING & DISTANCE
1	BRICKELL WAY	2+83.14 TO 3+70.86	110.50	87.68'	45°27'50"	46.30'	S38°13'46"W 85.40'



Frank Manalansan II
 8/15/2024
 "Professional certification, I hereby certify that these documents were prepared by me or approved by me, and that I am a duly Licensed Professional Land Surveyor under the laws of the State of Maryland, License No. 21476, Expiration Date 7-14-25."



BRICKELL WAY TYPICAL CUL-DE-SAC SECTION
 NOT TO SCALE
 TYPICAL SECTION FROM LP STA. 0+15.00 TO LP STA. 3+25.00



BRICKELL WAY TYPICAL FILLET SECTION
 NOT TO SCALE
 TYPICAL SECTION FROM NW FILLET STA. 0+00.00 TO STA. 0+44.04
 TYPICAL SECTION FROM SE FILLET STA. 0+00.00 TO STA. 0+41.94

BRICKELL PROPERTY
 LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E', 'I', AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B'
 PREVIOUS HOWARD COUNTY FILES: ECP-19-021, SP-19-003, F-22-020 AND WP-22-91
 TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274
 ZONED RE-DEO
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JULY, 2024
 SHEET 2 OF 19

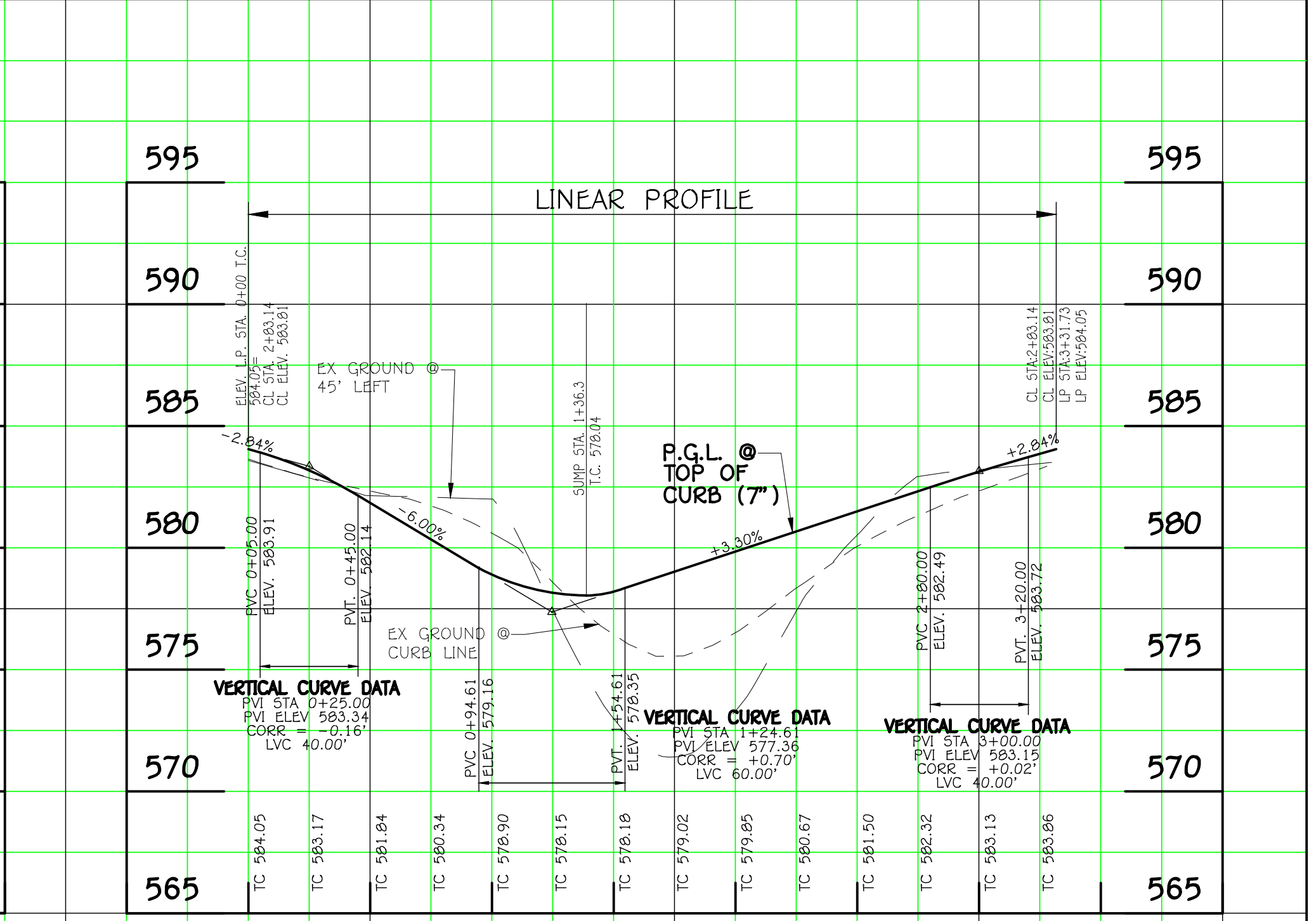
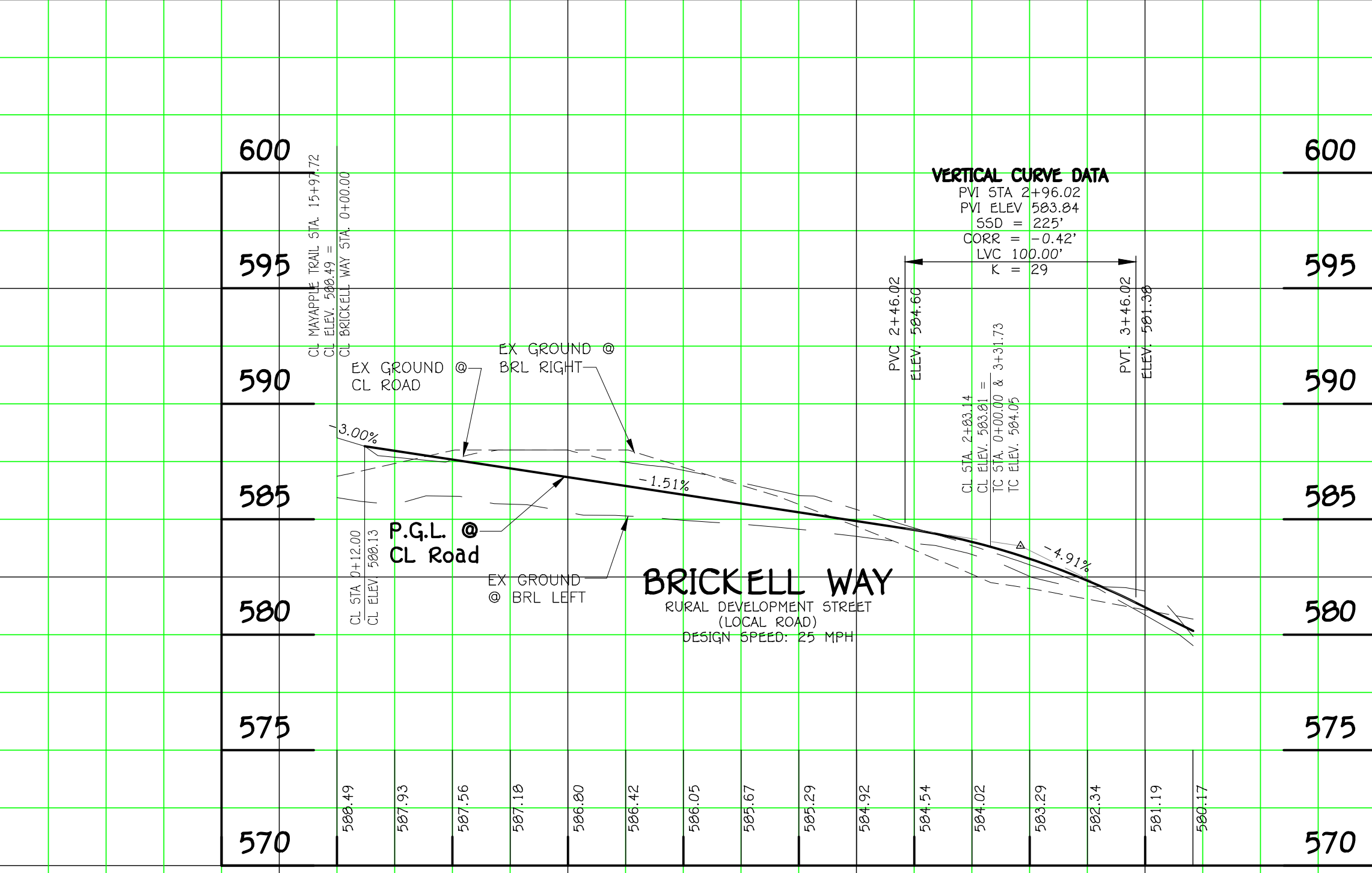
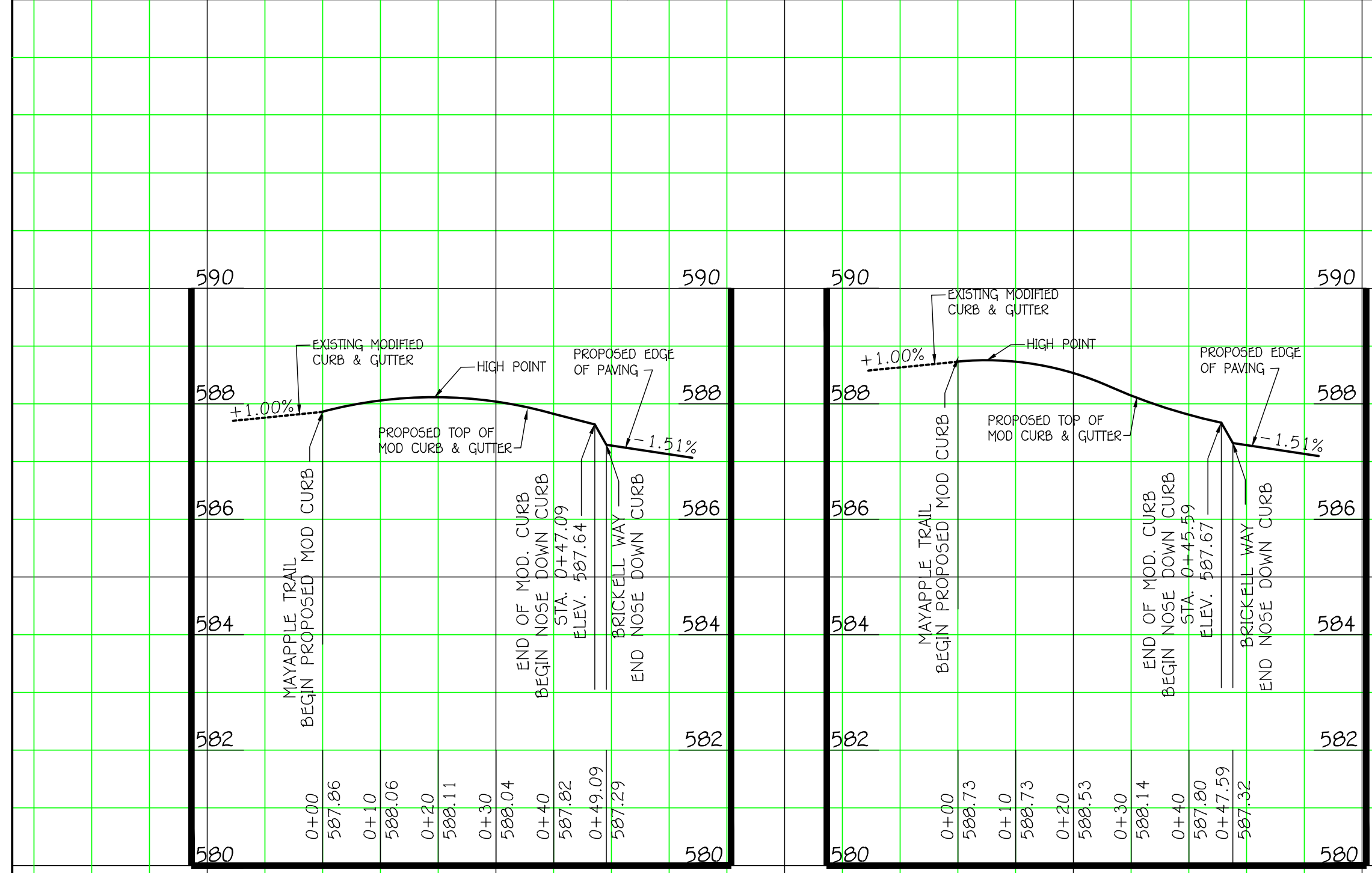
BRICKELL WAY
 PLAN AND PROFILE

OWNER/DEVELOPER
 ESC MEADOW SPRINGS, L.C.
 5074 DORSEY HALL DRIVE, SUITE 205
 ELLICOTT CITY, MARYLAND 21042
 PHONE: 410-720-3021

OWNER
 JOHN BERNARD AND JENNIFER ANN CZAJOWSKI
 12216 MAYAPLE DRIVE
 MARGROTTVILLE, MD 21104

SCALE: AS SHOWN DATE: MAY, 2024 DWG. NO. 2 OF 19
 DES. TCR DRN. TCR CHK. FJM

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10773 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2995



FILLET PROFILE - NW SIDE
 SCALE: HORIZ. 1" = 20'
 VERT. 1" = 2'

FILLET PROFILE - SE SIDE
 SCALE: HORIZ. 1" = 20'
 VERT. 1" = 2'

BRICKELL WAY RURAL DEVELOPMENT STREET (LOCAL ROAD)
 DESIGN SPEED: 25 MPH

VERTICAL CURVE DATA
 PVI STA 2+96.02
 PVI ELEV 583.94
 S50 = 22.5'
 CORR = -0.42'
 LVC 100.00'

VERTICAL CURVE DATA
 PVI STA 2+46.02
 PVI ELEV 584.02
 S50 = 29'
 CORR = -0.42'
 LVC 100.00'

VERTICAL CURVE DATA
 PVI STA 0+25.00
 PVI ELEV 577.36
 CORR = -0.16'
 LVC 40.00'

VERTICAL CURVE DATA
 PVI STA 0+94.61
 PVI ELEV 579.16
 CORR = -0.16'
 LVC 40.00'

VERTICAL CURVE DATA
 PVI STA 1+24.61
 PVI ELEV 577.36
 CORR = -0.16'
 LVC 40.00'

VERTICAL CURVE DATA
 PVI STA 1+47.59
 PVI ELEV 583.15
 CORR = +0.02'
 LVC 40.00'

PROFILE
 SCALE HORIZ. 1" = 50'
 VERT. 1" = 5'

LINEAR PROFILE
 SCALE HORIZ. 1" = 50'
 VERT. 1" = 5'

SOIL PREPARATION, TOPSOILING AND SOIL AMENDMENTS (B-4-2)

A. Soil Preparation

- 1. Temporary Stabilization
a. Seeded preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment...

2. Permanent Stabilization

- a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
i. Soil pH between 6.0 and 7.0.

B. Topsoiling

- 1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.

- a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and nutrients.

- a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority.

- a. Erosion and sediment control practices must be maintained when applying topsoil.
b. Uniformly distribute topsoil in a 5 to 10 inch layer and lightly compact to a minimum thickness of 4 inches.

- a. Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading and seeded preparation.

C. Soil Amendments (Fertilizer and Lime Specifications)

- 1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on areas having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory.
2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment.

PERMANENT SEEDING NOTES (B-4-5)

A. Seed Mixtures

- 1. General Use
a. 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 in Table B.2. Enter selected mixtures(s), application rates, and seeding dates in the Permanent Seeding Summary.
2. Turfgrass Mixtures
a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.

- a. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management.
b. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns.

- a. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where rapid establishment is necessary and when turf will receive medium to intensive management.
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b. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns.

Permanent Seeding Summary table with columns for Hardness Zone, No. of Species, Application Rate, Seeding Dates, Seeding Depth, N, P2O5, K2O, and Lime Rate.

STANDARD STABILIZATION NOTE table with columns for Fertilizer Rate (lb/acre) and Lime Rate (tons/acre).

STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA (B-4-B)

The mound or pile of soil protected by appropriately designed erosion and sediment control measures.

Purpose: To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

Conditions Where Practice Applies: Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

Criteria: The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.

1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.

2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1.

3. Runoff from the stockpile area must drain to a suitable sediment control practice.

4. Access the stockpile area from the upgrate side.

5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence.

6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.

7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization.

8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup.

STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING (B-4-3)

The application of seed and mulch to establish vegetative cover.

Purpose: To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies: To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

Criteria: 1. Seedings
a. All seed must meet the requirement of the Maryland State Seed Law.

b. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

c. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

d. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

e. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

f. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

g. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

h. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

i. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

j. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

k. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

l. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

m. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

n. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

o. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

p. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

q. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

r. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

s. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

t. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

u. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

v. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

w. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

x. All seed must meet the requirement of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory.

HOWARD SOIL CONSERVATION DISTRICT (HSCD) STANDARD SEDIMENT CONTROL NOTES

- 1. A pre-construction meeting must occur with the Howard County Department of Public Works, Construction Inspection Division (CID), 410-313-1895 after the future LLO and protected areas are marked clearly in the field.
2. Upon completion of the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading.

- 3. Prior to the start of another phase of construction or opening of another grading unit, a. Prior to the removal or modification of sediment control practices.

- 4. All vegetative and structural practices are to be installed according to the provisions of this plan and are to be in conformance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, and revisions thereto.

- 5. Following initial soil disturbance or re-disturbance, permanent or temporary stabilization is required within three (3) calendar days to the surface of all perimeter controls, dikes, swales, ditches, perimeter slopes, and all slopes steeper than 3 horizontal to 1 vertical (3:1); and seven (7) calendar days as to all other disturbed areas on the project site except for those areas under active grading.

- 6. All disturbed areas must be stabilized within the time period specified above in accordance with the 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, for topsoil (Sec. B-4-2), permanent seeding (Sec. B-4-5), temporary seeding (Sec. B-4-4) and mulching (Sec. B-4-3).

- 7. An additional control practice which is disturbed by grading activity for placement of the utilities must be repaired on the same day of disturbance.

- 8. Additional sediment control must be provided, if deemed necessary, for the placement of the utility and all controls shall be inspected by the contractor weekly, and the next day after each rain event. A written report for the contractor, made available upon request, is part of every inspection and should include:

- Inspection date
• Inspection type (routine, pre-storm event, during rain event)
• Name and title of inspector

- Brief description of project status (e.g., percent completed) and/or current activities
• Evidence of sediment discharges
• Identification of plan deficiencies

- Identification of sediment controls that require maintenance
• Identification of missing or improperly installed sediment controls
• Compliance with the requirements of construction and stabilization requirements

- Photographs
• Monitoring/drainage
• Maintenance and/or corrective action performed
• Other inspection items as required by the General Permit for Stormwater Associated with Construction Activities (NPDES, MD5).

- 9. Trenches for the construction of utilities are limited to three pipe diameters or that which can and shall be back-filled and stabilized by the end of each workday, whichever is shorter.

- 10. Any major changes or revisions to the plan or sequence of construction must be reviewed and approved by the HSCD prior to proceeding with construction. Minor revisions may be allowed by the CID per the list of HSCD-approved field changes.

- 11. Disturbance shall not occur outside the LLO.D. A project is to be sequenced so that grading activities begin on one grading unit (maximum acreage of 20 ac. per grading unit) at a time. Work may proceed to a subsequent grading unit when at least 50 percent of the disturbed area in the preceding grading unit has been stabilized and approved by the CID. Unless otherwise specified and approved by the CID, no more than 30 acres cumulatively may be disturbed at a given time.

- 12. WCM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.

- 13. WCM, including dye, must contain no germination or growth inhibiting factors.

- 14. WCM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry.

- 15. WCM material must not contain elements or compounds at concentration levels that will be phytotoxic.

- 16. WCM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

- 17. Application
a. Apply mulch to all seeded areas immediately after seeding.

- 18. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed. When using a mulch anchoring tool, increase the application rate to 2.5 tons per acre.

- 19. Wood cellulose fiber used as mulch must be applied to a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to obtain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

- 20. WCM material must not contain elements or compounds at concentration levels that will be phytotoxic.

- 21. WCM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

- 22. Application
a. Apply mulch to all seeded areas immediately after seeding.

- 23. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. Apply mulch to achieve a uniform distribution and depth so that the soil surface is not exposed.

- 24. Wood cellulose fiber used as mulch must be applied to a net dry weight of 1500 pounds per acre. Mix the wood cellulose fiber with water to obtain a mixture with a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION

Establishment of vegetative cover on cut and fill slopes.
Purpose: To provide timely vegetative cover on cut and fill slopes as work progresses.

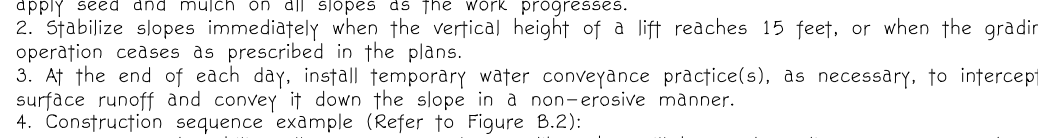
Conditions Where Practice Applies: Any cut or fill slope greater than 15 feet in height. This practice also applies to stockpiles.

- A. Incremental Stabilization - Cut Slopes
1. Excavate and stabilize cut slopes in increments not to exceed 15 feet in height.

- 2. Construction sequence example (refer to Figure B.1):
a. Construct and stabilize all temporary swales or dikes that will be used to convey runoff around the excavation.

- 3. Perform Phase 1 excavation, prepare seeded, and stabilize.
4. Perform Phase 2 excavation, prepare seeded, and stabilize.
5. Perform final phase excavation, prepare seeded, and stabilize.
6. Overseed previously seeded areas as necessary.

Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.



- B. Incremental Stabilization - Fill Slopes
1. Construct and stabilize fill slopes in increments not to exceed 15 feet in height.

- 2. Stabilize slopes immediately when the vertical height of a lift reaches 15 feet, or when the grading operation ceases as prescribed in the plans.

- 3. At the end of each day, install temporary water conveyance practices, as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.

- 4. Construction sequence example (refer to Figure B.2):
a. Construct and stabilize all temporary swales or dikes that will be used to divert runoff around the fill. Construct silt fence on low side of fill unless other methods shown on the plans address this area.

- b. At the end of each day, install temporary water conveyance practices, as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.

- c. Place Phase 1 fill, prepare seeded, and stabilize.

- d. Place Phase 2 fill, prepare seeded, and stabilize.

- e. Place final phase fill, prepare seeded, and stabilize. Overseed previously seeded areas as necessary.

Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.



DESIGN CERTIFICATION

I Herby Certify That This Plan Has Been Designed In Accordance With Current Maryland Erosion And Sediment Control Laws, Regulations And Standards. That It Represents A Practicable And Workable Plan Based On My Personal Knowledge Of The Site, And That It Was Prepared In Accordance With The Requirements Of The Howard Soil Conservation District.

LUKE GROOM Designer's Signature
LUKE A. GROOM MO REGISTRATION NO. 46091 Printed Name

OWNER/DEVELOPER CERTIFICATION

"I/We Certify That Any Clearing, Grading, Construction Or Development Will Be Done Pursuant To This Approved Erosion And Sediment Control Plan, Including Inspecting And Maintaining Controls And That The Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Training A4 Maryland Department Of The Environment (MDE) Approved Training Program For The Control On Erosion And Sediment Prior To Beginning The Project. I Certify Right-of-entry For Periodic On-site Evaluation By Howard County, The Howard Soil Conservation District And/or MDE."

JASON VAN KIRK Owner's/Developer's Signature
JASON VAN KIRK MO REGISTRATION NO. 46091 Printed Name

Approved: This Plan is Approved For Soil Erosion And Sediment Control By The Howard Soil Conservation District.
ALEXANDER BRATCHEV Declassified By

Approved: Department Of Planning And Zoning
ALEXANDER BRATCHEV Declassified By

Chief, Division Of Land Development
LINDA EDMONDSON Declassified By

Chief, Development Engineering Division
JASON VAN KIRK Declassified By

Approved: Howard County Department Of Public Works
JASON VAN KIRK Declassified By

Chief, Bureau Of Highways
ALEXANDER BRATCHEV Declassified By

Table with columns NO., DESCRIPTION, and DATE for REVISIONS.

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN A GRADING PERMIT AND HOLD PRE-CONSTRUCTION MEETING WITH COUNTY INSPECTOR. (2 WEEKS)
2. NOTIFY "M&S UTILITY" AT LEAST 48 HOURS BEFORE BEGINNING ANY WORK AT 410-313-1330 AT LEAST 24 HOURS BEFORE STARTING WORK. (1 DAY)
3. CLEAR AND GRUB AS NECESSARY FOR INSTALLATION OF PERIMETER CONTROLS. (2 DAYS)
4. COMMENCE INSTALLATION OF STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCE, TWO S.O.S.T.F. AND SEDIMENT BASIN WITH SUPPORTING EARTH DIKES. (3 WEEKS)
5. OBTAIN APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR TO PROCEED. (1 DAY)
6. COMMENCE SITE GRADING AND INSTALLATION OF CURB AND GUTTER, STORM DRAIN, BASE PAVING. (1 MONTH)
7. COMMENCE INSTALLATION OF LOW PRESSURE SEWER SYSTEM AND WASTEWATER TREATMENT SYSTEM IN ACCORDANCE WITH PUBLIC CONTRACT NO. 90-5187-0. (1 MONTH)
8. STABILIZE ALL DISTURBED AREAS WITH TEMPORARY SEEDING. (1 DAY)
9. WITH INSPECTORS PERMISSION, BEGIN CONVERSION OF S.O.S.T.F. AND BASIN TO SWM FACILITIES AND REMOVAL OF SUPPORTING EARTH DIKE. PERMANENTLY SEED AS NECESSARY. (1 MONTH)
10. INSTALL FINISHED SURFACE COURSE, PERIMETER LANDSCAPING AND STREET TREES. (2 WEEKS)
11. ALL FINAL GRADING AND STABILIZATION SHOULD BE COMPLETED BEFORE REMOVAL OF CONTROLS. WHEN ALL CONTRIBUTING AREAS TO THE SEDIMENT CONTROL DEVICES HAVE BEEN STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR REMOVE REMAINING SEDIMENT CONTROL DEVICES AND STABILIZED WITH PERMANENT SEEDING. (3 DAYS)
12. PROPOSED HOUSES CANNOT BE CONSTRUCTED UNDER THIS PLAN.

NOTE: THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE AFTER EACH RAINFALL AND ON A DAILY BASIS ON ALL SEDIMENT CONTROL MEASURES, REMOVE SEDIMENT FROM THE TRAP WHEN CLEAN OUT ELEVATION HAS BEEN REACHED. ALL SEDIMENT MUST BE PLACED UPSTREAM OF THE APPROVED TRAPPING DEVICE.

SEDIMENT AND EROSION CONTROL NOTES & DETAILS

BRICKELL PROPERTY

LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B' PREVIOUS HOWARD COUNTY FILES: ECP-19-021, SP-19-003, F-22-020 AND WP-22-91

TAX MAP NO.: 10 ZONED NO.: 1 PARCEL NO.: 274 GRID RR-DEO

THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND SCALE: AS SHOWN DATE: JULY, 2024 SHEET 5 OF 19

OWNERS DEVELOPER

ESC MEADOW SPRINGS, L.C. 5074 DORSEY HALL DRIVE SUITE 205 ELLICOTT CITY, MARYLAND 21042 PHONE: 410-720-3021

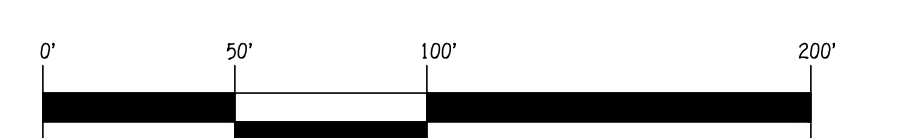
ESC MEADOW SPRINGS, L.C. 5074 DORSEY HALL DRIVE SUITE 205 ELLICOTT CITY, MARYLAND 21042 PHONE: 410-720-3021

PROFESSIONAL CERTIFICATION

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. 46091, EXPIRATION DATE: 5/14/25.

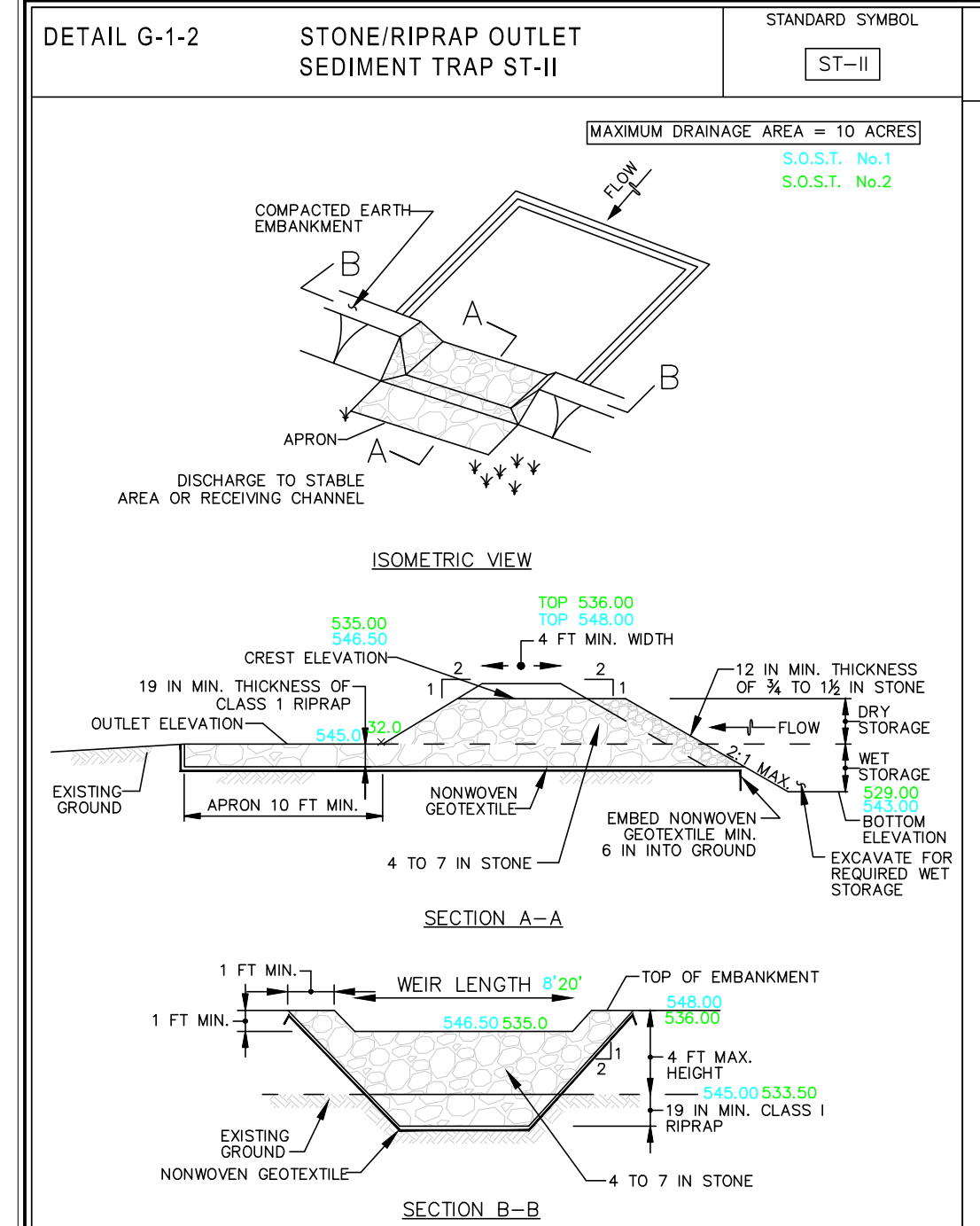
LUKE GROOM 7/18/2024

LUKE A. GROOM DATE



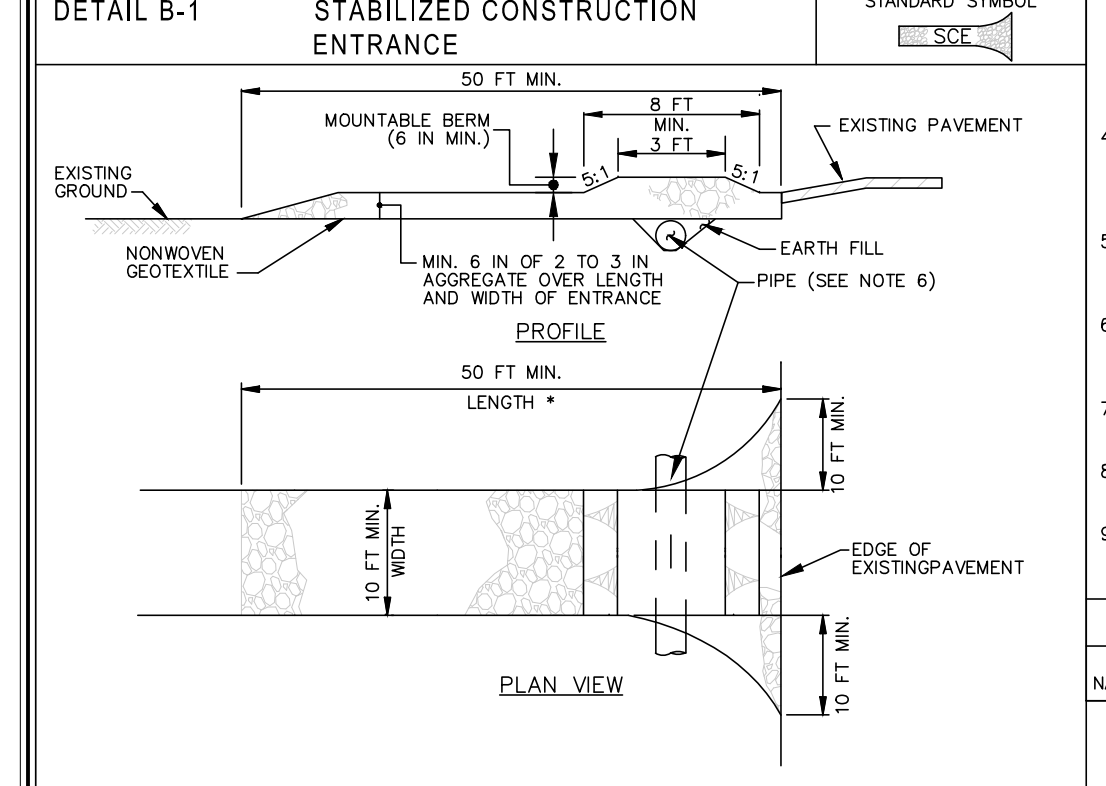
SCALE: 1" = 50'





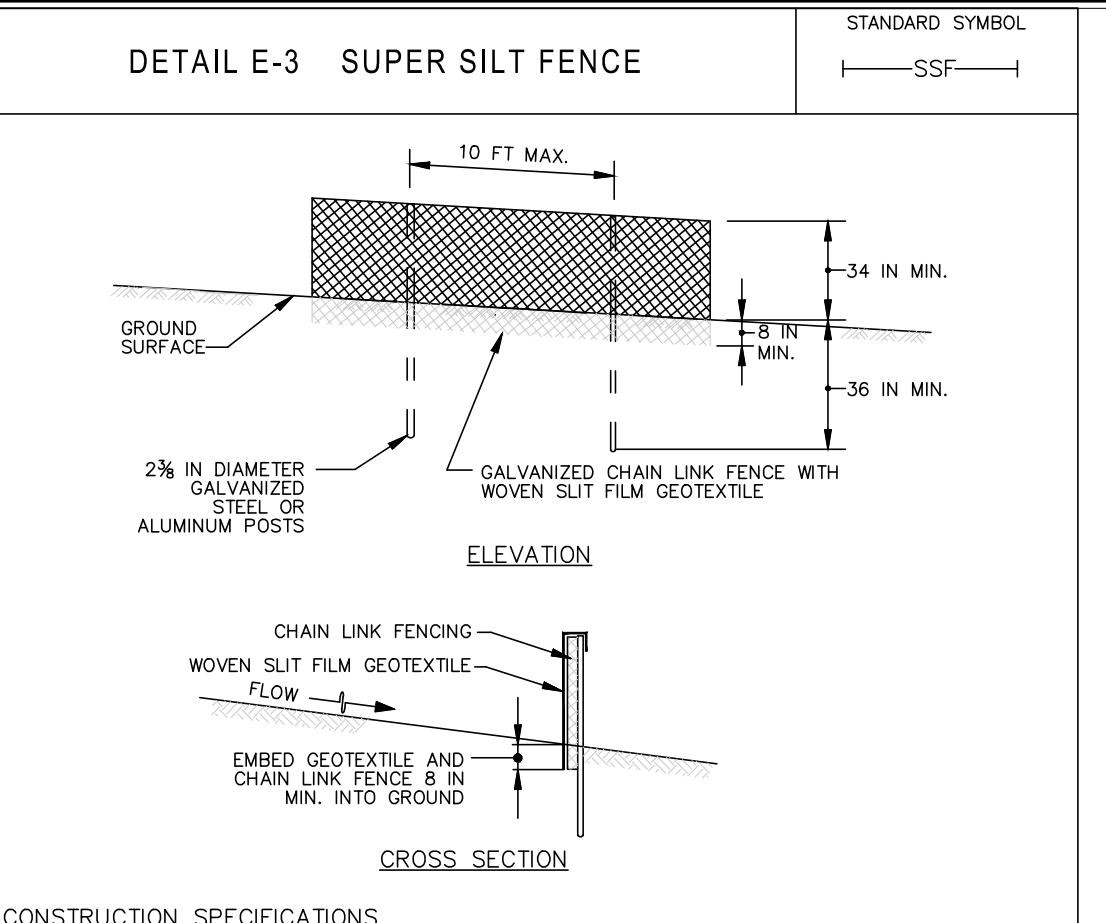
- CONSTRUCTION SPECIFICATIONS**
- CONSTRUCT TRAP IN SUCH A MANNER THAT EROSION AND WATER POLLUTION ARE AVOIDED.
 - CLEAR, GRUB, AND STRIP ANY VEGETATION AND ROOT MAT FROM THE AREA UNDER THE EMBANKMENT AND TRAP BOTTOM.
 - USE FILL MATERIAL FREE OF ROOTS, WOODY VEGETATION, OVERSIZED STONES, ROCKS, ORGANIC MATERIAL, OR OTHER OBJECTIONABLE MATERIAL FOR THE EMBANKMENT.
 - CONSTRUCT TOP OF EMBANKMENT 1 FOOT MINIMUM ABOVE WEIR CREST. COMPACT THE EMBANKMENT BY TRAVELING WITH EQUIPMENT WHILE IT IS BEING CONSTRUCTED.
 - MAKE ALL CUT AND FILL SLOPES 2:1 OR FLATTER.
 - PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE BOTTOM AND SIDES OF OUTLET AND APRON PRIOR TO PLACEMENT OF RIPRAP. OVERLAP SECTIONS OF GEOTEXTILE AT LEAST 1 FOOT WITH THE SECTION NEARER TO THE TRAP PLACED ON TOP. EMBED GEOTEXTILE AT LEAST 6 INCHES INTO EXISTING GROUND AT ENTRANCE OF OUTLET CHANNEL.
 - USE CLEAN 4 TO 7 INCH RIPRAP TO CONSTRUCT THE WEIR. USE CLASS 1 RIPRAP FOR THE APRON. USE OF RECYCLED CONCRETE EQUIVALENT IS ACCEPTABLE.
 - PLACE 1 FOOT OF CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE ON THE UPSTREAM FACE OF THE WEIR.
 - CONSTRUCT AND MAINTAIN THE OUTLET ACCORDING TO APPROVED PLAN, AND IN SUCH A MANNER THAT EROSION AT OR BELOW THE OUTLET DOES NOT OCCUR.
 - STABILIZE THE EMBANKMENT AND OUTER SLOPES WITH SEED AND MULCH. STABILIZE POINTS OF CONCENTRATED INFLOW AS SHOWN ON APPROVED PLAN.
 - REMOVE SEDIMENT AND RESTORE TRAP TO ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO CLEANOUT ELEVATION (SIDE OF WET STORAGE DEPTH). DEPOSIT REMOVED SEDIMENT IN AN APPROVED AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE. KEEP POINTS OF INFLOW AND OUTFLOW AS WELL AS INTERIOR OF TRAP FREE FROM EROSION AND REMOVE ACCUMULATED DEBRIS. MAINTAIN EMBANKMENTS TO CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION. REMOVE ANY TREES, BRUSH, OR OTHER WOODY VEGETATION GROWING ON EMBANKMENT OR NEAR PRINCIPAL SPILLWAY. MAINTAIN LINE, GRADE, AND CROSS SECTION.
 - WHEN DEWATERING TRAP, PASS REMOVED WATER THROUGH AN APPROVED SEDIMENT CONTROL PRACTICE.
 - UPON REMOVAL, GRADE AND STABILIZE THE AREA OCCUPIED BY TRAP.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011



- CONSTRUCTION SPECIFICATIONS**
- PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (40 FEET FOR SINGLE RESIDENCE LOT), USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
 - PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE. MAINTAIN POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
 - PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
 - PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
 - MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
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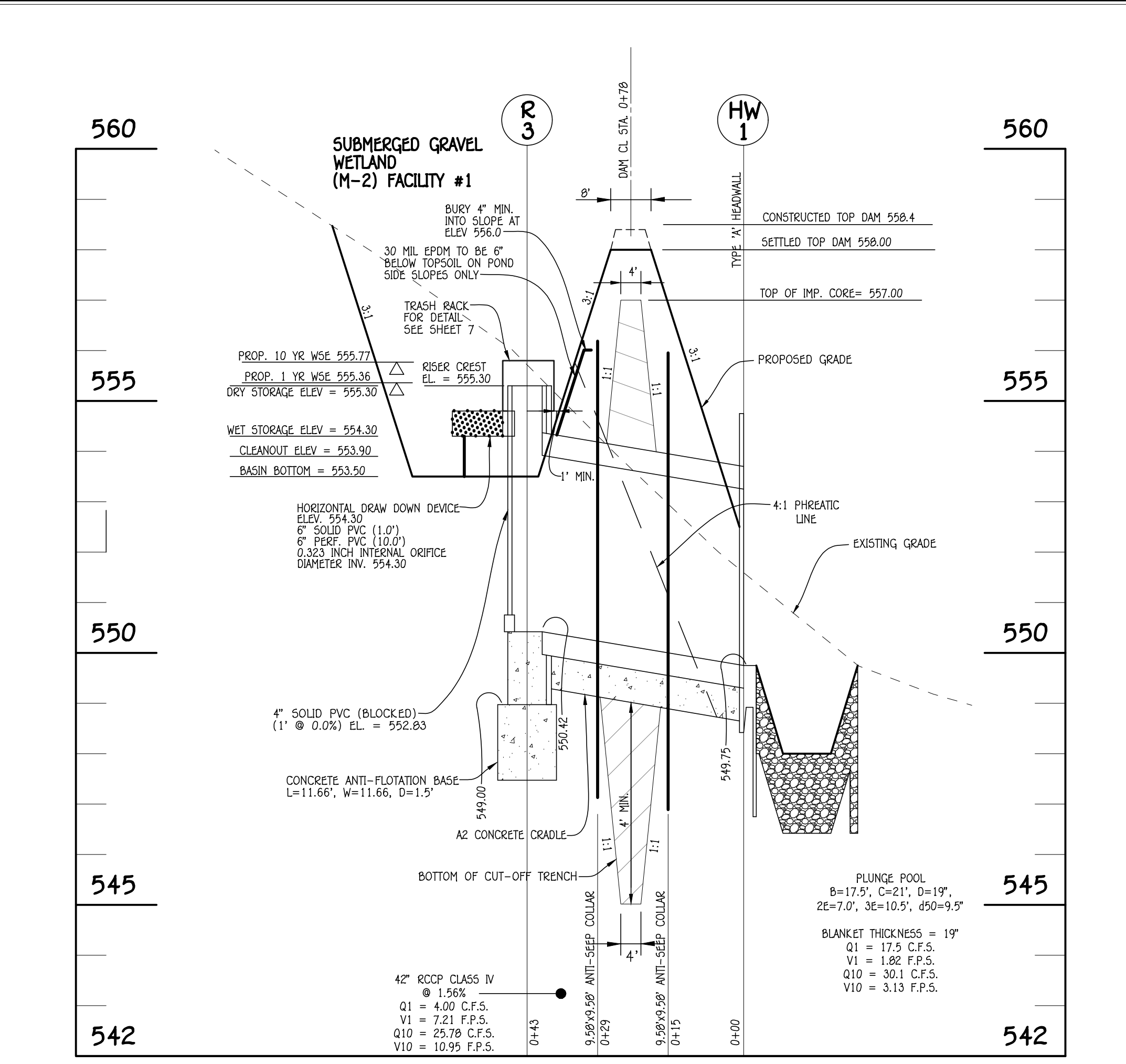
- CONSTRUCTION SPECIFICATIONS**
- INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
 - FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2 1/2 INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR RUG RINGS.
 - FASTEN WOVEN SILT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS, SECURELY TO THE UPSIDE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
 - WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
 - EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
 - PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
 - REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 20% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
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- CONSTRUCTION SPECIFICATIONS**
- USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
 - USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOOTHER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-HARMFUL TO THE SOIL. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
 - SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
 - PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDING PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
 - UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTERLINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MAT SMOOTHLY AND FIRMLY ON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
 - KEY-IN UPSTREAM END OF EACH MAT ROLL BY DIGGING A 6 INCH (MINIMUM) TRENCH AT THE UPSTREAM END OF THE MATTING, PLACING THE ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END.
 - OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.
 - STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
 - ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
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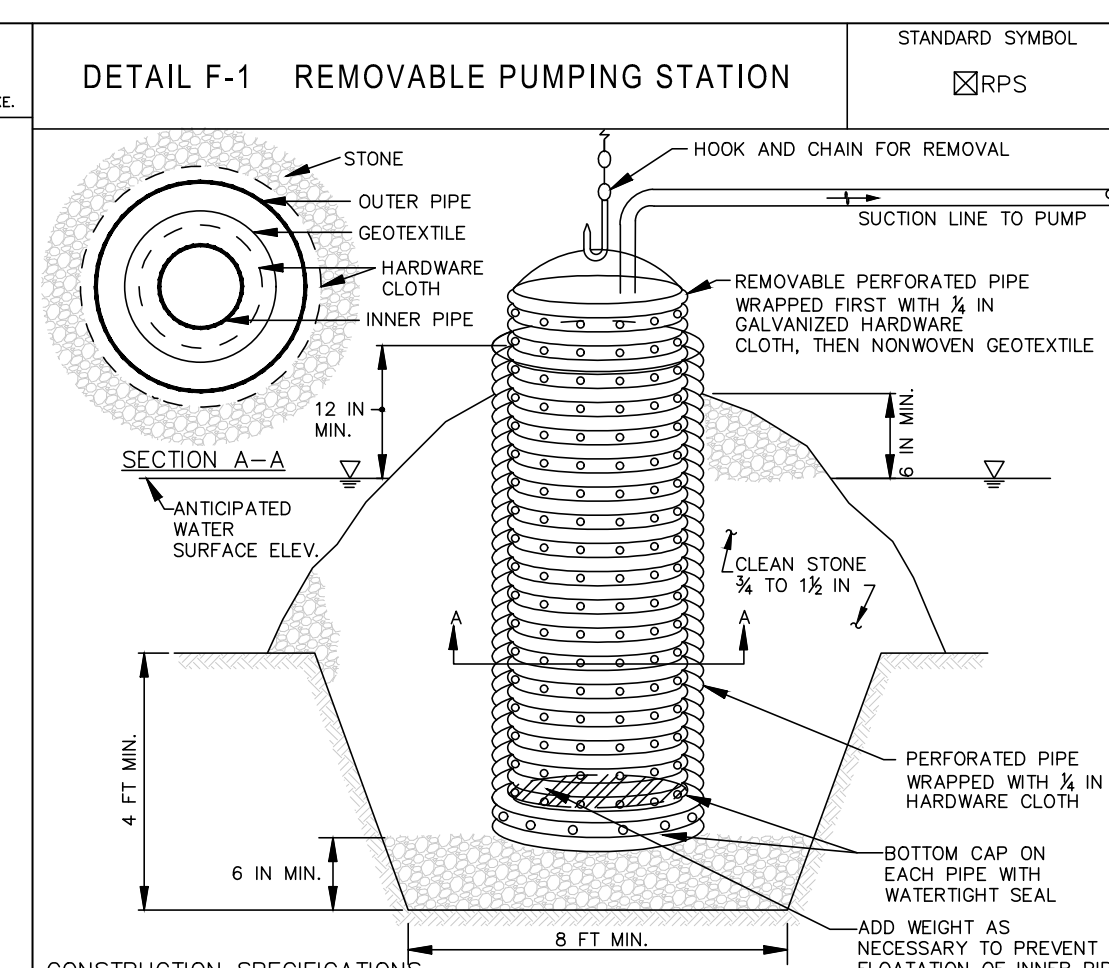


- CONSTRUCTION SPECIFICATIONS**
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 - USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOOTHER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-HARMFUL TO THE SOIL. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
 - SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
 - PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDING PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
 - UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTERLINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MAT SMOOTHLY AND FIRMLY ON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
 - KEY-IN UPSTREAM END OF EACH MAT ROLL BY DIGGING A 6 INCH (MINIMUM) TRENCH AT THE UPSTREAM END OF THE MATTING, PLACING THE ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END.
 - OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.
 - STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
 - ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.



- CONSTRUCTION SPECIFICATIONS**
- REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTHDIKE.
 - EXCAVATE OR SHAPE EARTH DIKE TO LINE, GRADE, AND CROSS SECTION AS SPECIFIED. BANK PROJECTIONS OR OTHER IRREGULARITIES ARE NOT ALLOWED.
 - COMPACT FILL.
 - CONSTRUCT FLOW CHANNEL ON AN UNINTERRUPTED, CONTINUOUS GRADE, ADJUSTING THE LOCATION DUE TO FIELD CONDITIONS AS NECESSARY TO MAINTAIN POSITIVE DRAINAGE.
 - PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
 - STABILIZE EARTH DIKE WITHIN THREE DAYS OF INSTALLATION. STABILIZE FLOW CHANNEL FOR CLEAR WATER DIVERSION WITHIN 24 HOURS OF INSTALLATION.
 - MAINTAIN LINE, GRADE, AND CROSS SECTION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS, AND MAINTAIN POSITIVE DRAINAGE. KEEP EARTH DIKE AND POINT OF DISCHARGE FREE OF EROSION, AND CONTINUOUSLY MEET REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.
 - UPON REMOVAL OF EARTH DIKE, GRADE AREA FLOUSH WITH EXISTING GROUND. WITHIN 24 HOURS OF REMOVAL, STABILIZE DISTURBED AREA WITH TOPSOIL, SEED, AND MULCH, OR AS SPECIFIED ON APPROVED PLAN.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
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- CONSTRUCTION SPECIFICATIONS**
- USE CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS 6 INCHES ON CENTER.
 - USE A MINIMUM 12 INCH DIAMETER INNER PIPE WITH AN OUTER PIPE A MINIMUM 6 INCHES LARGER IN DIAMETER. BOTTOM OF EACH PIPE MUST BE CAPPED WITH WATER TIGHT SEAL.
 - WRAP EACH PIPE WITH ¾ INCH GALVANIZED HARDWARE CLOTH. ON INNER PIPE WRAP NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH.
 - EXCAVATE 8 FEET X 8 FEET X 4 FEET DEEP PIT FOR PIPE PLACEMENT. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.
 - SET TOP OF INNER AND OUTER PIPES MINIMUM 12 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION (OR RISER CREST ELEVATION WHEN DEWATERING A BASIN).
 - BACKFILL PIT AROUND THE OUTER PIPE WITH ¾ TO 1½ INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.
 - DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
 - A REMOVABLE PUMPING STATION REQUIRES FREQUENT MAINTENANCE. IF SYSTEM CLOGS, PULL OUT INNER PIPE AND REPLACE GEOTEXTILE. KEEP POINT OF DISCHARGE FREE OF EROSION.

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STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II, TRAP NO. 1		
DRAINAGE AREA - INITIAL	1.17	ACRES
DRAINAGE AREA - INTERIM	---	ACRES
DRAINAGE AREA - FINAL	1.31	ACRES
TOTAL STORAGE REQUIRED	4,716	CF
TOTAL STORAGE PROVIDED	6,034	CF
WET STORAGE REQUIRED	2,358	CF
WET STORAGE PROVIDED	2,972	CF
DRY STORAGE REQUIRED	2,358	CF
DRY STORAGE PROVIDED	3,062	CF
EXISTING GROUND ELEVATION AT OUTLET (WET STORAGE ELEVATION)	545.0	FT
TRAP BOTTOM ELEVATION	543.0	FT
TRAP BOTTOM DIMENSIONS	24' x 46'	FT x FT
WEIR LENGTH	8'	FT
WEIR CREST (DRY STORAGE) ELEVATION	546.50	FT
CLEANOUT ELEVATION	544.00	FT
TOP OF EMBANKMENT ELEVATION	548.00	FT
SIDE SLOPE	2:1	H:V RATIO
EMBANKMENT TOP WIDTH	4'	FT
OUTLET PROTECTION - LENGTH	10'	FT
OUTLET PROTECTION - DEPTH	19'	IN

TEMPORARY SEDIMENT BASIN DATA		
DRAINAGE AREA - INITIAL	6.42	ACRES
DRAINAGE AREA - INTERIM	6.42	ACRES
DRAINAGE AREA - FINAL	6.28	ACRES
TOTAL STORAGE REQUIRED	23,112	CF
TOTAL STORAGE PROVIDED	27,396	CF
WET STORAGE REQUIRED	11,556	CF
WET STORAGE PROVIDED @ 554.30	11,739	CF
DRY STORAGE REQUIRED	11,556	CF
DRY STORAGE PROVIDED	15,657	CF
BASIN BOTTOM ELEVATION	553.50	FT
BASIN BOTTOM DIMENSIONS	81' x 175'	FT x FT
WEIR CREST (DRY STORAGE) ELEVATION	555.30	FT
CLEANOUT ELEVATION	553.90	FT
TOP OF EMBANKMENT ELEVATION	558.00	FT
SIDE SLOPE	3:1	H:V RATIO
EMBANKMENT TOP WIDTH	8	FT
OUTLET PROTECTION - LENGTH	N/A	FT
OUTLET PROTECTION - DEPTH	N/A	IN

STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II, TRAP NO. 2		
DRAINAGE AREA - INITIAL	4.19	ACRES
DRAINAGE AREA - INTERIM	4.19	ACRES
DRAINAGE AREA - FINAL	4.10	ACRES
TOTAL STORAGE REQUIRED	15,084	CF
TOTAL STORAGE PROVIDED	27,636	CF
WET STORAGE REQUIRED	7,542	CF
WET STORAGE PROVIDED @ 531.50	9,070	CF
DRY STORAGE REQUIRED (INC. TSWM)	15,682	CF
DRY STORAGE PROVIDED @ 535.0	18,566	CF
EXISTING GROUND ELEVATION AT OUTLET (WET STORAGE ELEVATION)	531.50	FT
TRAP BOTTOM ELEVATION	529.0	FT
TRAP BOTTOM DIMENSIONS	59' x 36'	FT x FT
WEIR LENGTH	20'	FT
WEIR CREST (DRY STORAGE) ELEVATION	535.00	FT
CLEANOUT ELEVATION	530.25	FT
TOP OF EMBANKMENT ELEVATION	536.00	FT
SIDE SLOPE	2:1	H:V RATIO
EMBANKMENT TOP WIDTH	4'	FT
OUTLET PROTECTION - LENGTH	10'	FT
OUTLET PROTECTION - DEPTH	19'	IN

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL	
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DESIGN CERTIFICATION

I hereby certify that this Plan has been designed in accordance with Current Maryland Erosion and Sediment Control Laws, Regulations and Standards, that it represents a practical and workable plan based on my personal knowledge of the site, and that it was prepared in accordance with the requirements of the Howard Soil Conservation District.

Luke Groom 7/18/2024
 Designer's Signature Date
 LUKE A. GROOM MD REGISTRATION NO. 46091
 Printed Name P.E.

OWNER/DEVELOPER CERTIFICATION

"I/We Certify that Any Clearing, Grading, Construction or Development Will Be Done Pursuant To This Approved Erosion And Sediment Control Plan, Including Inspecting And Maintaining Controls And That The Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Training At A Maryland Department Of The Environment (MDE) Approved Training Program For The Control On Erosion And Sediment Prior To Beginning The Project. I Certify Right-of-entry For Periodic On-site Evaluation By Howard County, The Howard Soil Conservation District And/or MDE."

Jason Van Kirk 7/17/2024
 Owner's/Developer's Signature Date
 Jason Van Kirk
 Printed Name & Title

Approved: This Plan is Approved For Soil Erosion And Sediment Control By The Howard County Conservation District.	Date
<i>Alexander Bratovich</i> 8/19/2024 Howard Soil Conservation District	Date
Approved: Department Of Planning And Zoning	Date
<i>CHAD Edmondson</i> 8/21/2024 Chief, Division Of Land Development	Date
Approved: Howard County Department Of Public Works	Date
<i>James A. ...</i> 8/26/2024 Chief, Bureau Of Highways	Date

NO.	REVISIONS	DESCRIPTION	DATE

SEDIMENT TRAP PROFILES AND DETAILS

BRICKELL PROPERTY

LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B' PREVIOUS HOWARD COUNTY FILES: ECP-19-021, 5P-19-003, F-22-020 AND WP-22-91
 TAX MAP NO.: 10 ZONED NO.: 1 PARCEL NO.: 274 GRID RR-DEO
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JULY, 2024
 SHEET 6 OF 19



PROFESSIONAL CERTIFICATION

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. 46091, EXPIRATION DATE: 5/14/25.

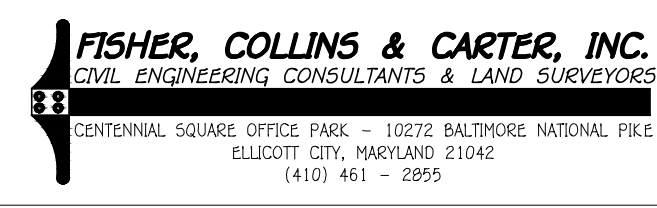
Luke Groom 7/18/2024
 LUKE A. GROOM Date

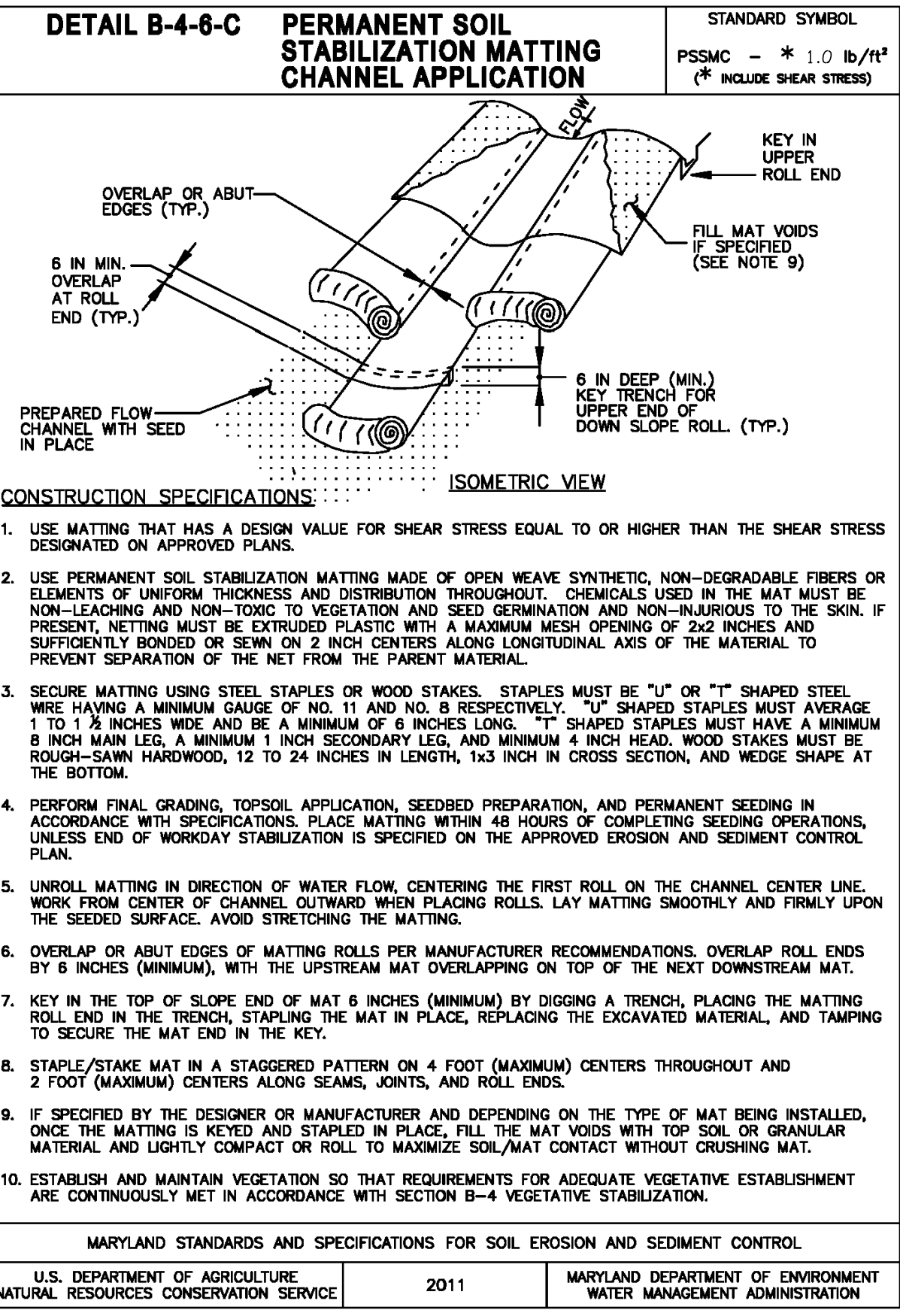
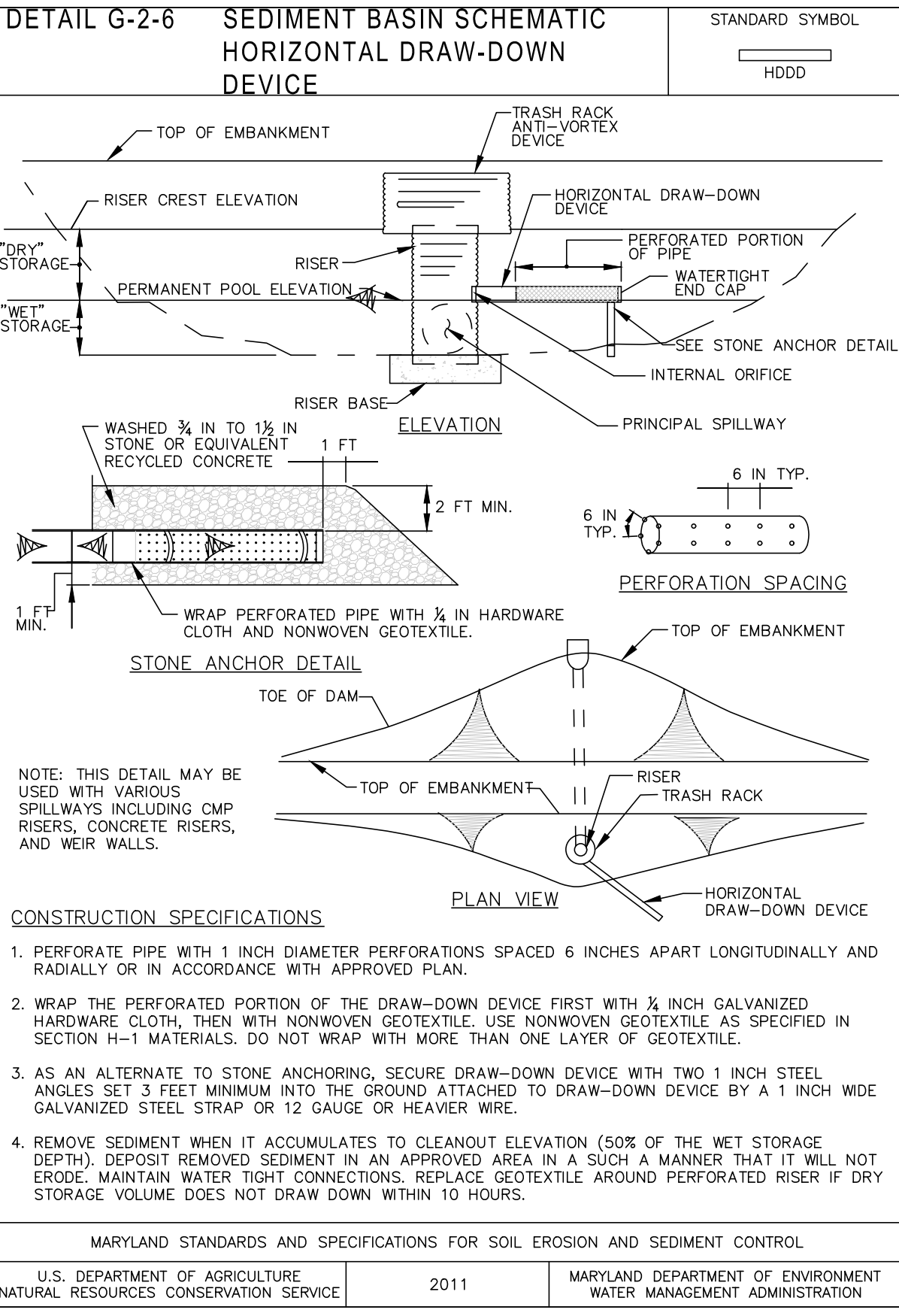
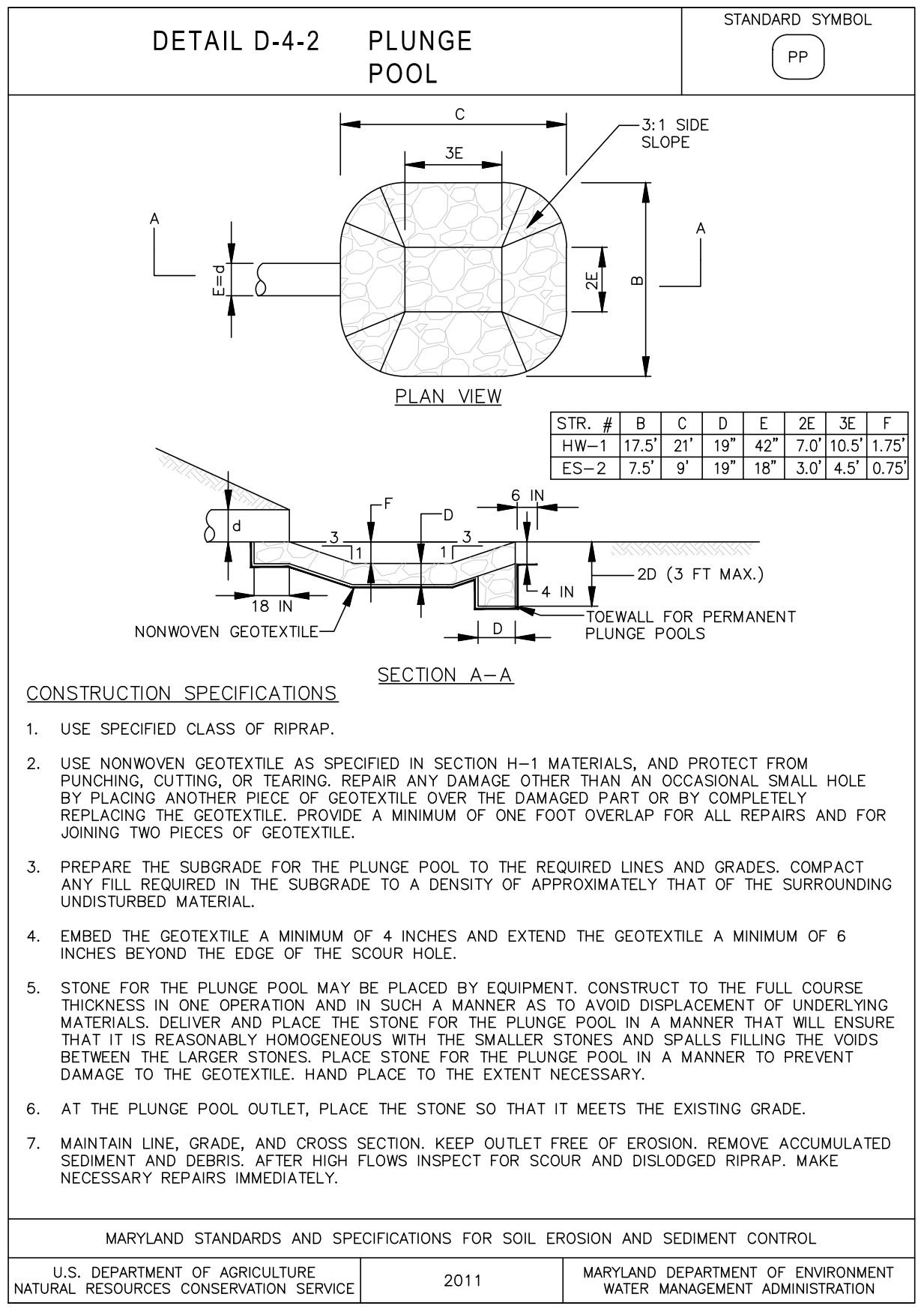
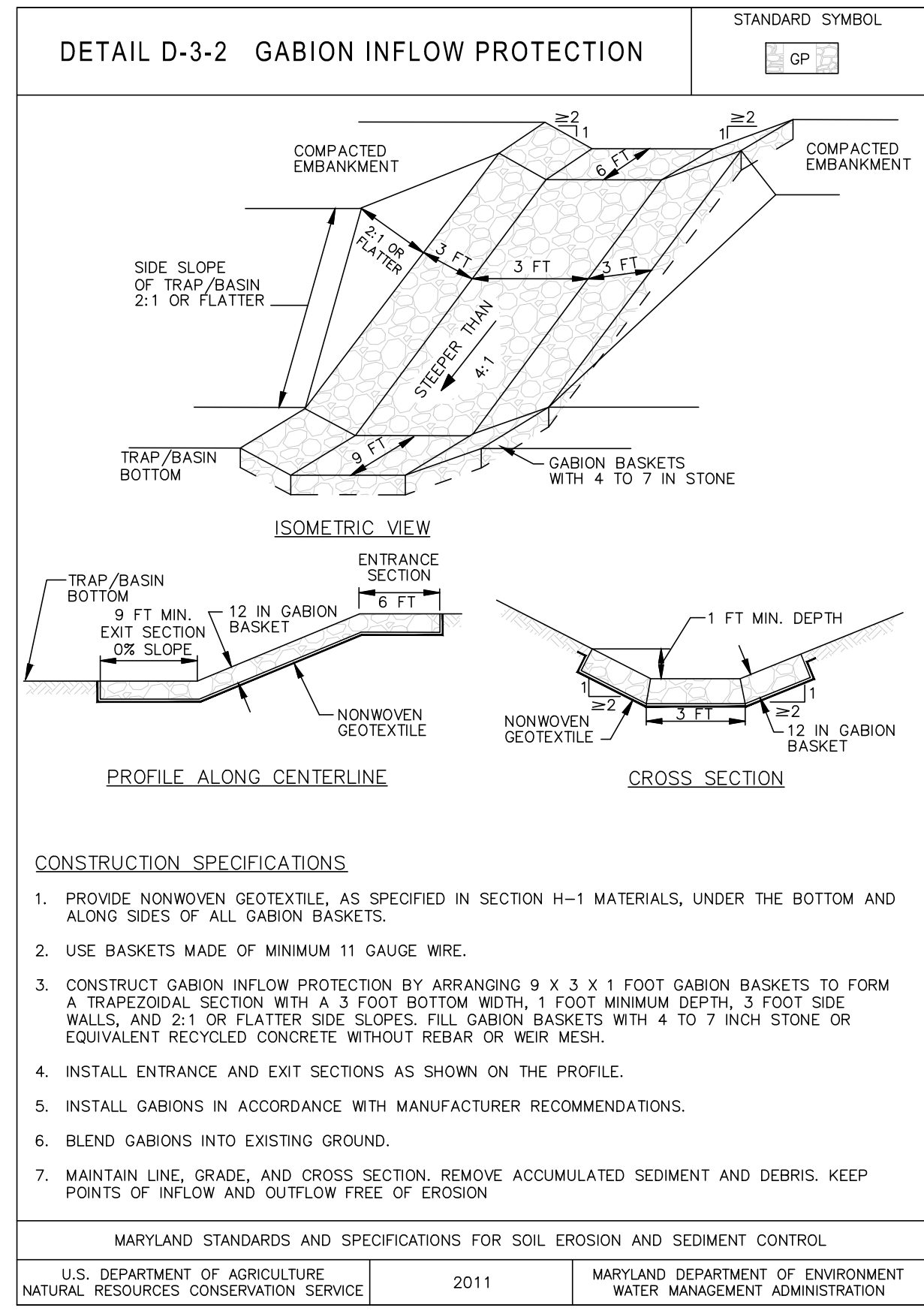
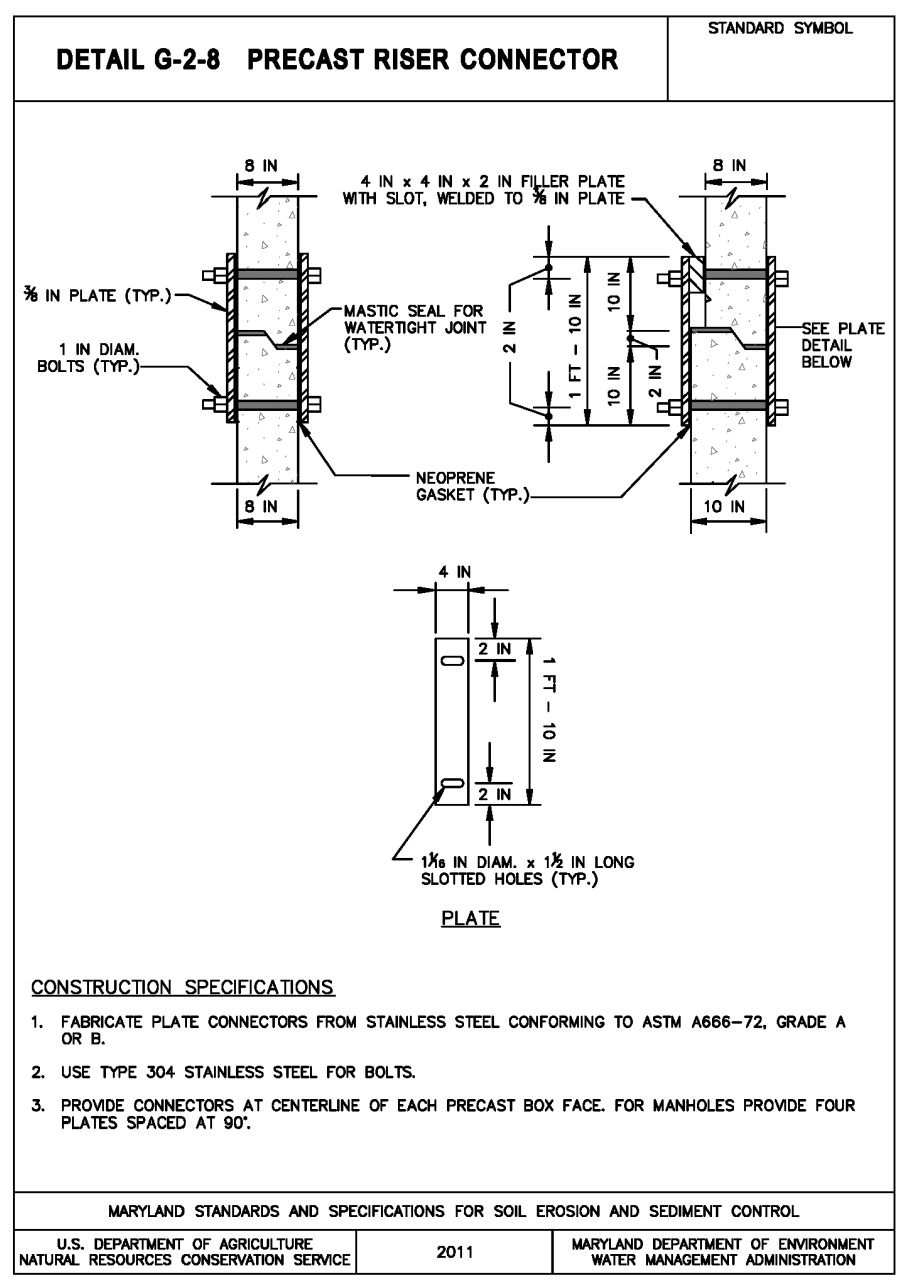
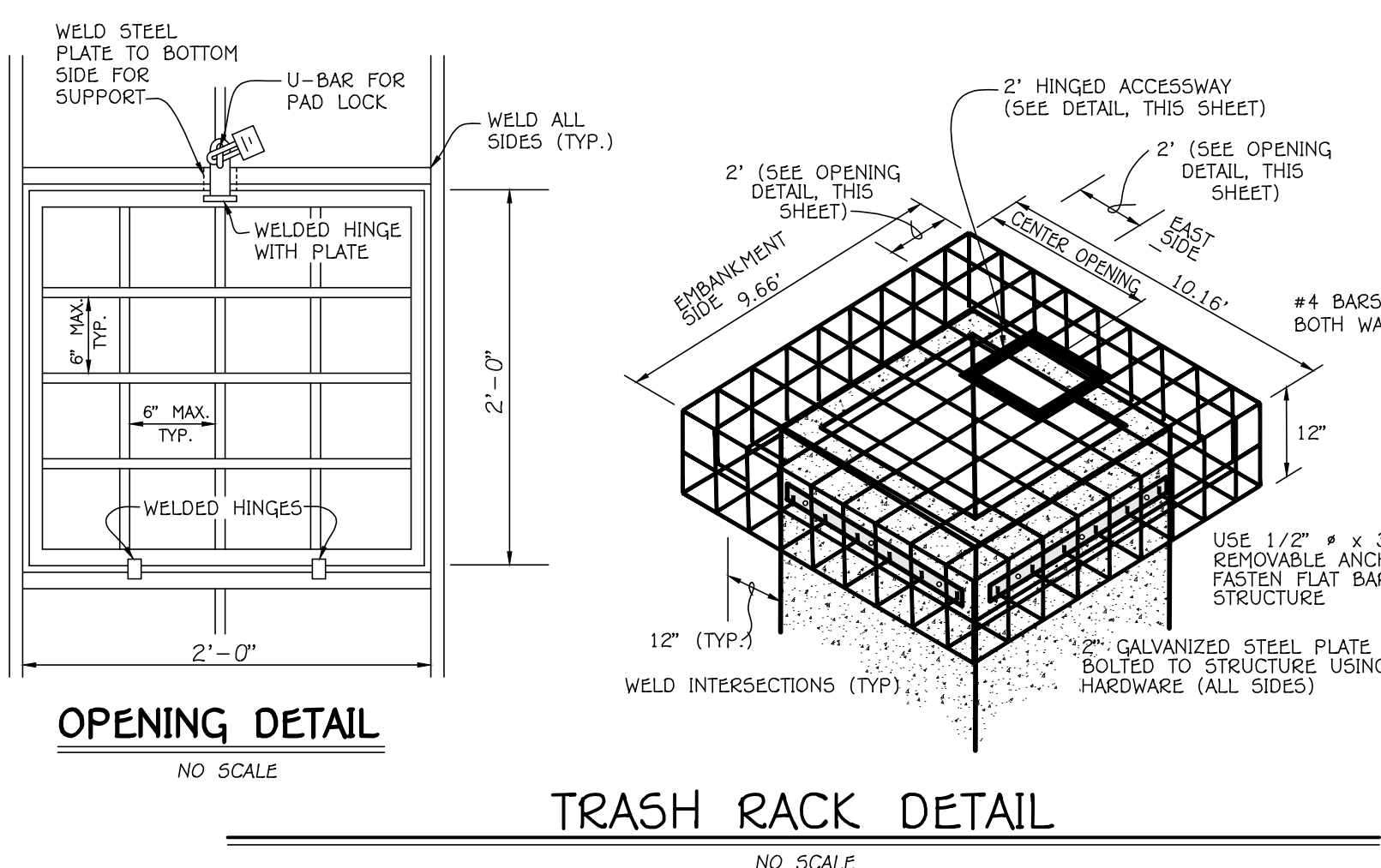
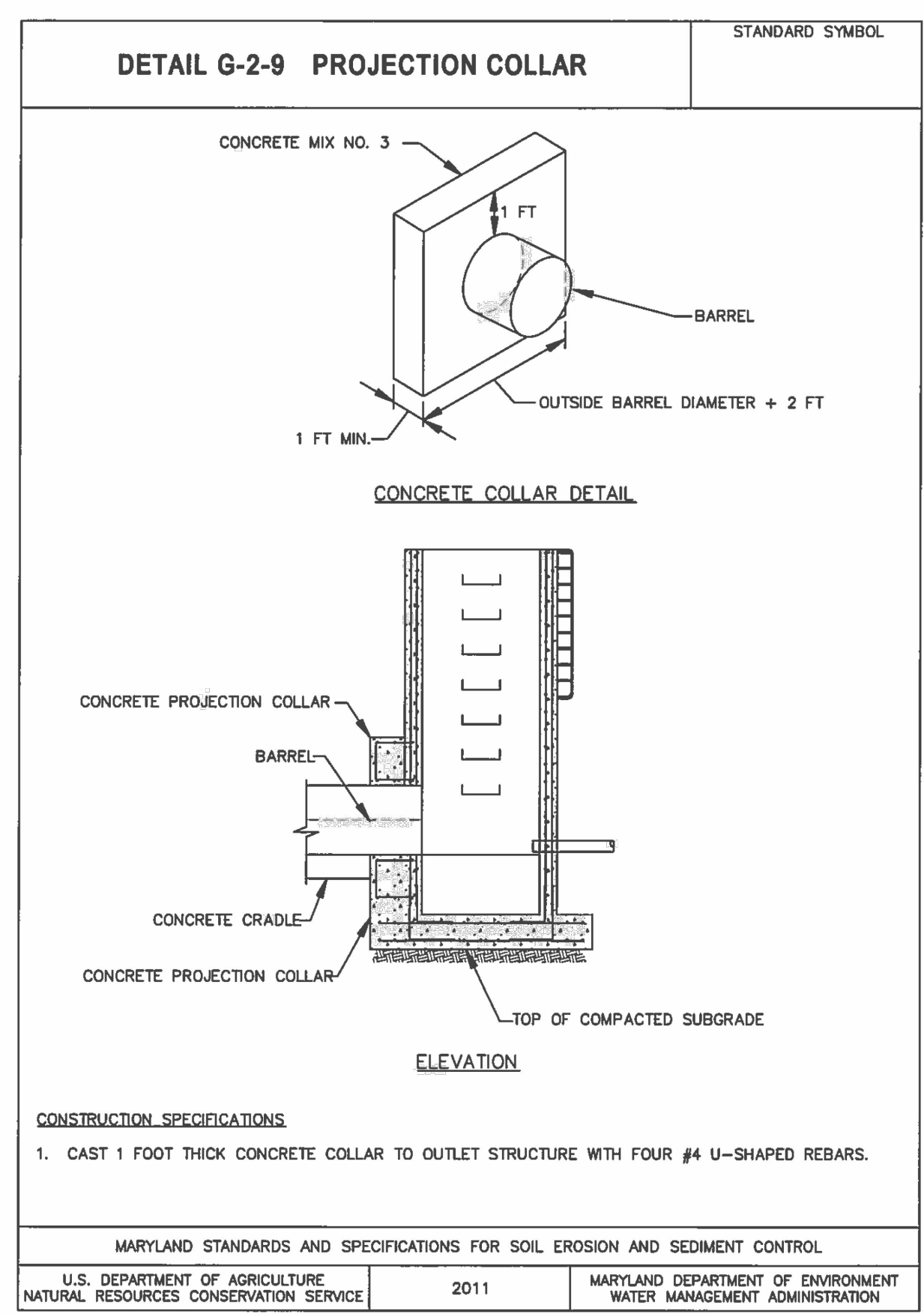
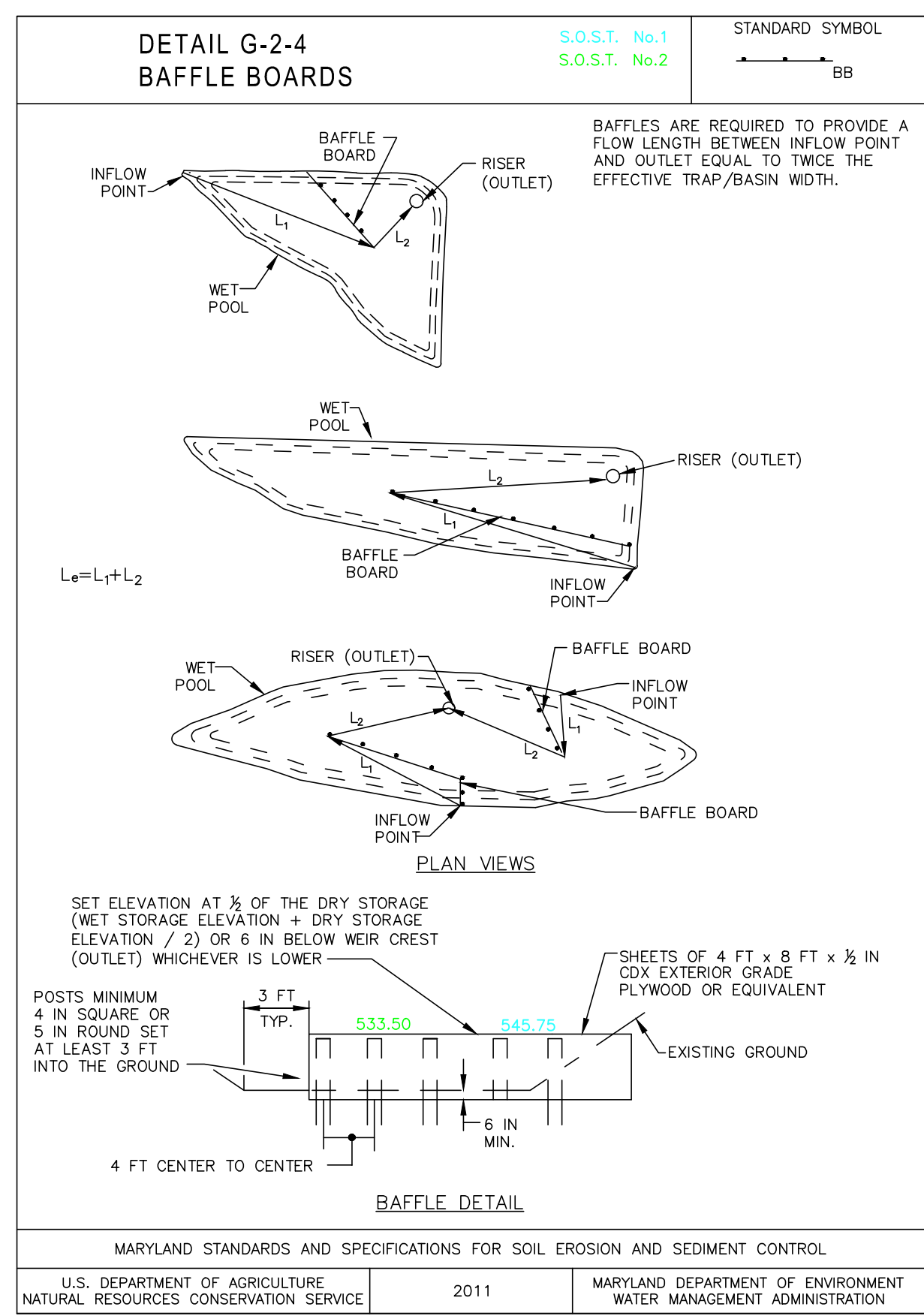
OWNERS

ESC MEADOW SPRINGS, L.C.
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 ELLICOTT CITY, MARYLAND 21042
 PHONE: 410-720-3021

DEVELOPER

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DESIGN CERTIFICATION

I hereby certify that this plan has been designed in accordance with current Maryland Erosion and Sediment Control Laws, Regulations and Standards. That it represents a Practical and Workable Plan Based on My Personal Knowledge of the Site, and that it was prepared in accordance with the Requirements of the Howard Soil Conservation District.

LUKE GROOM 7/18/2024

Designer's Signature: LUKE A. GROOM MD REGISTRATION NO. 46091
Printed Name: LUKE A. GROOM P.E.

OWNER/DEVELOPER CERTIFICATION

"I/We Certify That Any Clearing, Grading, Construction Or Development Will Be Done Pursuant To This Approved Erosion And Sediment Control Plan, Including Inspecting And Maintaining Controls And That The Responsible Personnel Involved In The Construction Project Will Have A Certificate Of Training At A Maryland Department Of The Environment (MDE) Approved Training Program For The Control On Erosion And Sediment Prior To Beginning The Project. I Certify Right-of-entry For Periodic On-site Evaluation By Howard County, The Howard Soil Conservation District And/or MDE."

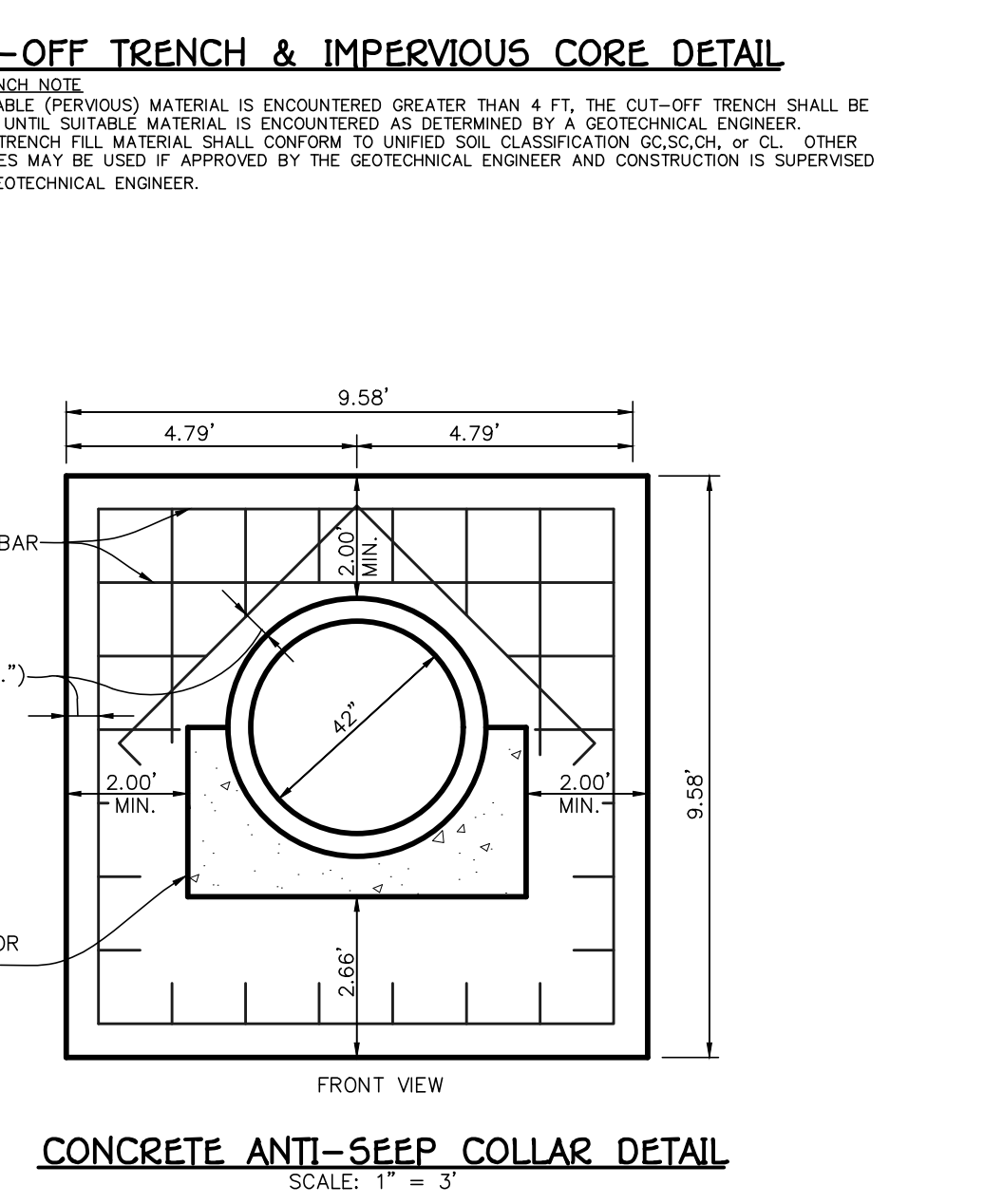
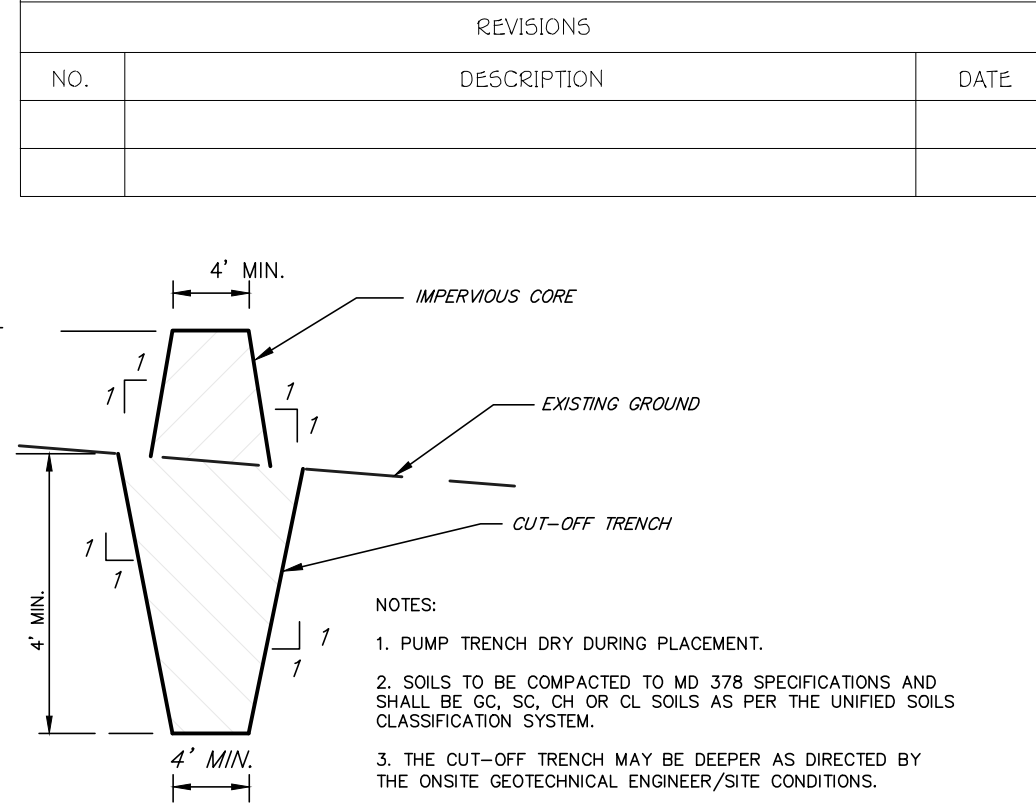
Owner's/Developer's Signature: Jason Van Kirk 7/17/2024
Printed Name & Title: Jason van kirk

Approved: This Plan Is Approved For Soil Erosion And Sediment Control By The Howard Soil Conservation District.
Alexander Bratohie 8/19/2024
Howard Soil Conservation District

Approved: Department Of Planning And Zoning 8/21/2024
Chief, Division Of Land Development

Approved: 8/19/2024
Chief, Development Engineering Division

Approved: Howard County Department Of Public Works 8/26/2024
Chief, Bureau Of Highways



SEDIMENT TRAP DETAILS BRICKELL PROPERTY

LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B' PREVIOUS HOWARD COUNTY FILES: ECP-19-021, SP-19-003, F-22-020 AND WP-22-91
TAX MAP NO.: 10 ZONED NO.: 1 PARCEL NO.: 274 GRID RR-DEO
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JULY, 2024
SHEET 7 OF 19

OWNERS DEVELOPER

ESC MEADOW SPRINGS, L.C. 5074 DORSEY HALL DRIVE SUITE 205 ELLICOTT CITY, MARYLAND 21042 PHONE: 410-720-3021

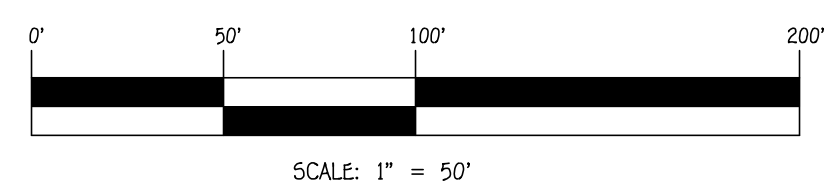
ESC MEADOW SPRINGS, L.C. 5074 DORSEY HALL DRIVE SUITE 205 ELLICOTT CITY, MARYLAND 21042 PHONE: 410-720-3021

JOHN BERNARD AND JENNIFER ANN CZAJOWSKI 12216 MAYAPPLE DRIVE MARIOTTVILLE, MD 21104 PHONE: 301-529-4775

PROFESSIONAL CERTIFICATION

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. 46091, EXPIRATION DATE: 5/14/25.

LUKE GROOM 7/18/2024
LUKE A. GROOM



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461-2895



LEGEND					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING CONTOUR 2' INTERVAL		DRYWELL (M-5)-TYPICAL		DENOTES 15%-24.9% SLOPES
	EXISTING CONTOUR 10' INTERVAL		SOIL LINES AND TYPES		DENOTES 25% AND GREATER SLOPE
	PROPOSED CONTOUR 10' INTERVAL		BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED		DENOTES FAILED PERC
	PROPOSED CONTOUR 2' INTERVAL		PROPOSED ROOF LEADER		DENOTES PASSED PERC
	SPOT ELEVATION		EXISTING TREES TO BE REMOVED		PROPOSED SEPTIC FIELD
	DENOTES PROPOSED WELL		EXISTING TREES TO REMAIN		EXISTING SEPTIC FIELD
	DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE		EXISTING WOOD FENCE (TO BE REMOVED UNLESS OTHERWISE NOTED)		FOREST CONSERVATION EASEMENT
	DENOTES EXISTING FOREST TO BE REMOVED		EXISTING WIRE FENCE		ERODIBLE SOILS
	LIMIT OF DISTURBANCE				
	SUPER SILT FENCE				
	SILT FENCE				
	EXISTING TREE LINE				
	DRAINAGE DIVIDE				

DRAINAGE AREA DATA					
AREA ID	STRUCTURE NO.	AREA	"C"	ZONED	% IMP.
A	I-1	0.60 AC.	0.44	RR-DEO	41%
B	I-2	0.54 AC.	0.54	RR-DEO	51%
C	I-3	0.56 AC.	0.44	RR-DEO	35%
D	R-2	0.46 AC.	0.55	RR-DEO	52%
E	R-1	0.48 AC.	0.51	RR-DEO	46%
F	R-4	0.43 AC.	0.46	RR-DEO	38%
G	ES-4	4.19 AC.	0.32	RR-DEO	16%

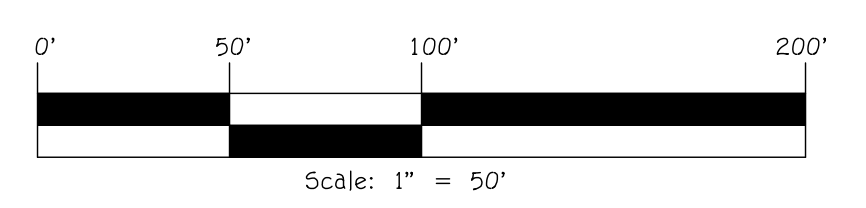


REVISIONS		
NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning
 Chief, Division of Planning, Development
 Chief, Development Engineering Division

Approved: Howard County Department Of Public Works
 Chief, Bureau Of Highways

WALKER MEADOWS LOT 25 F-17-045 ZONED: RR-DEO PLAT NOS. 24974-24979
 WALKER MEADOWS LOT 24 F-17-045 ZONED: RR-DEO PLAT NOS. 24974-24979
 WALKER MEADOWS LOT 23 F-17-045 ZONED: RR-DEO PLAT NOS. 24974-24979
 WALKER MEADOWS LOT 22 F-17-045 ZONED: RR-DEO PLAT NOS. 24974-24979



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 Luke Groom
 LIKE A. GROOM
 8/15/2024
 Date

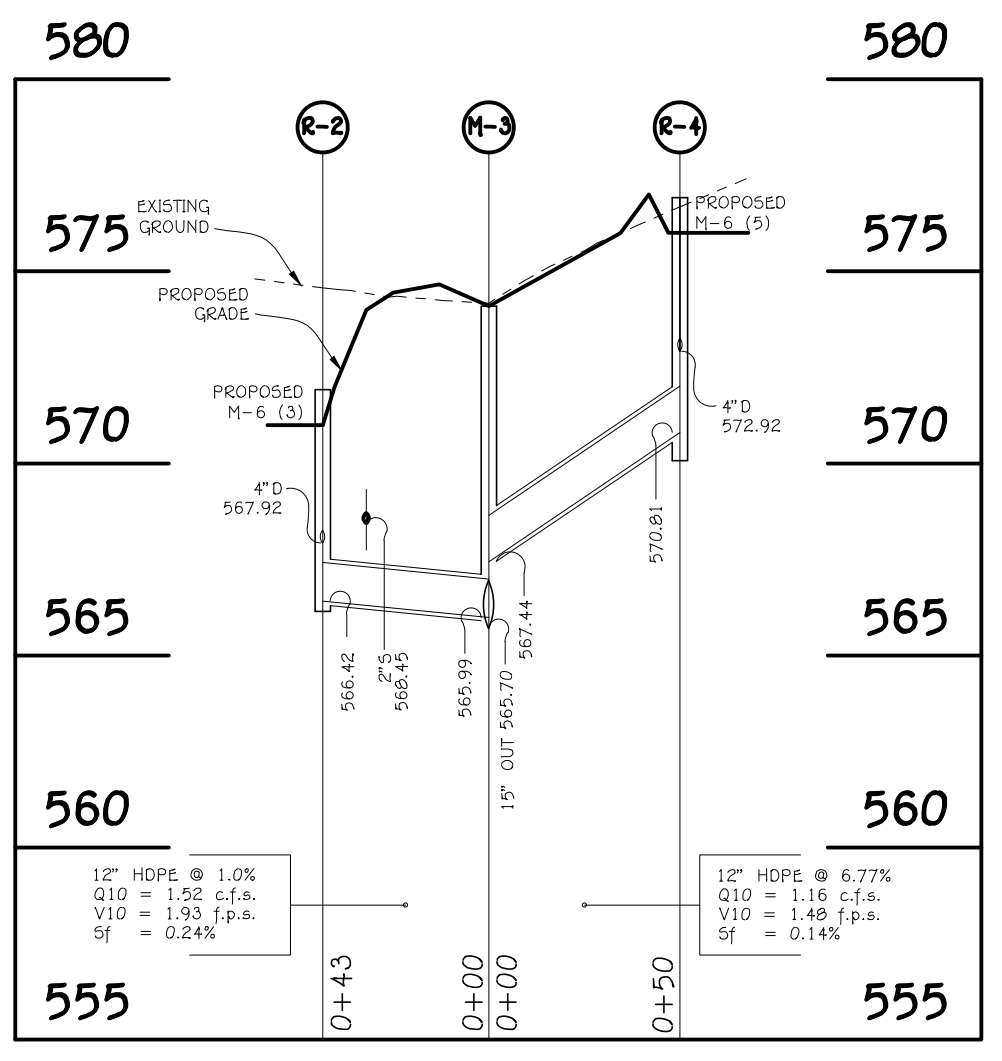
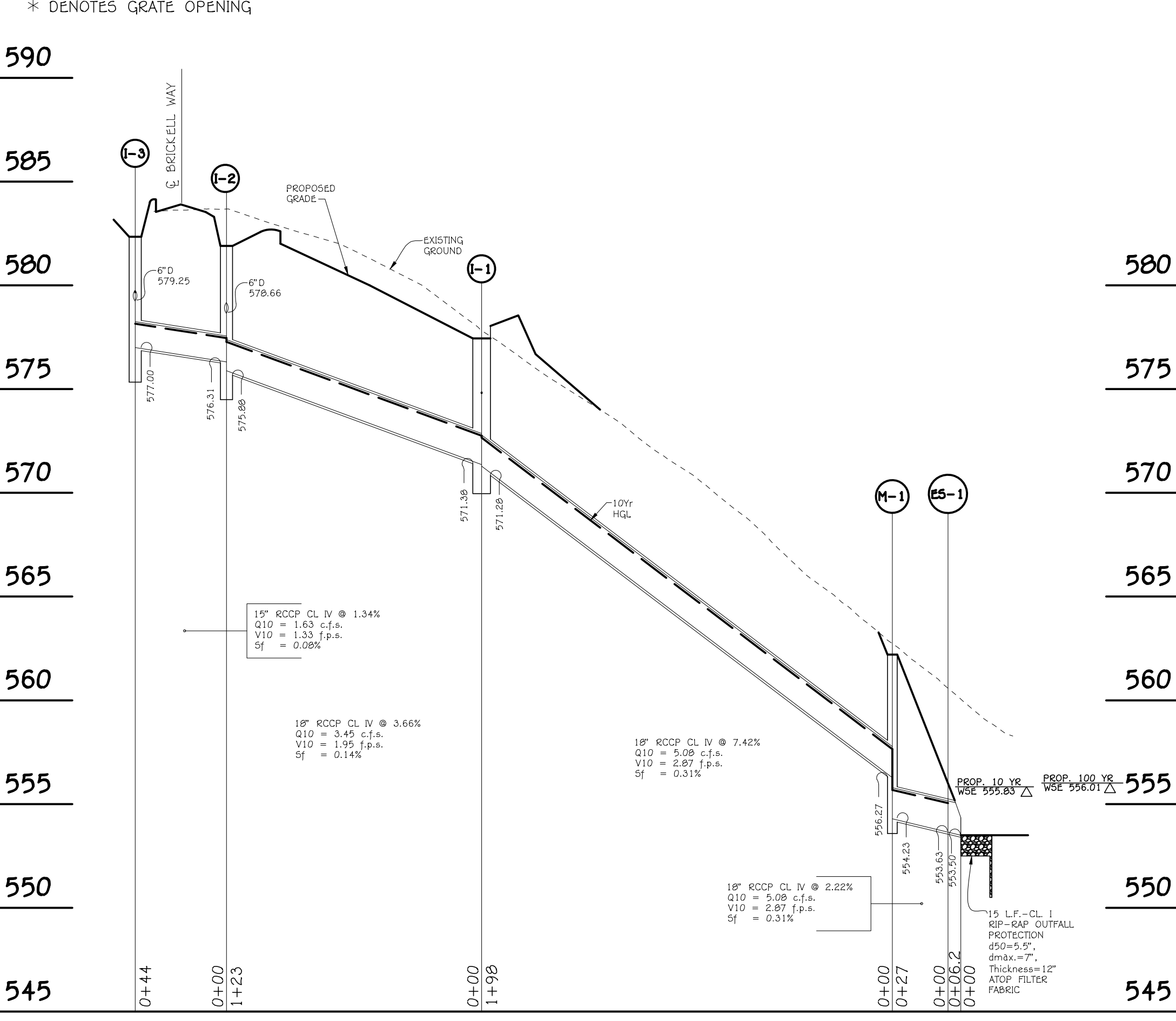
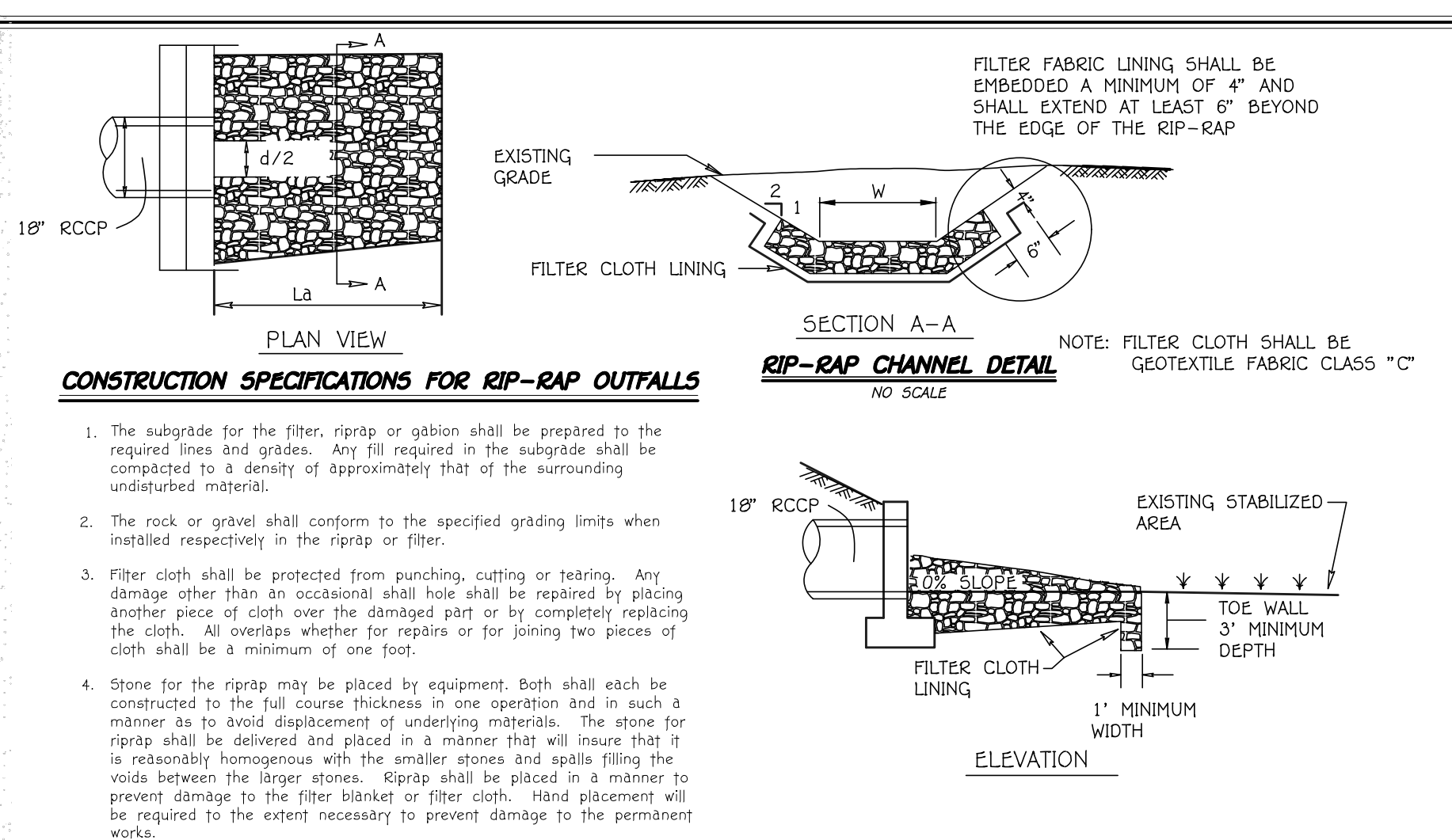
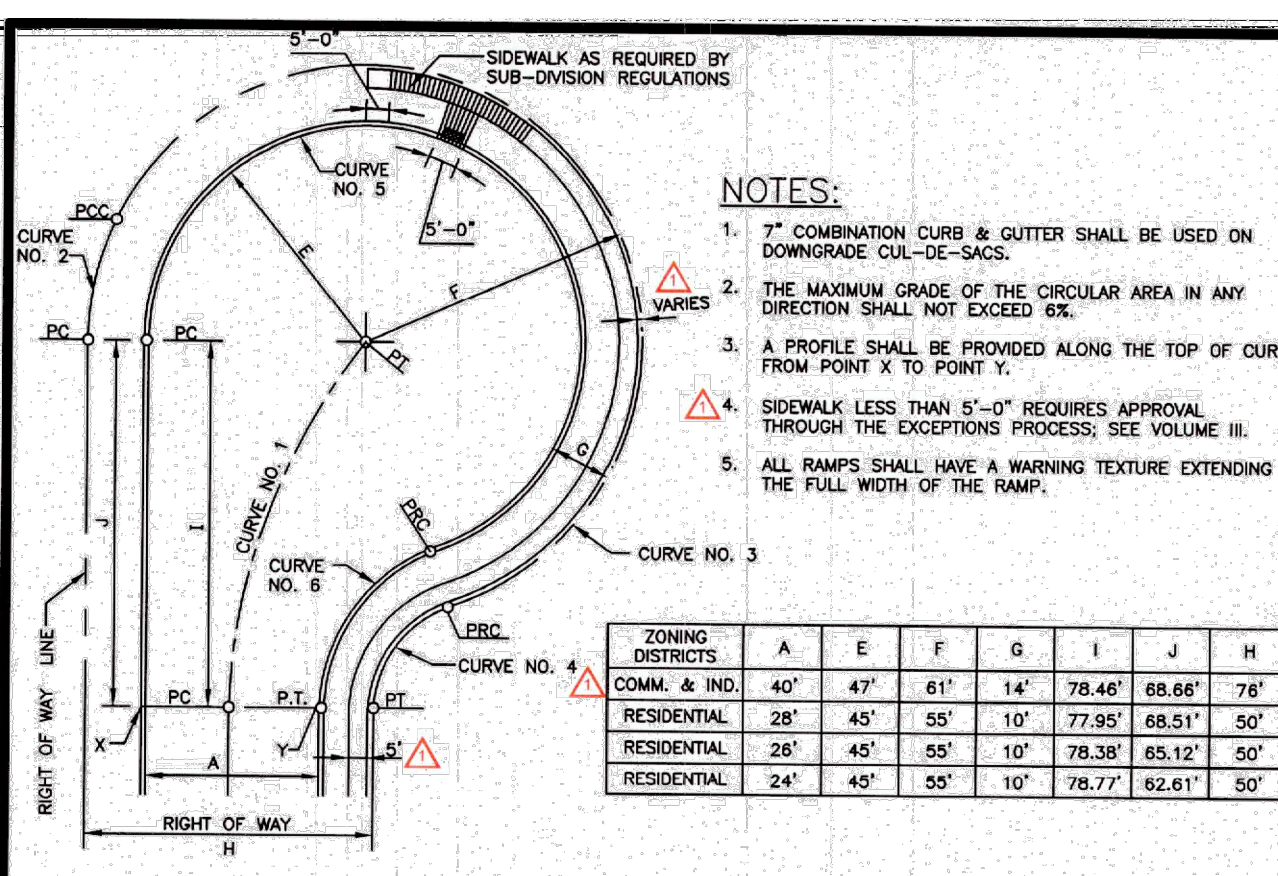
OWNERS
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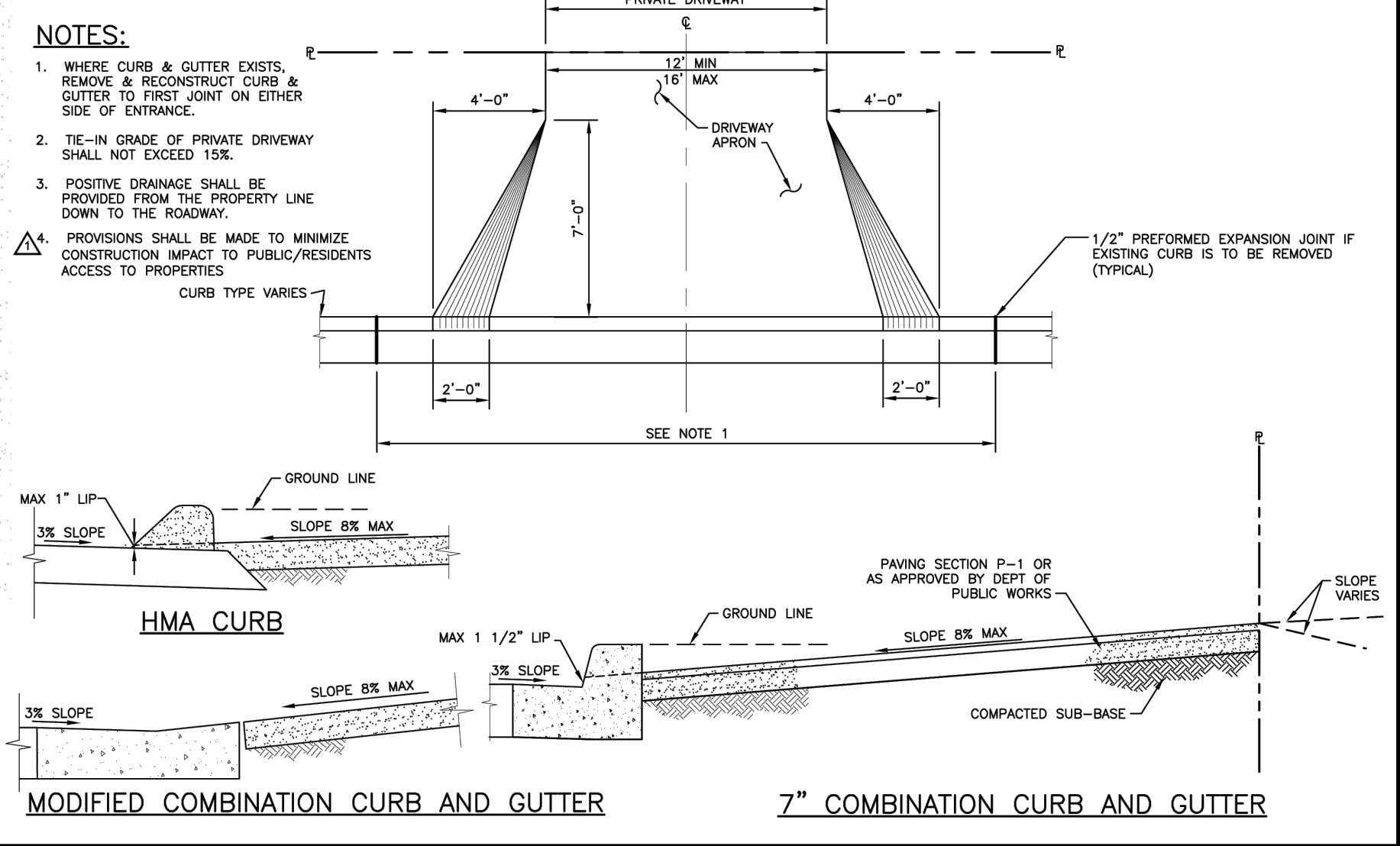
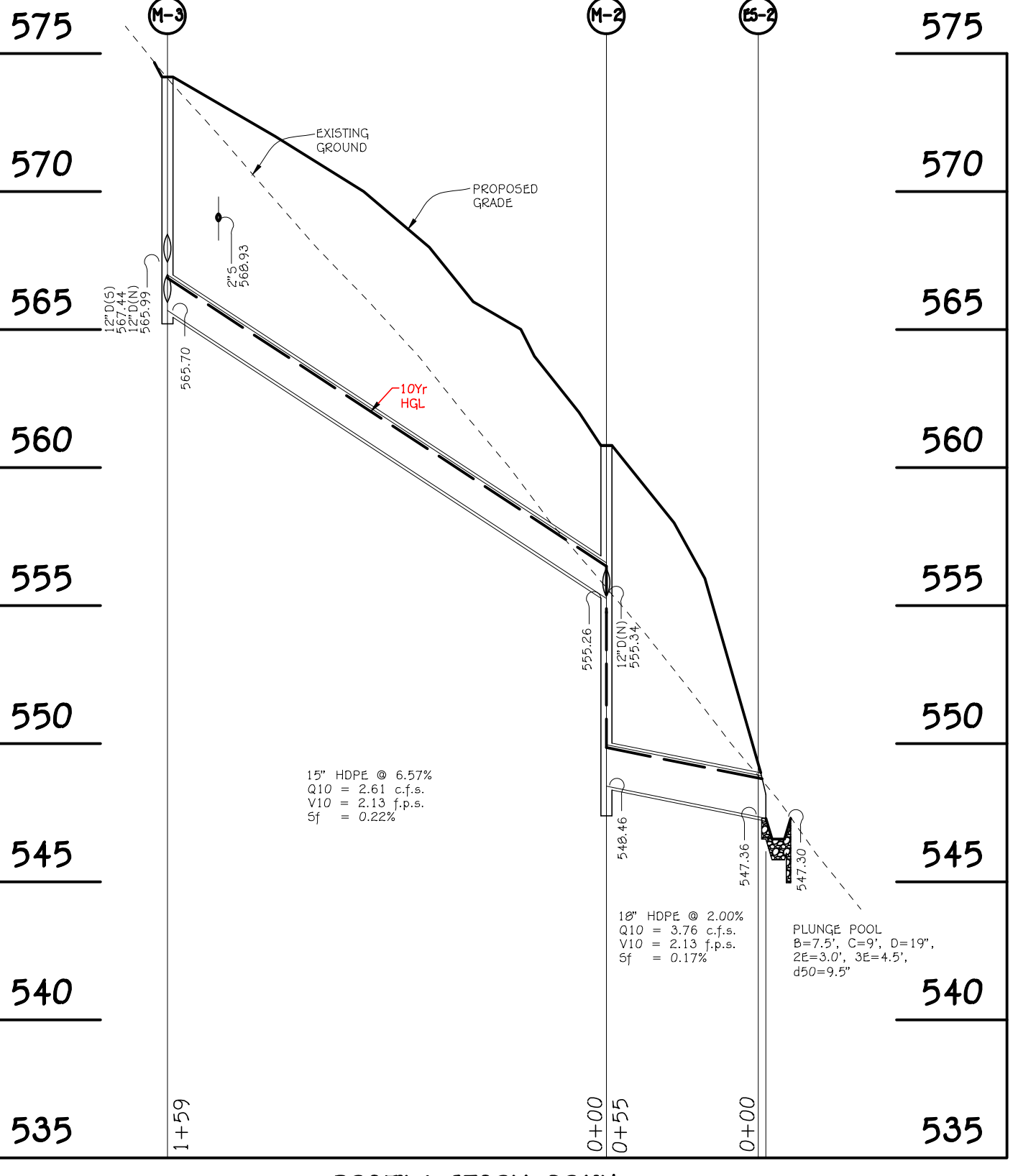
STORMDRAIN DRAINAGE AREA MAP
BRICKELL PROPERTY
 LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B'
 PREVIOUS HOWARD COUNTY FILES: ECP-19-021, SP-19-003, F-22-020 AND WP-22-91
 TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274
 ZONED RR-DEO
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JULY, 2024
 SHEET 8 OF 19

STRUCTURE SCHEDULE						
STRUCTURE NO.	OWNERSHIP AND MAINTENANCE	TOP ELEVATION	INV IN	INV OUT	COORDINATES / ROAD STA.	REMARKS
E5-1	PUBLIC	-	553.63 (18")	-	N 610706.29 E 1330871.28	CONCRETE END SECTION D - 5.51
E5-2	PRIVATE	-	547.36 (18")	-	N 610373.70 E 1331562.67	HDPE D - 5.51
I-1	PUBLIC	577.44 *	571.38 (18")	571.28 (18")	BRICKELL WAY LP STA. 1+34.7	TYPE 'E' COMB. INLET D - 4.22
I-2	PUBLIC	581.80 *	576.31 (15"), 578.66 (6")	575.88 (18")	BRICKELL WAY CL STA. 2+06 21.0' L	YARD INLET D - 4.12
I-3	PUBLIC	582.10 *	579.25 (6")	577.00 (15")	BRICKELL WAY CL STA. 2+75 21.0' R	YARD INLET D - 4.12
M-1	PUBLIC	562.85	556.27 (18")	554.23 (18")	N 610687.98 E 1330851.11	4' DIA. MANHOLE G - 5.12
M-2	PRIVATE	561.50	555.34 (12"), 555.26 (15")	548.46 (18")	N 610368.20 E 1331508.20	4' DIA. MANHOLE G - 5.12
M-3	PRIVATE	574.15	567.44 (12"), 565.99 (12")	565.70 (15")	N 610352.26 E 1331350.09	4' DIA. MANHOLE G - 5.12
R-1	PRIVATE	564.00	559.92 (4")	557.06 (12")	N 610393.29 E 1331503.47	18" NYLOPLAST DRAIN BASIN DOME GRATE
R-2	PRIVATE	572.00	567.92 (4")	567.25 (12")	N 610395.39 E 1331346.74	18" NYLOPLAST DRAIN BASIN DOME GRATE
R-3	PUBLIC	555.30	552.83 (4")	550.42 (12")	N 610719.30 E 1330918.52	MODIFIED 'S' INLET SEE SHEET 11
R-4	PRIVATE	577.00	572.92 (4")	570.81 (12")	N 610310.13 E 1331323.57	18" NYLOPLAST DRAIN BASIN DOME GRATE
HW-1	PUBLIC	554.75	549.75 (42")	-	N 610760.73 E 1330929.81	TYPE 'A' HEADWALL D - 5.11

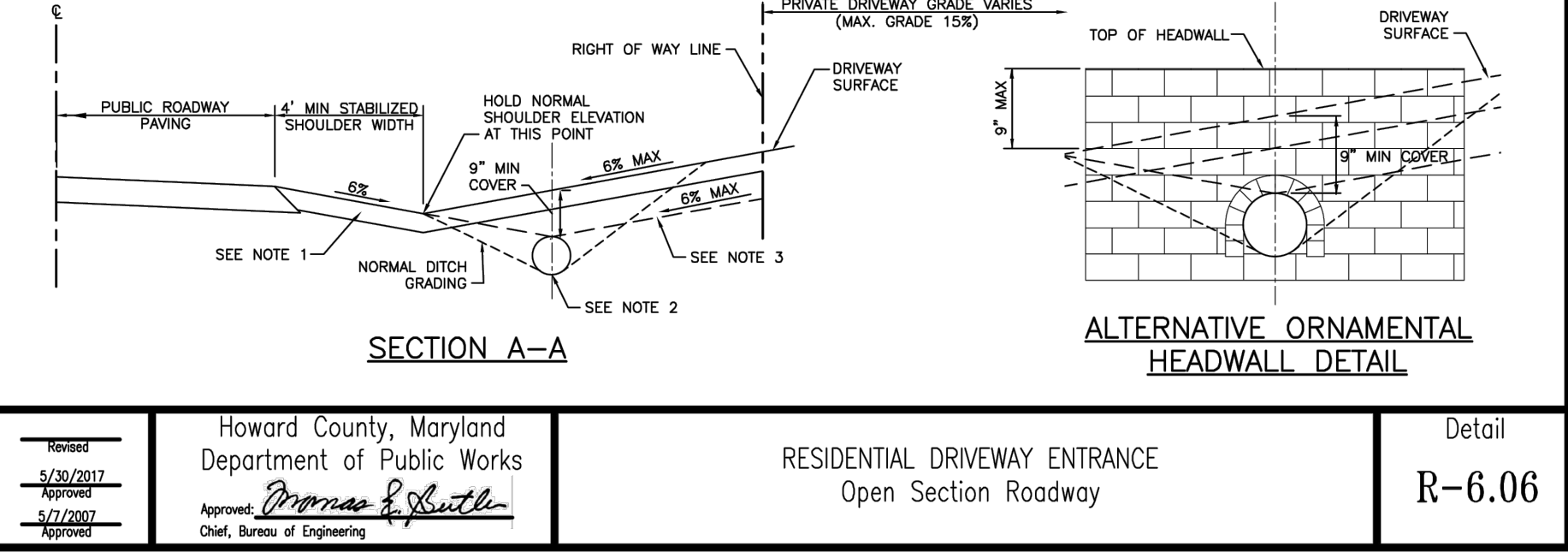
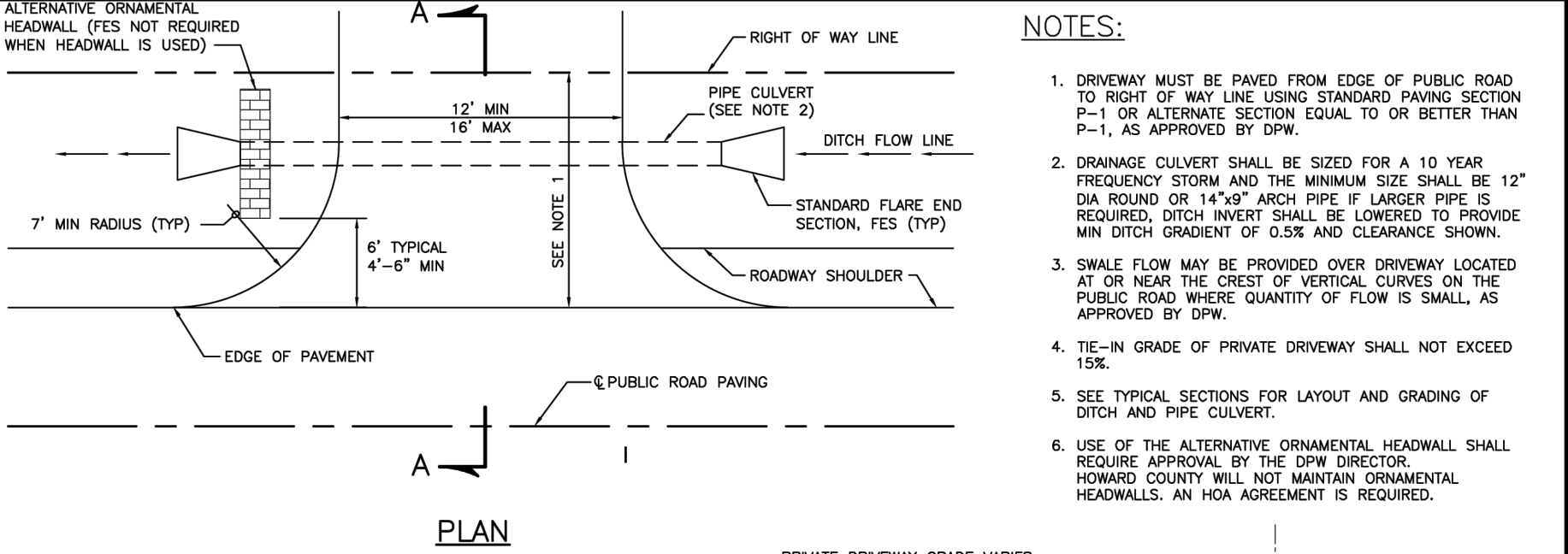
PIPE SCHEDULE		
SIZE	CLASS	LENGTH
4"	PERFORATED PVC, SCH.40	292 L.F.
4"	PVC, SCH.40	130 L.F.
6"	PERFORATED PVC, SCH.40	248 L.F.
6"	PVC, SCH.40	30 L.F.
12"	HDPE	119 L.F.
15"	HDPE	159 L.F.
15"	RCCP, CL. IV	44 L.F.
18"	RCCP, CL. IV	354 L.F.
18"	HDPE	55 L.F.
42"	RCCP, CL. IV	43 L.F.



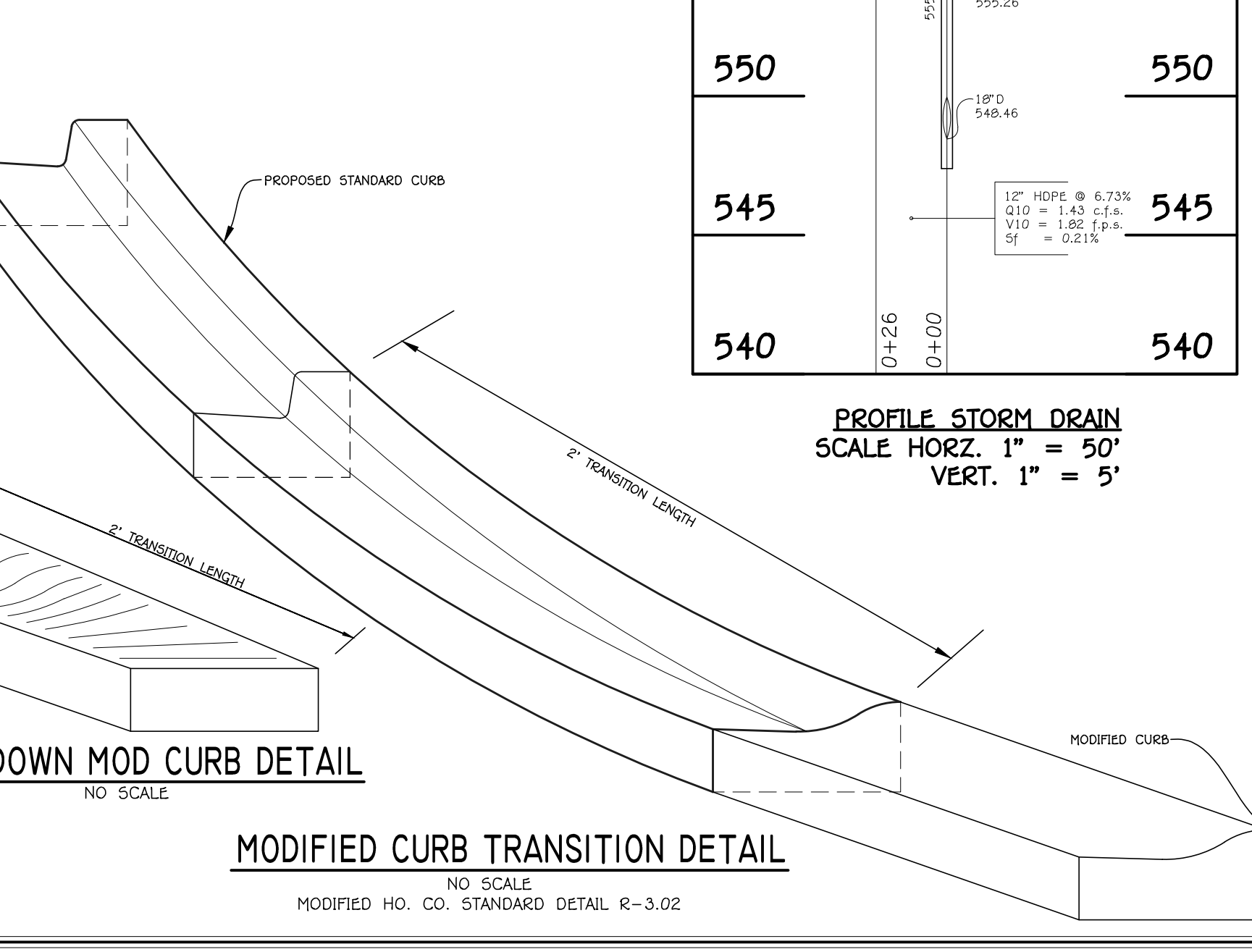
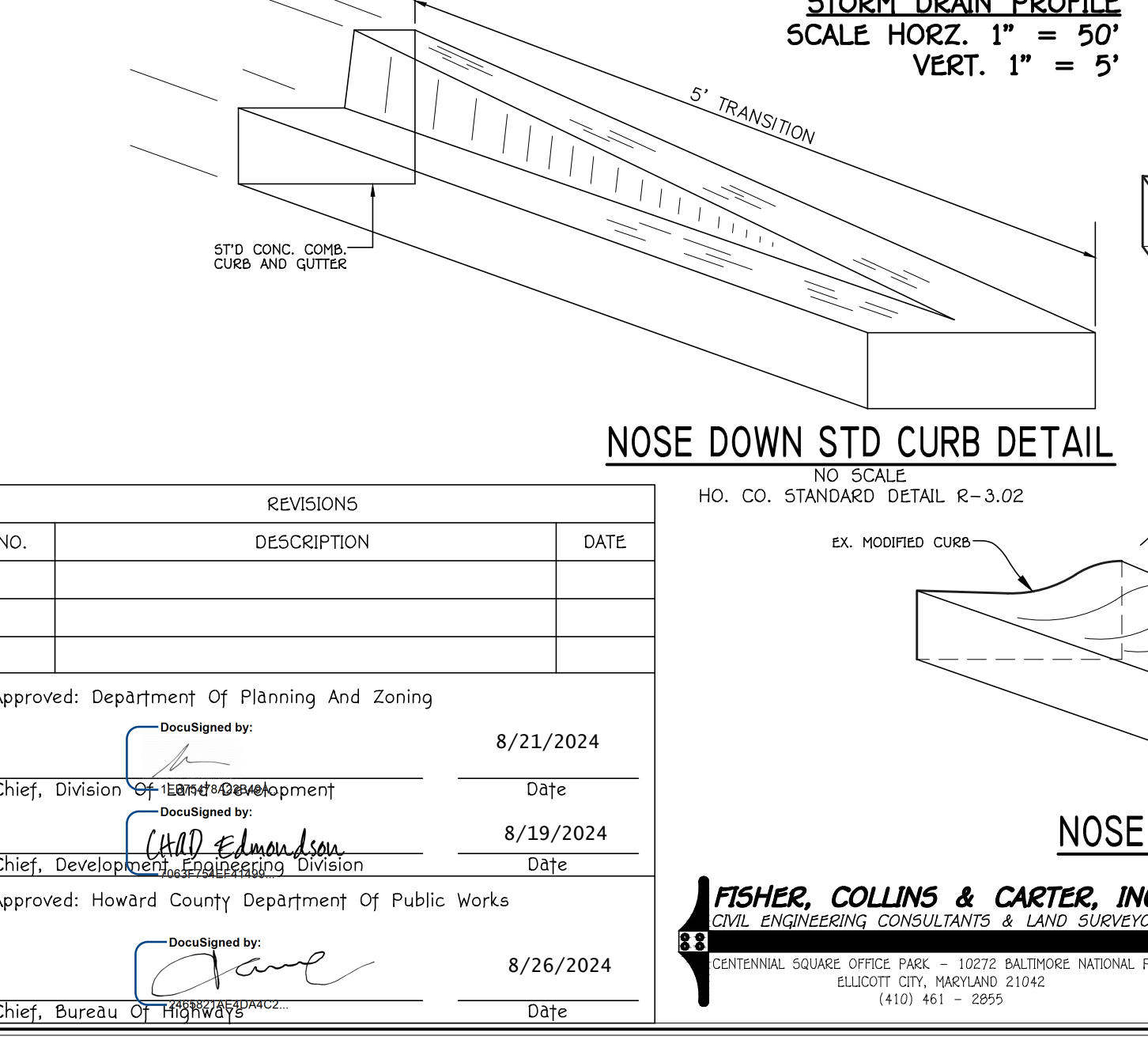
CURVE DATA											
COMMERCIAL - INDUSTRIAL 40' APPROACH L.P.=327.39'						RESIDENTIAL 28' APPROACH L.P.=328.83'					
CURVE 1	CURVE 2	CURVE 3	CURVE 4	CURVE 5	CURVE 6	CURVE 1	CURVE 2	CURVE 3	CURVE 4	CURVE 5	CURVE 6
Δ 37°58'45"	44°24'50"	200°50'17"	85°15'13"	249°04'31"	69°04'31"	Δ 43°22'31"	12°06'05"	244°09'34"	76°50'50"	258°56'50"	76°50'50"
R 127.50'	75.00'	61.00'	25.00'	47.00'	37.00'	R 113.50'	100.00'	55.00'	25.00'	45.00'	35.00'
L 84.51'	58.14'	213.82'	28.47'	204.32'	44.61'	L 85.92'	21.12'	234.38'	33.60'	201.85'	47.63'
T 43.88'	30.82'	18.00'	18.00'	25.47'	25.47'	T 45.14'	10.80'	19.88'	19.88'	27.84'	27.84'
LC 82.88'	56.69'	26.94'	26.94'	41.85'	41.85'	LC 83.89'	21.08'	31.12'	31.12'	44.98'	44.98'



Revised: 5/7/2022 Approved: <i>Thomas R. Smith</i> Chief, Bureau of Engineering	Howard County, Maryland Department of Public Works CUL-DE-SAC Offset without island	Detail R-5.03
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Revised: 5/7/2022 Approved: <i>Thomas R. Smith</i> Chief, Bureau of Engineering	Howard County, Maryland Department of Public Works RESIDENTIAL DRIVEWAY ENTRANCE Open Section Roadway	Detail R-6.06
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PROFESSIONAL CERTIFICATION

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Luke Groom
LUKE A. GROOM
Date: 7/18/2024

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TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274 ZONED RR-DEO
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JULY, 2024
SHEET 9 OF 19

INFILTRATION AND FILTER SYSTEM CONSTRUCTION SPECIFICATIONS

INFILTRATION AND FILTER SYSTEMS EITHER TAKE ADVANTAGE OF EXISTING PERMEABLE SOILS OR CREATE A PERMEABLE MEDIUM SUCH AS SAND FOR W.C. AND RE. V. IN SOME INSTANCES WHERE PERMEABILITY IS GREAT, THESE FACILITIES MAY BE USED FOR QP AS WELL. THE MOST COMMON SYSTEMS INCLUDE INFILTRATION TRENCHES, INFILTRATION BASINS, SAND FILTERS, AND ORGANIC FILTERS.

WHEN PROPERLY PLANTED, VEGETATION WILL THRIVE AND ENHANCE THE FUNCTIONING OF THESE SYSTEMS. FOR EXAMPLE, PRE-TREATMENT BUFFERS WILL TRAP SEDIMENTS THAT OFTEN ARE BOUND WITH PHOSPHOROUS AND METALS. VEGETATION PLANTED IN THE FACILITY WILL ADD TO NUTRIENT UPTAKE AND WATER STORAGE. ADDITIONALLY PLANT ROOTS WILL PROVIDE A NETWORK FOR STORAGE TO PERMEATE SOIL FOR GROUNDWATER RECHARGE. FINALLY, SUCCESSFUL PLANTINGS PROVIDE AESTHETIC VALUE AND WILDLIFE HABITAT MAKING THESE FACILITIES MORE DESIRABLE TO THE PUBLIC.

DESIGN CONSTRAINTS:
> PLANTING BUFFER STRIPS OF AT LEAST 20 FEET WILL CAUSE SEDIMENTS TO SETTLE OUT BEFORE REACHING THE FACILITY, THEREBY REDUCING THE POSSIBILITY OF CLOGGING.
> DETERMINE AREAS THAT WILL BE SATURATED WITH WATER AND WATER TABLE DEPTH SO THAT APPROPRIATE PLANTS MAY BE SELECTED (HYDROLOGY WILL BE SIMILAR TO BIORETENTION FACILITIES, SEE FIGURE A.5 AND TABLE A.4 FOR PLANTING MATERIAL GUIDANCE).
> PLANTS KNOWN TO SEND DOWN DEEP TAPROOTS SHOULD BE AVOIDED IN SYSTEMS WHERE FILTER FABRIC IS USED AS PART OF FACILITY DESIGN.
> TEST SOIL CONDITIONS TO DETERMINE IF SOIL AMENDMENTS ARE NECESSARY.
> PLANTS SHALL BE LOCATED SO THAT ACCESS IS POSSIBLE FOR STRUCTURE MAINTENANCE.
> STABILIZE HEAVY FLOW AREAS WITH EROSION CONTROL MATS OR SOD.
> TEMPORARILY DIVERT FLOWS FROM SEEDS AREAS UNTIL VEGETATION IS ESTABLISHED.
> SEE TABLE A.5 FOR ADDITIONAL DESIGN CONSIDERATIONS.

BIO-RETENTION SOIL BED CHARACTERISTICS
THE CHARACTERISTICS OF THE SOIL FOR THE BIORETENTION FACILITY ARE PERHAPS AS IMPORTANT AS THE FACILITY LOCATION, SIZE, AND TREATMENT VOLUME. THE SOIL MUST BE PERMEABLE ENOUGH TO ALLOW RUNOFF TO FILTER THROUGH THE MEDIA, WHILE HAVING CHARACTERISTICS SUITABLE TO PROMOTE AND SUSTAIN A ROBUST NEGATIVE COVER CROP. IN ADDITION, MUCH OF THE NUTRIENT POLLUTANT UPTAKE (NITROGEN AND PHOSPHORUS) IS ACCOMPLISHED THROUGH ABSORPTION AND MICROBIAL ACTIVITY WITHIN THE SOIL PROFILE. THEREFORE, SOILS MUST BALANCE THEIR CHEMICAL AND PHYSICAL PROPERTIES TO SUPPORT BIOTIC COMMUNITIES ABOVE AND BELOW GROUND.

TABLE A.3 PLANTING SOIL CHARACTERISTICS

PARAMETER	VALUE
PH RANGE	5.2 TO 7.0
ORGANIC MATTER	1.5 TO 4.0% (BY WEIGHT)
MAGNESIUM	35 LBS. PER ACRE, MINIMUM
PHOSPHORUS (PHOSPHATE - P205)	75 LBS. PER ACRE, MINIMUM
POTASSIUM (POTASH - K2O)	85 LBS. PER ACRE, MINIMUM
SOLUBLE SALTS	500 PPM
CLAY	10 TO 25 %
SILT	30 TO 55 %
SAND	35 TO 60%

MULCH LAYER
THE MULCH LAYER PLAYS AN IMPORTANT ROLE IN THE PERFORMANCE OF THE BIORETENTION SYSTEM. THE MULCH LAYER HELPS MAINTAIN SOIL MOISTURE AND AVOIDS SURFACE SEALING, WHICH REDUCES PERMEABILITY. MULCH HELPS PREVENT EROSION, AND PROVIDES A MICROENVIRONMENT SUITABLE FOR SOIL BIOTA AT THE MULCH/SOIL INTERFACE. IT ALSO SERVES AS A PRE-TREATMENT LAYER, TRAPPING THE FINEST SEDIMENTS, WHICH REMAIN SUSPENDED AFTER THE PRIMARY TREATMENT.

PLANTING GUIDANCE
PLANT MATERIAL SELECTION SHOULD BE BASED ON THE GOAL OF SIMULATING A TERRESTRIAL, FORESTED COMMUNITY OF NATIVE SPECIES. BIORETENTION SIMULATES AN UPLAND-SPECIFIC ECOSYSTEM, THE COMMUNITY SHOULD BE DOMINATED BY TREES, BUT HAVE A DISTINCT COMMUNITY OF UNDERSTORY TREES, SHRUBS AND HERBACEOUS MATERIALS BY CREATING A DIVERSE, DENSE PLANT COVER. A BIORETENTION FACILITY WILL BE ABLE TO TREAT STORMWATER RUNOFF AND WITHSTAND URBAN STRESSES FROM INSECTS, DISEASE, DROUGHT, TEMPERATURE, WIND, AND EXPOSURE.

DESIGN CERTIFICATION
I hereby certify that this Plan Has Been Designed in Accordance with Current Maryland Erosion and Sediment Control Laws, Regulations and Standards, That Represents a Practical and Workable Plan Based On My Personal Knowledge of The Site, And That It Was Prepared in Accordance with the Requirements of The Howard Soil Conservation District.

Luke Groom 7/18/2024
Designer's Signature Date
46091
Printed Name
MD Registration No. P.E. or R.L.A. (circle one)

OWNER/DEVELOPER CERTIFICATION
I/We Certify That Any Clearing, Grading, Construction Or Development Will Be Done Pursuant To This Approved Erosion And Sediment Control Plan, Including Inspecting And Maintaining Controls And That The Responsible Personnel Involved In The Construction Project Will Have A Certificate of Training At A Maryland Department of The Environment (MDE) Approved Training Program For The Control On Erosion And Sediment Prior To Beginning The Project. I Certify Right-of-entry For Periodic On-site Evaluation By Howard County, The Howard Soil Conservation District And/or MDC.

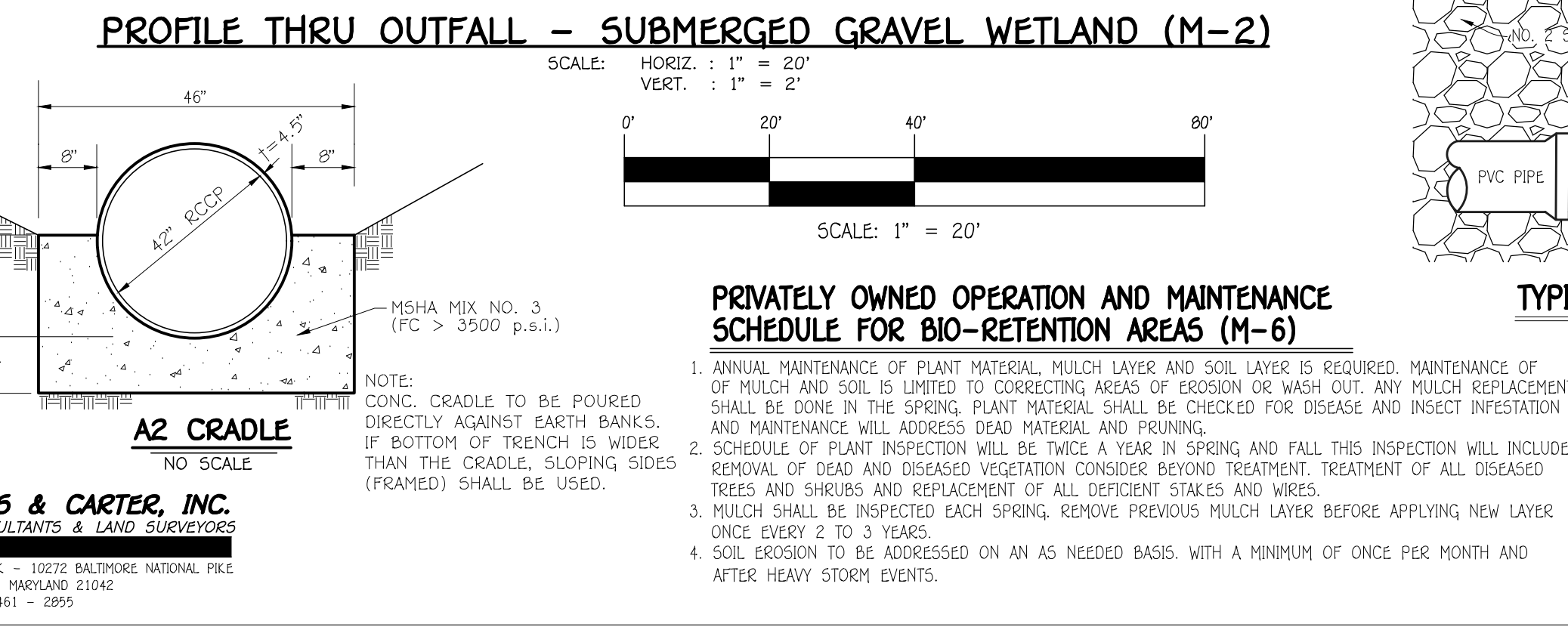
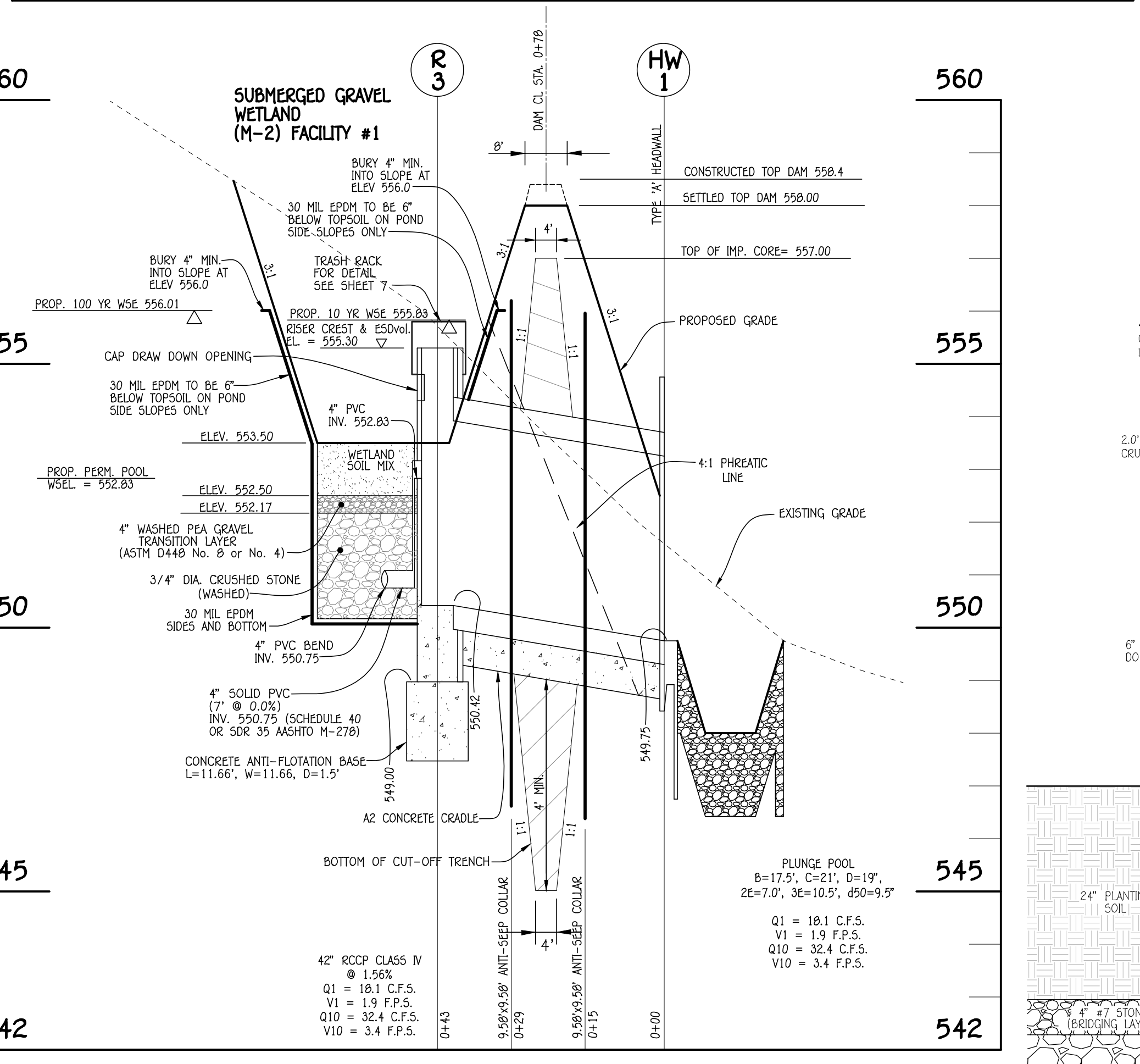
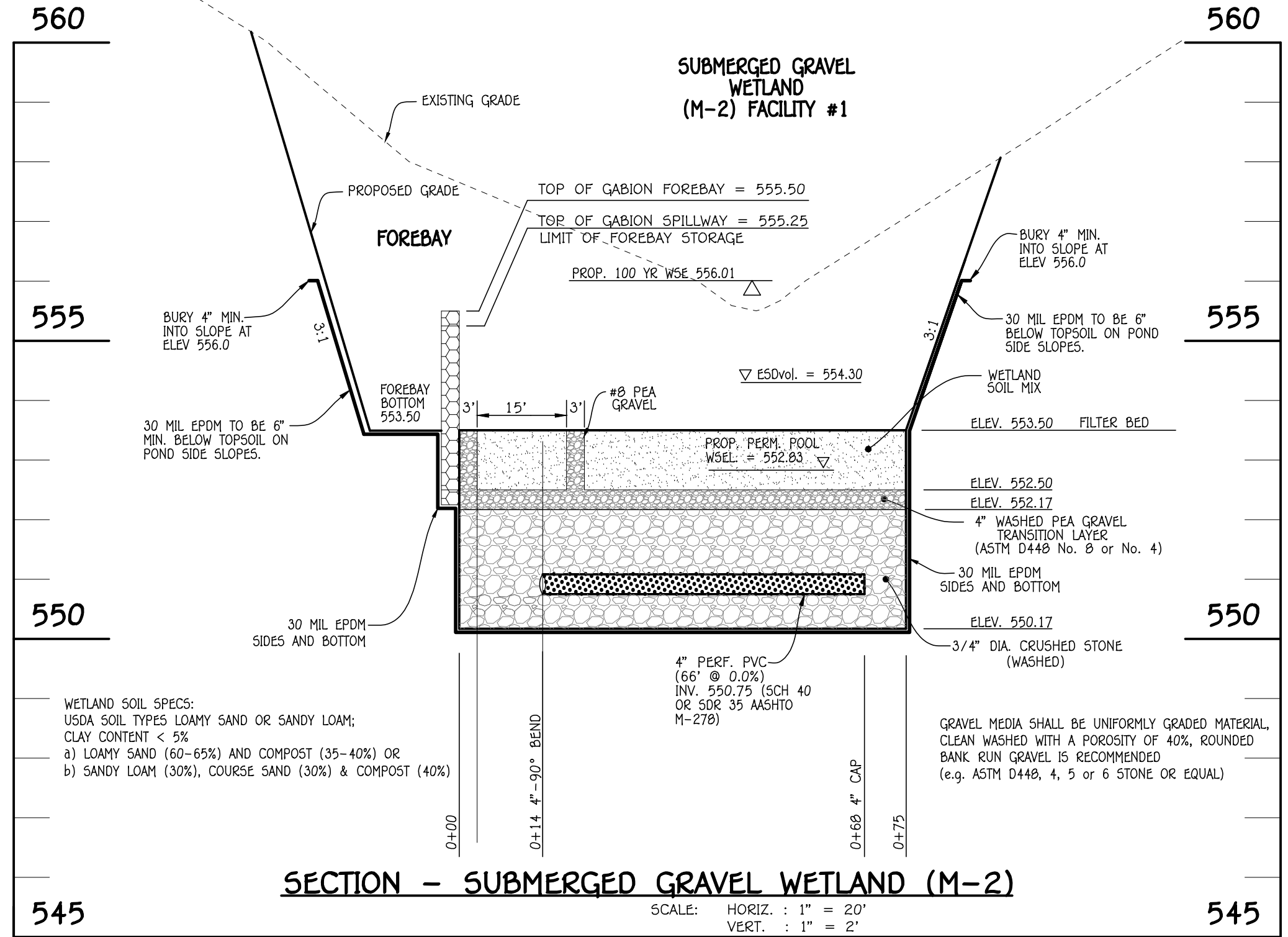
Jason Van Kirk 7/17/2024
Owner's/Developer's Signature Date
Jason Van Kirk
Printed Name & Title

Approved: This Plan is Approved For Soil Erosion And Sediment Control By The Howard Soil Conservation District.
DocuSigned by:
Alexander Brathie 8/19/2024
Howard Soil Conservation District Date

NO.	REVISIONS	DATE

Approved: Department of Planning And Zoning
DocuSigned by:
CHAD Edmondson 8/21/2024
Chief, Division of Planning and Development Date

Approved: Howard County Department of Public Works
DocuSigned by:
 8/26/2024
Chief, Bureau of Highways Date

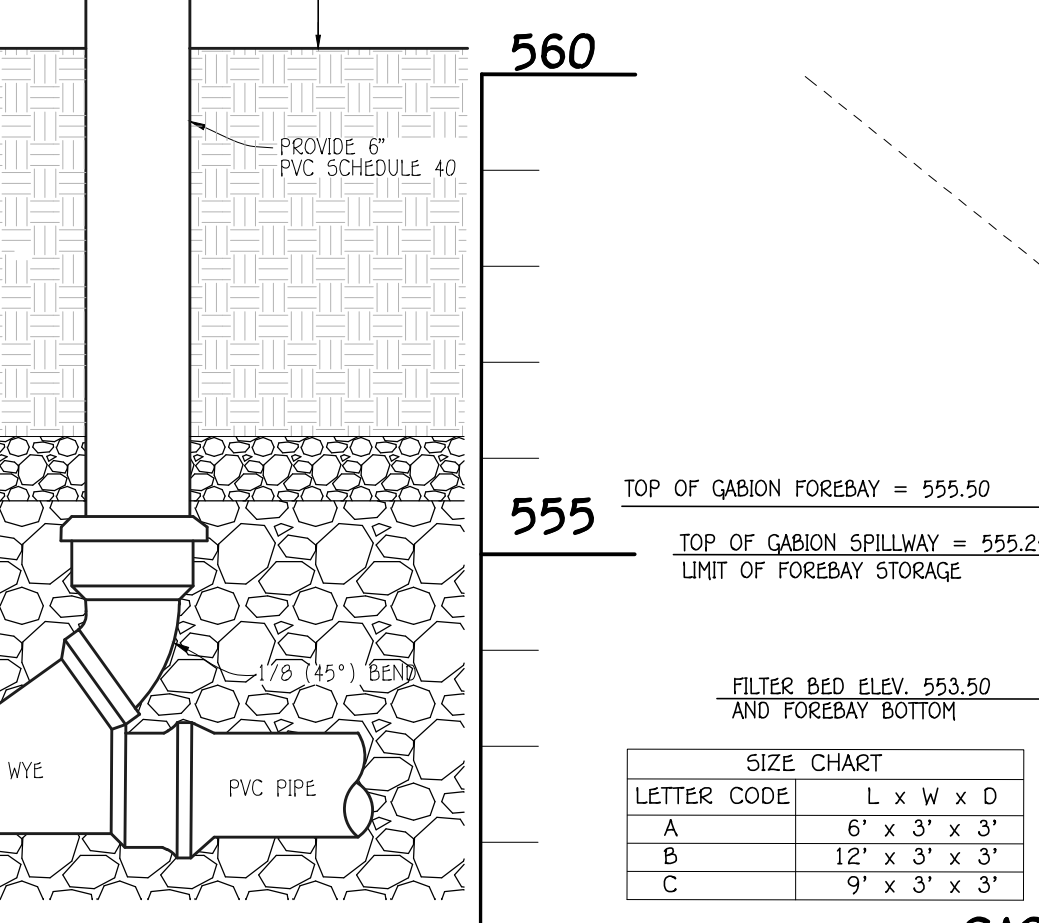
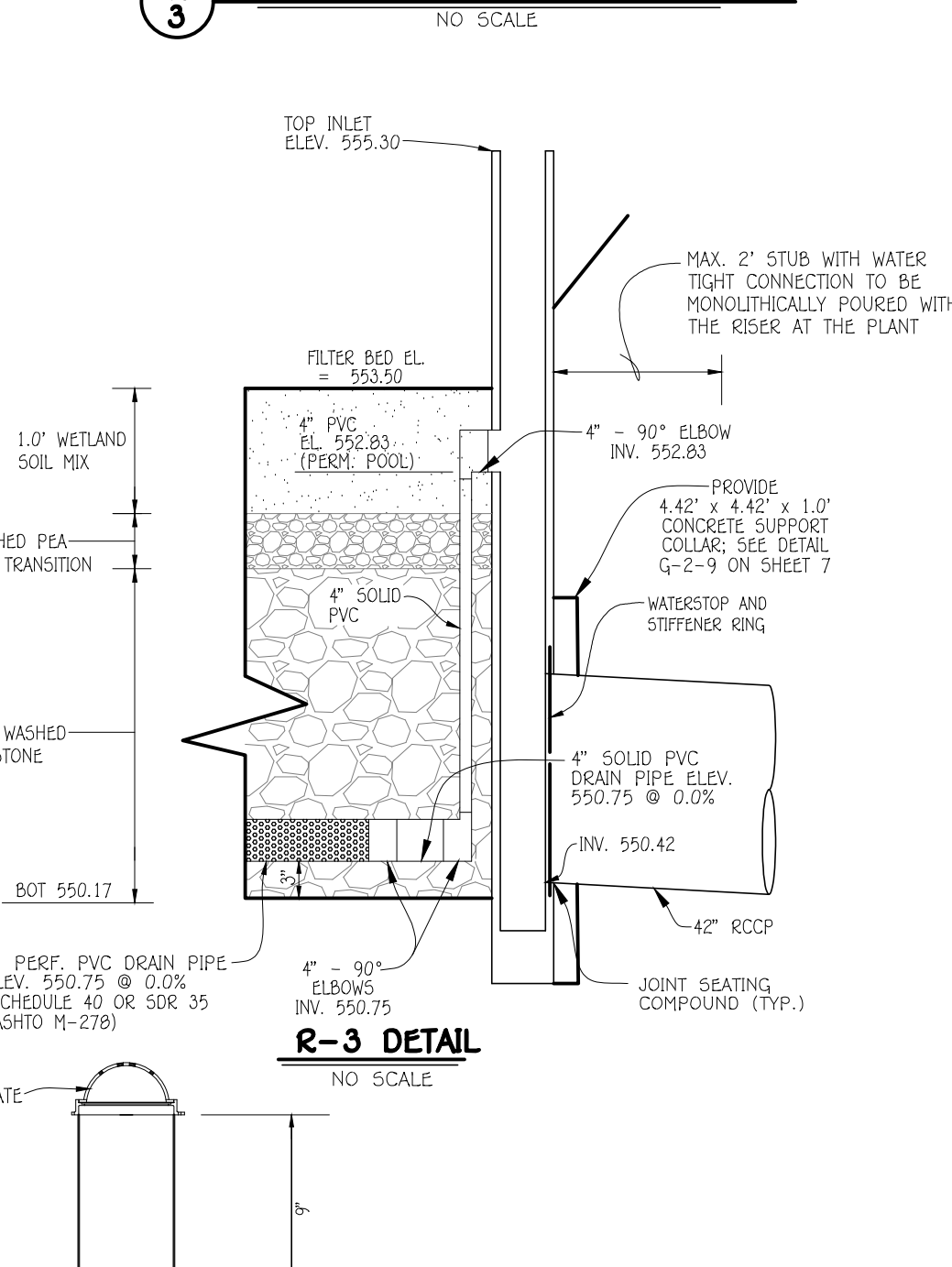
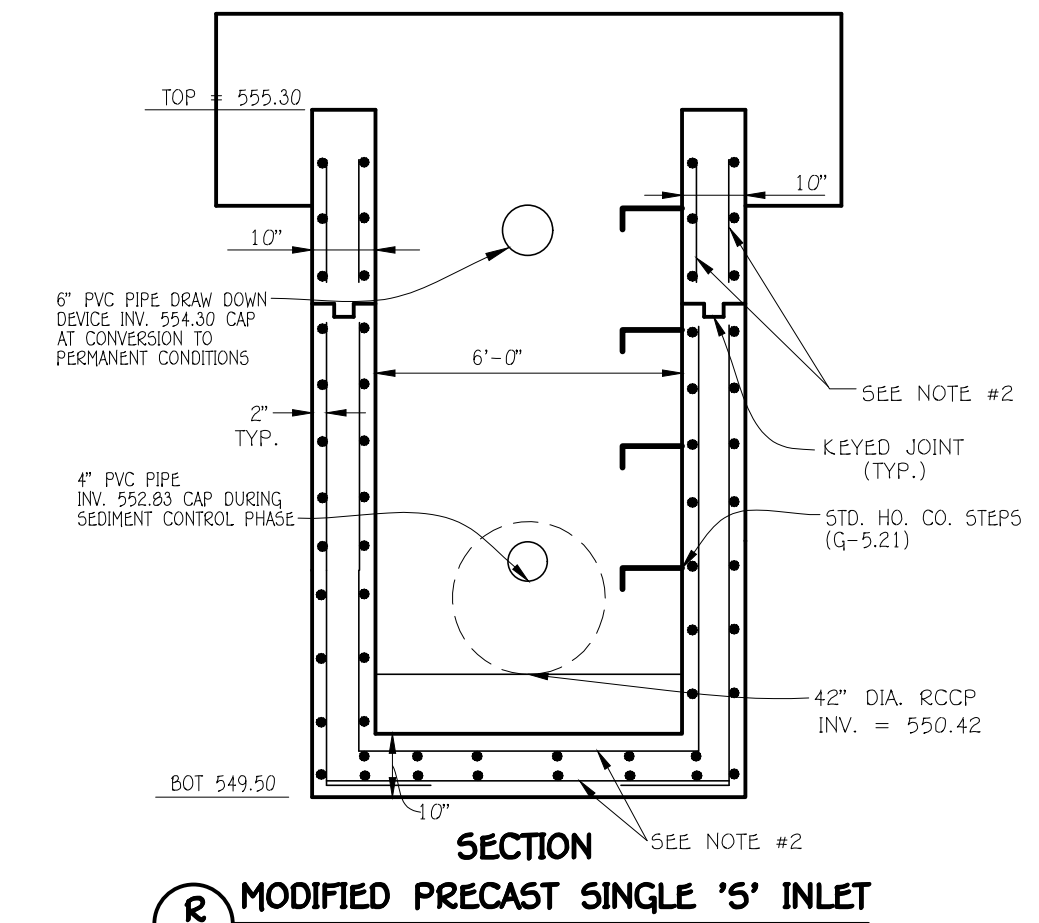


PRIVATELY OWNED OPERATION AND MAINTENANCE SCHEDULE FOR BIO-RETENTION AREAS (M-6)

- 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.
- SCHEDULE OF PLANT INSPECTION WILL BE TWICE A YEAR IN SPRING AND FALL. THIS INSPECTION WILL INCLUDE REMOVAL OF DEAD AND DISEASED VEGETATION CONSIDER 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.

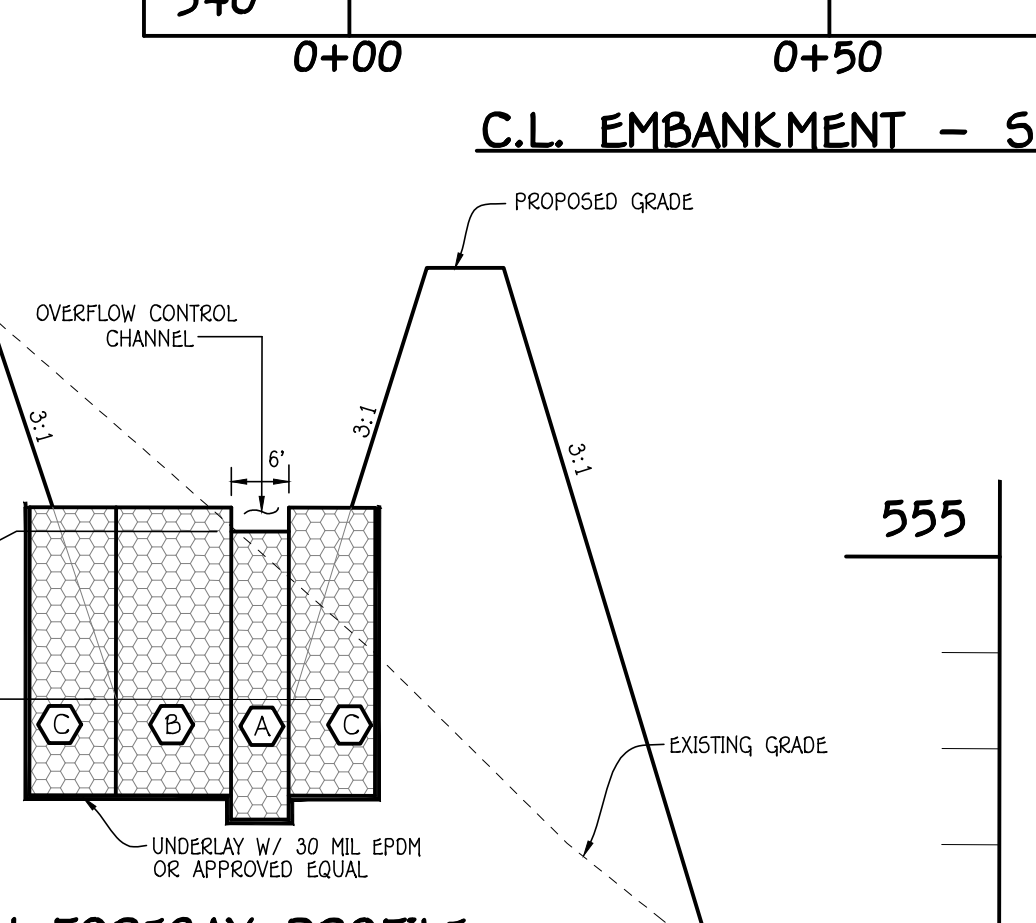
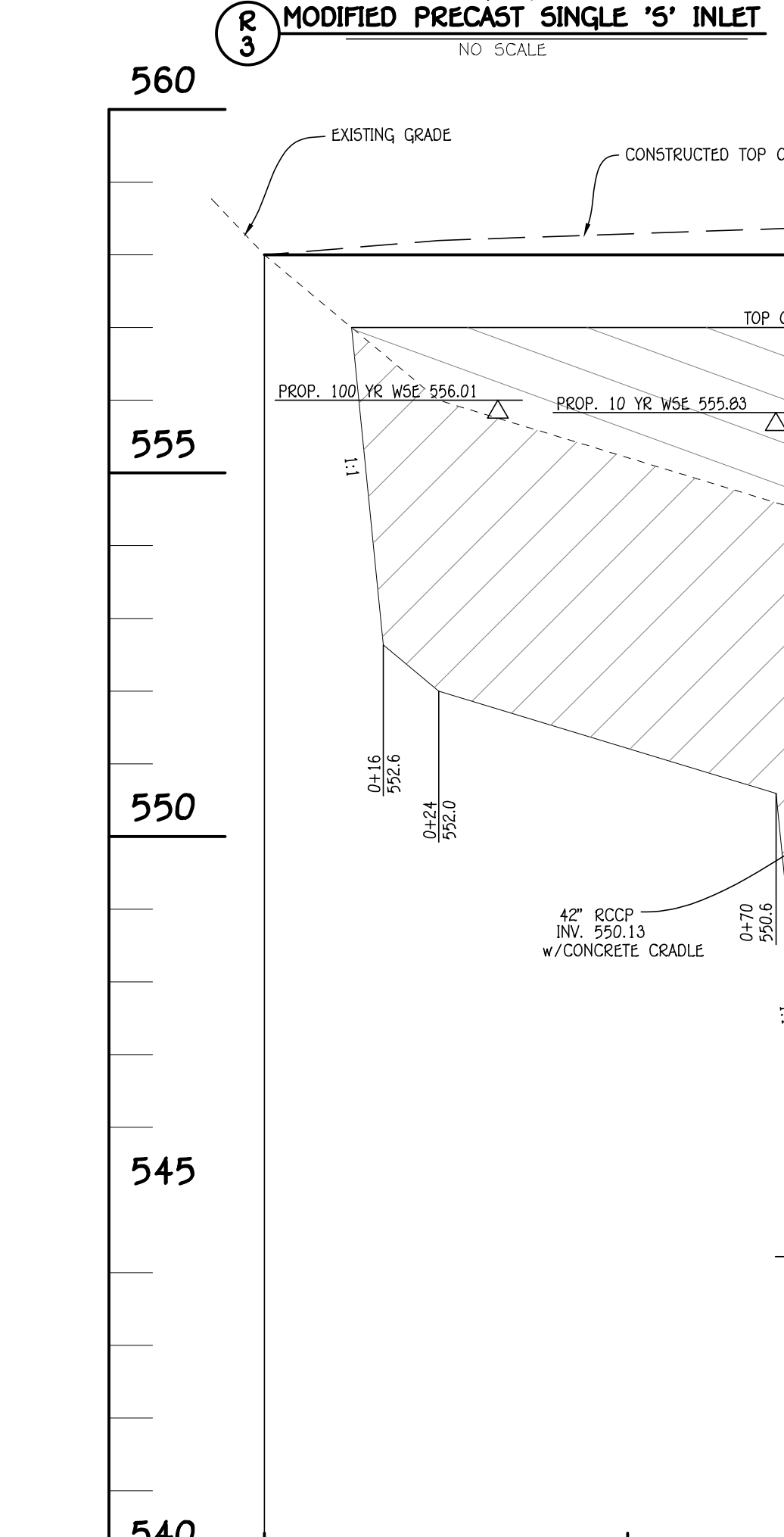
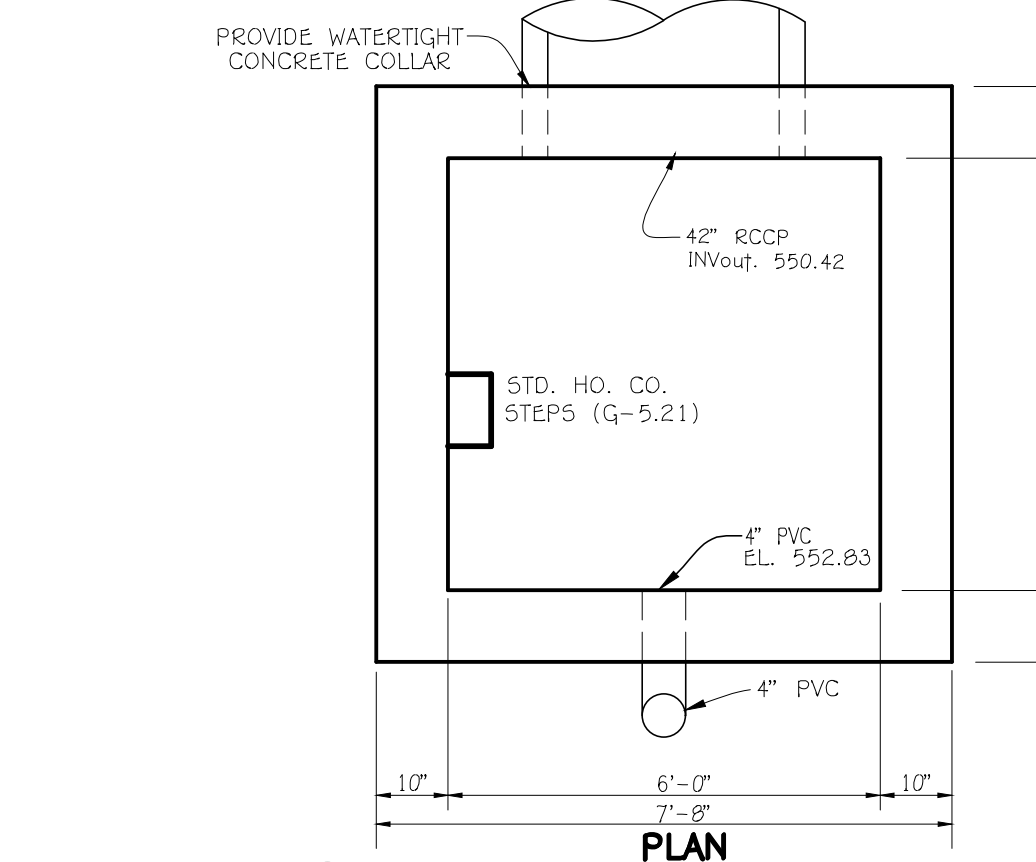
GENERAL NOTES:

- CONCRETE TO BE MIX NO. 6 (4500 PSI).
- REINFORCING - 2 LAYERS OF 4 x 4 - W 4.0 x W 4.0 WELDED WIRE FABRIC.
- THREADED PLASTIC INSERTS TO BE PROVIDED FOR HANDLING.
- GRADE AND SLOPE ADJUSTMENTS COMPLETED IN FIELD USING CONCRETE MIX NO. 6 OR BODICE AND MORTAR.
- PIPE OPENINGS TO BE PROVIDED AS REQUIRED, FOR SIZE, LOCATION AND INVERT ELEVATIONS REFER TO CONSTRUCTION PLANS.
- PLACEMENT OF SUBGRADE DRAINAGE WILL BE AS DIRECTED BY THE ENGINEER OR AS NOTED ON THE CONSTRUCTION PLANS.
- LADDER RUNGS SHALL BE IN ACCORDANCE WITH STANDARD MD. - 383.91, AS SHOWN OR AS DIRECTED BY THE ENGINEER.
- MINIMUM DEPTH PAYMENT PER "EACH" INLET INCLUDES DEPTHS UP TO 3'-6" VERTICAL DEPTH PAYMENT PER LINEAR FOOT INCLUDES DEPTHS IN EXCESS OF 3'-6".
- A 6" PERFORATED CIRCULAR PIPE, FOR EROSION AND SEDIMENT CONTROL, SHALL BE PLACED IN THE INLET WALL AT ALL INLET SEDIMENT TRAPS AS SHOWN ON THE PLANS.



PROFESSIONAL CERTIFICATION
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. 46091, EXPIRATION DATE: 5/14/25.

Luke Groom 7/18/2024
LIKE A. GROOM Date



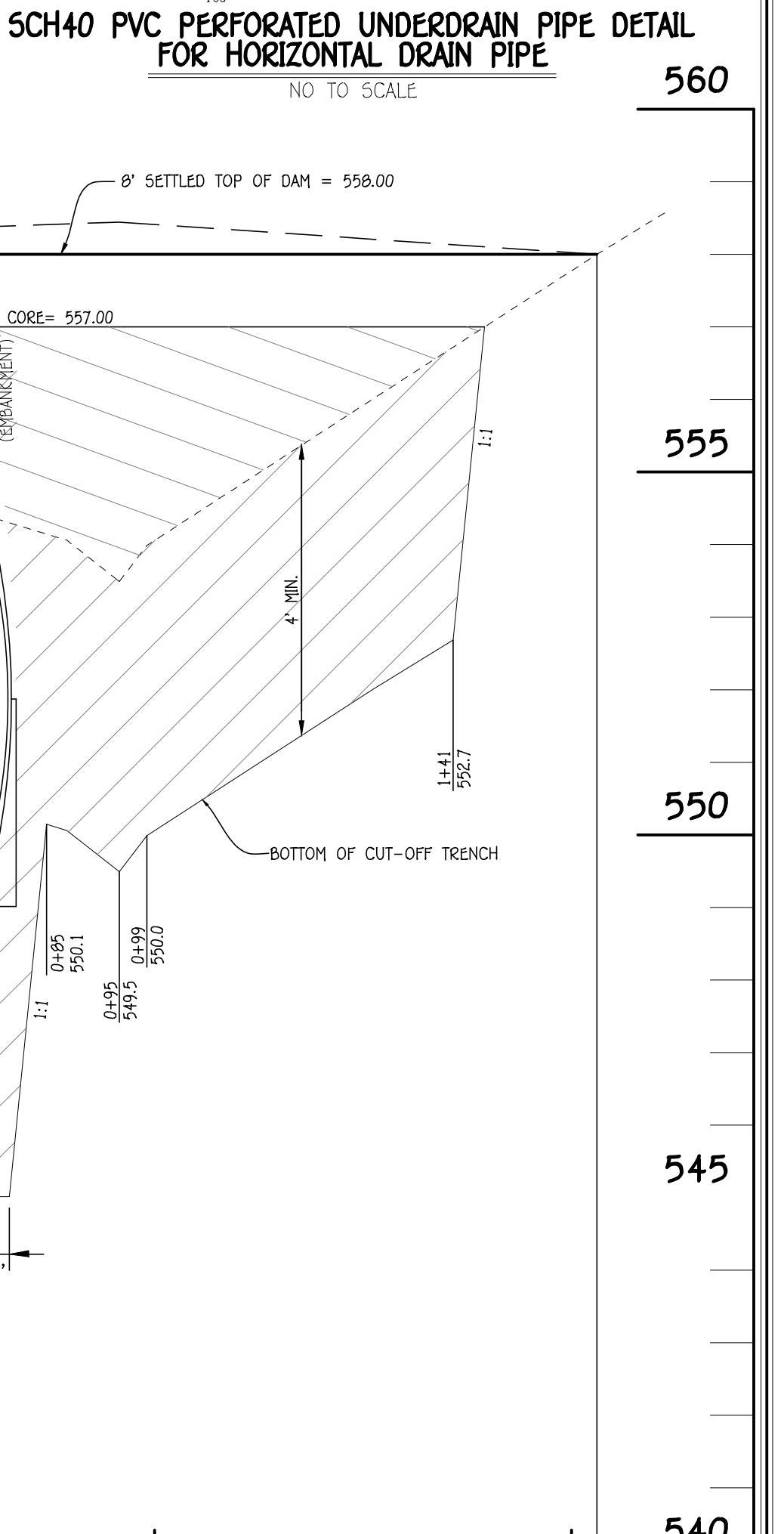
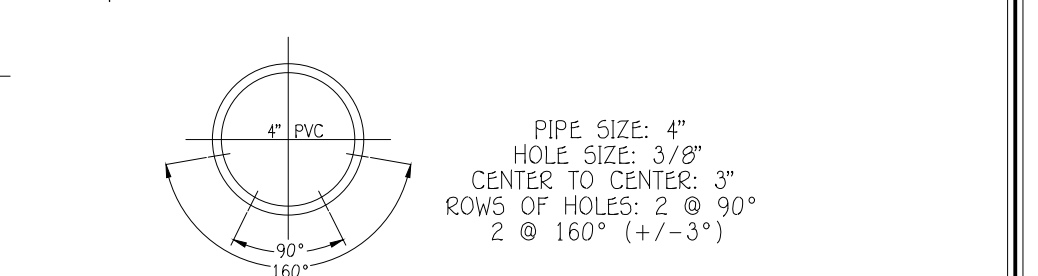
OWNERS
ESC MEADOW SPRINGS, L.C.
5074 DORSEY HALL DRIVE
SUITE 205
ELLCOTT CITY, MARYLAND 21042
PHONE: 410-720-3021

DEVELOPER
ESC MEADOW SPRINGS, L.C.
5074 DORSEY HALL DRIVE
SUITE 205
ELLCOTT CITY, MARYLAND 21042
PHONE: 410-720-3021

JOHN BERNARD AND JENNIFER ANN CZAJOWSKI
12216 MAYAPPLE DRIVE
MARRIOTTVILLE, MD 21104
PHONE: 301-529-4775

GABIION/FOREBAY WEIR OUTFALL NOTES

- GABIIONS SHALL BE MANUFACTURED BY MACCAFERRI GABIIONS INC. OR APPROVED EQUAL. THE INSTALLATION SHALL FOLLOW THE MANUFACTURER'S SPECIFICATIONS AND INSTALLATION GUIDELINES.
- THE GABIION BASKETS SHALL BE PVC COATED AND FILLED WITH CLEAN 4" - 7" STONE. GABIION STONE SHALL BE CAREFULLY PLACED AS TO CREATE A TIGHT INTERLOCKING STONE WALL WITH MINIMAL Voids.
- ONE SHEET OF 8 MIL OR GREATER VINYL PLASTIC SHEETING OR IMPACT MCF-1212 SHALL BE PLACED ON THE BURIED UPSTREAM FOREBAY SIDE FACE OF THE GABIION BASKETS NEXT TO THE FILTER FABRIC. USE 2 FT OVERLAP WHERE APPLICABLE.
- GEOTEXTILE FABRIC (MARIAT 600) OR APPROVED EQUAL SHALL BE PLACED AGAINST ALL BURIED GABIIONS (INCLUDING THE BURIED TOP OF GABIIONS) INCLUDING THE IMPERMEABLE LAYER ON THE UPSTREAM BURIED FACE.
- GABIIONS SHALL BE CAREFULLY PLACED WITH NO DAMAGED WIRE. EARTH FOUNDATION SHALL BE FIRM. FILL SOIL AROUND GABIIONS SHALL BE WELL-COMPACTED (95%).
- GABIIONS SHALL BE FASTENED TOGETHER WITH LACING OR RINGS PER MANUFACTURER'S RECOMMENDATIONS/SPECIFICATIONS. RINGS SHALL BE PER ASTM A975-97 SECTION 6.3. SPACING SHALL NOT EXCEED 6". SEE MACCAFERRI'S GABIION INSTALLATION GUIDE.
- MINIMUM GABIION EMBEDMENT INTO SIDE SLOPE IS A 2'-0" BURY.
- ADDITIONAL GABIIONS MAY BE NEEDED TO MEET THE MINIMUM EMBEDMENT INTO THE SIDE SLOPES. GABIIONS CAN BE "NESTED".



LEGEND		LEGEND		LEGEND	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING CONTOUR 2' INTERVAL		DRYWELL (M-5)-TYPICAL		DENOTES 15%-24.9% SLOPES
	EXISTING CONTOUR 10' INTERVAL		SOIL LINES AND TYPES		DENOTES 25% AND GREATER SLOPE
	PROPOSED CONTOUR 10' INTERVAL		BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED		DENOTES FAILED PERC
	PROPOSED CONTOUR 2' INTERVAL		PROPOSED ROOF LEADER		DENOTES PASSED PERC
	SPOT ELEVATION		DENOTES EXISTING TREES TO BE REMOVED		DENOTES PASSED PERC
	DENOTES PROPOSED WELL		DENOTES EXISTING TREES TO REMAIN		DENOTES PASSED PERC
	DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE		PROPOSED SEPTIC FIELD		DENOTES PASSED PERC
	DENOTES EXISTING FOREST TO BE REMOVED		EXISTING SEPTIC FIELD		DENOTES PASSED PERC
	LIMIT OF DISTURBANCE		FOREST CONSERVATION EASEMENT (RETENTION)		DENOTES PASSED PERC
	SUPER SILT FENCE		ERODIBLE SOILS		DENOTES PASSED PERC
	SILT FENCE		REFORESTATION PLANTING		DENOTES PASSED PERC
	EXISTING TREE LINE		SPECIMEN TREE		DENOTES PASSED PERC
	DRAINAGE DIVIDE		CRITICAL ROOT ZONE		DENOTES PASSED PERC
	EXISTING WOOD FENCE (TO BE REMOVED UNLESS OTHERWISE NOTED)				DENOTES PASSED PERC
	EXISTING WIRE FENCE				DENOTES PASSED PERC



REVISIONS		
NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning	8/21/2024
Chief, Division of Land Development	Date
<i>Chad Edmondson</i>	8/19/2024
Chief, Development Engineering Division	Date
Approved: Howard County Department Of Public Works	8/26/2024
Chief, Bureau Of Highways	Date

WALKER MEADOWS LOT 25
NON-BUILDABLE PRESERVATION PARCEL 'J'
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979
Ex. Septic Area

WALKER MEADOWS LOT 24
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979
Ex. Septic Area

WALKER MEADOWS LOT 23
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979
Ex. Septic Area

WALKER MEADOWS LOT 22
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979
Ex. Septic Area

LOT 02 DIEHL PROPERTY
PLAT #6937
ZONED: RR-DEO

LOT 03
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 04
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 05
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 06
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 07
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 08
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 09
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 10
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 11
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 12
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 13
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 14
F-17-045
ZONED: RR-DEO
PLAT NOS. 24974-24979

LOT 15 MEADOWWOOD SECTION ONE
PLAT #7806-7811
ZONED: RR-DEO

LOT 16 MEADOWWOOD SECTION ONE
PLAT #7806-7811
ZONED: RR-DEO

LOT 17 MEADOWWOOD SECTION ONE
PLAT #7806-7811
ZONED: RR-DEO

LANDSCAPE DEVELOPER'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 letter of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

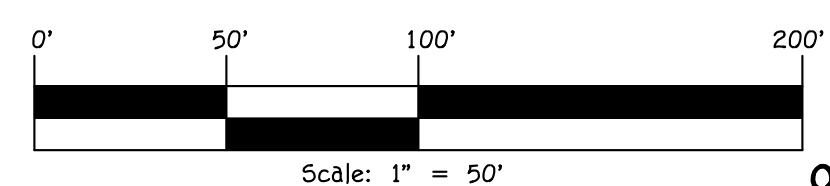
Jason Van Kirk
Name
8/15/2024
Date



PROFESSIONAL CERTIFICATION

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 NO. 21476, EXPIRATION DATE: 7/14/25.

Frank John Manalansan II
Name
8/15/2024
Date



OWNERS

ESC MEADOW SPRINGS, L.C.
5074 DORSEY HALL DRIVE
SUITE 205
ELLCOTT CITY, MARYLAND 21042
PHONE-410-720-3021

DEVELOPER

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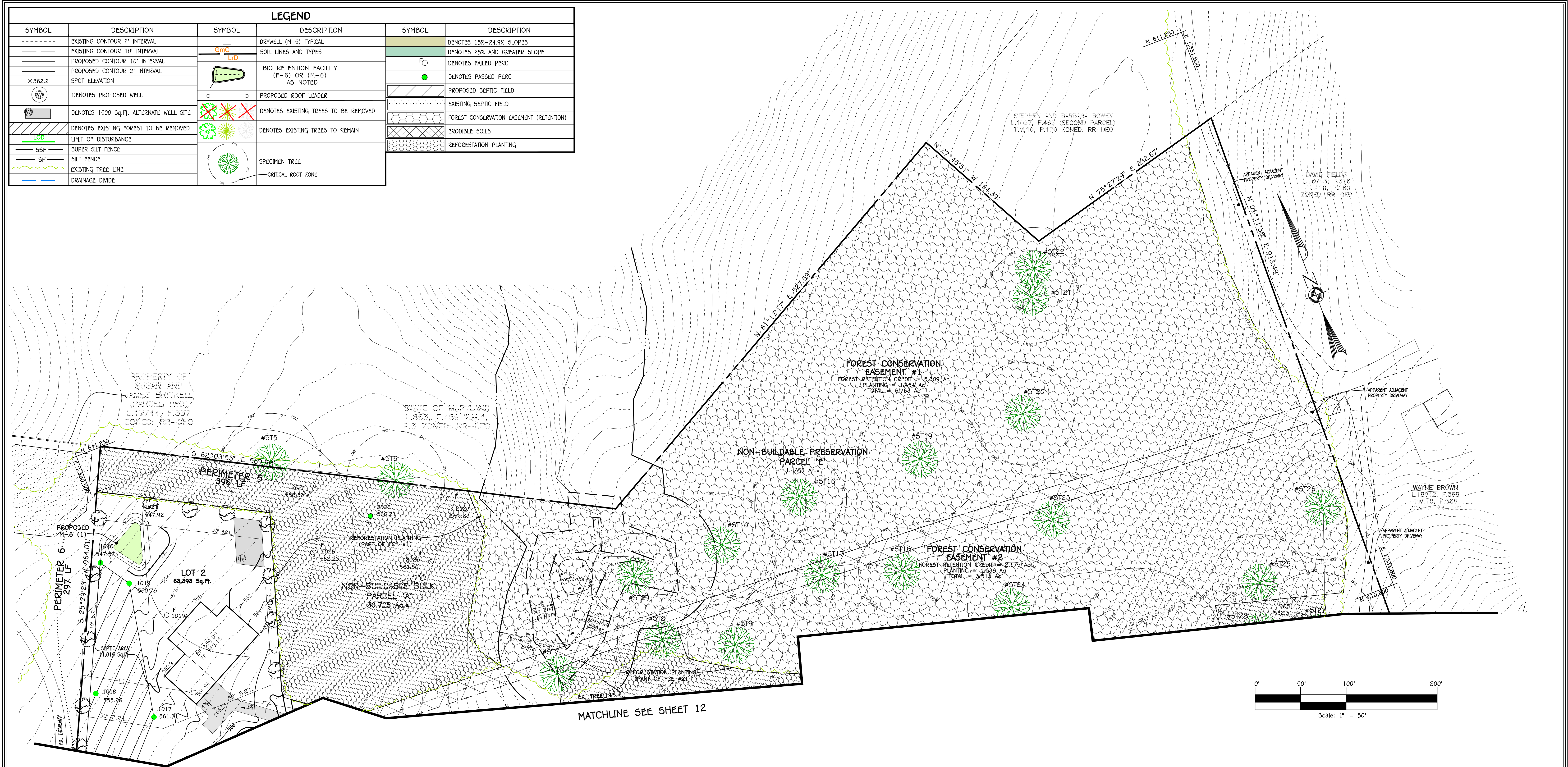
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JENNIFER ANN CZAJOWSKI
12216 MAYAPPLE DRIVE
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PHONE: 301-529-4775

**LANDSCAPE PLAN
BRICKELL PROPERTY**

LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B' PREVIOUS HOWARD COUNTY FILES: ECP-19-021, SP-19-003, F-22-020 AND WP-22-91

TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274
ZONED RR-DEO
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JULY, 2024
SHEET 12 OF 19

LEGEND					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING CONTOUR 2' INTERVAL		DRYWELL (M-5)-TYPICAL		DENOTES 15%-24.9% SLOPES
	EXISTING CONTOUR 10' INTERVAL		SOIL LINES AND TYPES		DENOTES 25% AND GREATER SLOPE
	PROPOSED CONTOUR 10' INTERVAL		BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED		DENOTES FAILED PERC
	PROPOSED CONTOUR 2' INTERVAL		PROPOSED ROOF LEADER		DENOTES PASSED PERC
	SPOT ELEVATION		DENOTES EXISTING TREES TO BE REMOVED		PROPOSED SEPTIC FIELD
	DENOTES PROPOSED WELL		DENOTES EXISTING TREES TO REMAIN		EXISTING SEPTIC FIELD
	DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE		SPECIMEN TREE		FOREST CONSERVATION EASEMENT (RETENTION)
	DENOTES EXISTING FOREST TO BE REMOVED		CRITICAL ROOT ZONE		ERODIBLE SOILS
	LIMIT OF DISTURBANCE				REFORESTATION PLANTING
	SUPER SILT FENCE				
	SILT FENCE				
	EXISTING TREE LINE				
	DRAINAGE DIVIDE				



REVISIONS		
NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning

DocuSigned by: 8/21/2024
 Chief, Division Of Land Development Date

DocuSigned by: 8/19/2024
 Chief, Development Engineering Division Date

Approved: Howard County Department Of Public Works

DocuSigned by: 8/26/2024
 Chief, Bureau Of Highways Date

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2895

LANDSCAPE DEVELOPER'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 letter of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

Jason Van Kirk Name 8/15/2024 Date



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Frank Manalansan II Name 8/15/2024 Date

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**LANDSCAPE PLAN
 BRICKELL PROPERTY**
 LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B'
 PREVIOUS HOWARD COUNTY FILES: ECP-19-021, 5P-19-003, F-22-020 AND WP-22-91
 TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274 ZONED RR-DEO
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JULY, 2024
 SHEET 13 OF 19

SCHEDULE A PERIMETER LANDSCAPE EDGE

PERIMETER	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	TOTALS
CATEGORY	SINGLE FAMILY DETACHED TO ALL USES	SINGLE FAMILY DETACHED TO ALL USES	SINGLE FAMILY DETACHED TO ALL USES	SINGLE FAMILY DETACHED TO ALL USES	SINGLE FAMILY DETACHED TO ALL USES	SINGLE FAMILY DETACHED TO ALL USES	SINGLE FAMILY DETACHED TO ALL USES	SINGLE FAMILY DETACHED TO ALL USES	SINGLE FAMILY DETACHED TO ALL USES	SINGLE FAMILY DETACHED TO ALL USES	
LANDSCAPE TYPE	A	A	A	A	A	A	A	A	B	B	
LINEAR FEET OF PERIMETER	390.45'	290.09'	245.44'	1,324.08'	395.85'	296.77'	238.24'	980.94'	163.43'	440.26'	
CREDIT FOR EXISTING VEGETATION (YES, NO, LINEAR FEET) (DESCRIBE BELOW IF NEEDED)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
CREDIT FOR WALL, FENCE OR BERM (YES, NO, LINEAR FEET) (DESCRIBE IF NEEDED)	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	
NUMBER OF PLANTS REQUIRED	(390'/60' = 6.5 OR 7)	(290'/60' = 4.8 OR 5)	(245'/60' = 4.1 OR 4)	(1325'/60' = 22)	(395'/60' = 6.6 OR 7)	(297'/60' = 4.9 OR 5)	(238'/60' = 3.9 OR 4)	(981'/60' = 16.3 OR 16)	(163'/50' = 3.3 OR 3)	(440'/50' = 8.8 OR 9)	82
SHADE TREES	-	-	-	-	-	-	-	-	-	-	15
EVERGREEN TREES	-	-	-	-	-	-	-	-	-	-	
SHRUBS	-	-	-	-	-	-	-	-	-	-	
NUMBER OF PLANTS PROVIDED	7	6	4	22	7	5	4	16	3	9	83
SHADE TREES	-	-	-	-	-	-	-	-	-	-	15
EVERGREEN TREES	-	-	-	-	-	-	-	-	-	-	
OTHER TREES (2:1 SUBSTITUTION)	-	-	-	-	-	-	-	-	-	-	
SHRUBS (10:1 SUBSTITUTION)	-	-	-	-	-	-	-	-	-	-	
(DESCRIBE PLANT SUBSTITUTION CREDITS BELOW IF NEEDED)	-	-	-	-	-	-	-	-	-	-	

PLANTING SPECIFICATIONS

PLANTS, RELATED MATERIAL, AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.

ALL PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED, HAVE A VIGOROUS ROOT SYSTEM, AND SHALL CONFORM TO THE SPECIES, SIZE, ROOT AND SHAPE SHOWN ON THE PLANT LIST AND THE AMERICAN ASSOCIATION OF NURSERYMEN (AAN) STANDARDS. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS, FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUN SCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BORERS AND ALL FORMS OF INSECT INFESTATIONS OR OBJECTIONABLE DISFIGUREMENTS. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORKED LEADERS WILL NOT BE ACCEPTED. ALL PLANTS SHALL BE FRESHLY DUG; NO HEALED-IN PLANTS FROM COLD STORAGE WILL BE ACCEPTED.

UNLESS OTHERWISE SPECIFIED, ALL GENERAL CONDITIONS, PLANTING OPERATIONS, DETAILS AND PLANTING SPECIFICATION SHALL CONFORM TO "LANDSCAPE SPECIFICATION GUIDELINES FOR BALTIMORE-WASHINGTON METROPOLITAN AREAS", HEREINAFTER "LANDSCAPE GUIDELINES") APPROVED BY THE LANDSCAPE CONTRACTORS ASSOCIATION OF METROPOLITAN WASHINGTON AND THE POTOMAC CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECT, LATEST EDITION, INCLUDING ALL AGENDA.

CONTRACTOR SHALL BE REQUIRED TO GUARANTEE ALL PLANT MATERIAL FOR A PERIOD OF ONE YEAR AFTER DATE OF ACCEPTANCE IN ACCORDANCE WITH THE APPROPRIATE SECTION OF THE LANDSCAPE GUIDELINES. CONTRACTOR'S ATTENTION IS DIRECTED TO THE MAINTENANCE REQUIREMENTS FOUND WITHIN THE ONE YEAR SPECIFICATIONS INCLUDING WATERING AND REPLACEMENT OF SPECIFIED PLANT MATERIAL.

BID SHALL BE BASE ON ACTUAL SITE CONDITIONS. NO EXTRA PAYMENT SHALL BE MADE FOR WORK ARISING FROM SITE CONDITIONS DIFFERING FROM THOSE INDICATED ON DRAWINGS AND SPECIFICATIONS.

ALL SHRUBS SHALL BE PLANTED IN CONTINUOUS TRENCHES OR PREPARED PLANTING BEDS AND MULCHED WITH COMPOSTED HARDWOOD MULCH AS DETAILS AND SPECIFIED EXCEPT WHERE NOTED ON PLANS.

POSITIVE DRAINAGE SHALL BE MAINTAINED IN PLANTING BEDS 2 PERCENT SLOPE).

PLANTING MIX SHALL BE AS FOLLOWS: DECIDUOUS PLANTS - TWO PARTS TOPSOIL, ONE PART WELL-ROTTED COW OR HORSE MANURE. ADD 3 LBS. OF STANDARD FERTILIZER PER CUBIC YARD OF PLANTING MIX. EVERGREEN PLANTS - TWO PARTS TOPSOIL, ONE PART HUMUS OR OTHER APPROVED ORGANIC MATERIAL. ADD 3 LBS. OF EVERGREEN (ACIDIC) FERTILIZER PER CUBIC YARD OF PLANTING MIX. TOPSOIL SHALL CONFORM TO THE LANDSCAPE GUIDELINES.

WEED CONTROL: INCORPORATE A PRE-EMERGENT HERBICIDE INTO THE PLANTING BED FOLLOWING RECOMMENDED RATES ON THE LABEL. CAUTION: BE SURE TO CAREFULLY CHECK THE CHEMICAL USED TO ASSURE ITS ADAPTABILITY TO THE SPECIFIC GROUND COVER TO BE TREATED.

ALL AREAS WITHIN CONTRACT LIMITS DISTURBED DURING OR PRIOR TO CONSTRUCTION NOT DESIGNATED TO RECEIVE PLANTS AND MULCH SHALL BE FINE GRADED AND SEEDED.

A MINIMUM OF 20" SHALL BE MAINTAINED BETWEEN ANY STREET LIGHT AND TREE.

PRE-CONSTRUCTION MEETING

- AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, AND AFTER THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, BUT BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
 - TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIMEN TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS;
 - INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
 - MAKE ALL NECESSARY ADJUSTMENTS;
 - ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.

CONSTRUCTION MONITORING

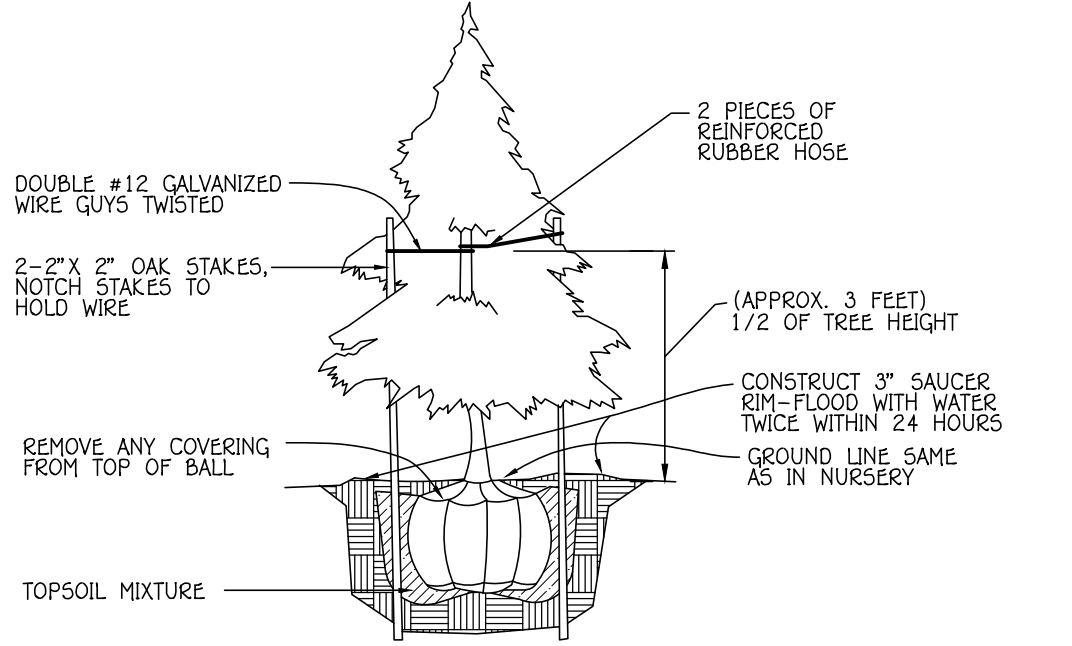
- THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS.
- ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
- THE CONSTRUCTION PROCEDURE SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

PERIMETER LANDSCAPING PLANT LIST

SYMBOL	QUANTITY	BOTANICAL AND COMMON NAME	SIZE	COMMENTS
	83	ACER RUBRUM 'OCTOBER GLORY' RED MAPLE	2 1/2" - 3" CAL.	
	15	PICEA ABIES NORWAY SPRUCE	6' - 8' HT.	

*At the time of plant installation, all trees listed and approved on the Landscape Plan, shall comply with the proper height requirement in accordance with the Howard County Landscape Manual. In addition, no substitutions or relocations of the required plantings may be made without prior review and approval from the Department of Planning and Zoning. Any deviations from the 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 the road drawing plans.

*The Owner, tenants and/or their agents shall be responsible for maintenance of the required perimeter landscaping. 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 the other required landscaping shall be permanently maintained in good condition, and when necessary, repaired or replaced.



EVERGREEN TREE PLANTING DETAIL

NO SCALE

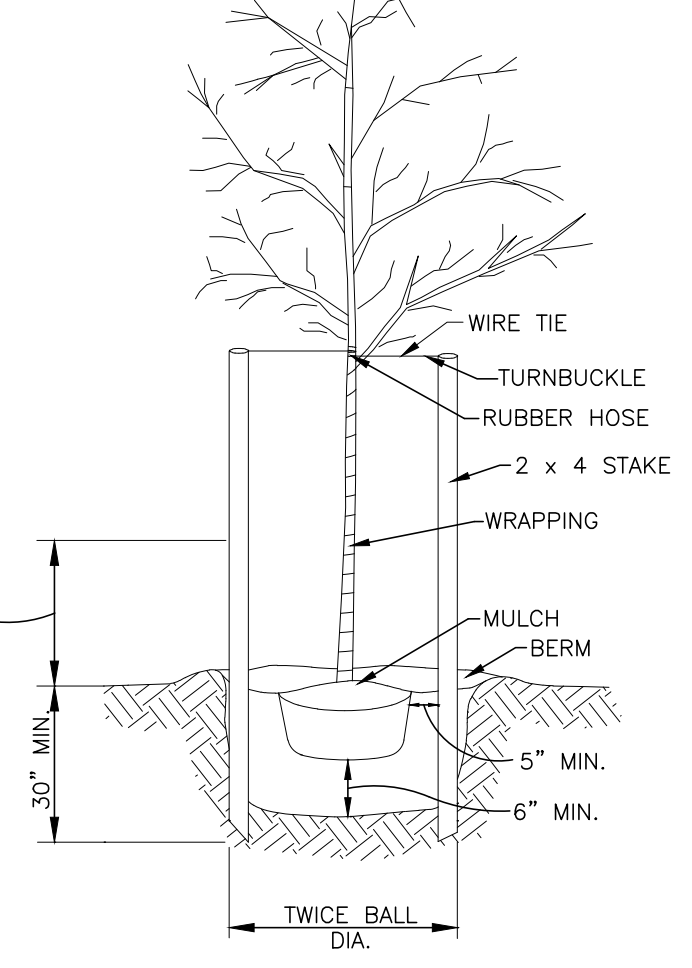
PRIVATE REFUSE PAD LANDSCAPING

4' x 8' PAD NUMBER AT USE-IN-COMMON DEVICES:	LOTS 2&3	LOTS 4-9
NUMBER OF TREES REQUIRED:	---	---
SHADE TREES	---	---
EVERGREEN TREES	6	6
SHRUBS	---	---
NUMBER OF TREES PROVIDED:	---	---
SHADE TREES	---	---
EVERGREEN TREES	6	6
SHRUBS - TAXUS CUSPIDATA 'NANA' DWARF JAPANESE YEW PLANTED 18"-24" APART	---	---

REFUSE PAD LANDSCAPE PLANT LIST

QTY.	KEY	NAME	SIZE	COMMENTS
12	*	TAXUS CUSPIDATA 'NANA' DWARF JAPANESE YEW	18"-24" SPREAD	

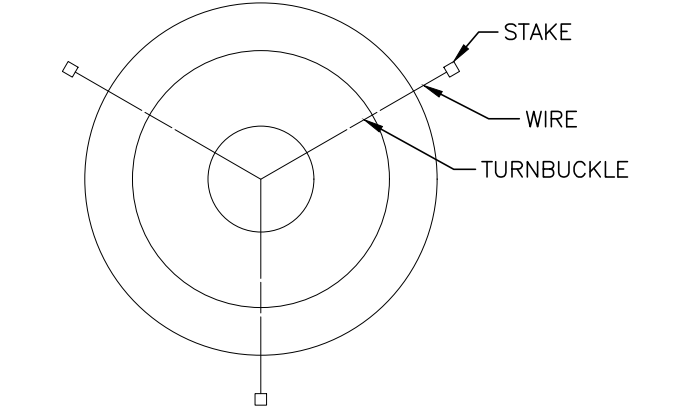
NOTE:
THE PERIMETER LANDSCAPE AND TRASH PAD PLANTING OBLIGATION IS PROVIDED IN ACCORDANCE WITH SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE LANDSCAPE MANUAL. A LANDSCAPE SURETY IN THE AMOUNT OF \$27,510.00 BASED ON 83 SHADE TREES @ \$300.00/TREE, 15 EVERGREEN TREES @ \$150.00/TREE, AND 12 SHRUBS @ \$30/SHRUB SHALL BE BONDED AS PART OF THE DPW DEVELOPER'S AGREEMENT.



NOTE: REMOVE BURLAP FROM TOP 1/3 OF BALL

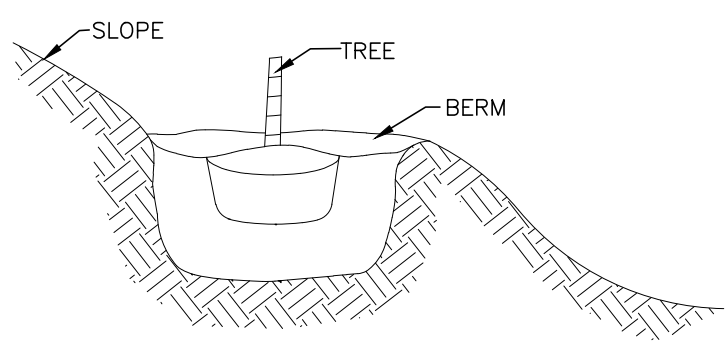
TREE PLANTING

NOT TO SCALE



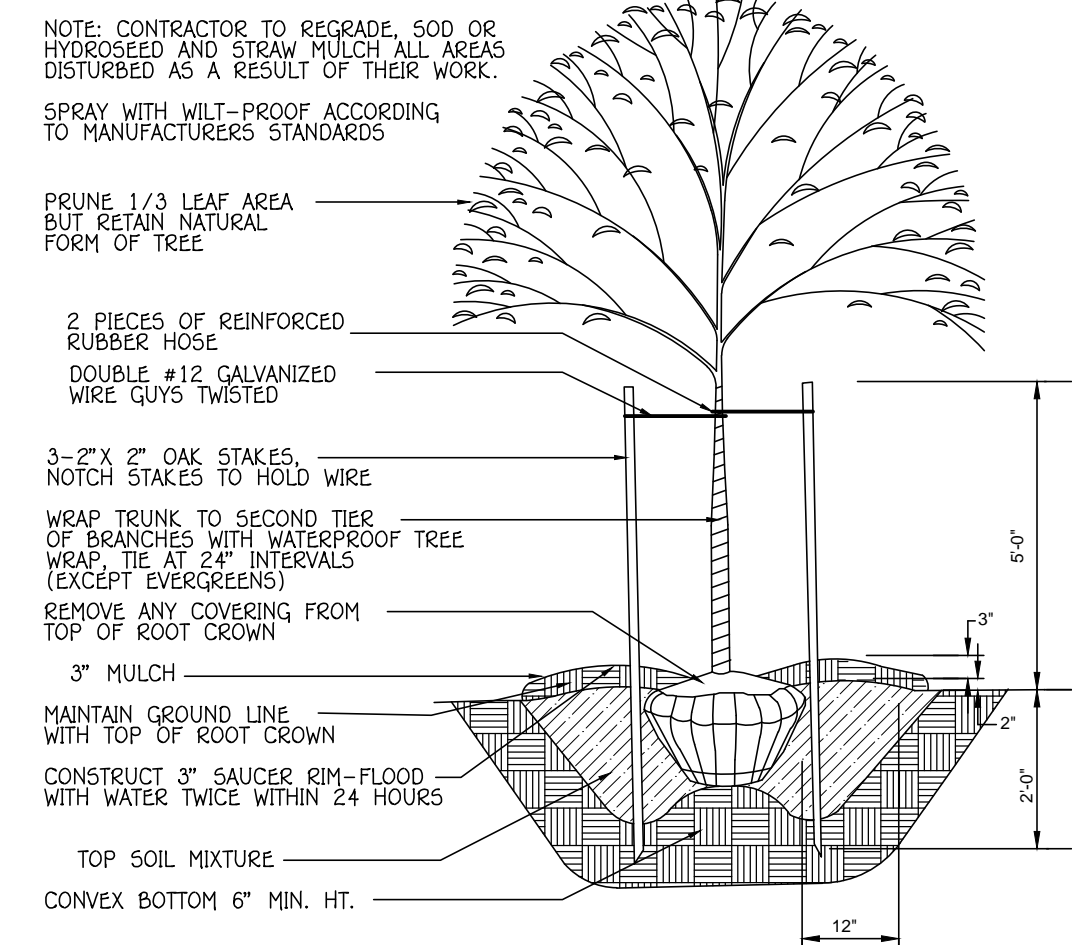
STAKING DETAIL

NOT TO SCALE



GRADING FOR PLANTING ON SLOPES

NOT TO SCALE



SHADE TREE PLANTING DETAIL

NO SCALE

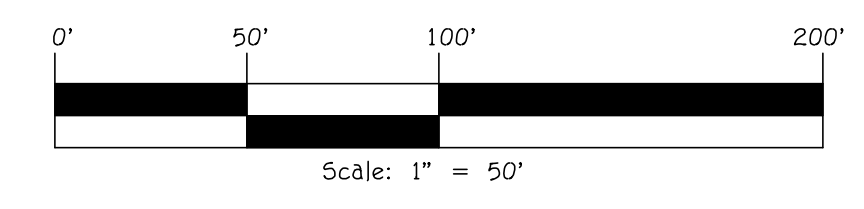
STREET TREE SCHEDULE

QTY.	KEY	NAME	SIZE	COMMENTS
18	o	ACER RUBRUM 'OCTOBER GLORY' RED MAPLE	2 1/2" - 3" CALIFER FULL CROWN DBB	40' APART ON PUBLIC R/W BRICKELL WAY

346'/40' = 8.65
8.65 x 2 = 17.3
18 TREES

(18 STREET TREES + 83 PERIMETER TREES =) 101 TOTAL SHADE TREES
15 TOTAL EVERGREEN TREES

NOTE: STREET TREES WILL BE BONDED WITH THE OED COST ESTIMATE



REVISIONS

NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning
 DocuSigned by: [Signature] 8/21/2024
 Chief, Division of Planning and Development
 [Signature] 8/19/2024
 Chief, Development Permitting Division
 Approved: Howard County Department Of Public Works
 DocuSigned by: [Signature] 8/26/2024
 Chief, Bureau Of Highways

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING, CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK, 10272 BALTIMORE NATIONAL PIKE, ELIJAH CITY, MARYLAND 21042
 (410) 461-2895

LANDSCAPE DEVELOPER'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 letter of landscape installation accompanied by an executed one year guarantee of plant materials will be submitted to the Department of Planning and Zoning.

Jason Van Kirk 7/17/2024
 Name Date

STATE OF MARYLAND
 PROFESSIONAL LAND SURVEYOR
 No. 21476
 Frank John Manlusan II

PROFESSIONAL CERTIFICATION
 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 NO. 21476, EXPIRATION DATE: 7/14/25.

Frank John Manlusan II 7/19/2024
 Name Date

OWNERS
 ESC MEADOW SPRINGS, L.C.
 5074 DORSEY HALL DRIVE SUITE 205
 ELLICOTT CITY, MARYLAND 21042
 PHONE: 410-720-3021

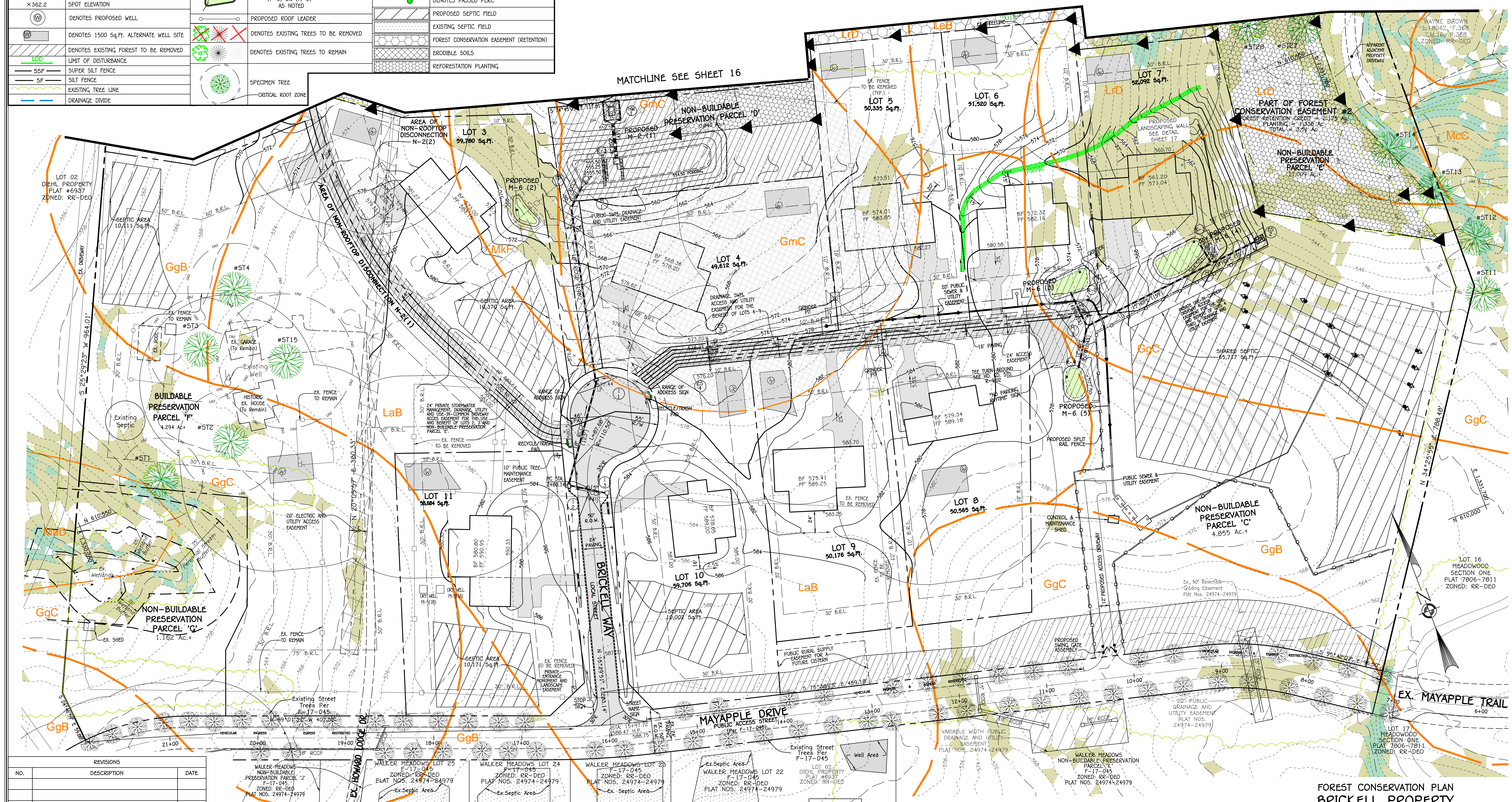
DEVELOPER
 ESC MEADOW SPRINGS, L.C.
 5074 DORSEY HALL DRIVE SUITE 205
 ELLICOTT CITY, MARYLAND 21042
 PHONE: 410-720-3021

JOHN BERNARD AND JENNIFER ANN CZAJOWSKI
 12216 MAYAPPLE DRIVE MARRIOTTVILLE, MD 21104
 PHONE: 301-529-4775

LANDSCAPE NOTES & DETAILS
BRICKELL PROPERTY
 LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B'
 PREVIOUS HOWARD COUNTY FILES: ECP-19-021, SP-19-003, F-22-020 AND WP-22-91
 TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274
 ZONED RR-DEO
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JULY, 2024
 SHEET 14 OF 19

LEGEND		LEGEND		LEGEND	
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
	EXISTING CONTOUR 2' INTERVAL		DRYWELL (M-5)-TYPICAL		DENOTES 15%-24.9% SLOPES
	EXISTING CONTOUR 10' INTERVAL		SOIL LINES AND TYPES		DENOTES 25% AND GREATER SLOPE
	PROPOSED CONTOUR 10' INTERVAL		BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED		DENOTES FAILED PERC
	PROPOSED CONTOUR 2' INTERVAL		PROPOSED ROOF LEADER		DENOTES PASSED PERC
	SPOT ELEVATION		PROPOSED SEPTIC FIELD		EXISTING SEPTIC FIELD
	DENOTES PROPOSED WELL		EXISTING SEPTIC FIELD		FOREST CONSERVATION EASEMENT (RETENTION)
	DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE		FOREST CONSERVATION EASEMENT (RETENTION)		ERODIBLE SOILS
	DENOTES EXISTING FOREST TO BE REMOVED		REFORESTATION PLANTING		
	LIMIT OF DISTURBANCE				
	SUPER SILT FENCE				
	SILT FENCE				
	EXISTING TREE LINE				
	DRAINAGE DIVIDE				
			SPECIMEN TREE		
			CRITICAL ROOT ZONE		

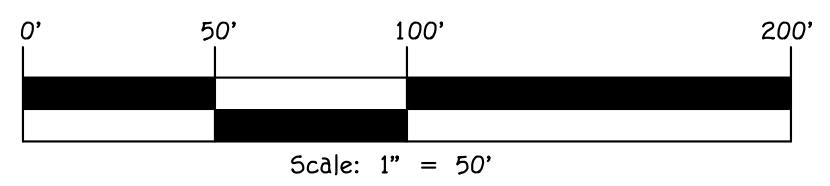
NOTE: SEE SHEET 13 FOR THE PERIMETER LANDSCAPING CHART



REVISIONS		
NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning	Date: 8/21/2024
Chief, Division of Land Development	Date: 8/19/2024
Chief, Development Engineering Division	Date:
Approved: Howard County Department Of Public Works	Date: 8/26/2024
Chief, Bureau Of Highways	Date:

LOT	DESCRIPTION	ZONING	PLAT NOS.
WALKER MEADOWS NON-BUILDABLE PRESERVATION PARCEL 'J'	F-17-045	ZONED: RR-DEO	PLAT NOS. 24974-24979
WALKER MEADOWS LOT 25	F-17-045	ZONED: RR-DEO	PLAT NOS. 24974-24979
WALKER MEADOWS LOT 24	F-17-045	ZONED: RR-DEO	PLAT NOS. 24974-24979
WALKER MEADOWS LOT 23	F-17-045	ZONED: RR-DEO	PLAT NOS. 24974-24979
WALKER MEADOWS LOT 22	F-17-045	ZONED: RR-DEO	PLAT NOS. 24974-24979
LOT 02, DIEHL PROPERTY	F-17-045	ZONED: RR-DEO	PLAT NOS. 24974-24979
WALKER MEADOWS NON-BUILDABLE PRESERVATION PARCEL 'C'	F-17-045	ZONED: RR-DEO	PLAT NOS. 24974-24979



Eco-Science Professionals, Inc.
CONSULTING ECOLOGISTS
J. Brody McAllister
ISA Certified Arborist
MD DNR P-CA Qualified Professional

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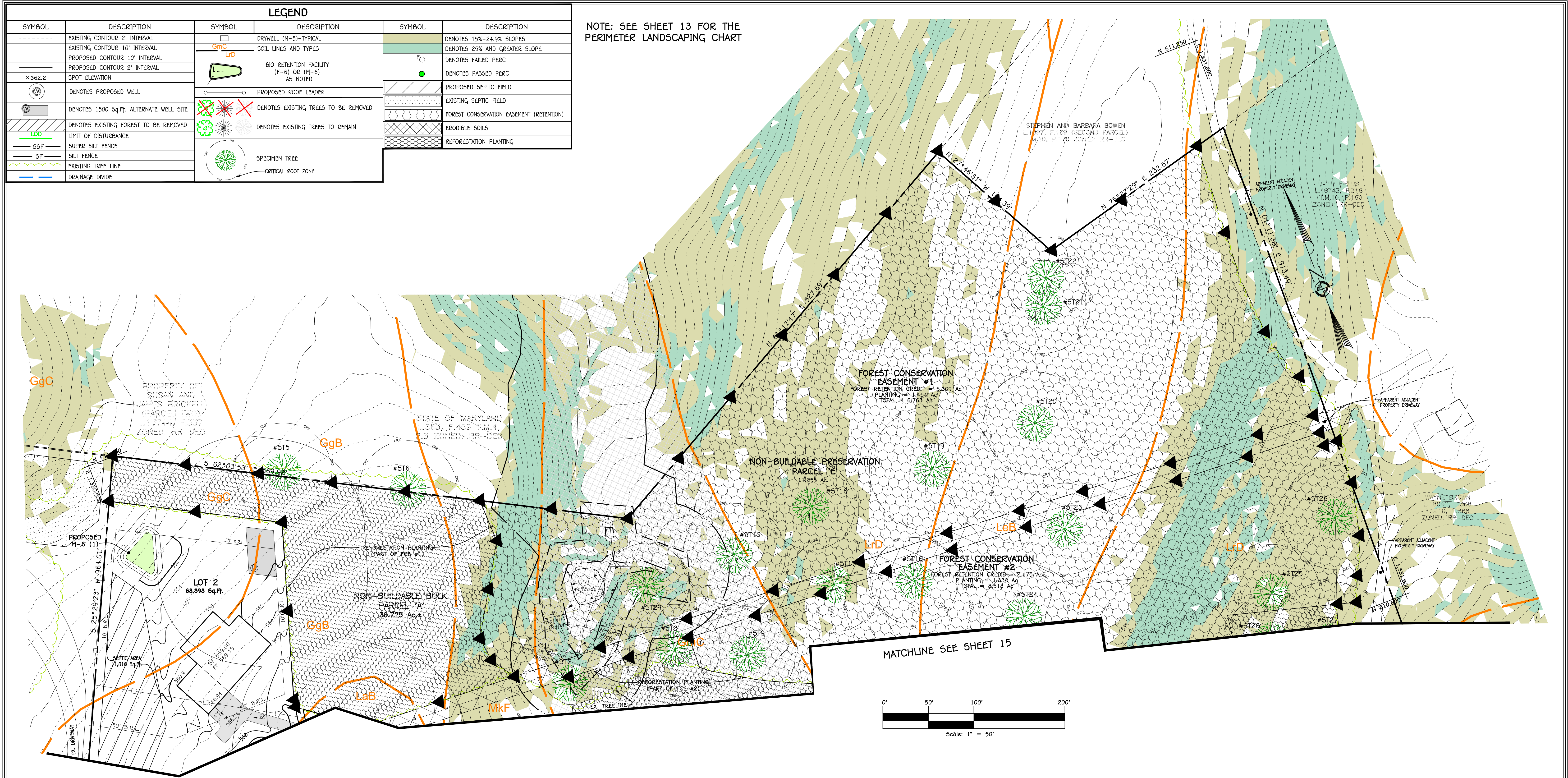
DEVELOPER
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JOHN BERNARD and JENNIFER ANN CZAJOWSKI
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**FOREST CONSERVATION PLAN
BRICKELL PROPERTY**
LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B' PREVIOUS HOWARD COUNTY FILES: ECP-19-021, SP-19-003, F-22-020 AND WP-22-91
TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274 ZONED RR-DEO
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: A5 SHOWN DATE: JULY, 2024
SHEET 15 OF 19

LEGEND					
SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION
---	EXISTING CONTOUR 2' INTERVAL		DRYWELL (M-5)-TYPICAL		DENOTES 15%-24.9% SLOPES
---	EXISTING CONTOUR 10' INTERVAL		SOIL LINES AND TYPES		DENOTES 25% AND GREATER SLOPE
---	PROPOSED CONTOUR 10' INTERVAL		BIO RETENTION FACILITY (F-6) OR (M-6) AS NOTED		DENOTES PASSED PERC
---	PROPOSED CONTOUR 2' INTERVAL		PROPOSED SEPTIC FIELD		EXISTING SEPTIC FIELD
x362.2	SPOT ELEVATION		PROPOSED ROOF LEADER		FOREST CONSERVATION EASEMENT (RETENTION)
	DENOTES PROPOSED WELL		DENOTES EXISTING TREES TO BE REMOVED		ERODIBLE SOILS
	DENOTES 1500 Sq.Ft. ALTERNATE WELL SITE		DENOTES EXISTING TREES TO REMAIN		REFORESTATION PLANTING
	DENOTES EXISTING FOREST TO BE REMOVED		SPECIMEN TREE		
	SUPER SILT FENCE		CRITICAL ROOT ZONE		
	SILT FENCE				
	EXISTING TREE LINE				
	DRAINAGE DIVIDE				

NOTE: SEE SHEET 13 FOR THE PERIMETER LANDSCAPING CHART



REVISIONS		
NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning

DocuSigned by: 8/21/2024

Chief, Division Of Land Development

DocuSigned by: 8/19/2024

Chief, Development Engineering Division

Approved: Howard County Department Of Public Works

DocuSigned by: 8/26/2024

Chief, Bureau Of Highway

FISHER, COLLINS & CARTER, INC.
 CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
 CENTENNIAL SQUARE OFFICE PARK - 10272 BALTIMORE NATIONAL PIKE
 ELLICOTT CITY, MARYLAND 21042
 (410) 461-2855

SOILS LEGEND			
SOIL	NAME	CLASS	K' VALUE
GgB	Glenelg loam, 3 to 8 percent slopes	B	0.20
GgC	Glenelg loam, 8 to 15 percent slopes	B	0.20
GmC	Glenville silt loam, 8 to 15 percent slopes	C	0.37
LaB	Legore silt loam, 3 to 8 percent slopes	C	0.02
LeB	Legore silt loam, 3 to 8 percent slopes, stony	C	0.02
LrD	Legore-Rely gravelly loams, 15 to 25 percent slopes, very stony	B/C	0.02
MaD	Manor loam, 15 to 25 percent slopes	B	0.24
McC	Manor-channery loam, 8 to 15 percent slopes	B	
MkF	Manor-Brinklow complex, 25 to 65 percent slopes, very rocky	B	0.24

Eco-Science Professionals, Inc.
 CONSULTING ECOLOGISTS
 1000 N.W. 100th Ave., Suite 1000, Fort Lauderdale, FL 33304
 Phone: 954-588-1000

J. Brody McAllister
 ISA Certified Arborist
 Cert ID: M46817A
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**FOREST CONSERVATION PLAN
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 TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274
 ZONED RR-DEO
 THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
 SCALE: AS SHOWN DATE: JULY, 2024
 SHEET 16 OF 19

FOREST CONSERVATION NOTES

- 1. ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS RECORDED IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT DISTURBANCE AND USE OF THESE AREAS.
2. THE FOREST CONSERVATION EASEMENTS HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD CODE AND FOREST CONSERVATION ACT. 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.
3. LIMITS OF DISTURBANCE SHALL BE RESTRICTED TO AREAS OUTSIDE THE LIMIT OF TEMPORARY FENCING OR THE FCE BOUNDARY, WHICHEVER IS GREATER. NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS FOREST CONSERVATION EASEMENT.
4. PASSIVE RECREATIONAL ACTIVITIES, INCLUDING HORSEBACK RIDING ON UNMARKED TRAILS, ARE PERMITTED WITHIN THE FOREST CONSERVATION EASEMENTS IF APPROVED BY THE COUNTY, AND IF THEY ARE CONSISTENT WITH AND DO NOT INTERFERE WITH FOREST CONSERVATION MANAGEMENT AND DO NOT CAUSE HARM TO PROTECTED FOREST RESOURCES OR DO NOT DESTROY THE FOREST ECOLOGICAL SYSTEM. BE ADVISED, IF THE UNMARKED HORSEBACK RIDING TRAILS DO NOT ADHERE TO THE ABOVE REQUIREMENTS, RELEASE OF THE FOREST CONSERVATION SURETY MAY BE DELAYED UNTIL THE FOREST CONSERVATION EASEMENTS ARE IN ACCEPTABLE CONDITION.
5. BOARD ON BOARD, CHAIN LINK, PANEL AND PICKET FENCES ARE NOT PERMITTED WITHIN THE FOREST CONSERVATION EASEMENTS. THE EXISTING FENCING SHOWN ON THE PLANS IS AN OPEN WOOD FENCING THAT ALLOWS FLORA AND FAUNA TO FREELY MOVE THROUGH THE EASEMENT. ANY ALTERATION OF THE FENCING, LIKE WIRE MESH, IS NOT PERMITTED BECAUSE IT WILL BLOCK THE FOREST AREA FROM WILDLIFE AND NATURAL REGENERATION.

PLANTING / SOIL SPECIFICATIONS

- 1. Planting Of Nursery Stock Shall Take Place Between March 15th And April 30th Or September 15th And November 15th.
2. A Twelve (12) Inch Layer Of Topsoil Shall Be Spread Over All Reforestation Areas Impacted By Site Grading To Assure A Suitable Planting Area, If Applicable. Disturbed Areas Shall Be Stabilized With Permanent Accordion With The Sediment & Erosion Control Plan For This Project. Planting Areas Not Impacted By Site Grading Shall Have No Additional Topsoil Installed.
3. All Bare Root Planting Stock Shall Have Their Root System Dipped Into An Anti-Desiccant Gel Prior To Planting.
4. Plants Shall Be Installed So That The Top Of The Root Mass Is Level With The Top Of Existing Grade. Backfill In The Planting Pits Shall Consist Of 3 Parts Existing Soil To 1 Part Fine Pine Fines Or Equivalent.
5. Fertilizer Shall Consist Of Agriform 22-8-2, Or Equivalent, Applied As Per Manufacturer's Specifications.
6. A Two (2) Inch Layer Of Hardwood Mulch Shall Be Placed Over The Root Area Of All Plantings. See Planting Detail On This Sheet.
7. Plant Material Shall Be Transported To The Site In A Tarped Or Covered Truck. Plants Shall Be Kept Moist Prior To Planting.
8. All Non-Organic Debris Associated With The Planting Operation Shall Be Removed From The Site By The Contractor.

FOREST PROTECTION GENERAL NOTES

- 1. ALL FOREST RETENTION AREAS SHALL BE TEMPORARILY PROTECTED BY WELL ANCHORED BLAZE ORANGE PLASTIC MESH FENCING, AS NECESSARY, AND SIGNAGE AS INDICATED ON THE PLANS. THE DEVICES SHALL BE INSTALLED ALONG THE FOREST RETENTION BOUNDARY PRIOR TO ANY LAND CLEARING, GRADING, OR GRADING ACTIVITIES.
2. THE FOREST PROTECTION DEVICES SHALL BE INSTALLED SUCH THAT THE CRITICAL ROOT ZONES OF ALL TREES WITHIN THE RETENTION AREA NOT BEING PROTECTED WILL BE WITHIN FOREST PROTECTION DEVICES, UNLESS ROOT PRUNING IS PROPOSED.
3. ALL PROTECTION DEVICES SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION, INCLUDING SILT FENCE BEING USED AS PROTECTIVE FENCING. ALL DEVICES SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION HAS CEASED IN THE IMMEDIATE VICINITY. UPON REMOVAL OF THESE PROTECTION DEVICES ALL DISTURBED AREAS SHALL BE STABILIZED WITH PERMANENT SEEDING & MULCH.
4. ATTACHMENT OF SIGNS, OR ANY OTHER OBJECTS TO TREES STRONGLY IS PROHIBITED. NO EQUIPMENT, MACHINERY, VEHICLES, MATERIALS OR EXCESSIVE PEDESTRIAN TRAFFIC SHALL BE ALLOWED WITHIN THESE PROTECTED AREAS.
5. INSTALLATION AND MAINTENANCE OF PROTECTIVE FENCING AND SIGNAGE SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL TAKE THE UTMOST CARE TO PROTECT TREE ROOT SYSTEMS DURING ALL CONSTRUCTION ACTIVITIES. TREE ROOT SYSTEMS SHALL BE PROTECTED FROM SMOTHERING, FLOODING, EXCESSIVE WETTING FROM DE-WATERING OPERATIONS, OFF-SITE RUN OFF, ALONG WITH SPILLAGE AND DRAINING OF MATERIALS THAT MAY BE HARMFUL TO TREES.
6. THE GENERAL CONTRACTOR SHALL PERFORM PARKING OF CONSTRUCTION VEHICLES AND EQUIPMENT, AND THE STORING OF BUILDING SUPPLIES OR STOCK-PILING OF EARTH WITHIN FOREST CONSERVATION EASEMENTS.
7. REMOVAL OF TOPSOIL OR ROOT MAT WITHIN THE TREE PRESERVATION AREA SHALL BE PROHIBITED.
8. THE GENERAL CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ANY TREES DAMAGED OR DESTROYED WITHIN THE FOREST CONSERVATION EASEMENTS.
9. ROOT PRUNING SHALL BE USED AT THE LIMIT OF DISTURBANCE OR LIMIT OF GRADING WITHIN AND ADJACENT TO ALL PRESERVATION AREAS, AS NECESSARY.

REFORESTATION PLANTING NOTES

- 1. PLANTS, RELATED MATERIAL AND OPERATIONS SHALL MEET THE DETAILED DESCRIPTION AS GIVEN ON THE PLANS AND AS DESCRIBED HEREIN.
2. PLANT MATERIAL, UNLESS OTHERWISE SPECIFIED, SHALL BE NURSERY GROWN, UNIFORMLY BRANCHED AND HAVE A VIGOROUS ROOT SYSTEM. PLANT MATERIAL SHALL BE HEALTHY, VIGOROUS PLANTS FREE FROM DECAY, DISTURBED ROOTS, SUNSCALD INJURIES, ABRASIONS OF THE BARK, PLANT DISEASE, INSECT PEST EGGS, BOXERS, INFESTATIONS OR OBJECTIONABLE DISFIGUREMENTS. PLANT MATERIAL THAT IS WEAK OR WHICH HAS BEEN CUT BACK FROM LARGER GRADES TO MEET SPECIFIED REQUIREMENTS WILL BE REJECTED. TREES WITH FORCED LEADERS WILL NOT BE ACCEPTED. PLANTS SHALL BE FRESHLY DUG; NO HEEL-IN PLANTS OR PLANTS FROM COLD STORAGE WILL BE ACCEPTED.
3. UNLESS OTHERWISE SPECIFIED, PLANT MATERIAL SHALL CONFORM TO "AMERICAN STANDARD FOR NURSERY STOCK" ANSI Z60.1-1990, PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INCLUDING ALL ADDENDA.
4. CONTRACTOR WILL BE REQUIRED TO GUARANTEE PLANT MATERIAL FOR A PERIOD OF TWO (2) YEARS AFTER THE DATE OF ACCEPTANCE, AND MAINTAIN A 75% SURVIVABILITY AT THE END OF THE TWO (2) YEARS. ALL PLANT MATERIAL BELOW THE 75% THRESHOLD DURING THE 2 YEAR PERIOD WILL BE REPLACED AT THE BEGINNING OF THE NEXT GROWING SEASON AT THE CONTRACTOR'S EXPENSE.
5. TO LESSEN THE CHANCE OF LOSS, THE PLANTINGS SHOULD BE CHECKED FROM TIME TO TIME TO INSURE THAT THEY ARE RECEIVING SUFFICIENT WATER. SEE "MAINTENANCE OF PLANTINGS" FOR GUIDELINES.
6. THE LOCATION AND ORIENTATION OF ALL PLANT MATERIAL SHALL BE RANDOMLY PLANTED IN DESIGNATED REFORESTATION AREAS BY THE CONTRACTOR. CONTRACTOR SHALL BE RESPONSIBLE FOR MOVING ANY PLANT MATERIAL INSTALLED WITHOUT APPROVAL.
7. CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND PRUNING PLANT MATERIAL IN THE PROPER PLANTING SEASON FOR EACH PLANT TYPE, SEE TREE PLANTING & MAINTENANCE CALENDAR.
8. UPON COMPLETION OF INSTALLATION, SIGNAGE SHALL BE INSTALLED AS SHOWN.

PRE-CONSTRUCTION MEETING

- 1. AFTER THE BOUNDARIES OF THE FOREST RETENTION AREAS HAVE BEEN FIELD LOCATED AND MARKED, ALONG WITH THE FOREST PROTECTION DEVICES HAVE BEEN INSTALLED, AND BEFORE ANY OTHER DISTURBANCE HAS TAKEN PLACE ON SITE, A PRE-CONSTRUCTION MEETING SHALL TAKE PLACE ON SITE. THE DEVELOPER, CONTRACTOR OR PROJECT MANAGER, AND HOWARD COUNTY INSPECTORS SHALL ATTEND. THE PURPOSE OF THIS MEETING WILL BE:
A. TO IDENTIFY THE LOCATIONS OF THE FOREST RETENTION AREAS, SPECIMEN TREES WITHIN 50 FEET OF THE LIMIT OF DISTURBANCE, LIMITS OF CONSTRUCTION, EMPLOYEE PARKING AREAS AND EQUIPMENT STAGING AREAS;
B. INSPECT ALL FLAGGED BOUNDARIES AND PROTECTION DEVICES;
C. MAKE ALL NECESSARY ADJUSTMENTS;
D. ASSIGN RESPONSIBILITIES AS APPROPRIATE AND DISCUSS PENALTIES.

CONSTRUCTION MONITORING

- 1. THE SITE SHALL BE INSPECTED PERIODICALLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. A QUALIFIED PROFESSIONAL SHALL BE RESPONSIBLE FOR IDENTIFYING DAMAGE TO PROTECTED FOREST AREAS OR INDIVIDUAL TREES WHICH MAY HAVE BEEN CAUSED BY CONSTRUCTION ACTIVITIES, SUCH AS SOIL COMPACTION, ROOT INJURY, TRUNK WOUNDS, LIMB INJURY, OR STRESS CAUSED BY FLOODING OR DROUGHT CONDITIONS.
2. ANY SUCH DAMAGE THAT MAY OCCUR SHALL BE REMEDIATED IMMEDIATELY USING APPROPRIATE MEASURES. SEVERE PROBLEMS MAY REQUIRE CONSULTATION WITH A PROFESSIONAL ARBORIST.
3. ALL CONSTRUCTION ACTIVITIES SHALL NOT DAMAGE AREAS OUTSIDE OF THE LIMITS OF DISTURBANCE AS DESIGNATED ON THE PLANS. ANY DAMAGE SHALL BE RESTORED BY THE CONTRACTOR AT HIS EXPENSE AND TO THE SATISFACTION OF THE DESIGN TEAM OR ENGINEER.

SURETY FOR FORESTATION

- 1. THE DEVELOPER SHALL POST A SURETY (BOND OR LETTER OF CREDIT) TO ENSURE THAT FORESTATION PLANTINGS ARE COMPLETED.

PLANTING NOTES

WHEN POSSIBLE, PLANTS SHALL BE INSTALLED WITHIN 24 HOURS OF DELIVERY. IF INSTALLATION CANNOT BE PERFORMED WITHIN THIS TIME FRAME, PLANT STOCK SHALL BE WATERED AND PROTECTED FROM DESSICATION. APPLICATION OF HERBICIDES, ROUND-UP OR EQUIVALENT, MAY BE USED TO REDUCE PLANT COMPETITION FROM OLD FIELD SUCCESSIONAL GROWTH AT THE TIME OF INSTALLATION. MOWING, RE-APPLICATION OF HERBICIDE, OR A COMBINATION THEREOF, MAY BE USED TO CONTROL UNWANTED, COMPETING VEGETATION. PLANTING SHALL BE INSTALLED WITHIN ONE YEAR OR TWO GROWING SEASONS OF SUBDIVISION APPROVAL. PLANTINGS SHALL BE INSTALLED IN ACCORDANCE WITH THE TIME SCHEDULE SHOWN IN NOTE 1 OF THE PLANTING /SOIL SPECIFICATIONS ON THIS SHEET.

FCP NOTES

- 1. ANY FOREST CONSERVATION EASEMENT (FCE) AREA SHOWN HEREON IS SUBJECT TO PROTECTIVE COVENANTS WHICH MAY BE FOUND IN THE LAND RECORDS OF HOWARD COUNTY WHICH RESTRICT THE DISTURBANCE AND USE OF THESE AREAS.
2. FORESTED AREAS OCCURRING OUTSIDE OF THE FCE SHALL NOT BE CONSIDERED PART OF THE FCE AND SHALL NOT BE SUBJECT TO PROTECTIVE LAND COVENANTS.
3. LIMITS OF DISTURBANCE SHALL BE RESTRICTED TO AREAS OUTSIDE THE LIMIT OF TEMPORARY FENCING OR THE FCE BOUNDARY, WHICHEVER IS GREATER.
4. THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT, EXCEPT AS SHOWN ON AN APPROVED ROAD CONSTRUCTION DRAWING. HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION EASEMENT ARE ALLOWED.
5. NO STOCKPILES, PARKING AREAS, EQUIPMENT CLEANING AREAS, ETC. SHALL OCCUR WITHIN AREAS DESIGNATED AS FOREST CONSERVATION EASEMENTS.
6. TEMPORARY FENCING SHALL BE USED TO PROTECT FOREST RESOURCES DURING CONSTRUCTION. THE FENCING SHALL BE PLACED ALONG ALL FCE BOUNDARIES WHICH OCCUR WITHIN 15 FEET OF THE PROPOSED LIMITS OF DISTURBANCE.
7. PERMANENT SIGNAGE SHALL BE PLACED 50'-100' APART ALONG THE BOUNDARIES OF ALL AREAS INCLUDED IN FOREST CONSERVATION EASEMENTS.
8. THE FOREST CONSERVATION EASEMENT AREAS WITHIN THIS SUBDIVISION HAVE BEEN ESTABLISHED TO FULFILL THE REQUIREMENTS OF SECTION 16.1200 OF THE HOWARD COUNTY CODE AND THE FOREST CONSERVATION ACT. NO CLEARING, GRADING OR CONSTRUCTION IS PERMITTED WITHIN THE FOREST CONSERVATION EASEMENT; HOWEVER, FOREST MANAGEMENT PRACTICES AS DEFINED IN THE DEED OF FOREST CONSERVATION ARE ALLOWED. THE FOREST CONSERVATION ACT REQUIREMENTS FOR BRICKELL PROPERTY WILL BE MET THROUGH THE ON-SITE PLANTING OF 2.8 ACRES IN COMBINED FCE#1, & FCE#2 REQUIRING A SURETY IN THE AMOUNT OF \$60,984 (BASED ON 2.8 ACRES X 43560 SQ. FT./ACRE X \$0.50/SQ. FT.).
9. THE FOREST CONSERVATION EASEMENT PLANTINGS ARE NOT TO BE CONSIDERED LANDSCAPING, AS IT IS USUALLY PRACTICED. THE PURPOSE OF THESE PLANTINGS IS TO CREATE A NEW FOREST COMMUNITY THAT WILL REPLACE TO SOME DEGREE THE FOREST RESOURCES THAT HAVE BEEN LOST DURING RECENT LAND DEVELOPMENT. THEIR PRIMARY PURPOSE IS ENVIRONMENTAL AND NOT AESTHETIC. THE REFORESTATION STAND WILL REQUIRE SPECIAL MANAGEMENT AND INITIALLY MAY NOT LOOK ATTRACTIVE."

FOREST CONSERVATION WORKSHEET VERSION 1.0

Table with columns for site data, acreage, and calculations. Includes rows for Total Tract Area, Area Within 100 Year Floodplain, Area to Remain in Agricultural Production, Net Tract Area, Land Use Category, and various thresholds for afforestation, forest cover, and reforestation.

FCE#1 Planting Area - 1.454 acres

Table listing planting requirements for FCE#1. Columns include Qty, Species, Size, Spacing, and Notes. Lists species like Acer rubrum, Quercus alba, Juniperus virginiana, Quercus rubra, Liriodendron tulipifera, and Ostrya virginiana.

FCE#2 Planting Area - 1.338 acres

Table listing planting requirements for FCE#2. Columns include Qty, Species, Size, Spacing, and Notes. Lists species like Acer rubrum, Quercus alba, Juniperus virginiana, Quercus rubra, Liriodendron tulipifera, and Ostrya virginiana.

SEQUENCE OF CONSTRUCTION FOR REFORESTATION AREAS

- 1. Sediment Controls And Tree Protective Devices Shall Be Installed In Accordance With Sediment & Erosion Control Plans For This Site, If Applicable. Site Shall Be Graded In Accordance With The Plans. (2 Days)
2. Proposed Reforestation Areas Impacted By The Site Grading Shall Be Topsoiled And Stabilized As Per Note 2 Of The "Planting / Soil Specifications". Shown On This Sheet. (1 Day)
3. Plants Shall Be Installed And Maintained As Per Notes And Specifications For This Project. (1 Week)
4. Upon Completion Of The Plantings, Signage Shall Be Installed As Per FCE Note #7 On This Sheet. (1 Week)
5. Plantings Shall Be Quarantined And Maintained In Accordance With The "Quarantine Requirements" And "Maintenance Of Plantings" Associated With This Project As Shown On This Sheet. (24 Months)

MAINTENANCE OF PLANTINGS

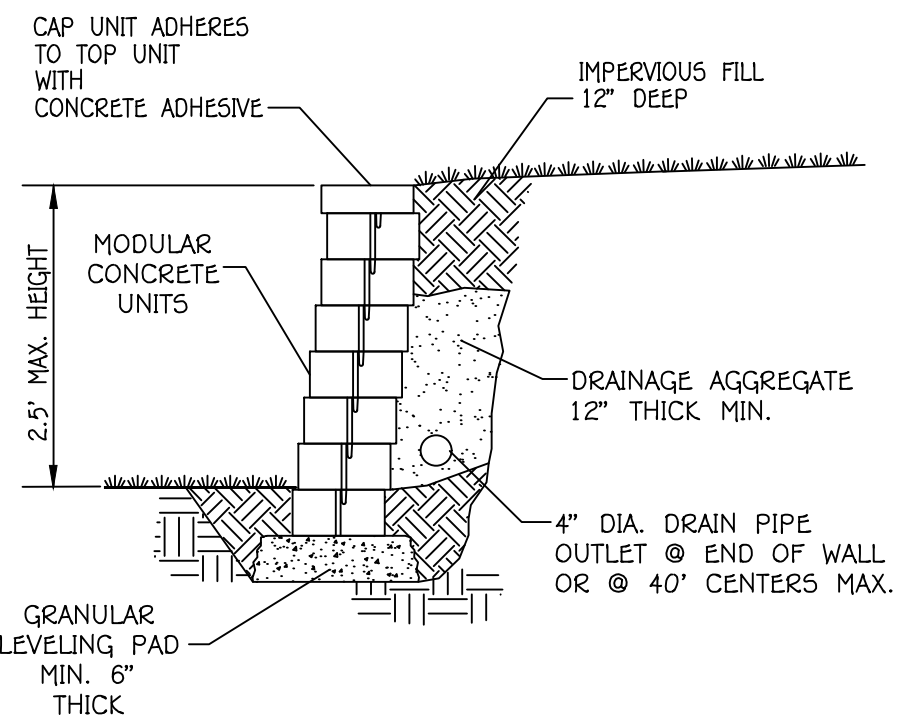
- 1. Maintenance Of Plantings Shall Last For A Period Of 26 Months.
2. All Plant Material Shall Be Generally Watered Twice A Month During The 1st Growing Season. Watering May Be More Or Less Frequent Depending On Weather Conditions.
3. During The 2nd Growing Season, Plant Material Shall Be Watered Once A Month From May To September, As Needed.
4. Invasive Exotics And Noxious Weeds Shall Be Removed From The Reforestation Area(s). Old Field Successional Species Shall Be Retained.
5. Plants Shall Be Examined A Minimum Of Two (2) Times During The Growing Season For Serious And Treated Plant Pests And Diseases With The Appropriate Agent.
6. Dead Branches Shall Be Pruned From The Plantings.

GUARANTEE REQUIREMENTS

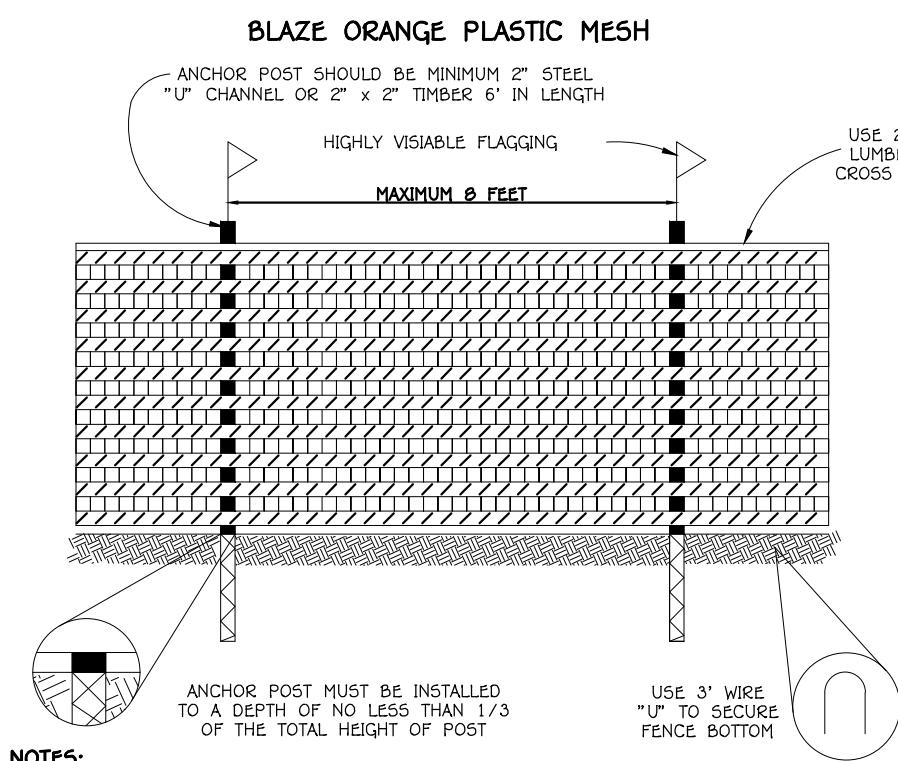
A 75% Survival Rate For The Reforestation Plantings Is Required At The End Of The 24 Month Maintenance Period. All Plant Material Below The 75% Threshold Is Required To Be Replaced At The Beginning Of The Next Growing Season.

MULTIFLORA ROSE CONTROL NOTE:

PRIOR TO PLANTING ALL MULTIFLORA ROSE WITHIN PLANTING AREAS SHALL BE REMOVED. Removal Of The Multiflora Rose May Be Performed With Mowing And Herbicide Treatments. Physical Removal Of All Top Growth Followed By A Periodic Herbicide Treatment Of Stump Sprouts Is Recommended. Native Tree And Shrub Species Occurring Within The Rose Thickets Should Be Retained Wherever Possible. Herbicide Treatments Shall Occur On Two (2) Month Intervals During The First Growing Season And Once In The Spring And Once In The Fall For Subsequent Years. Herbicides Used Shall Be Made Specifically To Address Woody Plant Material And Shall Be Applied As Per Manufacturer's Specifications. Care Should Be Taken Not To Spray Planted Trees Or Naturally Occurring Native Tree And Shrub Seedlings. It Is Recommended That Initiation Of Rose Removal Begin At Least Six Months Prior To Planting So That New Growth Of Roses Is Able To Be More Successfully Managed.



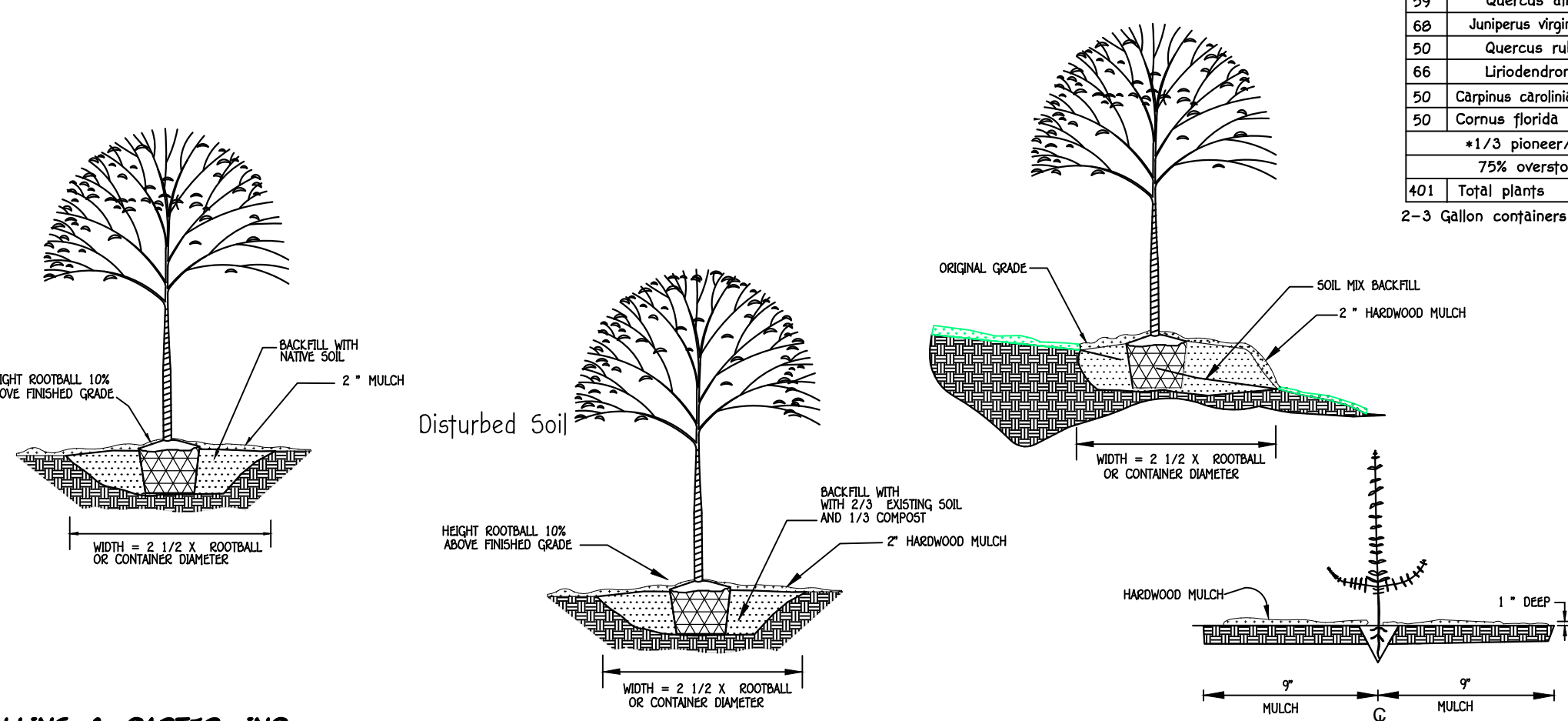
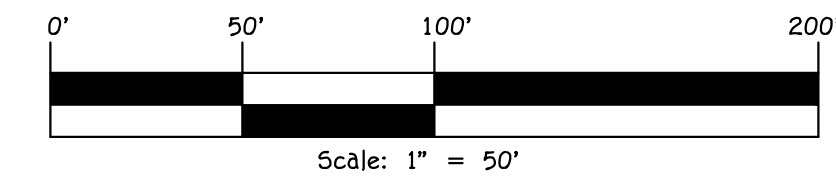
CONCRETE BLOCK LANDSCAPE WALL DETAIL NO SCALE



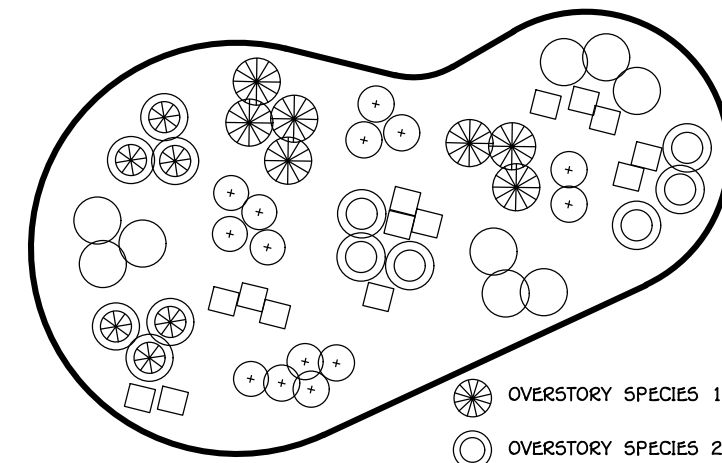
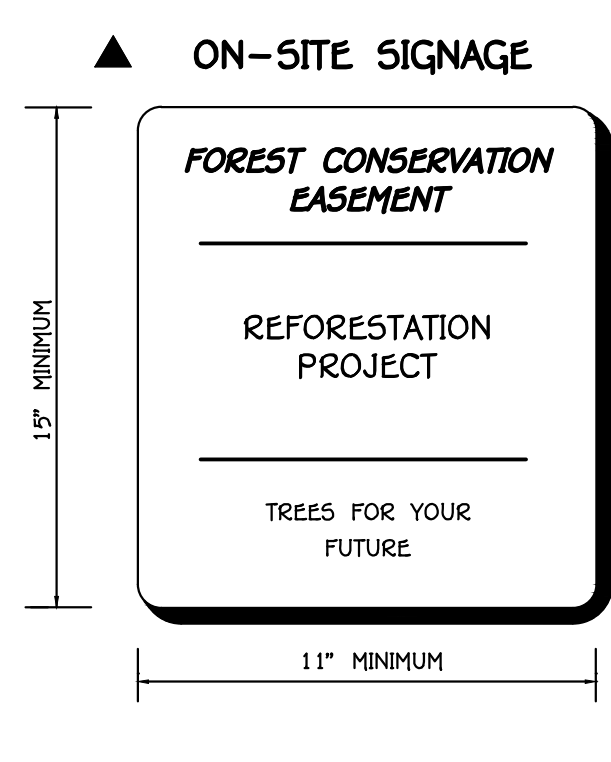
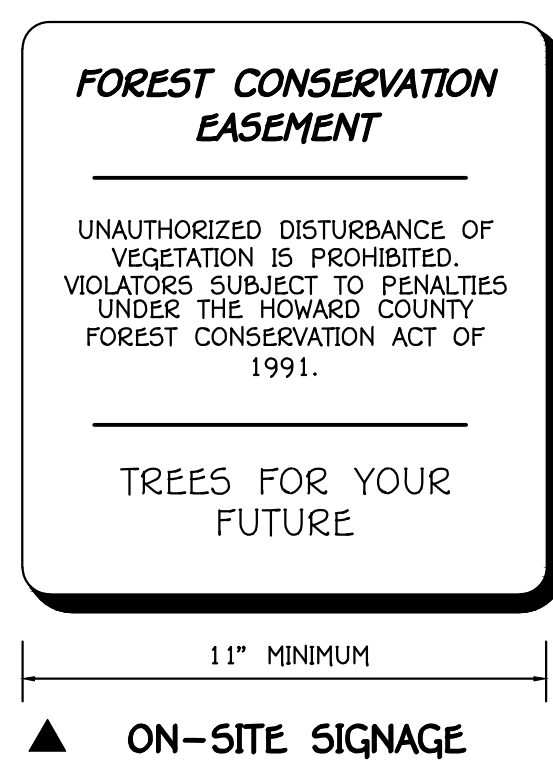
- 1. FOREST PROTECTION DEVICE ONLY.
2. RETENTION AREA WILL BE SET AS PART OF THE REVIEW PROCESS.
3. BOUNDARIES OF RETENTION AREA SHOULD BE STAKED AND FLAGGED PRIOR TO INSTALLING DEVICE.
4. ROOT DAMAGE SHOULD BE AVOIDED.
5. SIGNAGE MAY BE USED IN ADDITION TO FENCING.
6. DEVICE SHOULD BE MAINTAINED THROUGHOUT CONSTRUCTION AND REMOVED WHEN SITE IS STABILIZED.

TREE PROTECTION DETAIL

NOT TO SCALE



Seeding and Whip Planting Details



OVERSTORY SPECIES 1, OVERSTORY SPECIES 2, OVERSTORY SPECIES 3, OVERSTORY SPECIES 4. NOTE: ALL TREE & SHRUB SPECIES TO BE DISTRIBUTED RANDOMLY IN SMALL GROUPINGS. SHRUBS TO BE EVENLY DISTRIBUTED THROUGHOUT PLANTING AREA.

RANDOM PLANTING DISTRIBUTION PLAN

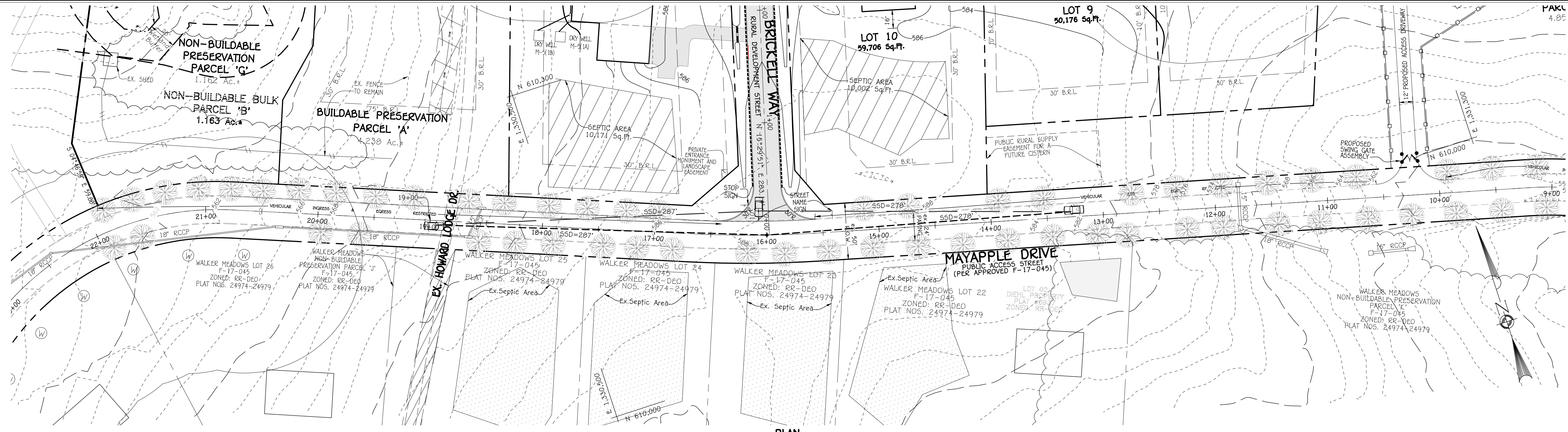
Table with columns: NO., REVISIONS, DESCRIPTION, DATE. Includes revision history and approval signatures for Department of Planning And Zoning, Chief, Division of Land Development, Chief, Development Engineering Division, and Howard County Department of Public Works, Chief, Bureau Of Highways.

FISHER, COLLINS & CARTER, INC. CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS. CENTENNIAL SQUARE OFFICE PARK, 10272 BALTIMORE NATIONAL PIKE, ELLSWORTH CITY, MARYLAND 21042. PHONE: 410-214-2895.

Eco-Science Professionals, Inc. CONSULTING ECOLOGISTS. J. Brody McAllister, J. Brody McAllister, ISA Certified Arborist, Cert. ID: M06471A, MD DNR PCA Qualified Professional.

OWNERS: ESC MEADOW SPRINGS, L.C., 5074 DORSEY HALL DRIVE, SUITE 205, ELLICOTT CITY, MARYLAND 21042. PHONE: 410-720-3021. DEVELOPER: ESC MEADOW SPRINGS, L.C., 5074 DORSEY HALL DRIVE, SUITE 205, ELLICOTT CITY, MARYLAND 21042. PHONE: 410-720-3021. JOHN BERNARD AND JENNIFER ANN CZAJOWSKI, 12216 MAYAPPLE DRIVE, MARIOTTVILLE, MD 21104. PHONE: 301-529-4775.

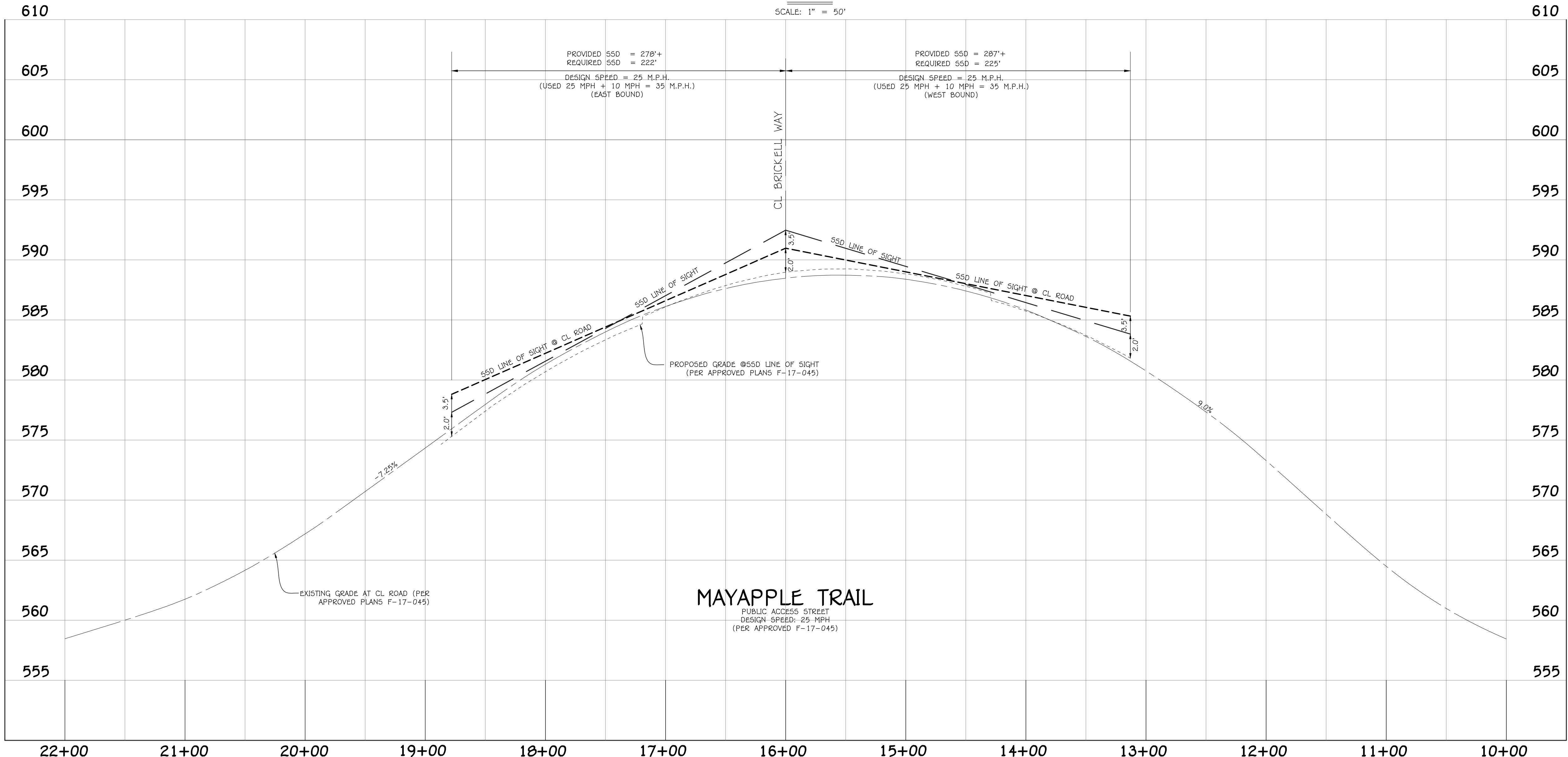
FOREST CONSERVATION NOTES AND DETAILS BRICKELL PROPERTY. LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G'. A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B'. PREVIOUS HOWARD COUNTY FILES: ECP-19-021, SP-19-003, F-22-020 AND WP-22-91. TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274. ZONED RR-DEO. THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND. SCALE: AS SHOWN DATE: JULY, 2024 SHEET 17 OF 19.



REVISIONS		
NO.	DESCRIPTION	DATE
Approved: Department of Planning And Zoning		
		8/21/2024
Chief, Division of Land Use Development		
		8/19/2024
Chief, Development Engineering Division		
Approved: Howard County Department Of Public Works		
		8/26/2024
Chief, Bureau Of Highways		

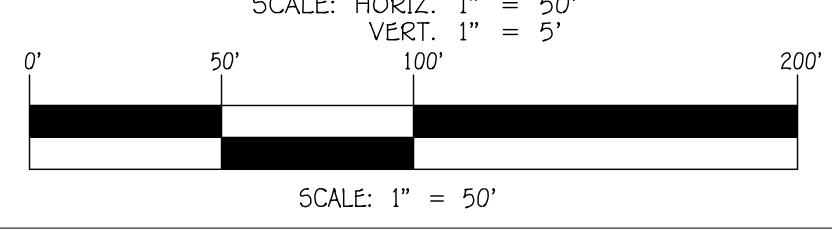
NOTE: THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY PREPARED BY MAPPING RESOURCES GROUP, INC. DATED APRIL 2018 AND SUPPLEMENTED BY A FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY FISHER, COLLINS AND CARTER, INC. DATED JANUARY 2018.

PLAN
SCALE: 1" = 50'



MAYAPPLE TRAIL
PUBLIC ACCESS STREET
DESIGN SPEED: 25 MPH
(PER APPROVED F-17-045)

PROFILE
SCALE: HORIZ. 1" = 50'
VERT. 1" = 5'



FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK, 10272 BALTIMORE NATIONAL PIKE
ELLICOTT CITY, MARYLAND 21042
(410) 461-2895

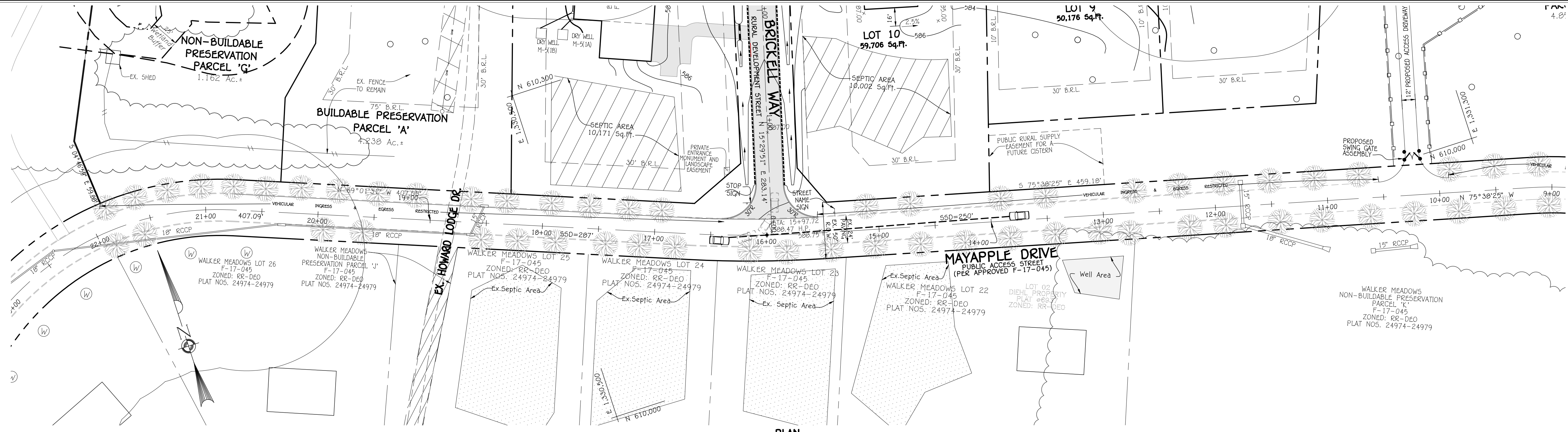


PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL LAND SURVEYOR UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 21476, EXPIRATION DATE: 7/14/25.
Frank Manalansan II
Date: 8/15/2024

OWNERS
ESC MEADOW SPRINGS, L.C.
5074 DORSEY HALL DRIVE
SUITE 205
ELLICOTT CITY, MARYLAND 21042
PHONE: 410-720-3021

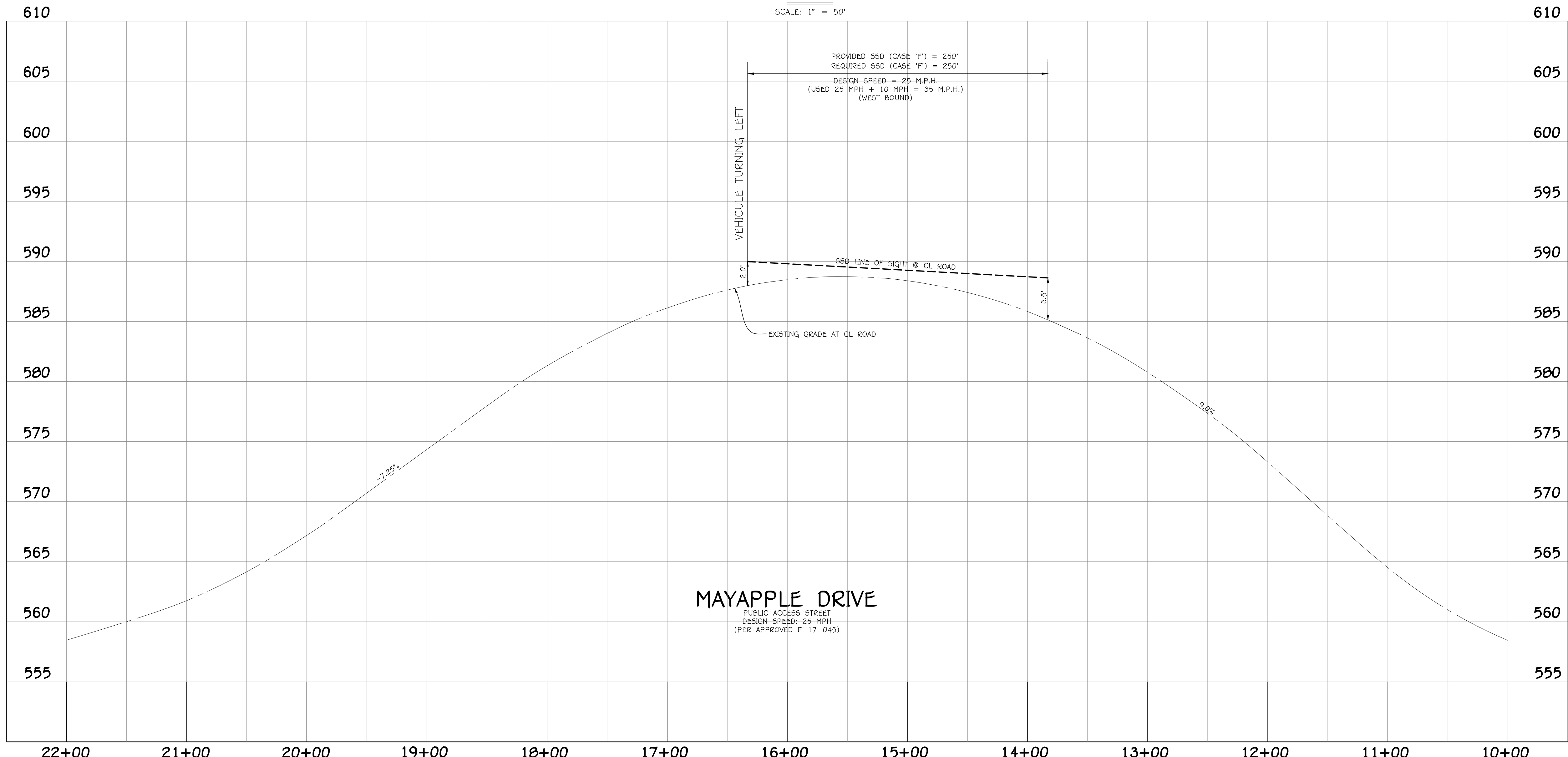
DEVELOPER
ESC MEADOW SPRINGS, L.C.
5074 DORSEY HALL DRIVE
SUITE 205
ELLICOTT CITY, MARYLAND 21042
PHONE: 410-720-3021

SIGHT DISTANCE PLAN AND PROFILE
BRICKELL PROPERTY
LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B'
PREVIOUS HOWARD COUNTY FILES: ECP-19-021, SP-19-003, F-22-020 AND WP-22-91
TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274
ZONED RR-DEO
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: AS SHOWN DATE: JULY, 2024
SHEET 18 OF 19



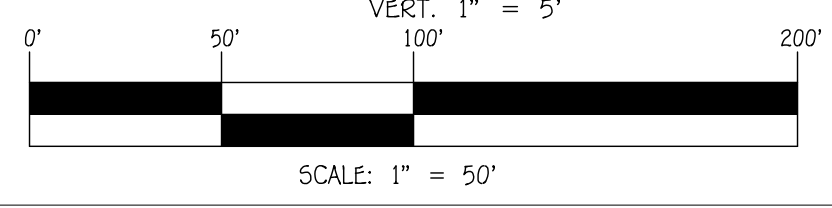
REVISIONS		
NO.	DESCRIPTION	DATE
Approved: Department Of Planning And Zoning		
	Designed by: [Signature]	8/21/2024
	Chief, Division Of Planning And Zoning	Date
	Designed by: [Signature]	8/19/2024
	Chief, Development Engineering Division	Date
Approved: Howard County Department Of Public Works		
	Designed by: [Signature]	8/26/2024
	Chief, Bureau Of Highways	Date

NOTE: THE EXISTING TOPOGRAPHY IS TAKEN FROM AERIAL SURVEY PREPARED BY MAPPING RESOURCES GROUP, INC. DATED APRIL 2018 AND SUPPLEMENTED BY A FIELD RUN SURVEY WITH MAXIMUM TWO FOOT CONTOUR INTERVALS PREPARED BY FISHER, COLLINS AND CARTER, INC. DATED JANUARY 2018.



SIGHT DISTANCE PLAN AND PROFILE (CASE 'F')
BRICKELL PROPERTY
LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND 'B' NON-BUILDABLE BULK PARCEL 'A' AND 'B'
PREVIOUS HOWARD COUNTY FILES: ECP-19-021, SP-19-003, F-22-020 AND WP-22-91
TAX MAP NO.: 10 GRID NO.: 1 PARCEL NO.: 274
ZONED RR-DEO
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: A5 SHOWN DATE: JULY, 2024
SHEET 19 OF 19

FISHER, COLLINS & CARTER, INC.
CIVIL ENGINEERING CONSULTANTS & LAND SURVEYORS
CENTENNIAL SQUARE OFFICE PARK, 10272 BALTIMORE NATIONAL PIKE
ELLCOTT CITY, MARYLAND 21042
(410) 461-2895

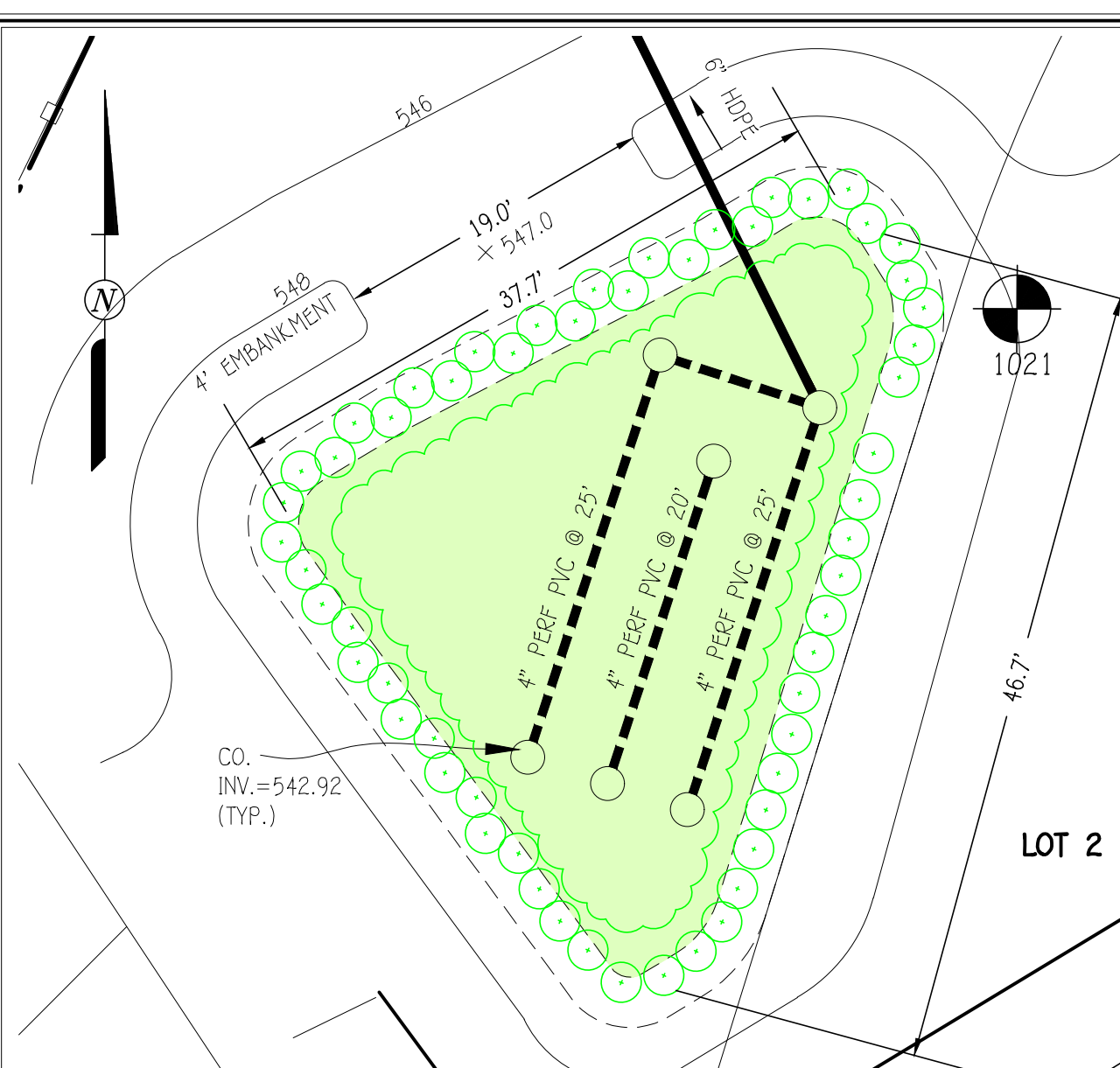


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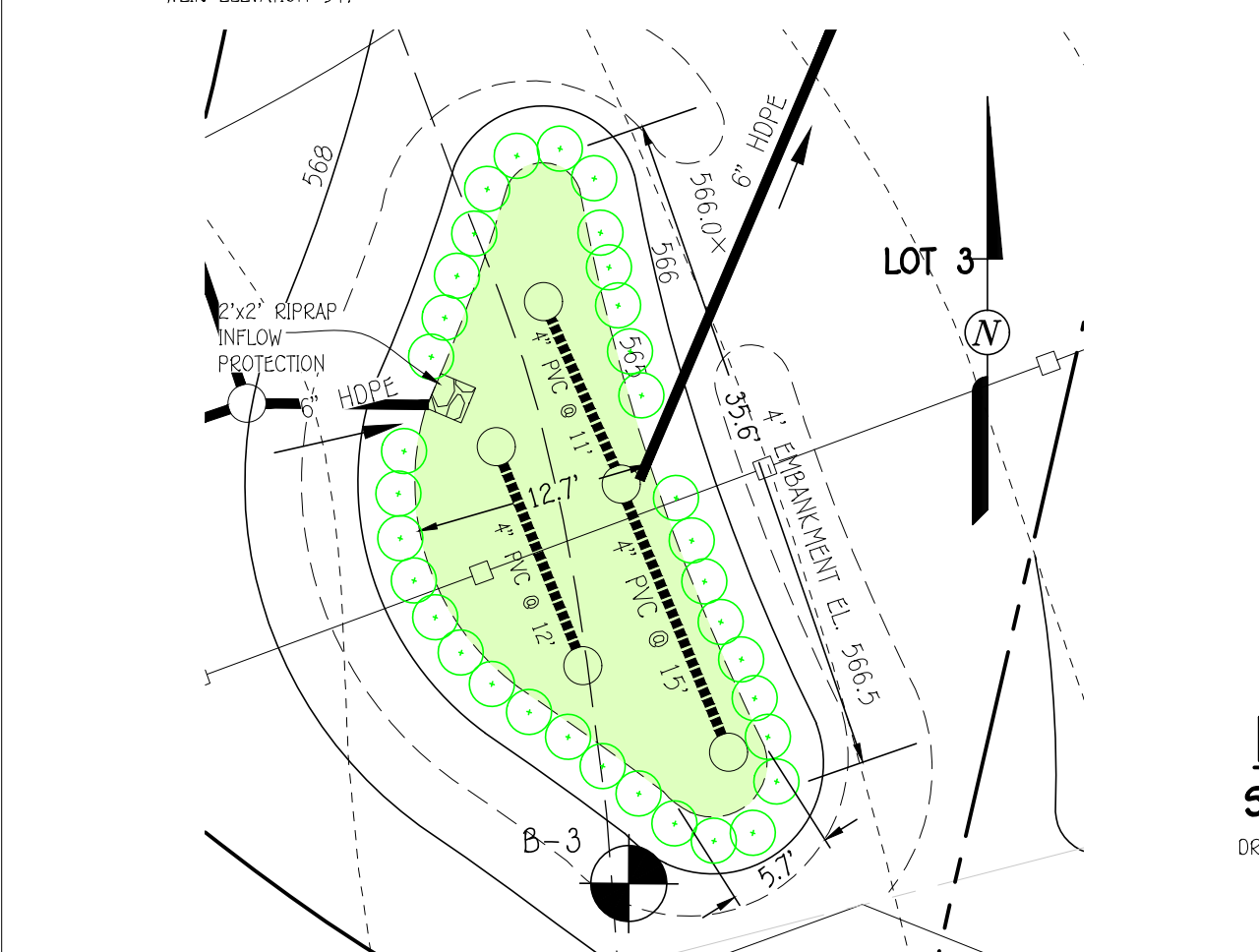
JOHN BERNARD AND JENNIFER ANN CZAJOWSKI
12216 MAYAPPLE DRIVE
MARRIOTTVILLE, MD 21104
PHONE: 301-529-4775



M-6 (1)
SCALE= 1"=10'

DRAINAGE AREA: 23,419 SqFt.
FILTER AREA: 868 SqFt.
ELEVATION 546
WEIR ELEVATION 547

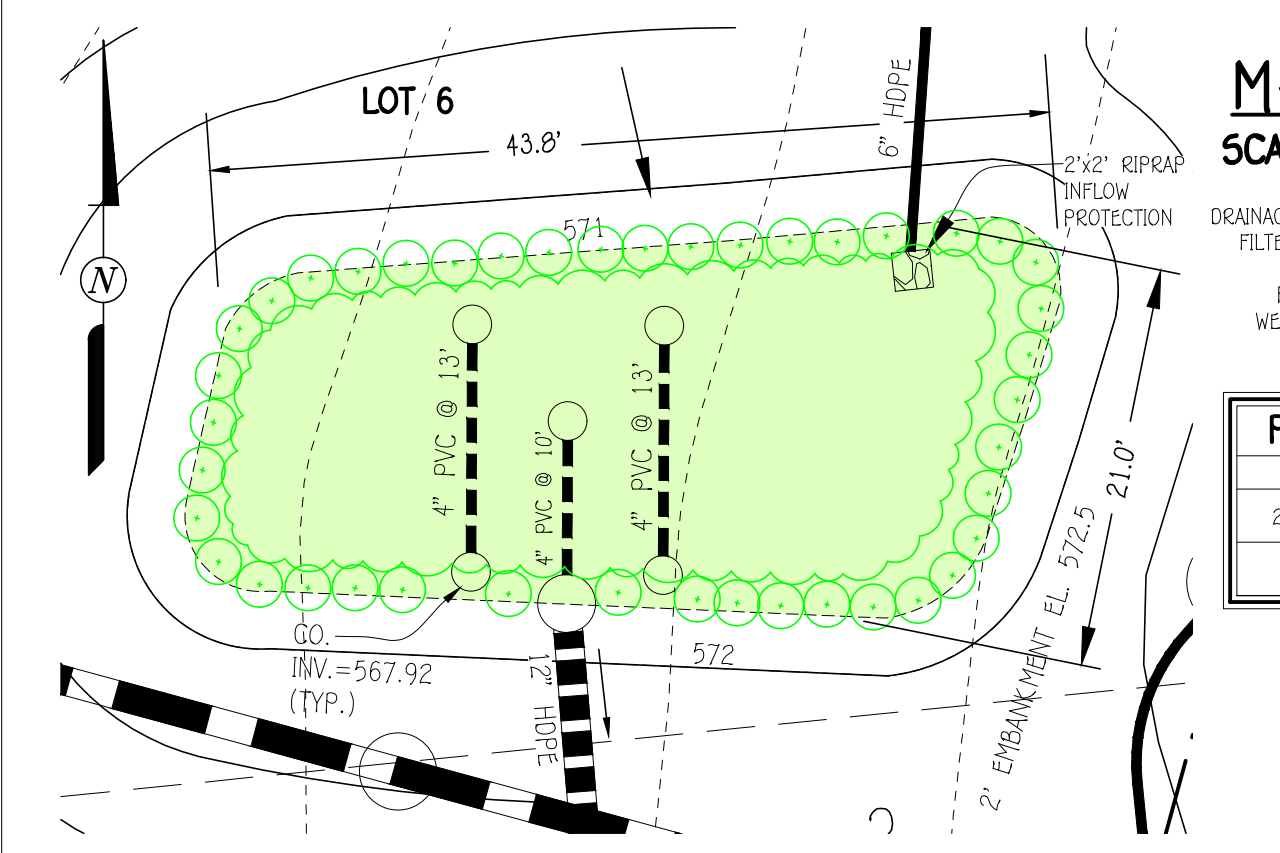
PLANT MATERIAL- BIO-RETENTION M-6 (1)			
QUANTITY	NAME	MAXIMUM SPACING (FT.)	
289 (868 sq.ft.)	GRASSES	36" o.c.	
57	SHRUBS	36"-40" o.c.	



M-6 (2)
SCALE= 1"=10'

DRAINAGE AREA: 14,997 SqFt.
FILTER AREA: 329 SqFt.
ELEVATION 566
PERIMETER 83'
WEIR ELEVATION 567

PLANT MATERIAL- BIO-RETENTION M-6 (2)			
QUANTITY	NAME	MAXIMUM SPACING (FT.)	
110 (329 sq.ft.)	GRASSES	36" o.c.	
30	SHRUBS	36"-40" o.c.	

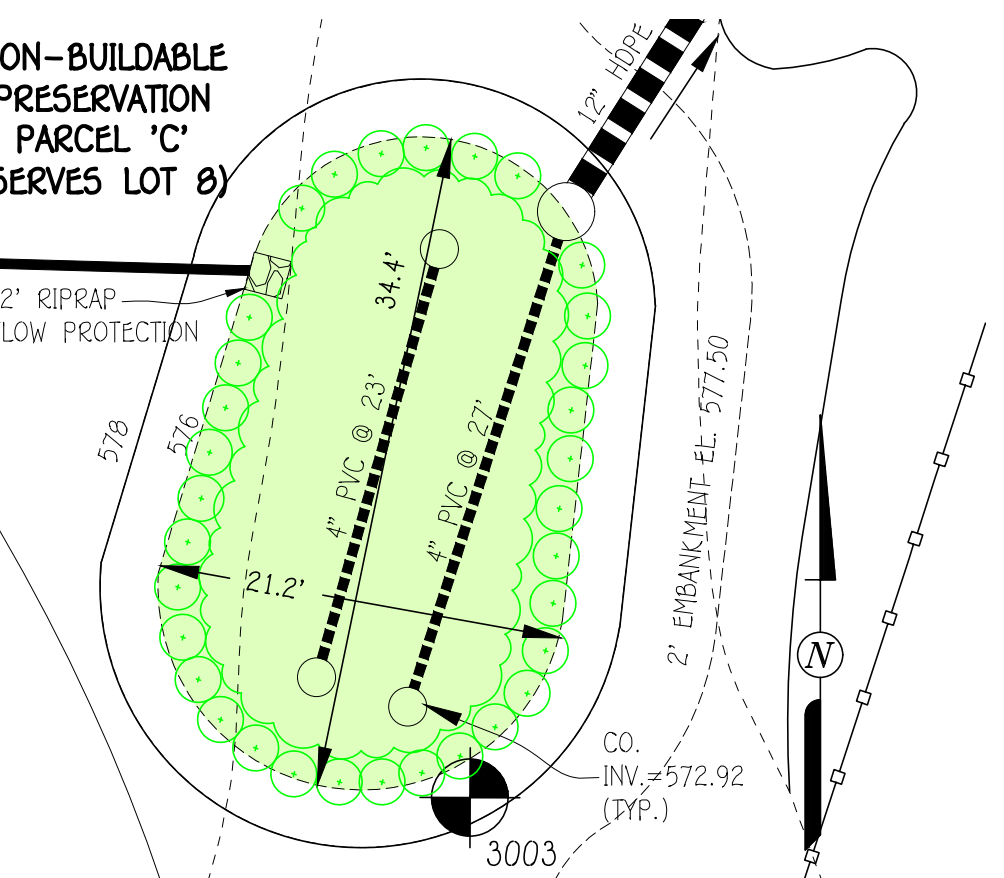


M-6 (3)
SCALE= 1"=10'

DRAINAGE AREA: 20,036 SqFt.
FILTER AREA: 779 SqFt.
ELEVATION 571
PERIMETER 116'
WEIR ELEVATION 572

PLANT MATERIAL- BIO-RETENTION M-6 (3)			
QUANTITY	NAME	MAXIMUM SPACING (FT.)	
260 (779 sq.ft.)	GRASSES	36" o.c.	
42	SHRUBS	36"-40" o.c.	

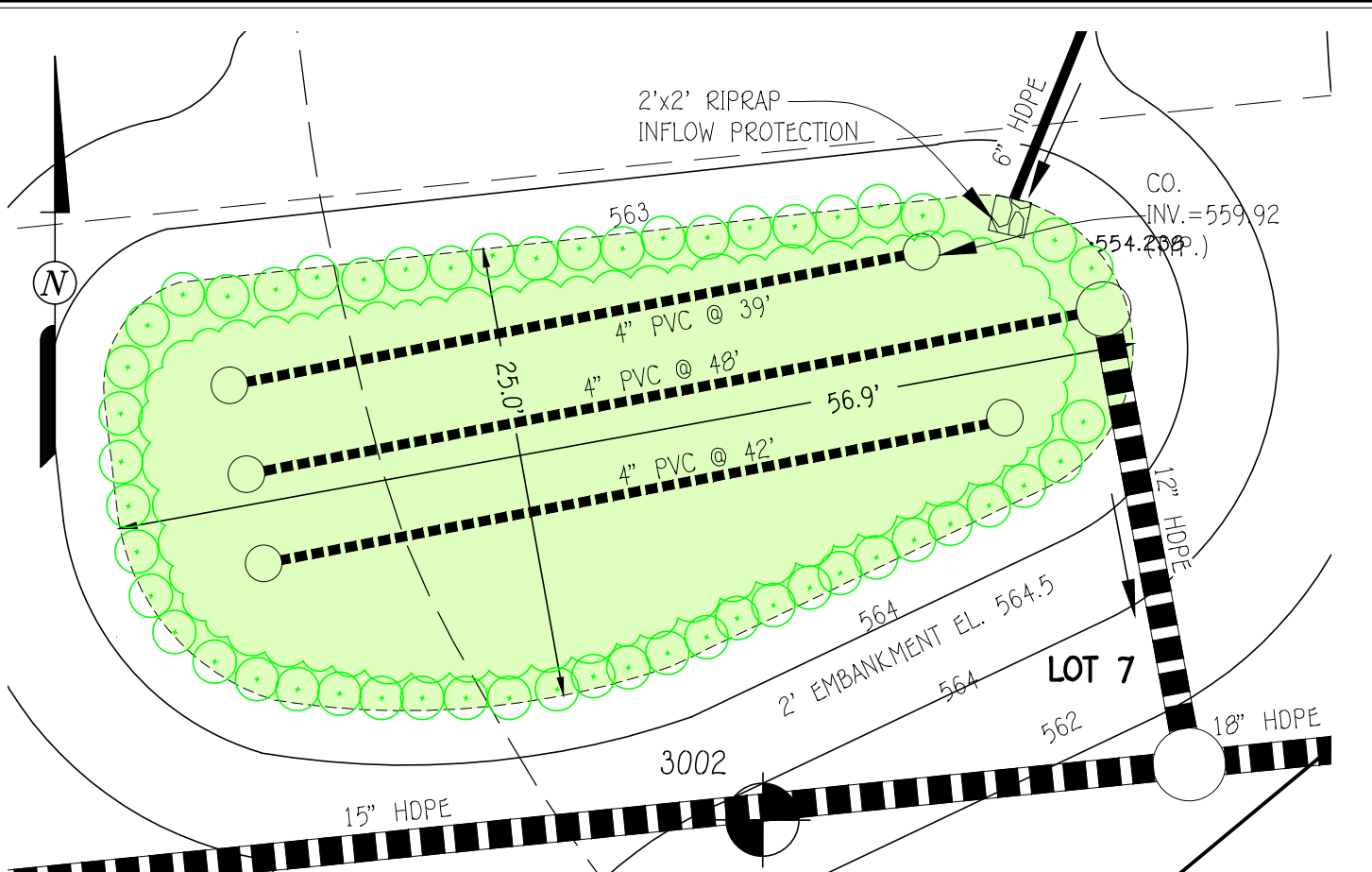
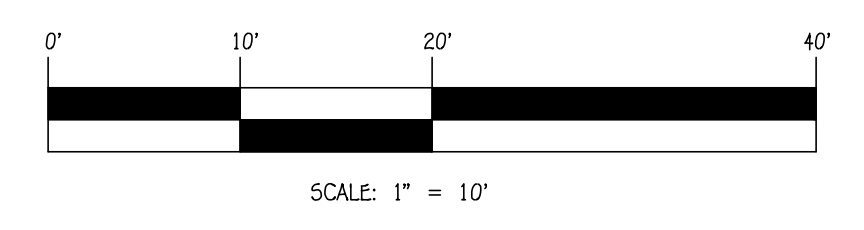
- GRASS**
- ANY OF THE GRASS LISTED MAY BE USED
 - SWITCHGRASS
 - HEAVY METAL SWITCHGRASS
- SHRUBS**
- ANY OF THE SHRUBS LISTED MAY BE USED
 - SPICEBUSH
 - ARROWWOOD
 - WINTERBERRY
 - INKBERRY
 - WITCH HAZEL
 - BUTTONBUSH
 - BUCKEYE
 - BOTTLEBRUSH
 - BUCKEYE



M-6 (5)
SCALE= 1"=10'

DRAINAGE AREA: 10,934 SqFt.
FILTER AREA: 595 SqFt.
ELEVATION 576
PERIMETER 71'
WEIR ELEVATION 577

PLANT MATERIAL- BIO-RETENTION M-6 (5)			
QUANTITY	NAME	MAXIMUM SPACING (FT.)	
52 (155 sq.ft.)	GRASSES	36" o.c.	
33	SHRUBS	36"-40" o.c.	

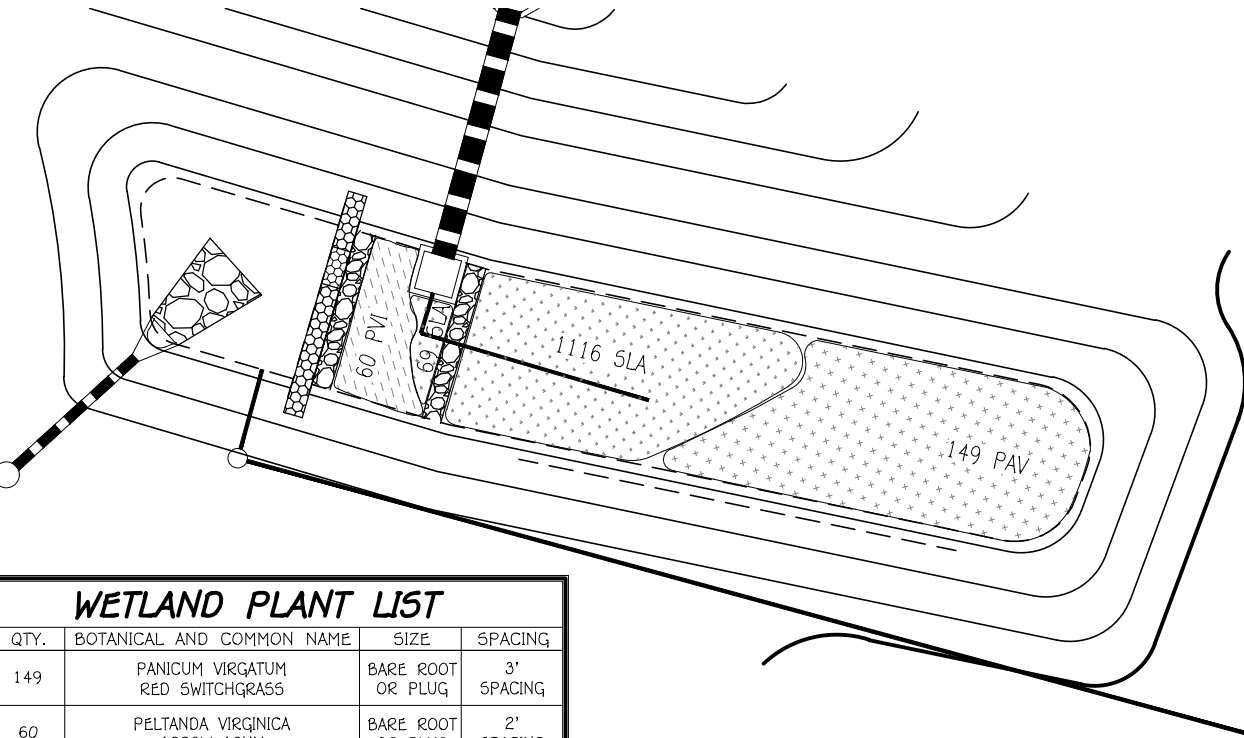


TYPICAL SECTION BIO-RETENTION FACILITY (F-6 / M-6)
NO NOT SCALE

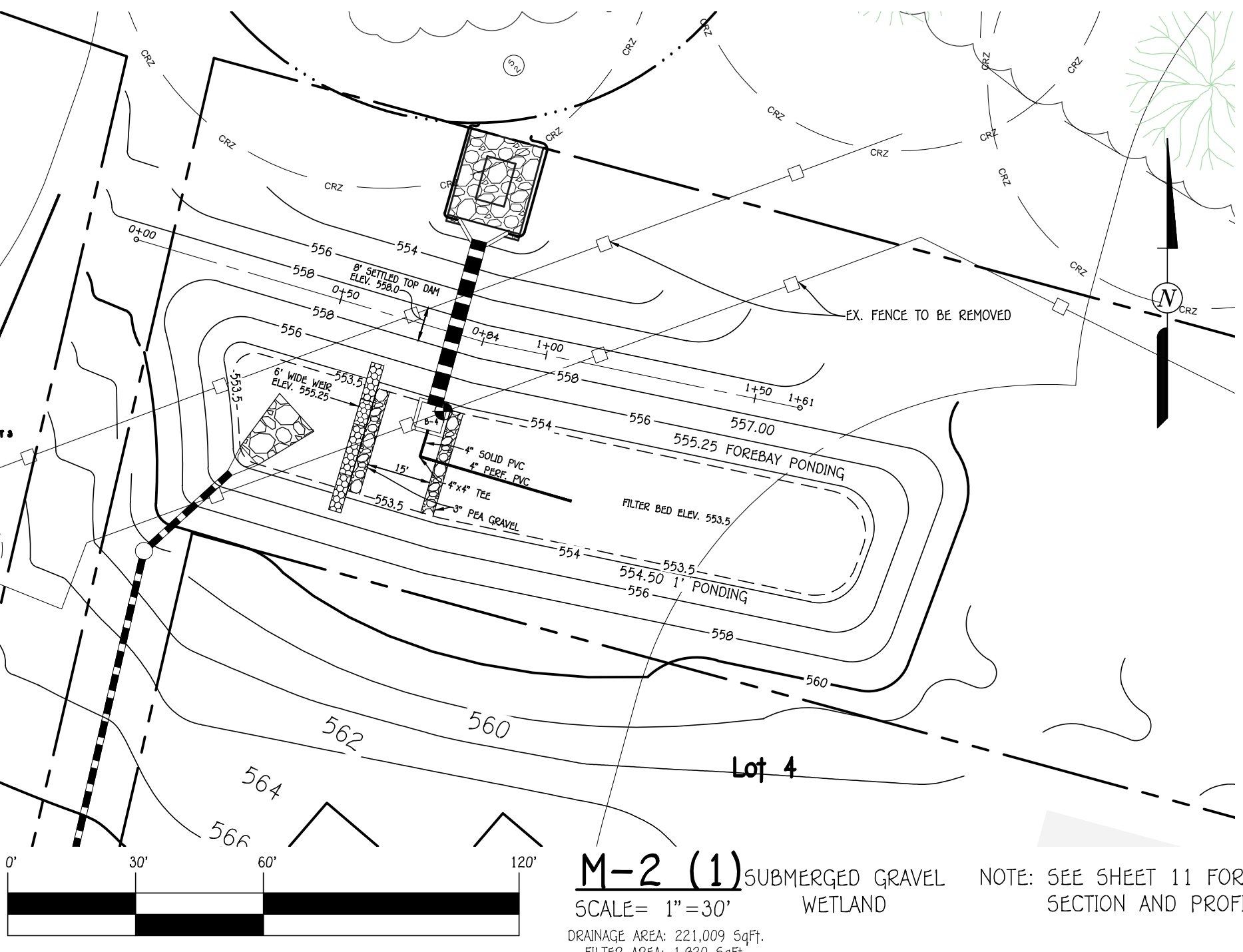
FACILITY NO.	A	B
M-6 (1)	546.00	542.92
M-6 (2)	565.00	561.92
M-6 (3)	571.00	567.92
M-6 (4)	563.00	559.92
M-6 (5)	576.00	572.92

WETLAND PLANT LIST

SYMBOL	QTY.	BOTANICAL AND COMMON NAME	SIZE	SPACING
149	149	FANCIUM VEGUTUM RED SWITCHGRASS	BARE ROOT OR PLUG	3' SPACING
60	60	PELTANDIA VIRGINICA BROWNS BEAR	BARE ROOT OR PLUG	6" SPACING
1185	1185	SAGITTARIA LATIFOLIA ARROWHEAD	BARE ROOT OR PLUG	1' SPACING



WETLAND PLANTING PLAN
SCALE= 1"=30'



STORMWATER MANAGEMENT NOTES

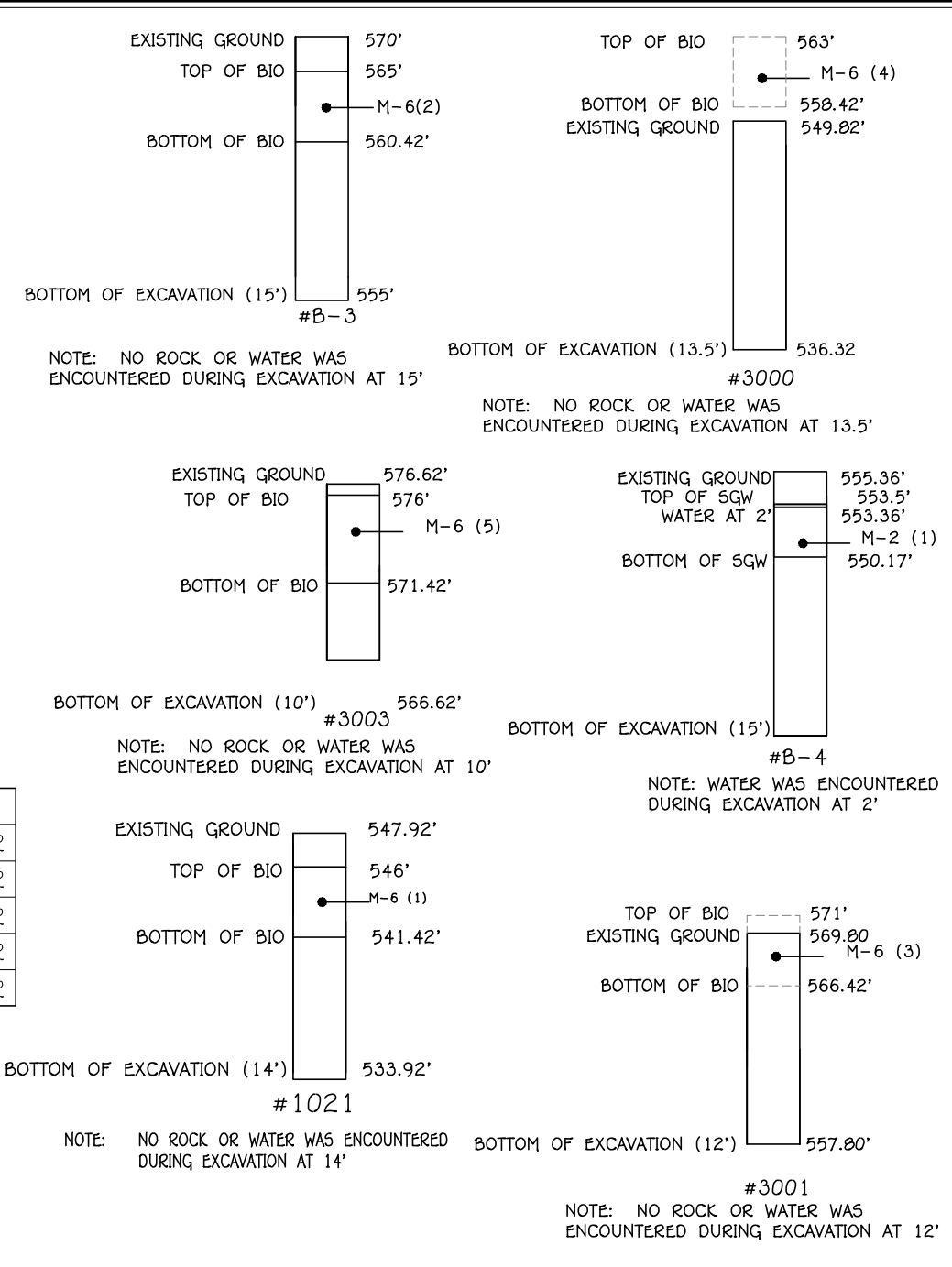
- STORMWATER MANAGEMENT IS PROVIDED IN ACCORDANCE WITH WITH CHAPTER 5, "ENVIRONMENTAL SITE DESIGN" OF THE 2007 MARYLAND STORMWATER MANAGEMENT DESIGN MANUAL, EFFECTIVE MAY 4, 2010.
- MAXIMUM CONTRIBUTING ROOF TOP AREA TO EACH DOWNSPOUT SHALL BE 500 SQ. FT. OR LESS.
- DRYWELLS SHALL BE PROVIDED AT LOCATIONS WHERE THE LENGTH OF DISCONNECTION IS LESS THAN 75' AT 5%. THE SIZE AND CONSTRUCTION OF THE DRYWELL SHALL BE IN ACCORDANCE WITH THE DETAIL SHOWN ON THIS SHEET.
- FINAL GRADING IS SHOWN ON THIS GRADING PLAN.



PROFESSIONAL CERTIFICATION

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. 46091, EXPIRATION DATE: 5/14/25.

LUKE A. GROOM
DATE: 7/18/2024



GUTTER DRAIN FILTER DETAIL
NOT TO SCALE

*A GUTTER GUARD OR A SUITABLE EQUIVALENT SHALL BE USED FOR EACH DOWNSPOUT DIRECTED TO A DRYWELL.

OPERATION & MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED 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 SEVENTY-TWO (72) HOUR TIME PERIOD, CORRECTIVE ACTION SHALL BE TAKEN.
- THE MAINTENANCE LOG BOOK SHALL BE AVAILABLE TO HOWARD COUNTY FOR INSPECTION TO INSURE COMPLIANCE WITH OPERATION AND MAINTENANCE CRITERIA.

OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNER AND MAINTAINED SUBMERGED GRAVEL WETLAND (M-2)

- DURING THE FIRST YEAR OF OPERATION, THE OWNER SHALL INSPECT THE FACILITY AFTER EVERY HEAVY STORM AND REPLACE VEGETATION AS NEEDED.
- THE OWNER SHALL REMOVE SEDIMENT ACCUMULATED IN THE PRETREATMENT AREAS AS NECESSARY.
- SIGNS OF UNEVEN FLOW WITHIN THE WETLAND MAY MEAN THAT THE GRAVEL OR UNDERDRAIN IS CLOGGED. THE GRAVEL OR UNDERDRAIN SHALL BE REMOVED, CLEANED, AND REPLACED, AS NEEDED.
- THE OWNER SHALL ENSURE A DENSE STAND OF WETLAND VEGETATION IS MAINTAINED THROUGH THE LIFE OF THE FACILITY AND REPLACE VEGETATION AS NEEDED.
- THE OWNER SHALL ENSURE THE INLETS AND OUTLETS TO EACH GRAVEL WETLAND CELL ARE FREE FROM DEBRIS.
- THE OWNER SHALL REPAIR EROSION AT INFLOW POINTS AND ENSURE FLOW SPLITTERS AREA FUNCTIONAL TO PREVENT STORM WATER FROM BYPASSING THE FACILITY.

CONSTRUCTION CRITERIA:

THE FOLLOWING ITEMS SHOULD BE ADDRESSED DURING CONSTRUCTION OF PROJECTS WITH DRY WELLS:

EROSION AND SEDIMENT CONTROL:
FINAL GRADING FOR PROPOSED DRY WELLS SHOULD NOT TAKE PLACE UNTIL THE SURROUNDING SITE IS COMPLETELY STABILIZED. IF THIS CANNOT BE ACCOMPLISHED, RUNOFF FROM DISTURBED AREAS SHALL BE DIVERTED.

SOIL COMPACTION:
EXCAVATION SHOULD BE CONDUCTED IN DRY CONDITIONS WITH EQUIPMENT LOCATED OUTSIDE OF THE PRACTICE TO MINIMIZE BOTTOM AND SIDEWALL COMPACTION. CONSTRUCTION OF A DRY WELL SHALL BE PERFORMED WITH LIGHTWEIGHT, WIDE-TRACKED EQUIPMENT TO MINIMIZE DISTURBANCE AND COMPACTION. EXCAVATED MATERIALS SHALL BE PLACED IN A CONTAINED AREA.

UNDERGROUND CHAMBER:
A SUBSURFACE PREFABRICATED CHAMBER MAY BE USED.

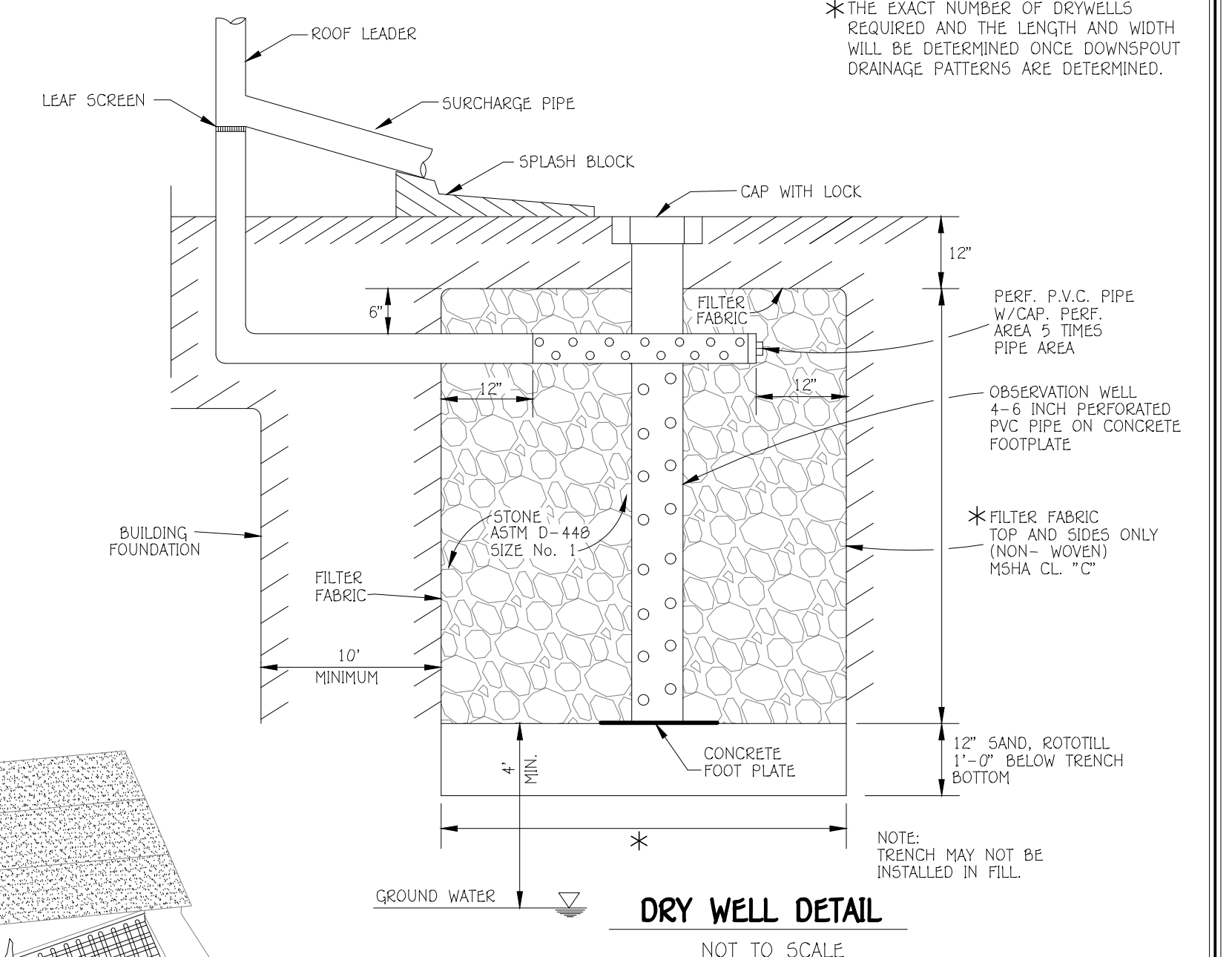
DRY WELL BOTTOM:
THE BOTTOM SHALL BE AS LEVEL AS POSSIBLE TO MINIMIZE POOLED WATER IN SMALL AREAS THAT MAY REDUCE OVERALL INFILTRATION AND LONGEVITY.

FILTER CLOTH:
FILTER CLOTH SHALL NOT BE INSTALLED ON THE BOTTOM OF THE WELL. NON-WOVEN FILTER CLOTH SHOULD BE USED TO LINE THE TOP AND SIDES OF THE DRY WELL TO PREVENT THE PORE SPACE BETWEEN THE STONES FROM BEING BLOCKED BY THE SURROUNDING NATIVE MATERIAL.

GRAVEL MEDIA:
THE AGGREGATE SHALL BE COMPOSED OF AN 18 TO 48-INCH LAYER OF CLEAN WASHED, OPEN GRADED MATERIAL WITH 40% POROSITY (E.G., ASTM D448 4, 5, OR 6 STONE OR EQUAL).

DRY WELL CHART

LOT NO.	DRYWELL NUMBER	NO. OF DOWNSPOUTS	AREA OF ROOF	VOLUME PROVIDED	VOLUME STORAGE	AREA OF TREATMENT	NO. OF DRYWELLS	DIMENSIONS OF DRYWELLS
11	M-5 (1A)	2	675 SqFt	139 CuFt	162 CuFt	100%	1	9' X 9' X 5'
11	M-5 (1B)	2	675 SqFt	139 CuFt	162 CuFt	100%	1	9' X 9' X 5'



STORMWATER MANAGEMENT DETAILS

BRICKELL PROPERTY

LOTS 2 THRU 11, BUILDABLE PRESERVATION PARCEL 'F' AND NON-BUILDABLE PRESERVATION PARCEL 'C', 'D', 'E' AND 'G' A RE-SUBDIVISION OF LOT 1 AND NON-BUILDABLE BULK PARCEL 'A' AND 'B' PREVIOUS HOWARD COUNTY FILES: ECP-19-021, 5P-19-003, F-22-020 AND WP-22-91
TAX MAP NO.: 10 ZONED RR-DEO
THIRD ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SCALE: A5 SHOWN DATE: JULY, 2024
SHEET 10 OF 19

REVISIONS

NO.	DESCRIPTION	DATE

Approved: Department Of Planning And Zoning
Date: 8/21/2024

Chief, Division of Planning and Zoning
Date: 8/19/2024

Approved: Howard County Department Of Public Works
Date: 8/26/2024

