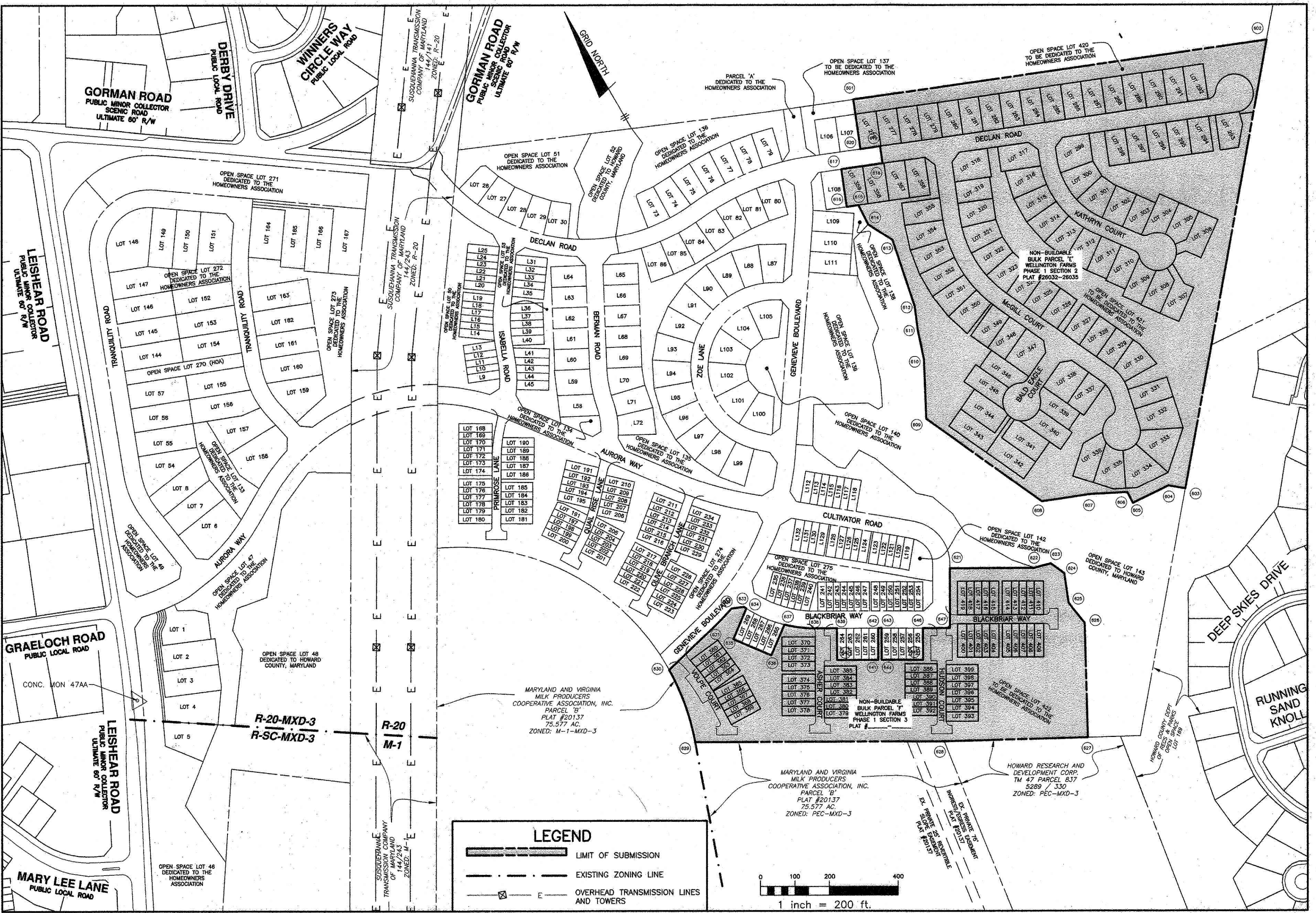
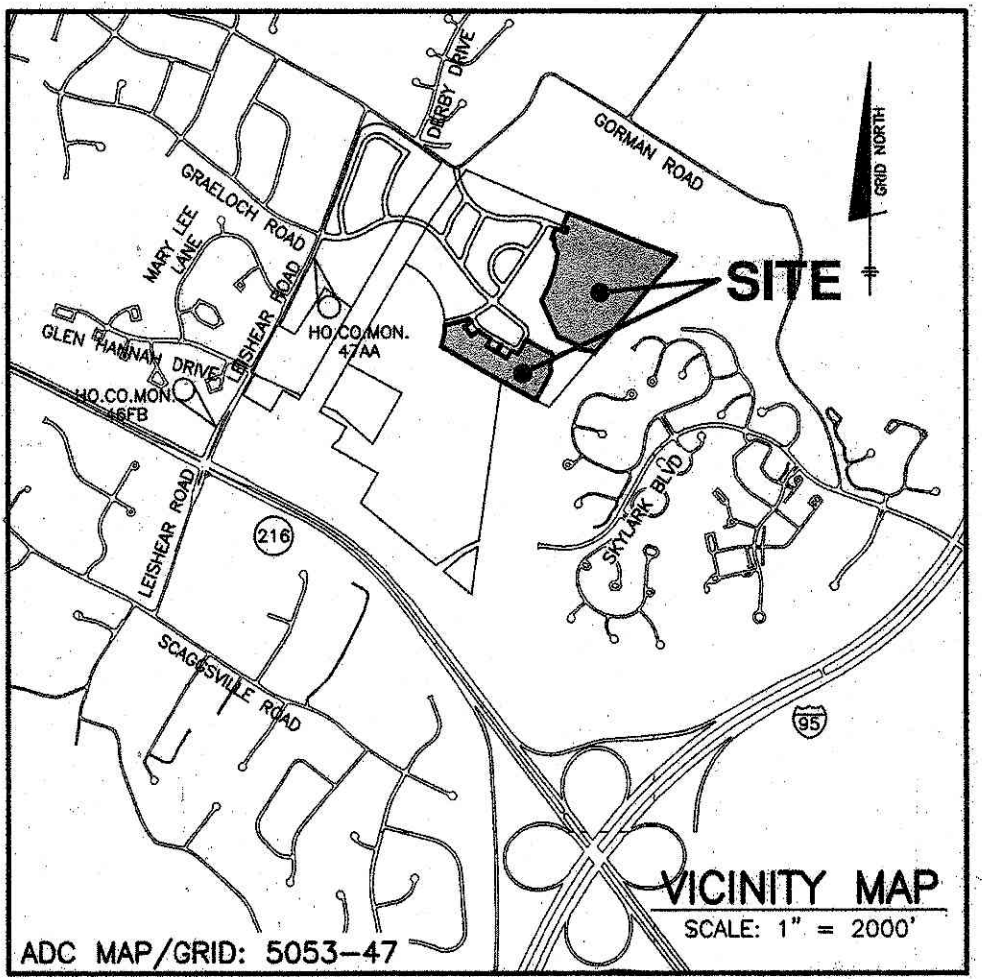


GENERAL NOTES

- 1. SUBJECT PROPERTY IS ZONED R-SC-MXD-3 PER THE OCTOBER 6, 2013 COMPREHENSIVE ZONING PLAN.
2. THIS PROJECT IS SUBJECT TO THE AMENDED FIFTH EDITION OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS.
3. THE PROJECT BOUNDARY IS BASED ON RECORDED PLATS #20136-37, #26023-26035, AND #26110-26117.
...
23. WP-20-039, AN ALTERNATIVE COMPLIANCE TO SECTION 16.1205(a)(3) TO ALLOW FOR THE REMOVAL OF 6 SPECIMEN TREES WAS APPROVED ON MAY 1, 2020 SUBJECT TO THE FOLLOWING CONDITIONS:
...
24. SECTION 110.0.4.1.6 OF THE ZONING REGULATIONS LIMITS THE LENGTH OF SINGLE-FAMILY ATTACHED UNITS TO 120 FEET BUT IT ALSO GRANTS THE DIRECTOR OF DPZ THE AUTHORITY TO APPROVE A GREATER LENGTH UP TO A MAXIMUM OF 200 FEET BASED ON DETERMINATION THAT THE DESIGN OF THE BUILDING WILL MITIGATE THE VISUAL IMPACT OF THE INCREASED LENGTH.
...
25. A DESIGN MANUAL WAIVER TO SECTIONS 2.3.1.1.6 (MINIMUM CURVE RADIUS) OF DESIGN MANUAL VOLUME 11 WAS APPROVED ON FEBRUARY 13, 2020 FOR CURVE C123 (IDENTIFIED AS C4 ON THIS F-PLAN). THIS DESIGN MANUAL WAIVER ALSO INCLUDED SECTION 2.3.1.1.6 (MINIMUM CURVE LENGTH) FOR CURVE C123 (IDENTIFIED AS C4 ON THIS F-PLAN).
...
26. DRIVEWAYS SHALL BE PROVIDED PRIOR TO RESIDENTIAL OCCUPANCY TO INSURE SAFE ACCESS FOR FIRE AND EMERGENCY VEHICLES FOR THE FOLLOWING MINIMUM REQUIREMENTS:
...
27. PARKING SPACES AND THE 8' ASPHALT PATH ALONG THE PUBLIC ROADS SHALL BE MAINTAINED BY THE HOMEOWNERS ASSOCIATION.
...
28. FINANCIAL SURETY IN THE AMOUNT OF \$78,000.00 FOR THE REQUIRED 198 STREET TREES AND 65 PERIMETER TREES SHALL BE POSTED AS PART OF THE DPW DEVELOPER AGREEMENT.
...
29. FOR FLAG AND PIPE STEM LOTS, REFUSE COLLECTION, SNOW REMOVAL, AND ROAD MAINTENANCE ARE PROVIDED TO THE JUNCTION OF THE FLAG OR PIPE STEM AND ROAD RIGHT OF WAY LINE AND NOT UNTIL THE FLAG OR PIPE STEM LOT DRIVEWAY.
...
30. FOR THE PRIVATE ROADS (VOLPE COURT, ASHER COURT, HUDSON COURT, AND BLACKBERRY WAY STATION 64+18.6 TO END) REFUSE COLLECTION, SNOW REMOVAL, AND ROAD MAINTENANCE SHALL BE PRIVATE.
...
30. WP-20-099, AN ALTERNATIVE COMPLIANCE TO SECTION 16.120.4.4 TO ALLOW FOR THE TOWNSHIP LOTS ALONG THE PRIVATE ROADS LOCATED MORE THAN 200 FEET FROM THE PUBLIC RIGHT-OF-WAY TO NOT HAVE PUBLIC ROAD FRONTAGE WAS APPROVED ON JUNE 24, 2020 SUBJECT TO THE FOLLOWING CONDITIONS:
...
31. TO PROMOTE PEDESTRIAN WALKABILITY AN INTERNAL PATH SYSTEM IS PROPOSED TO PROVIDE A CONNECTION FROM THE END OF MCGILL COURT TO THE DECLAN ROAD CUL-DE-SAC. ADDITIONALLY, A PATH CONNECTION IS PROVIDED FROM DECLAN ROAD CUL-DE-SAC TO THE EXISTING PATH BEHIND GORMAN CROSSING ELEMENTARY SCHOOL AND A SECOND PATH CONNECTION IS PROVIDED FROM MCGILL COURT TO THE EXISTING PARKING LOT IN THE FRONT OF GORMAN CROSSING ELEMENTARY SCHOOL. THE PORTION OF THE PATHS INTERNAL TO THE PROJECT SITE SHALL BE MAINTAINED BY THE HOA. THE PORTION OF THE PATHS LOCATED ON THE GORMAN CROSSING ELEMENTARY SCHOOL PROPERTY SHALL BE MAINTAINED BY HPCSS.

FINAL ROAD CONSTRUCTION PLANS
WELLINGTON FARMS
PHASE 2

THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/CONSTRUCTION INSPECTION DIVISION AT 410-313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
THE CONTRACTOR SHALL NOTIFY "MISS UTILITY" AT 1-800-257-7777 AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION WORK BEING DONE.



BENCHMARKS
NAD '83 HORIZONTAL - NAVD88 VERTICAL
HO. CO. #4689
STAMPED BRASS DISK SET ON TOP OF A 3/4" DEEP COLUMN OF CONCRETE.
N 537149.785' E 1347468.998' ELEVATION: 317.217'
HO. CO. #474A
STAMPED BRASS DISK SET ON TOP OF A 3/4" DEEP COLUMN OF CONCRETE.
N 539861.645' E 1348439.009' ELEVATION: 382.821'

SHEET INDEX table with columns for SHEET and TITLE. Includes entries for COVER SHEET, ROAD PLAN AND PROFILES, STORM DRAIN DRAINAGE AREA MAP, etc.

Open Space Chart table showing Zoning, Gross Area (total project), Area of Open Space Required, and Open Space Provided for various phases and sections.

MODERATE INCOME HOUSING UNIT (MIHU) APPLICATION EXEMPTIONS TRACKING table with columns for Phase/Section, P1S1, P1S2, P1S3, P2, and TOTAL.

NOTE: SEE SHEET 2 FOR MORE DETAILED STORMWATER MANAGEMENT SUMMARY TABLE, RECREATIONAL OPEN SPACE CALCS, MINIMUM LOT SIZE CHART, PARKING CHART, ROAD CHART, AND BOUNDARY COORDINATE CHART.

Stormwater Management Practice Chart / Summary Table with columns for MDE Designation, Practice Description, Quantity of Each Practice, ESDv (cf) Required based on individual DA, ESDv (cf) Provided, REV (cf) Provided, and Ownership.

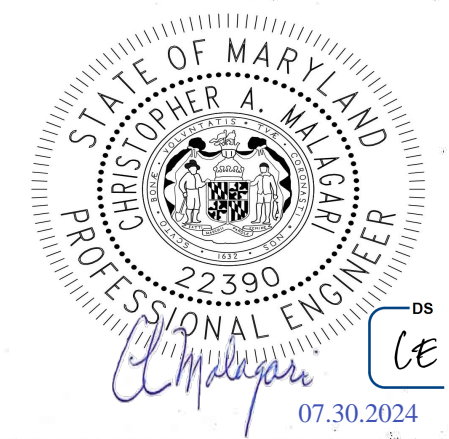
Summary table with columns for Total from P2 (F-22-001), Total from P1S3 (F-22-001), Total from P1S2 (F-21-044), Total from P1S1 (F-21-025), and Total provided to date.

Site Analysis Data Chart (All areas are in acres) table with columns for Zoning, Phase 1 Section 1, Phase 1 Section 2, Phase 1 Section 3, Phase 2, and Total. Includes rows for Gross Area, 100-yr Floodplain, Steep Slopes, Net Area, and various lot/area metrics.

R-SC Density Chart table with columns for Gross Area, 100-yr floodplain, Steep slopes, Net Area, and Density Allowed/Proposed for various phases.

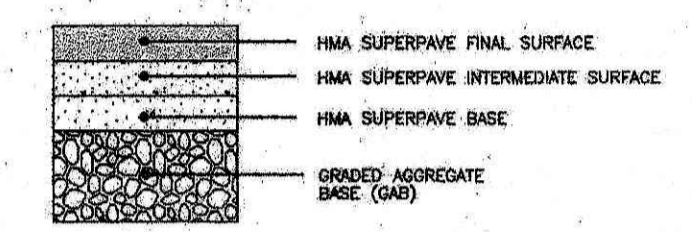
Phasing Chart table with columns for Phase, No. of Units, Allocation Year, and F-Plan Filing Milestone.

APPROVED: DEPARTMENT OF PUBLIC WORKS
[Signature]
CHIEF, BUREAU OF HIGHWAYS
APPROVED: DEPARTMENT OF PLANNING AND ZONING
[Signature]
CHIEF, DIVISION OF LAND DEVELOPMENT



Project information including OWNER (ESC WELLINGTON, L.C.), DEVELOPER (ESC WELLINGTON, L.C.), and a large BENCHMARK ENGINEERING, INC. logo and seal. Includes project details like 'WELLINGTON FARMS Phase 2' and 'Lots 276 thru 419; Open Space Lots 420 thru 422'.

ROAD CHART table with columns: Road, Station, Classification, Right-of-Way width, Pavement width, Design Speed (mph), Pwmt Type



SECTION NUMBER table with columns: ROAD AND STREET CLASSIFICATION, CALIFORNIA BEARING RATIO (CBR), PAVEMENT MATERIAL (INCHES), MIN HMA WITH GAB, HMA WITH CONSTANT GAB

P-2 PAVING DETAIL NOTE: GEOTECHNICAL ENGINEER SHALL VERIFY THE ON-SITE CBR TO DETERMINE PAVEMENT DEPTH REQUIRED.

STREET LIGHT CHART table with columns: ROAD, STATION, OFFSET, TYPE

- \* LED-150 POLE: 14' TYPE: BLACK FIBERGLASS FIXTURE: POT-TOP PREMIERE COLONIAL LAMP TYPE: LED-150
- ☆ LED-100 POLE: 14' TYPE: BLACK FIBERGLASS FIXTURE: POST-TOP PREMIERE LAMP TYPE: LED-100

BOUNDARY COORDINATES table with columns: POINT #, NORTHING, EASTING

LEGEND OF SYMBOLS

- EXISTING CONTOURS (dashed line)
- EXISTING CL STREAM (dashed line with hatching)
- EXISTING STEEP SLOPES 25% OR GREATER (hatched pattern)
- EXISTING LIMIT OF 100YR FLOODPLAIN (stippled pattern)
- EXISTING TREELINE (wavy line)
- EXISTING SPECIMEN TREE (circle with cross)
- EXISTING SPECIMEN TREE TO BE REMOVED (circle with X)
- PROJECT BOUNDARY (dashed line)
- PROPOSED CONC. SIDEWALK (dashed line)
- PROPOSED STORM DRAIN (line with T-shape)
- PROPOSED SEWER (line with circles)
- INDICATES BUILDING RESTRICTION LINE (dashed line with 'XX' BRL)
- PROPOSED MICRO-BIO (oval shape)
- PROPOSED DRY WELL (rectangle with X)
- PROPOSED N-2 DISCONNECTION AREA (rectangle with hatching)
- FOREST CONSERVATION EASEMENT (wavy line with circles)
- STREET LIGHTS (star symbol)
- SOIL BORING LOCATION (circle with cross)
- END SECTION WITH RIP-RAP AND RIP-RAP WITH GABIONS (triangle symbol)

STORMWATER MANAGEMENT SUMMARY TABLE with columns: Practice, DA (sf), Imp Area (sf), % Imp, Rv, Pe required, ESDv (cf) Required, ESDv (cf) Provided, 75% ponding Req., ponding Prov., Pe Provided, Maintenance

Recreational Open Space Chart table with columns: Zone, Subdivision Section, Requirement, Unit Count, Required (sf)

Table with columns: Credit, Size (sf), Credit (sf)

Note: The total building square footage is 3,120 sf. However, the exercise room and multi-purpose room (used for recreation calculation) is only 1,305 sf.

Minimum Lot Size Chart table with columns: Lot, Zoned, Total Lot Area (sf), Footprint Area (sf), Min Lot

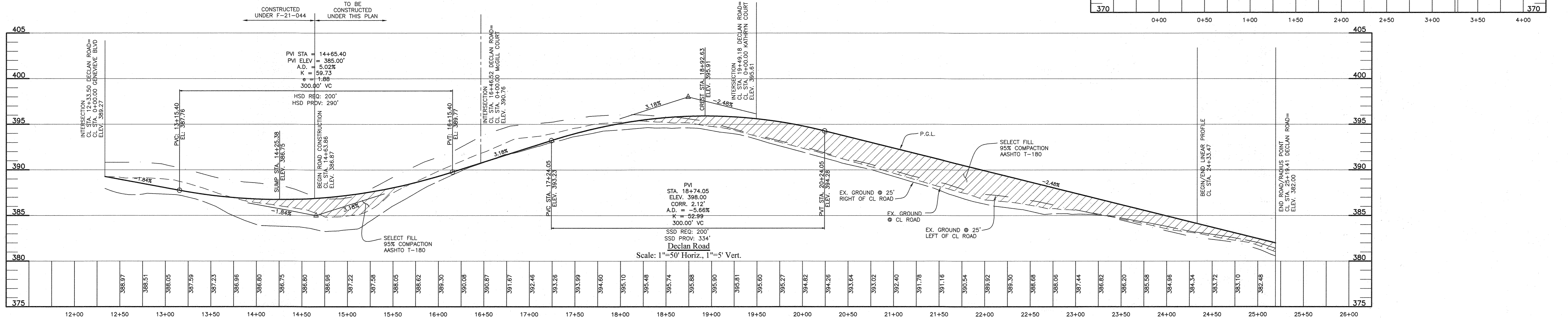
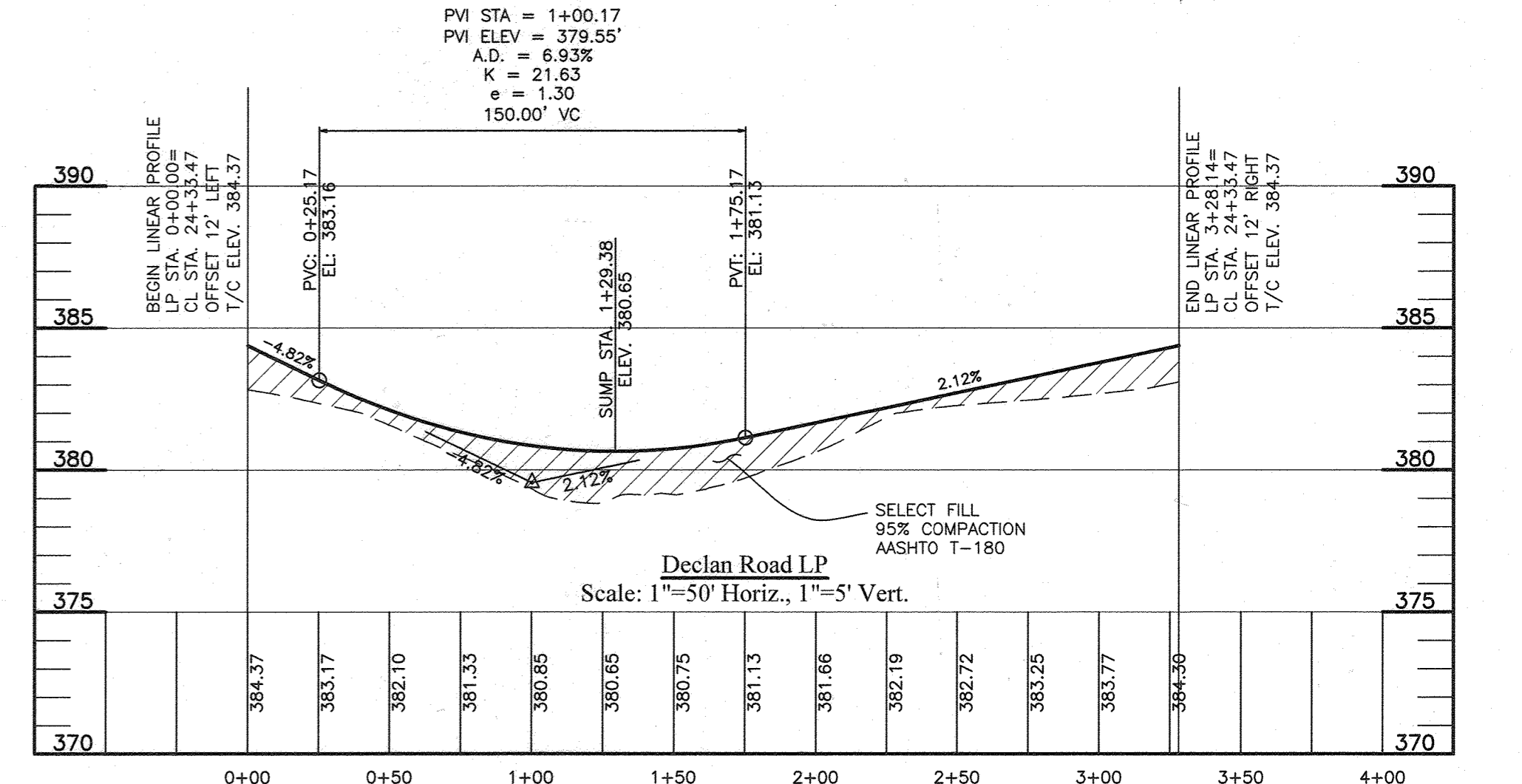
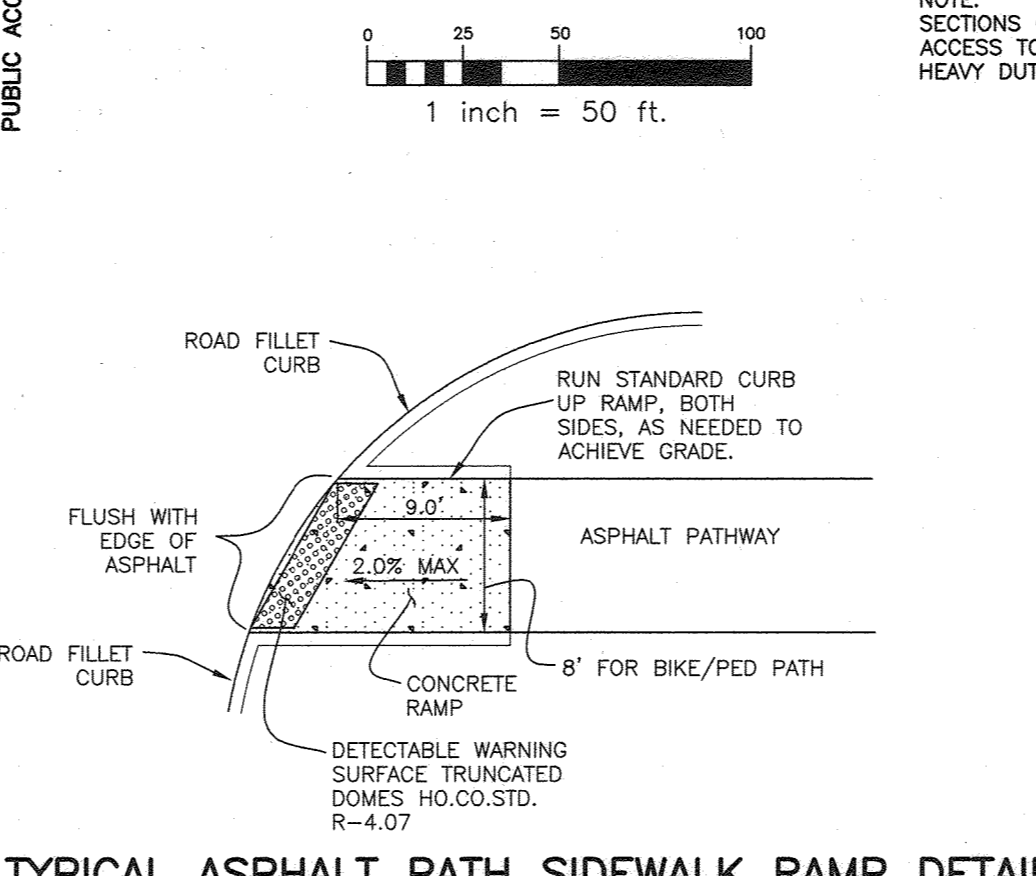
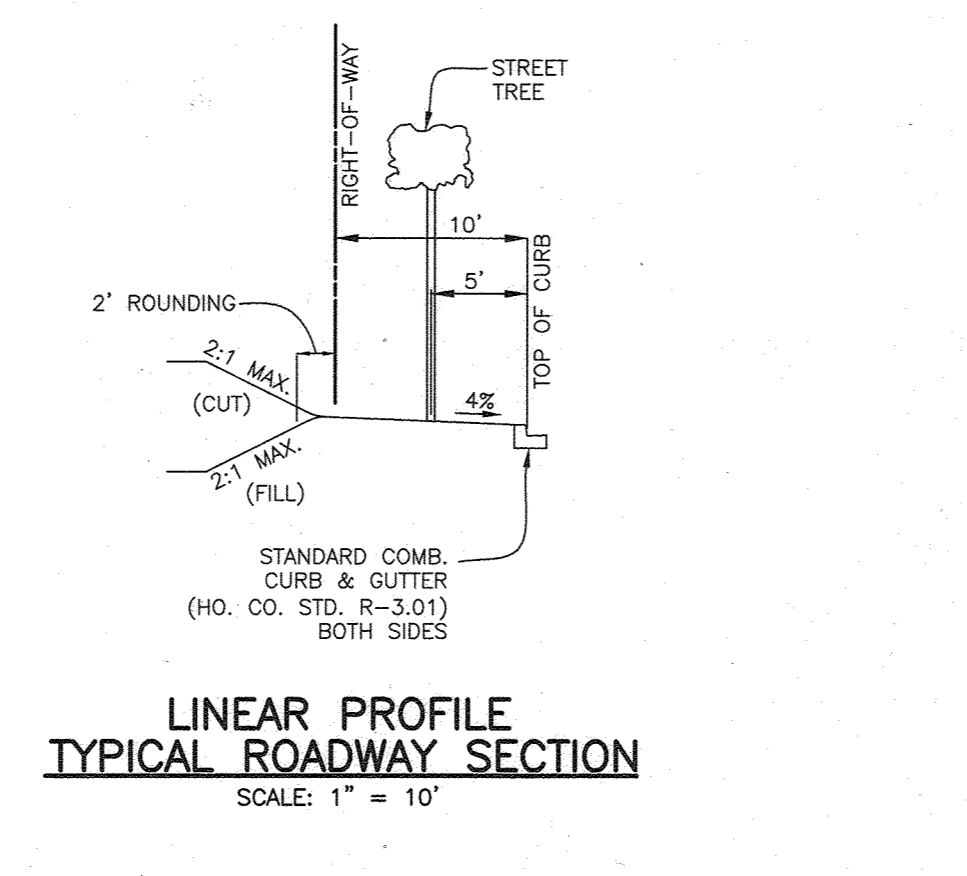
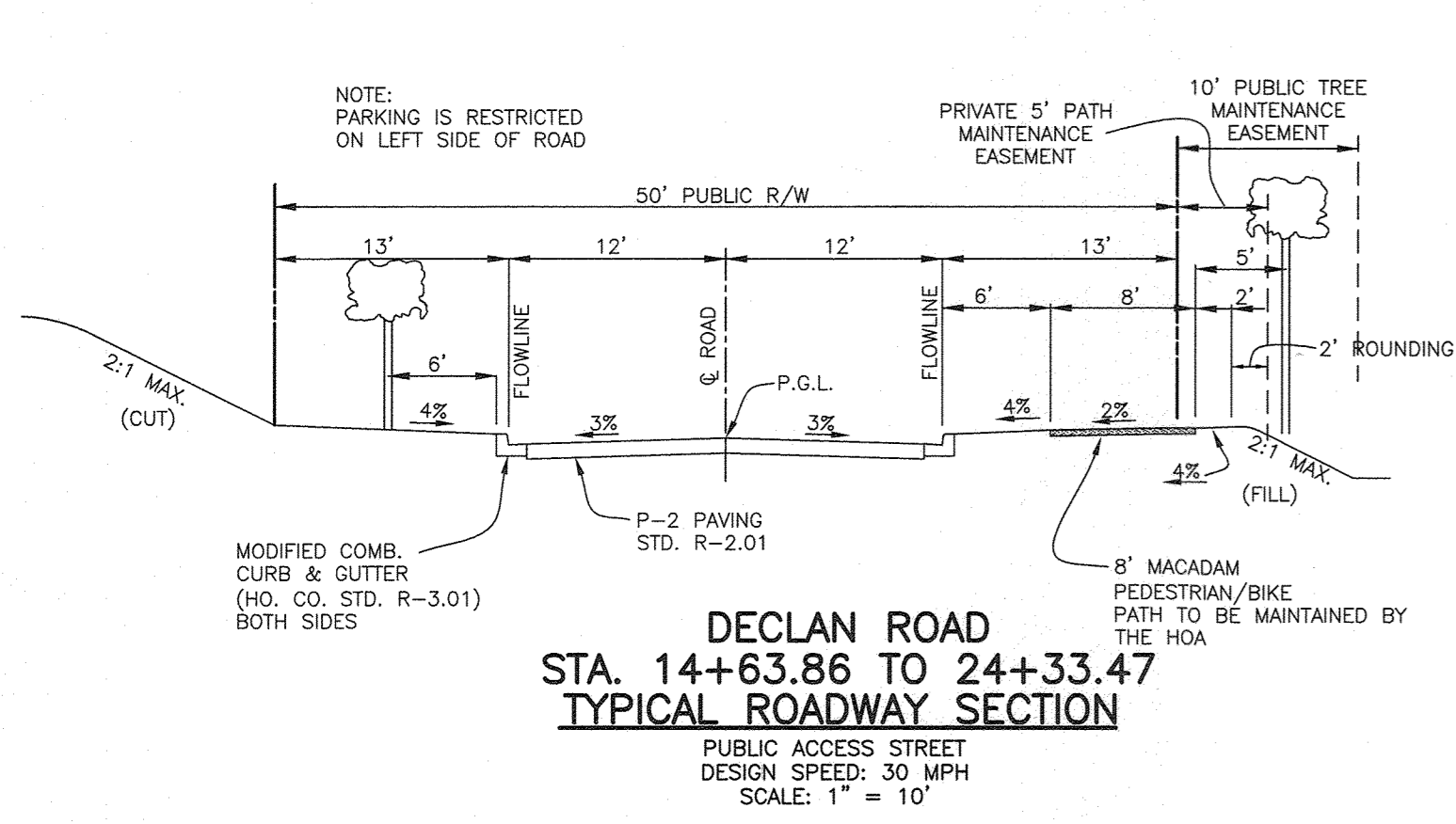
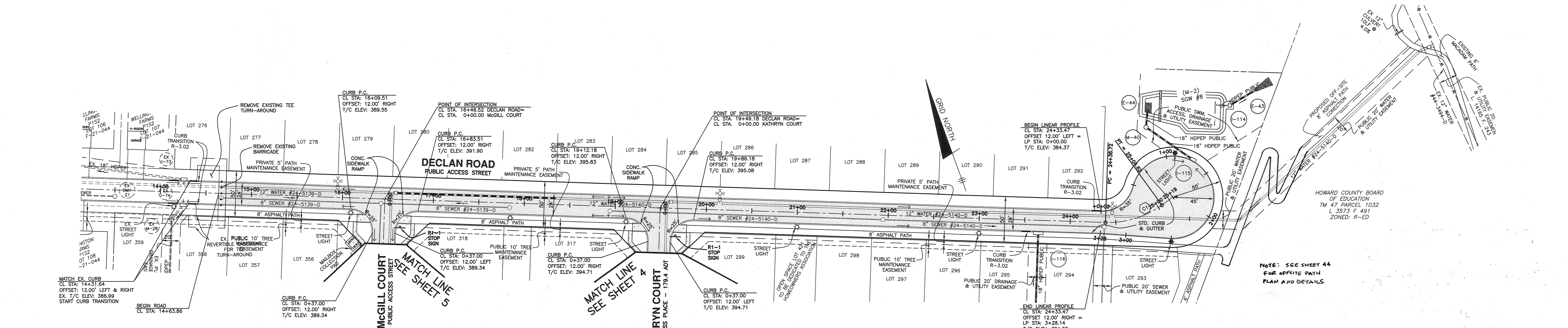
Parking Chart table with columns: Phase, Item, Unit, Zoning Section, Requirement, spaces req., spaces prov.

- 1. Spaces provided include 2 spaces per garage, 2 spaces per driveway.
- 2. Spaces provided include 1 space per garage and 1 space per driveway.
- 3. Off-street parking spaces along Aurora Way (44), Cultivator Road (22), Blackbrier Way (6), Olive Branch Lane (3), and Volpe Court (7) Asher Court (8), and Hudson Court (16).

Professional Engineer seal for Christopher A. Winters, PE, License No. 22390. BENCHMARK ENGINEERING, INC. stamp with address in Elkridge, MD. WELLINGTON FARMS Phase 2 project details, including owner (ESC Wellington, L.C.), developer, and cover sheet information.

APPROVED: DEPARTMENT OF PUBLIC WORKS and DEPARTMENT OF PLANNING AND ZONING stamps with signatures and dates.

Notes: 1. The Pe required column is based on total site Pe calculation. The Rv is based on individual drainage area percent impervious. 2. See Dry Well Summary Table for computations for each drywell.

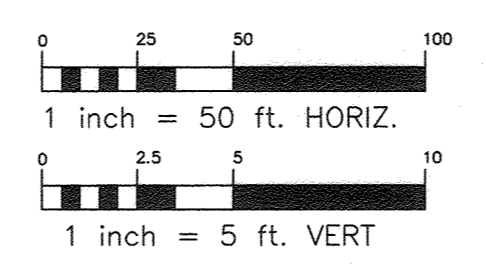


APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]*  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 10/26/2022

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]*  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 11/3/22

**CENTER LINE CURVE DATA**

CURVE	ALIGNMENT	STATION	RADIUS	ARC	DELTA	TANGENT	CHORD DIRECTION	CHORD LENGTH
C1	Declan Road	24+38.72 TO 25+04.62	100.00'	65.90'	37°45'29"	34.20'	S87°00'30"E	64.71'



NO. 1 DATE 8.1.2023 REVISION REVISE OPPOSITE PATH ALIGNMENT, REVISE PATH TYP. SECT. REVISE TOTAL NUMBER OF SHEETS

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-8105 (F) 410-465-8844  
 WWW.BE-CIVLENGINEERING.COM

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. 22390, Expiration Date: 6-30-2023.

9-19-22

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

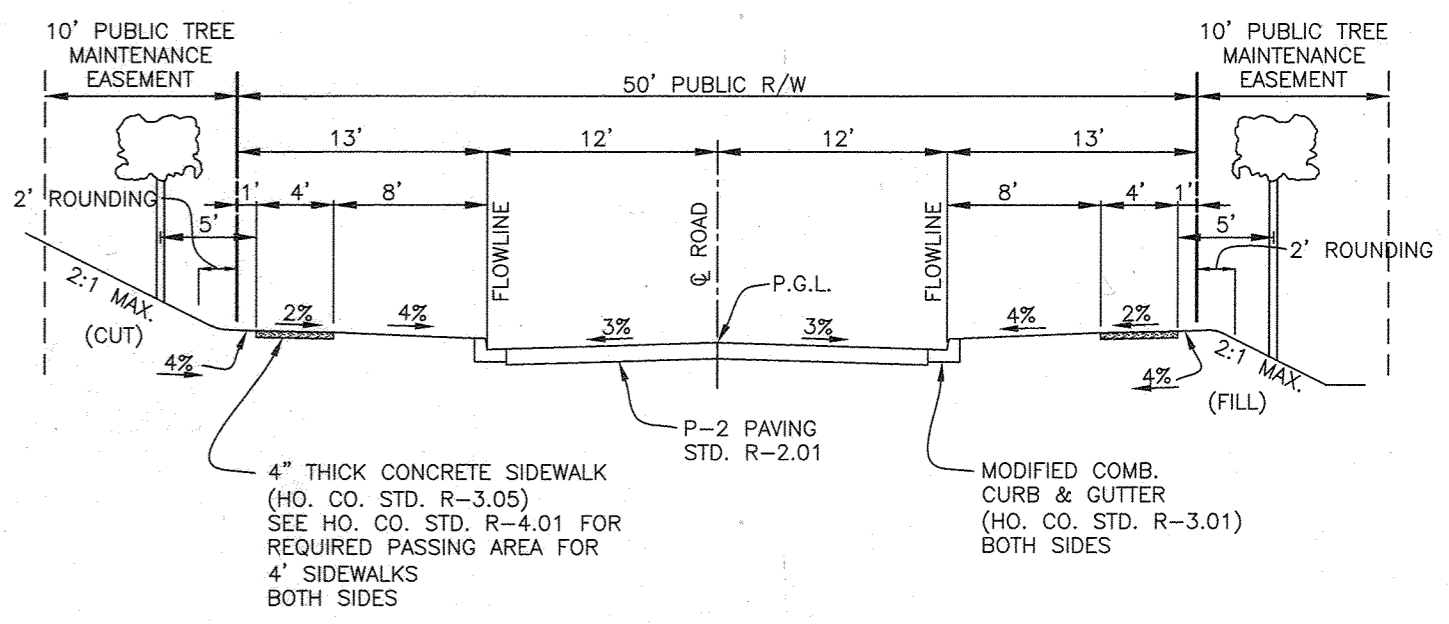
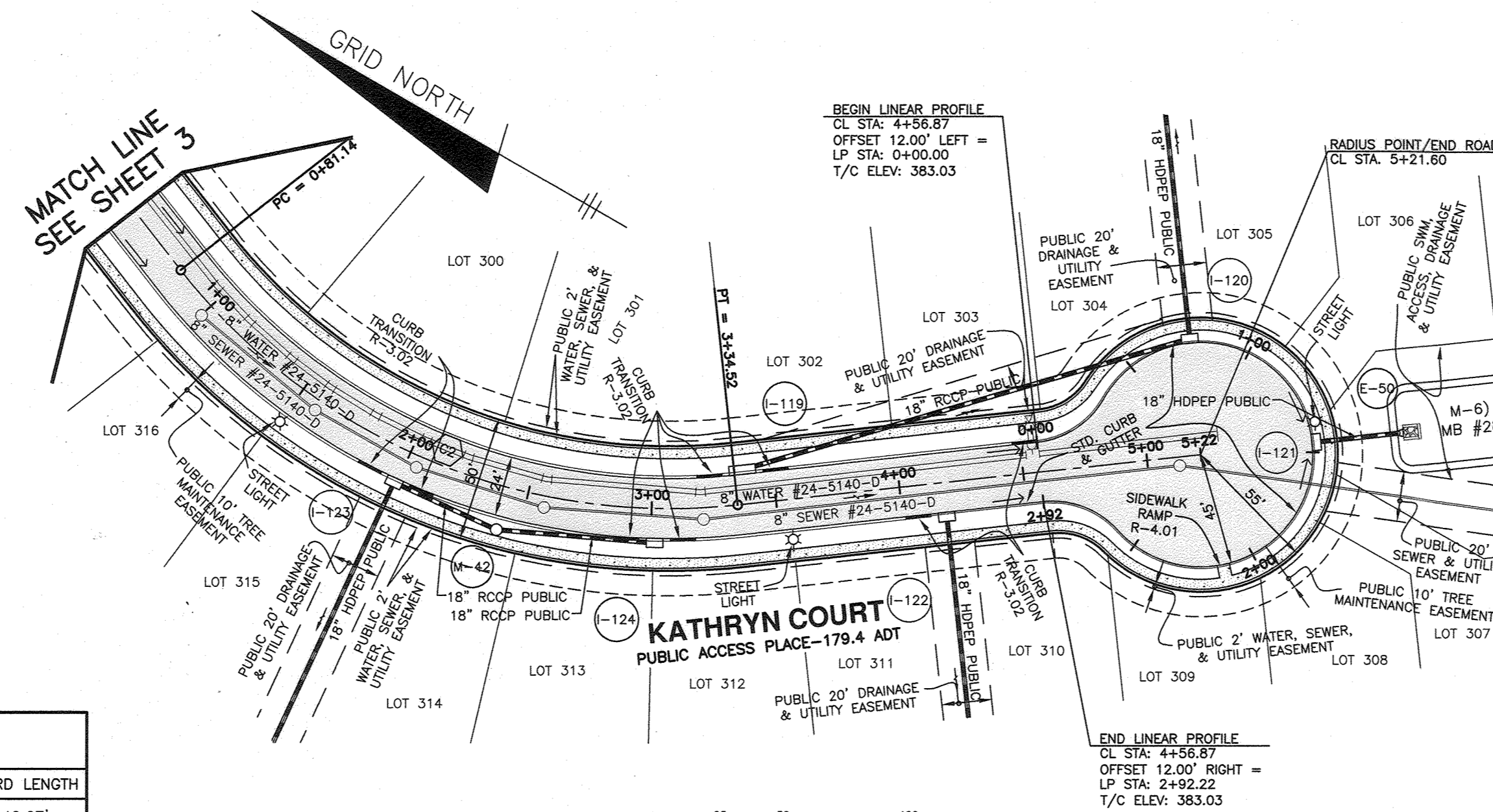
DEVELOPER:  
 ESC WELLINGTON, L.C.  
 5074 DORSEY HALL DRIVE, SUITE 205  
 ELLICOTT CITY, MARYLAND 21042  
 410-720-3021

**WELLINGTON FARMS**  
 Phase 2  
 Lots 276 thru 419; Open Space Lots 420 thru 422;  
 (A Resubdivision of Non-Buildable Bulk Parcel 'E'  
 previously recorded under F-21-044 and  
 Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

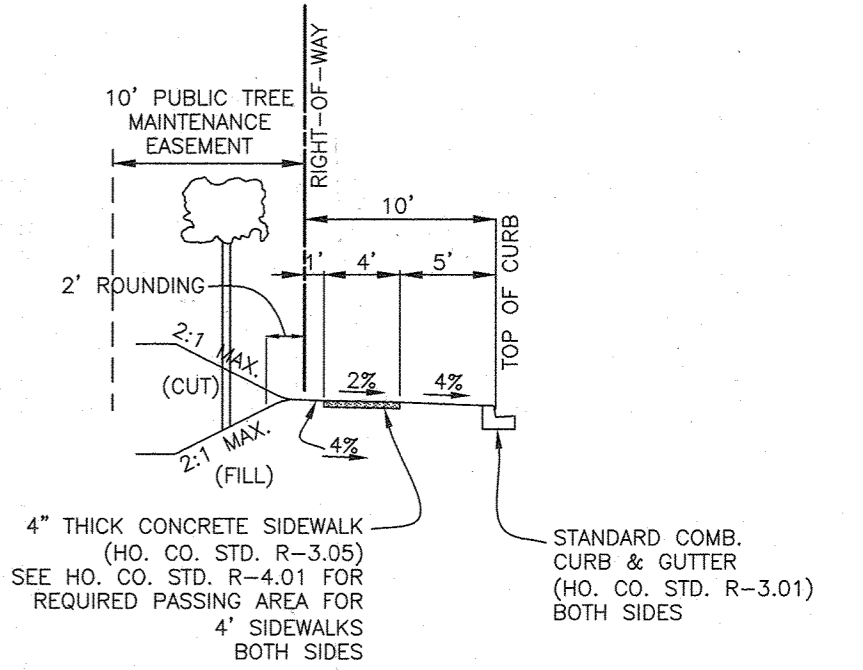
TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONE: R-20-MXO-3 / R-SC-MXO-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

**ROAD PLAN  
DECLAN ROAD**

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
 SCALE: AS SHOWN SHEET 3 OF 44

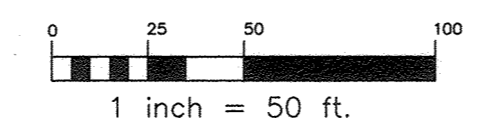


**KATHRYN COURT  
TYPICAL ROADWAY SECTION**  
PUBLIC ACCESS PLACE = 179.4 ADT  
DESIGN SPEED: 30 MPH  
SCALE: 1" = 10'

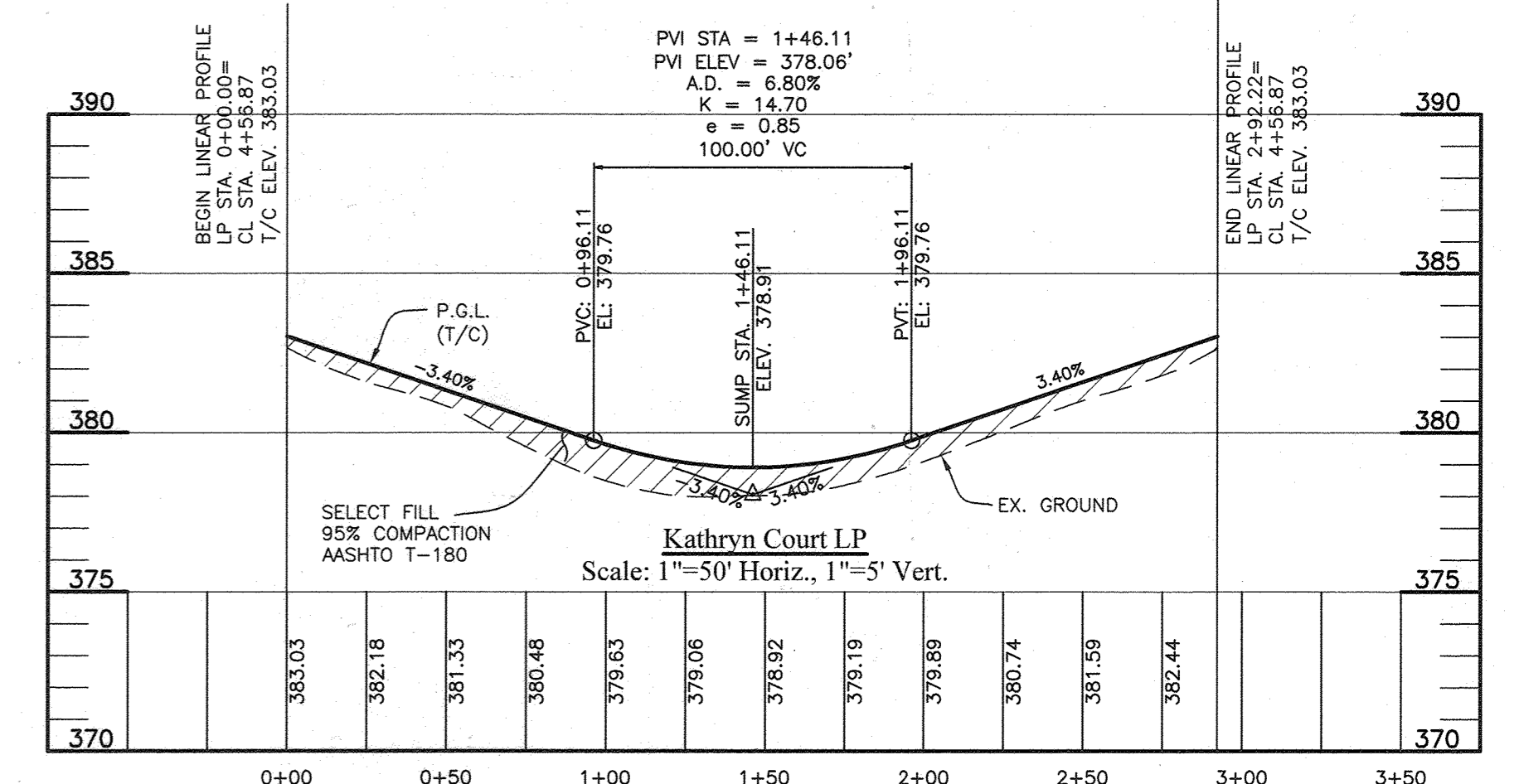
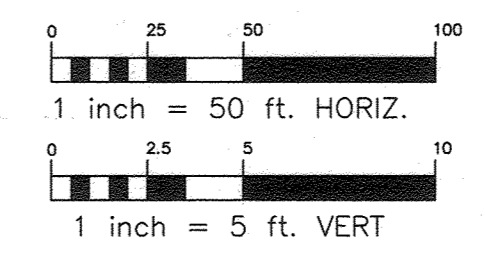
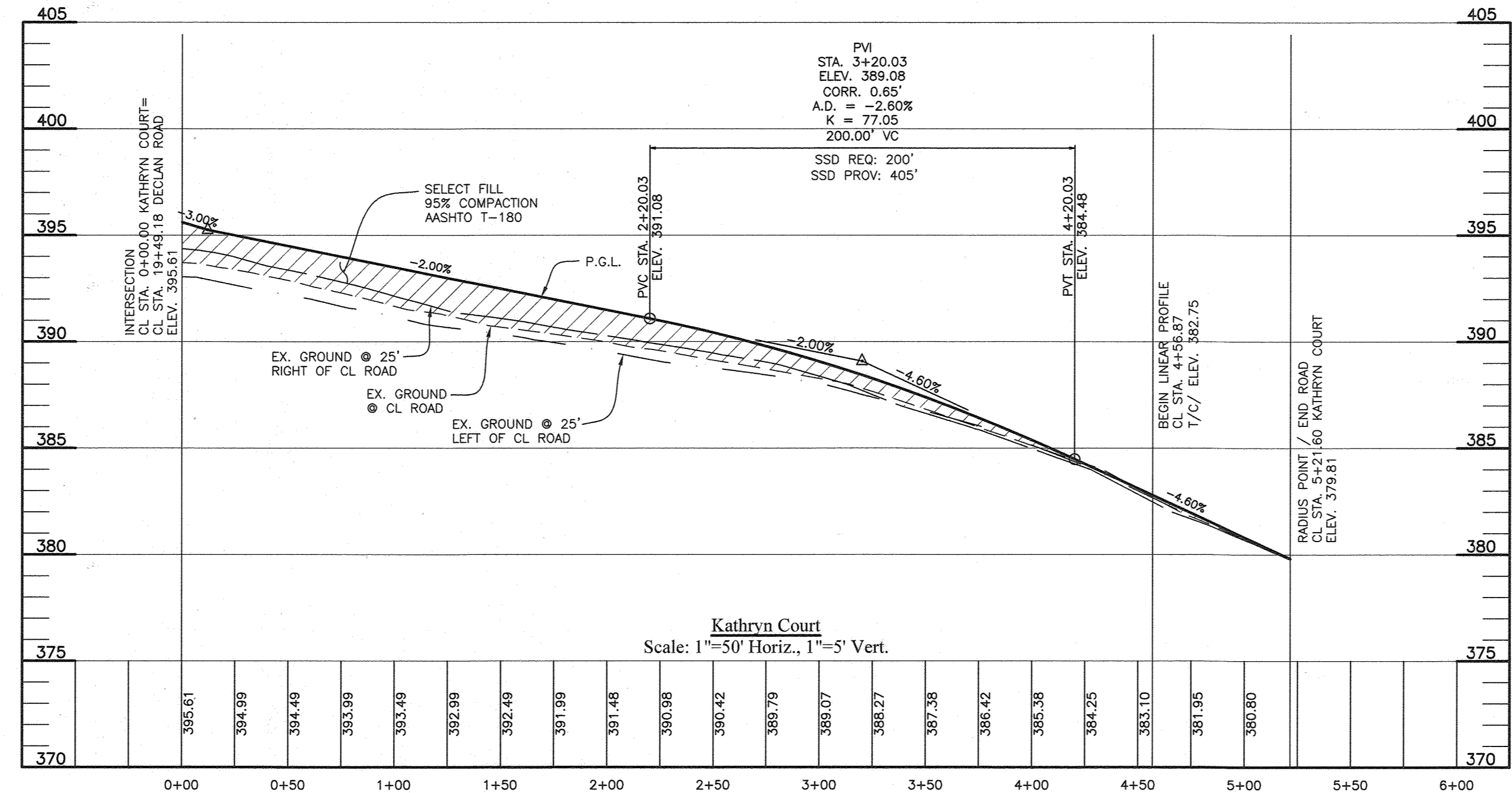


**LINEAR PROFILE  
TYPICAL ROADWAY SECTION**  
SCALE: 1" = 10'

CENTER LINE CURVE DATA								
CURVE	ALIGNMENT	STATION	RADIUS	ARC	DELTA	TANGENT	CHORD DIRECTION	CHORD LENGTH
C2	Kathryn Court	0+81.14 TO 3+34.52	250.00'	253.38'	58°04'12"	138.78'	S07° 09' 52"E	242.67'



NOTE:  
SECTIONS OF SIDEWALK IN LOCATION OF  
ACCESS TO SWIM PRACTICES SHALL BE  
HEAVY DUTY SIDEWALK.



<b>BENCHMARK</b> ENGINEERS & LAND SURVEYORS & PLANNERS <b>ENGINEERING, INC.</b> 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043 (P) 410-465-8105 (F) 410-465-8644 WWW.BEI-CIVILENGINEERING.COM		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. 38929.
--	--	--

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/3/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

**WELLINGTON FARMS**  
 Phase 2  
 Lots 276 thru 419; Open Space Lots 420 thru 422;  
 (A Resubdivision of Non-Buildable Bulk Parcel 'E'  
 previously recorded under F-21-044 and  
 Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONED: R-20-MXO-3 / R-30-MXO-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

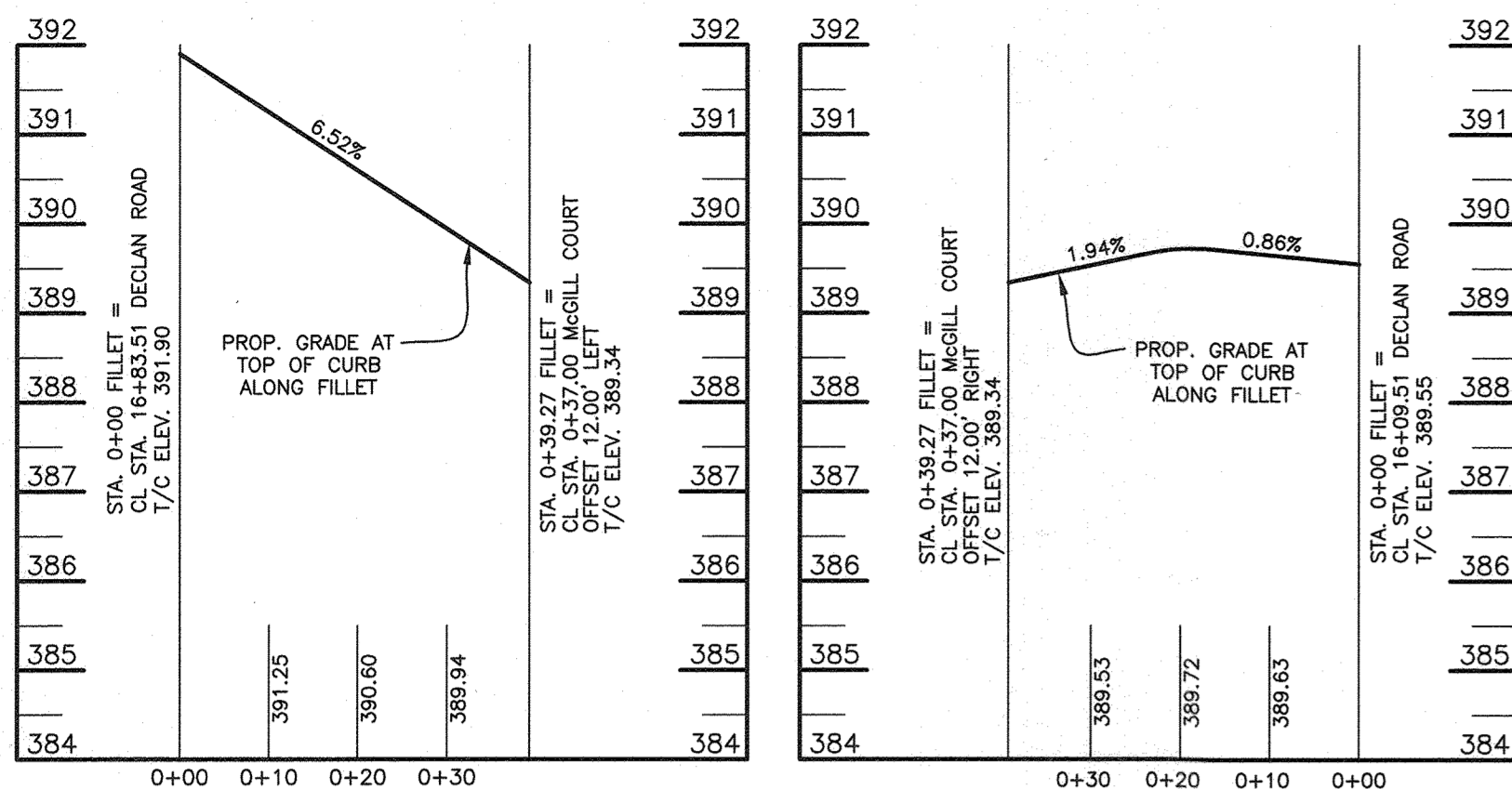
**ROAD PLAN  
KATHRYN COURT**

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

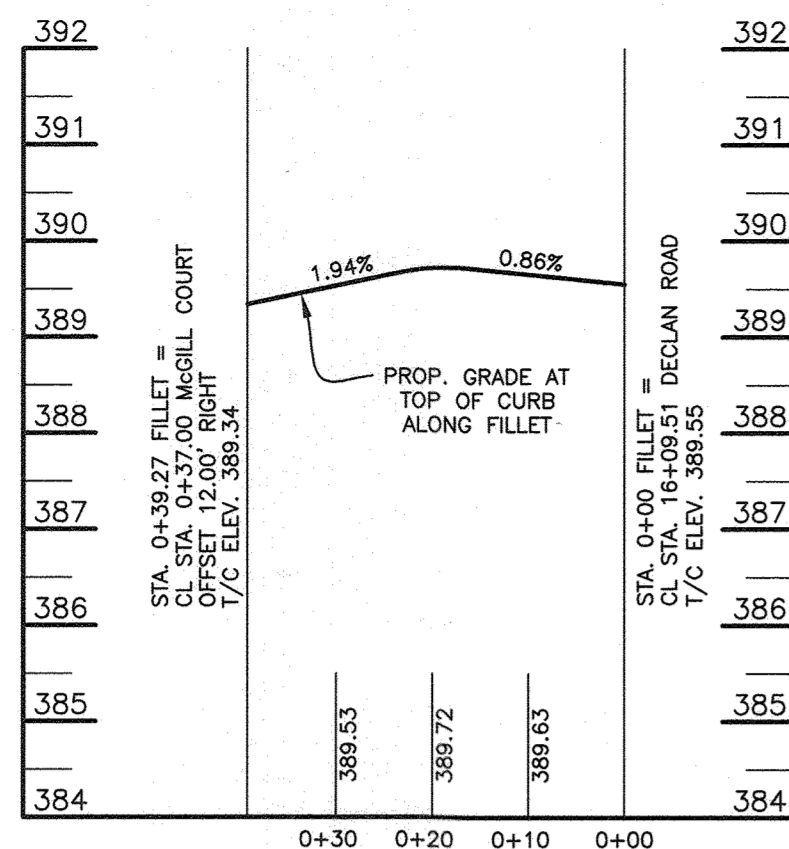
DEVELOPER: ESC WELLINGTON, L.C.  
5074 DORSEY HALL DRIVE, SUITE 205  
ELLICOTT CITY, MARYLAND 21042  
410-720-3021

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
 SCALE: AS SHOWN SHEET 4 OF 44

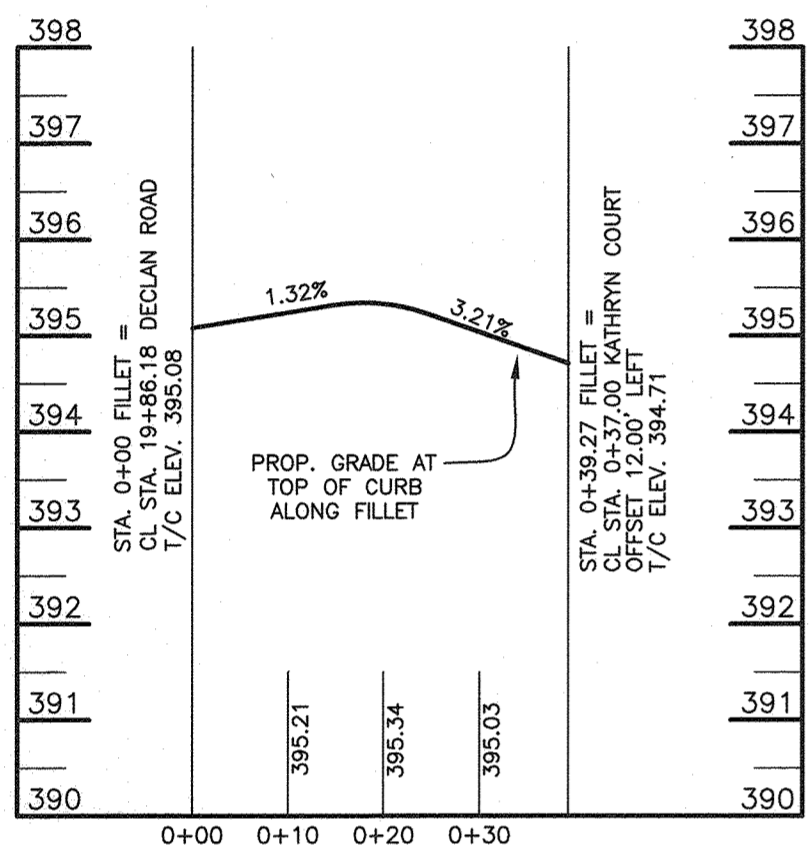




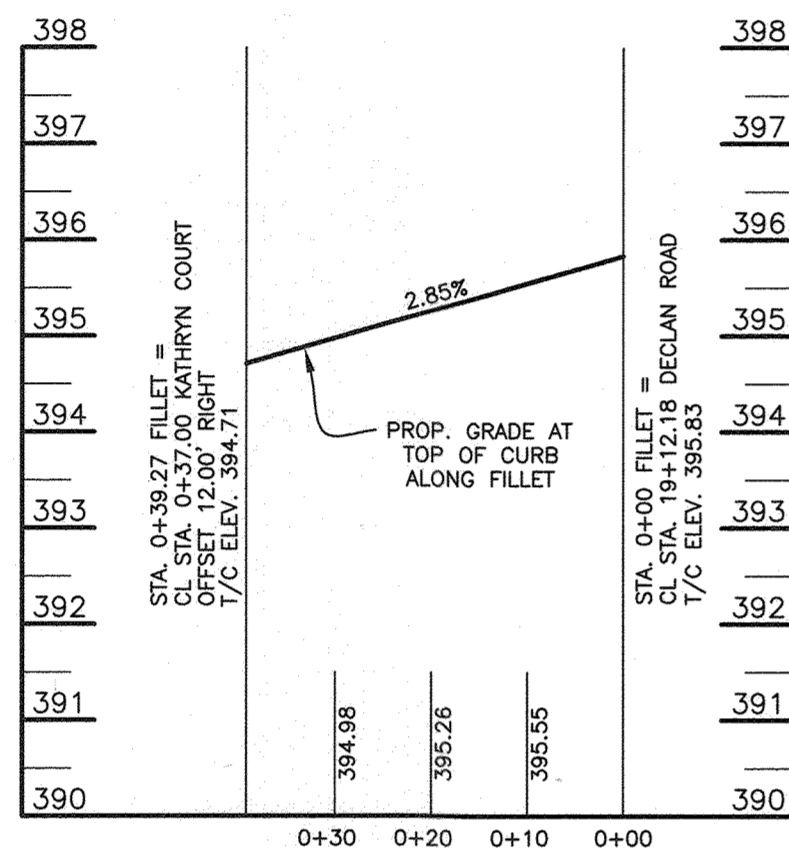
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DECLAN/McGILL: EAST  
SCALE: 1"=20' HORIZ., 1"=2' VERT.



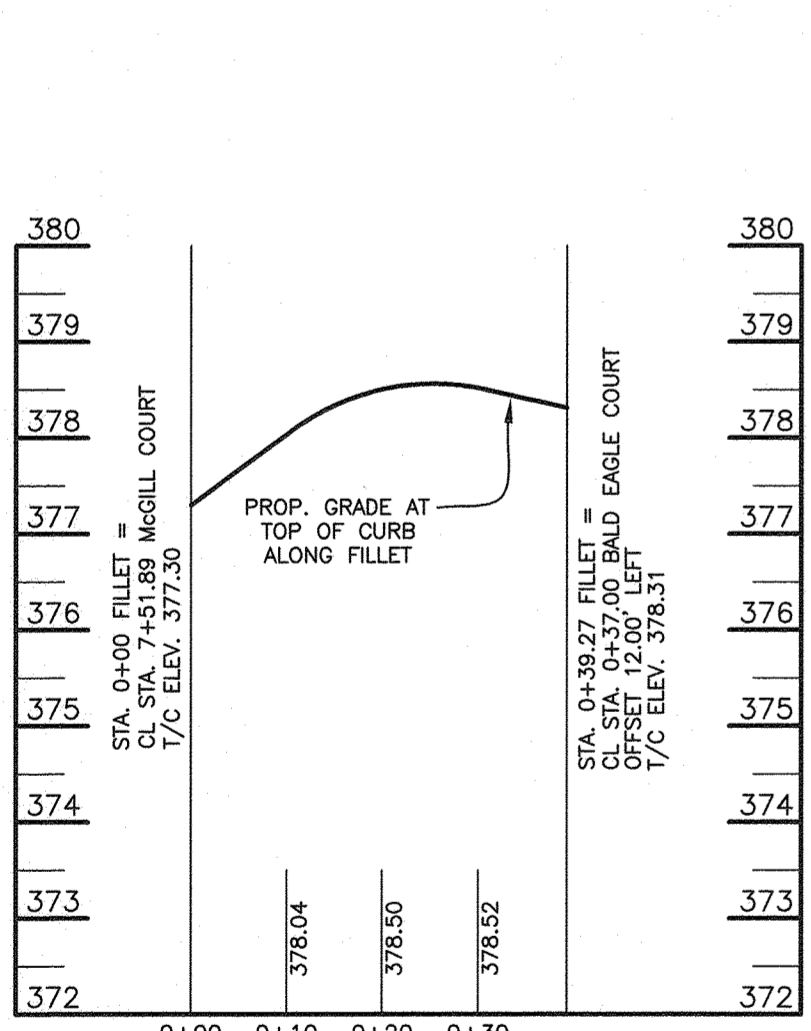
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DECLAN/McGILL: WEST  
SCALE: 1"=20' HORIZ., 1"=2' VERT.



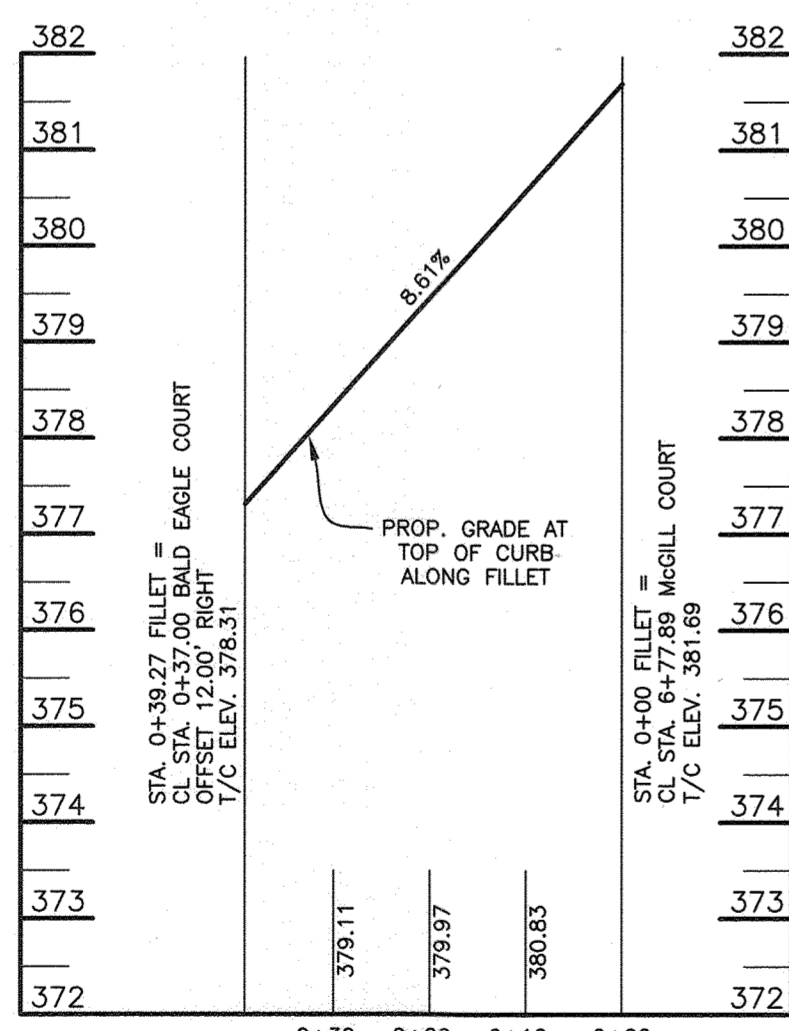
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DECLAN/KATHRYN: EAST  
SCALE: 1"=20' HORIZ., 1"=2' VERT.



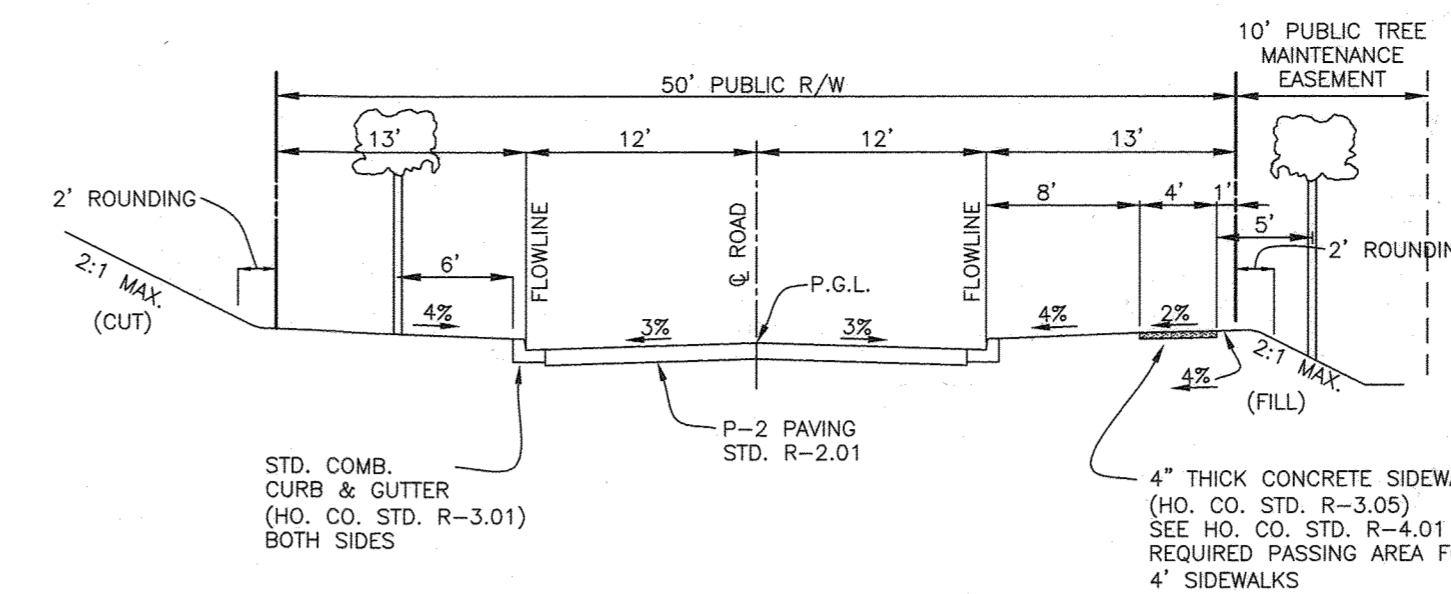
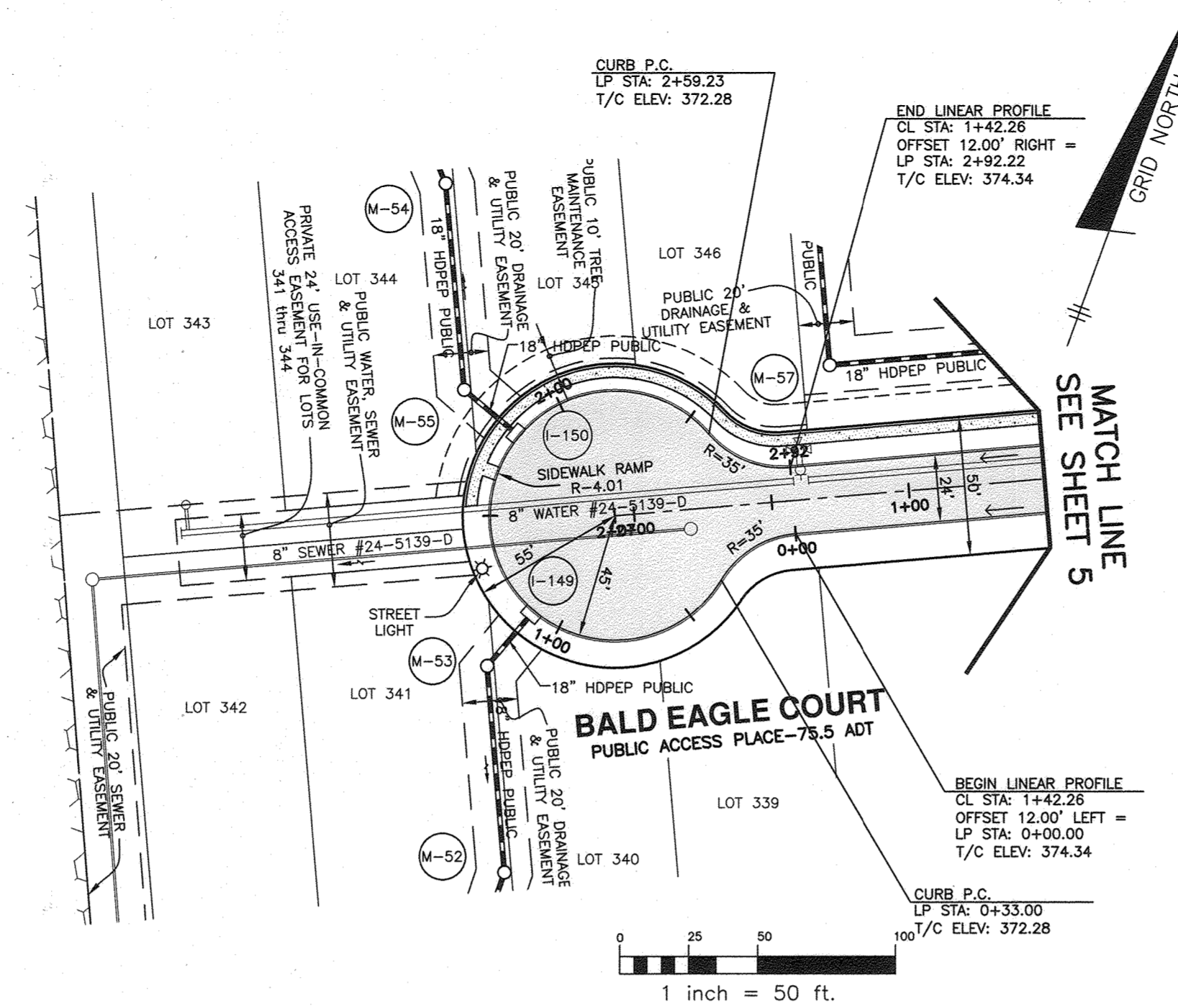
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DECLAN/KATHRYN: WEST  
SCALE: 1"=20' HORIZ., 1"=2' VERT.



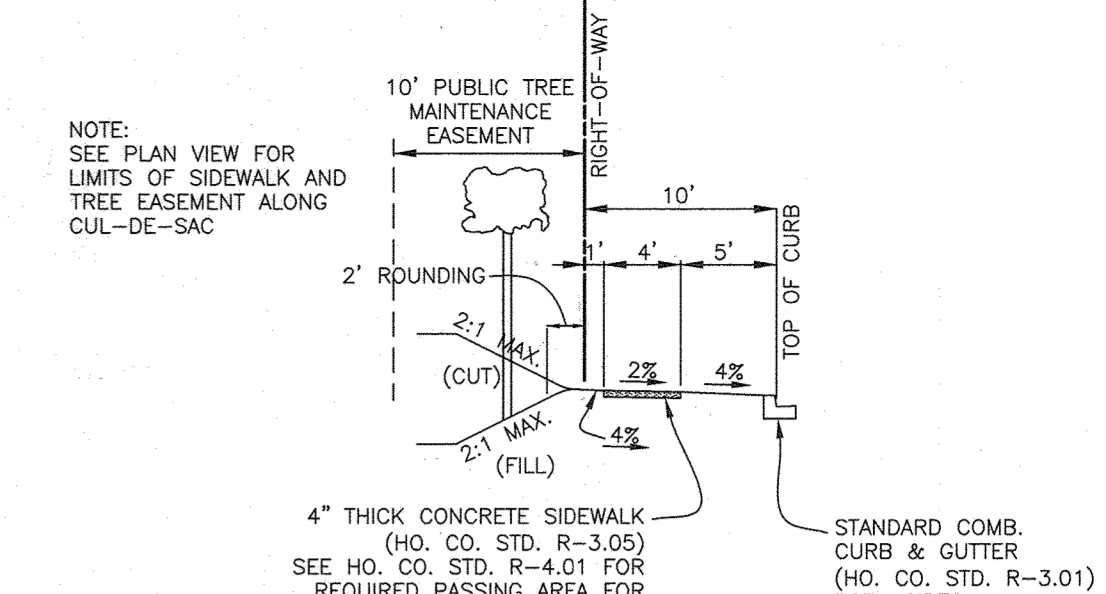
**FILLET PROFILE:**  
McGILL/BALD EAGLE: SOUTH  
SCALE: 1"=20' HORIZ., 1"=2' VERT.



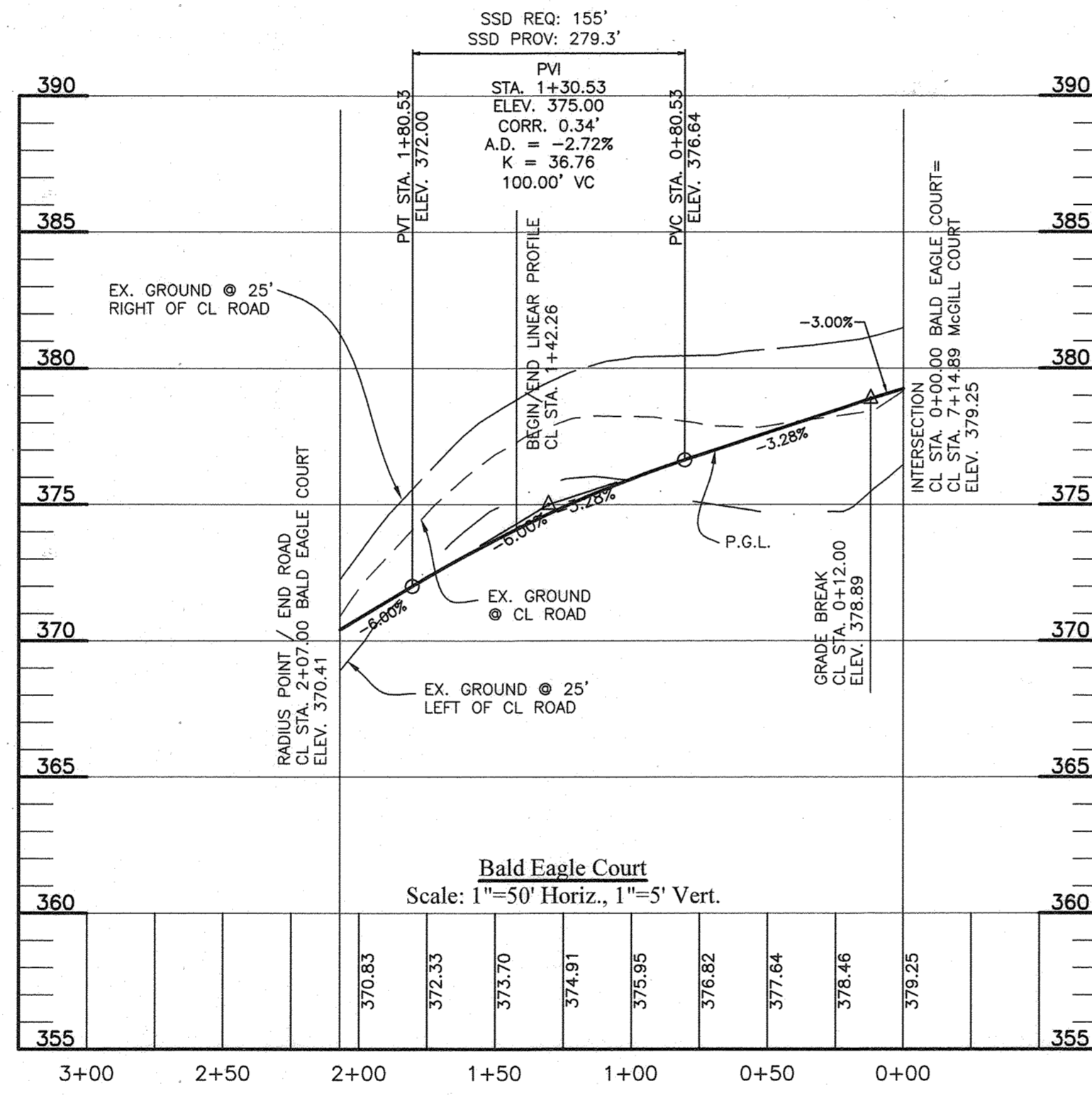
**FILLET PROFILE:**  
McGILL/BALD EAGLE NORTH  
SCALE: 1"=20' HORIZ., 1"=2' VERT.



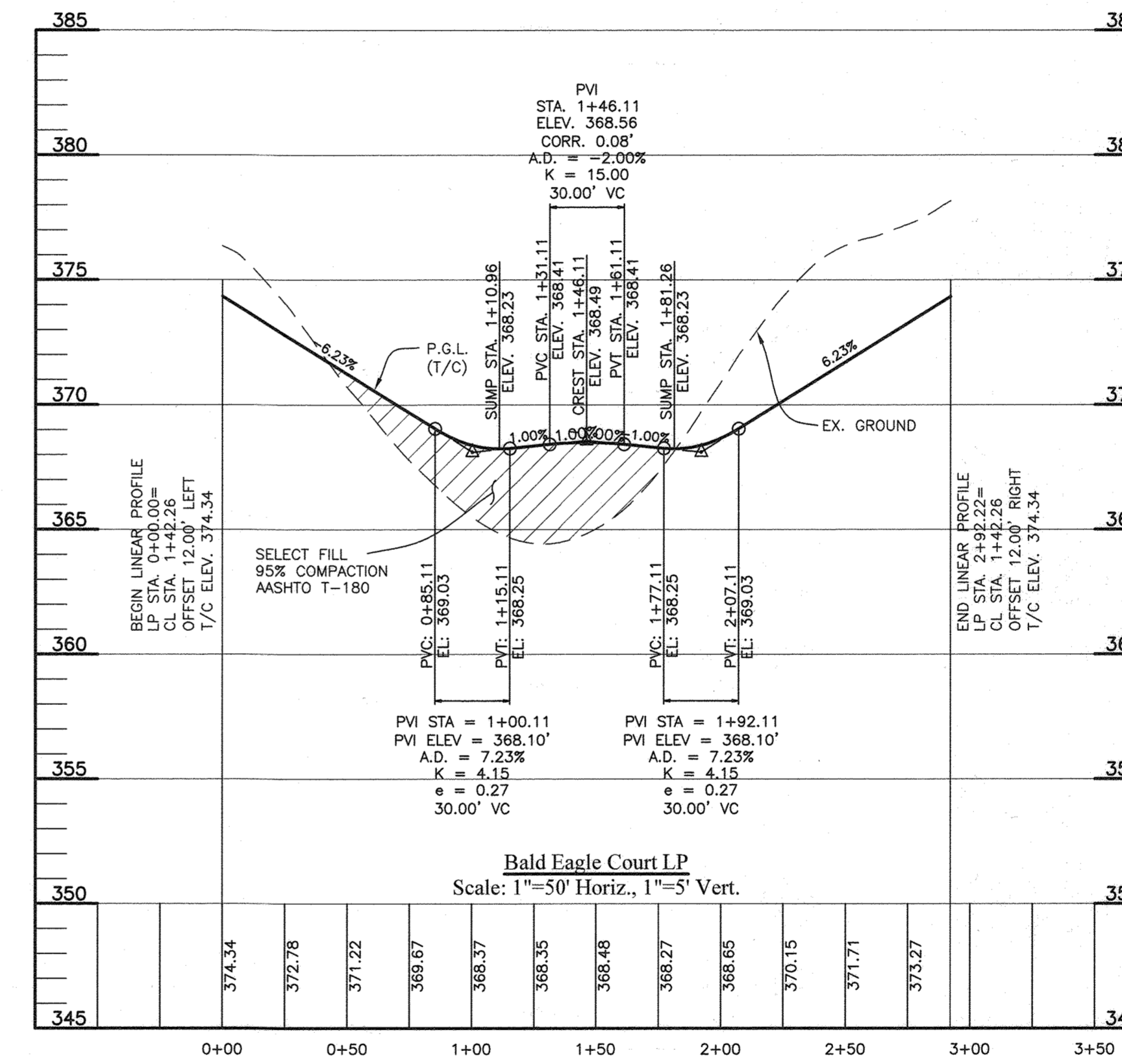
**BALD EAGLE COURT**  
TYPICAL ROADWAY SECTION  
PUBLIC ACCESS PLACE - 75.5 ADT  
DESIGN SPEED: 30 MPH  
SCALE: 1" = 10'



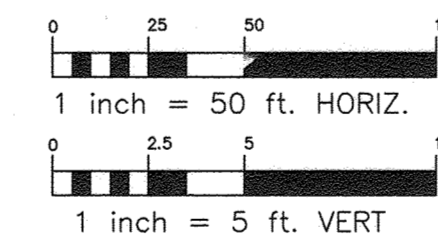
**LINEAR PROFILE CUL-DE-SAC**  
TYPICAL ROADWAY SECTION  
SCALE: 1" = 10'

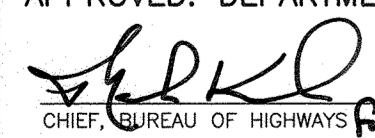


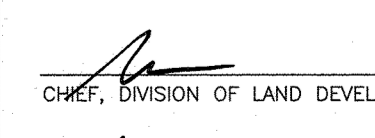
**Bald Eagle Court**  
Scale: 1"=50' Horiz., 1"=5' Vert.




**Bald Eagle Court LP**  
Scale: 1"=50' Horiz., 1"=5' Vert.



APPROVED: DEPARTMENT OF PUBLIC WORKS  
  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 10/20/22

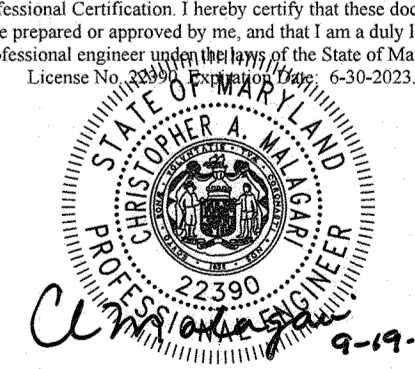
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 11/7/22

  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 11/3/22

NO.	DATE	REVISION
1	8.1.2023	REVISE TOTAL NUMBER OF SHEETS

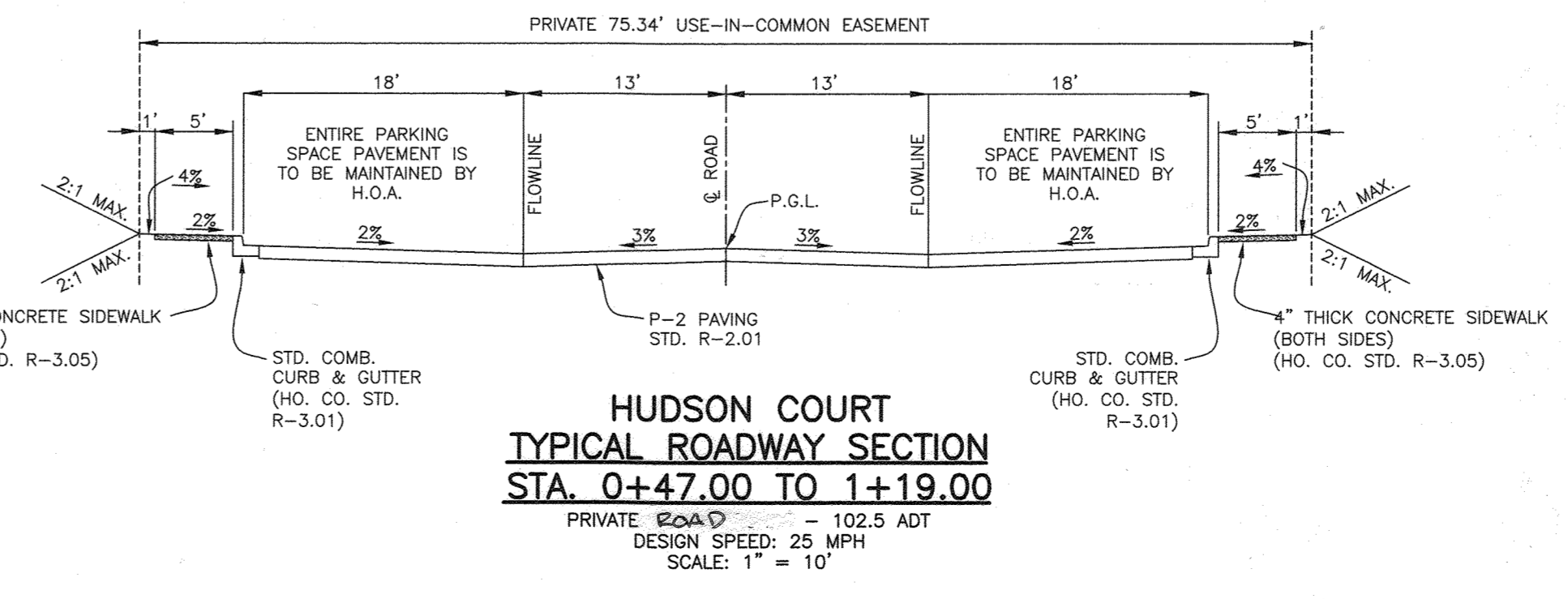
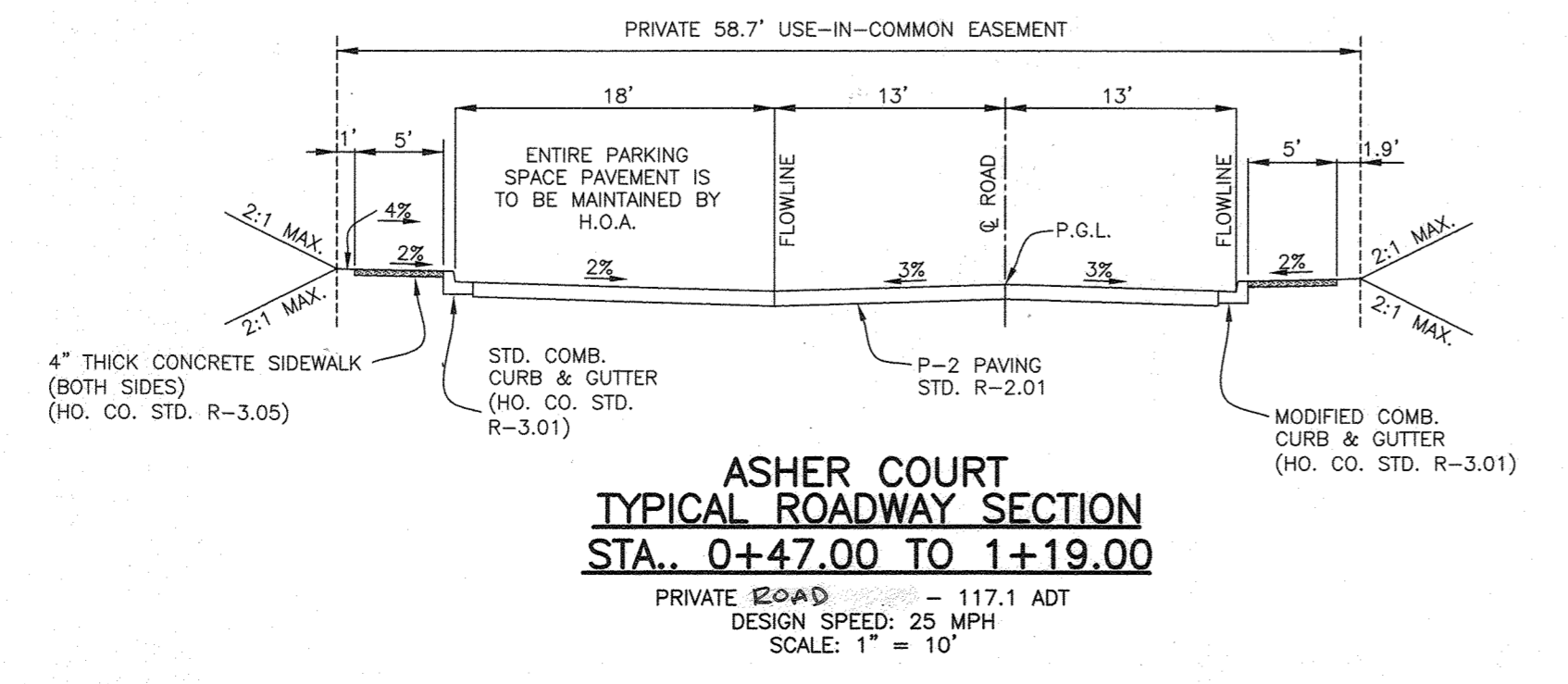
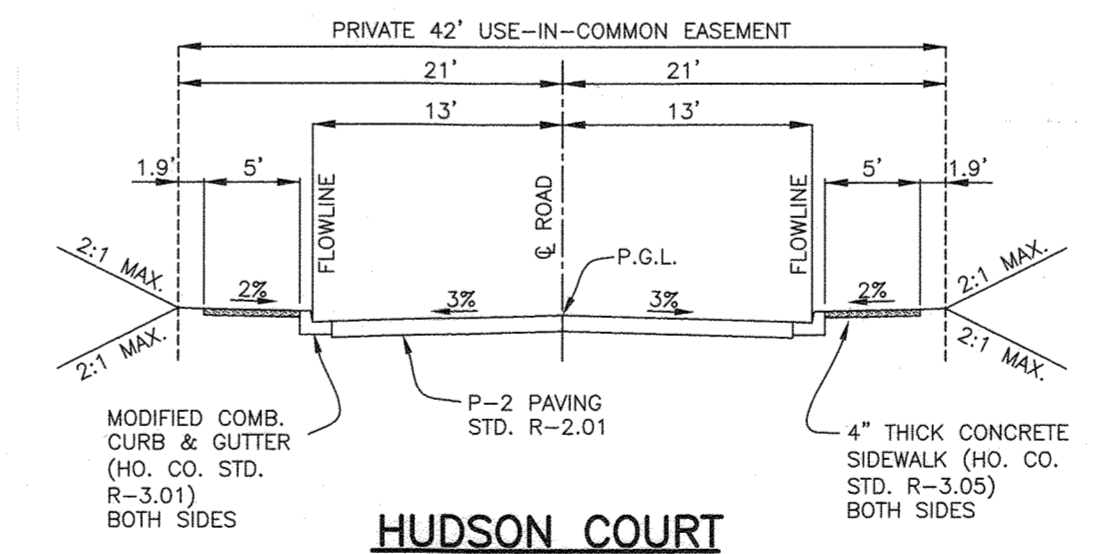
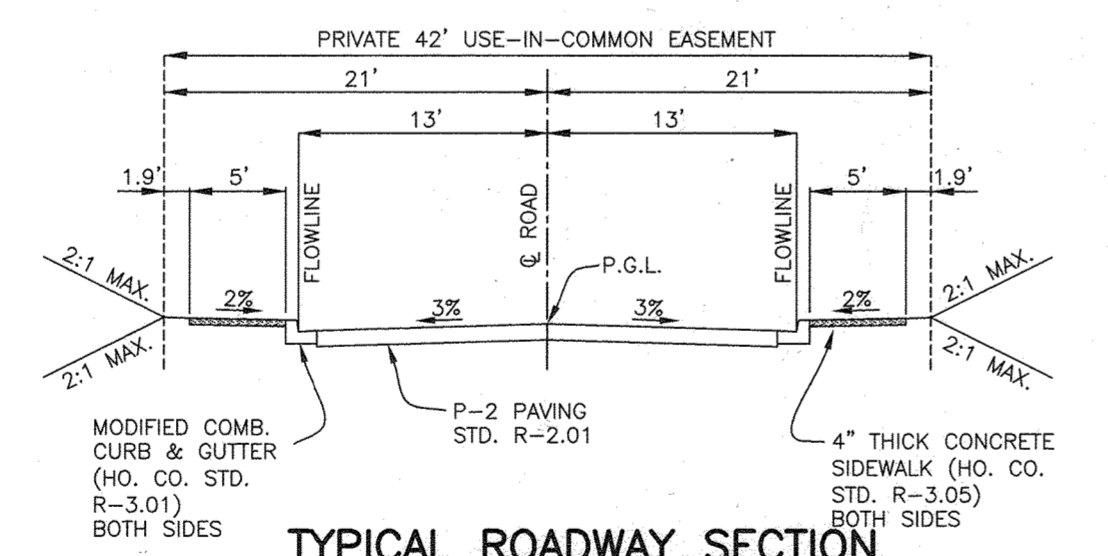
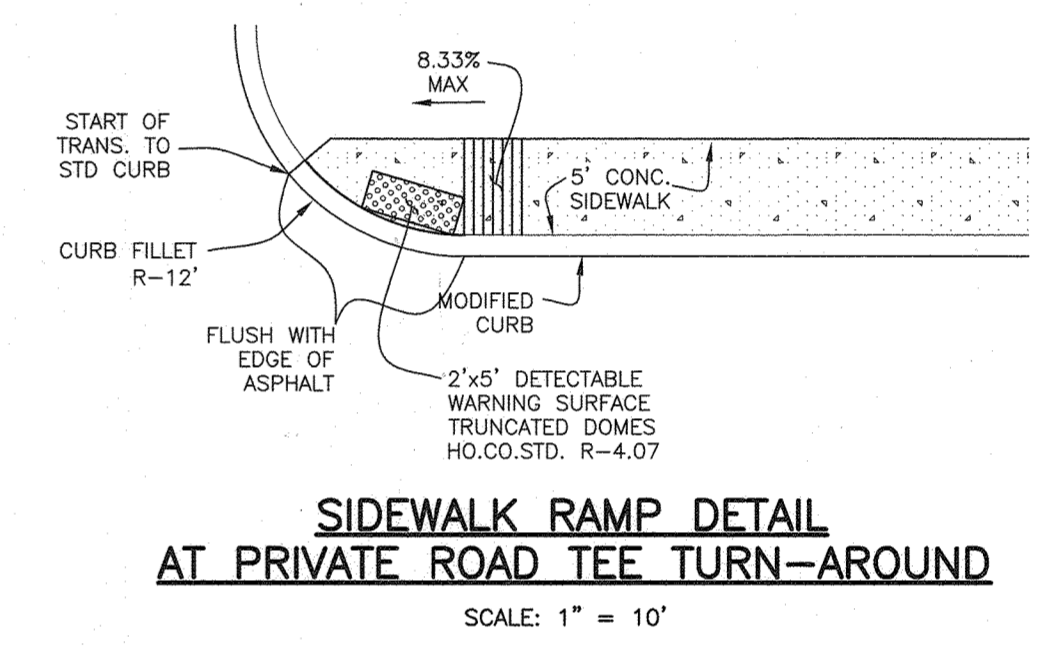
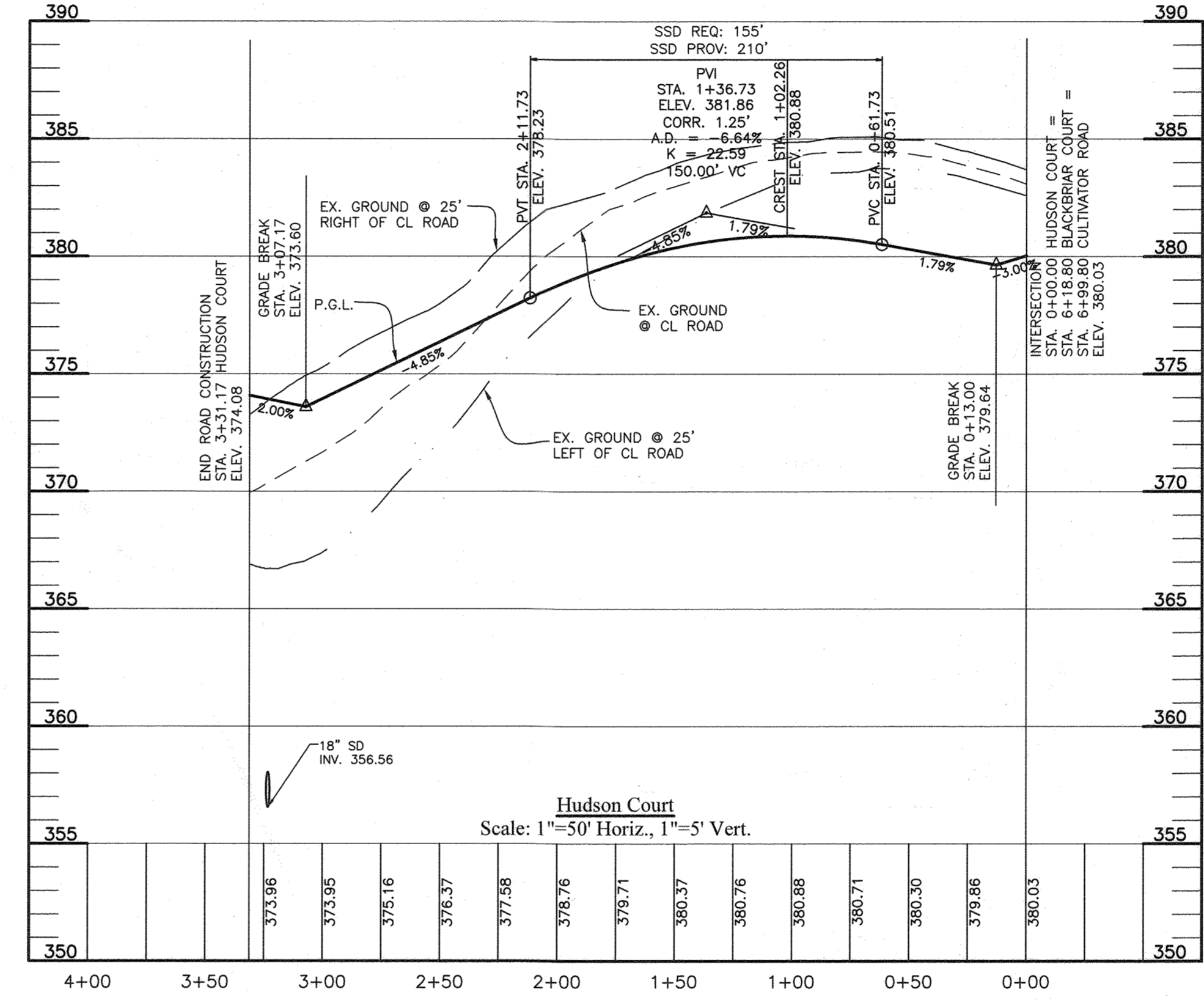
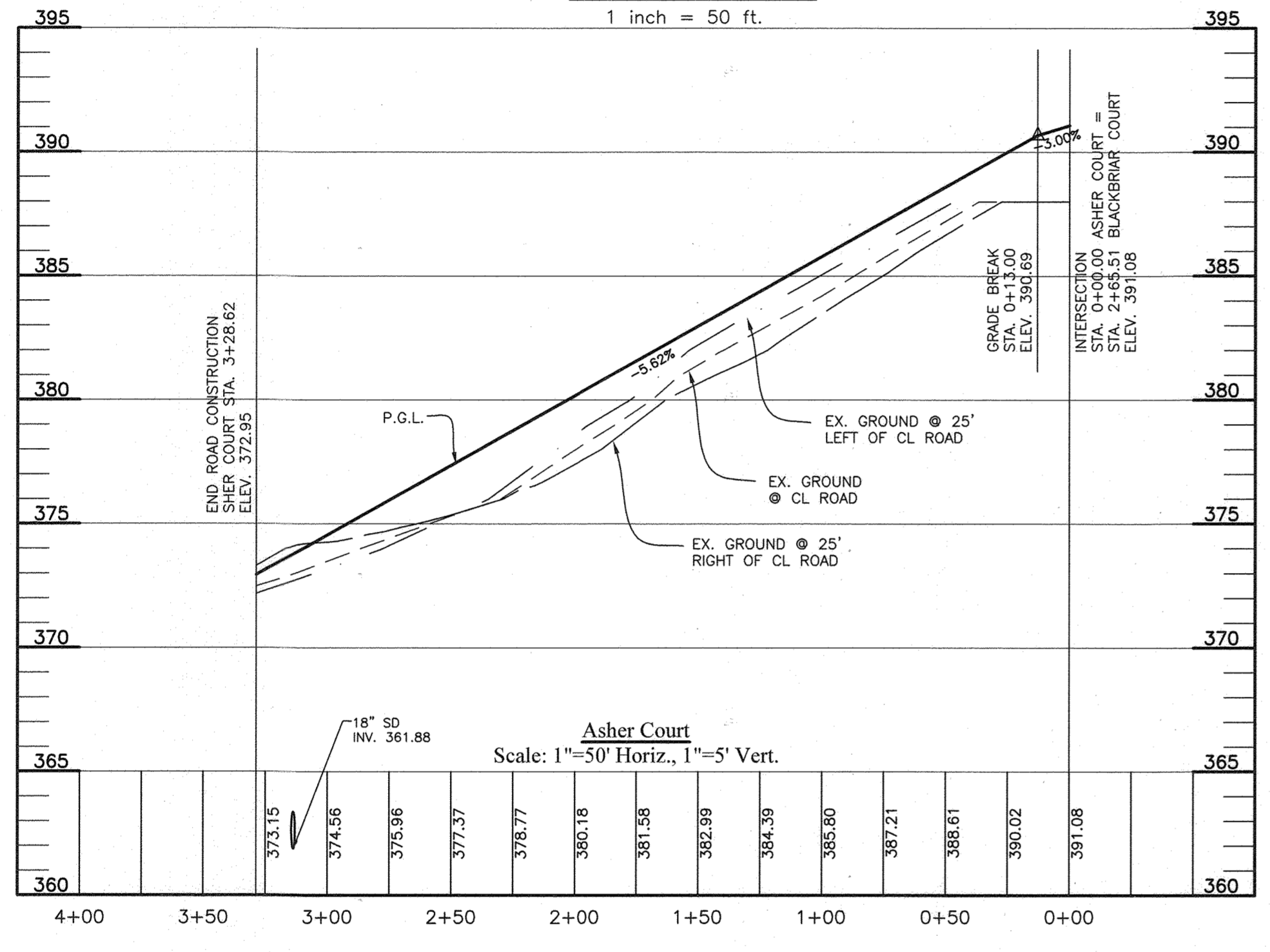
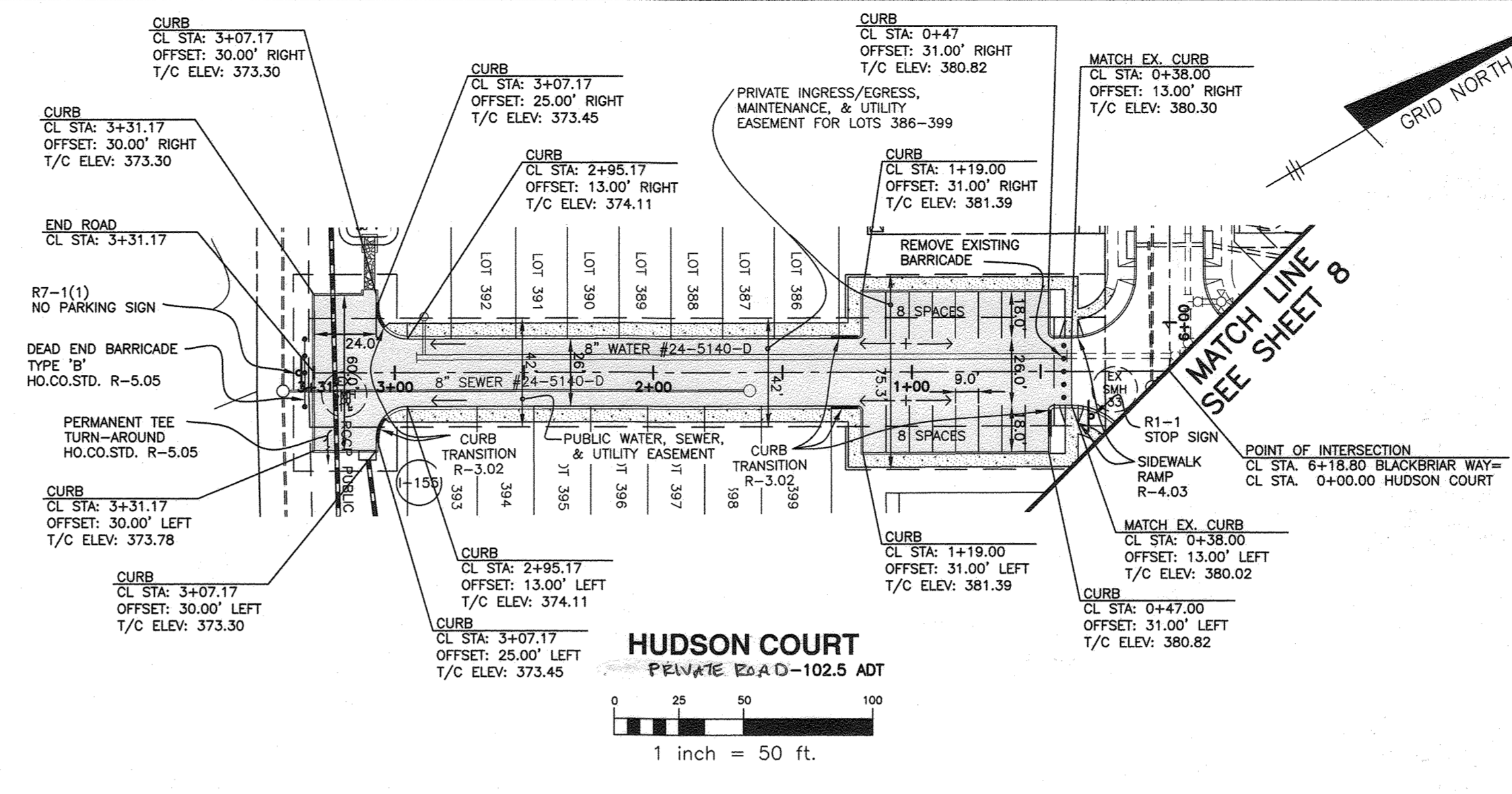
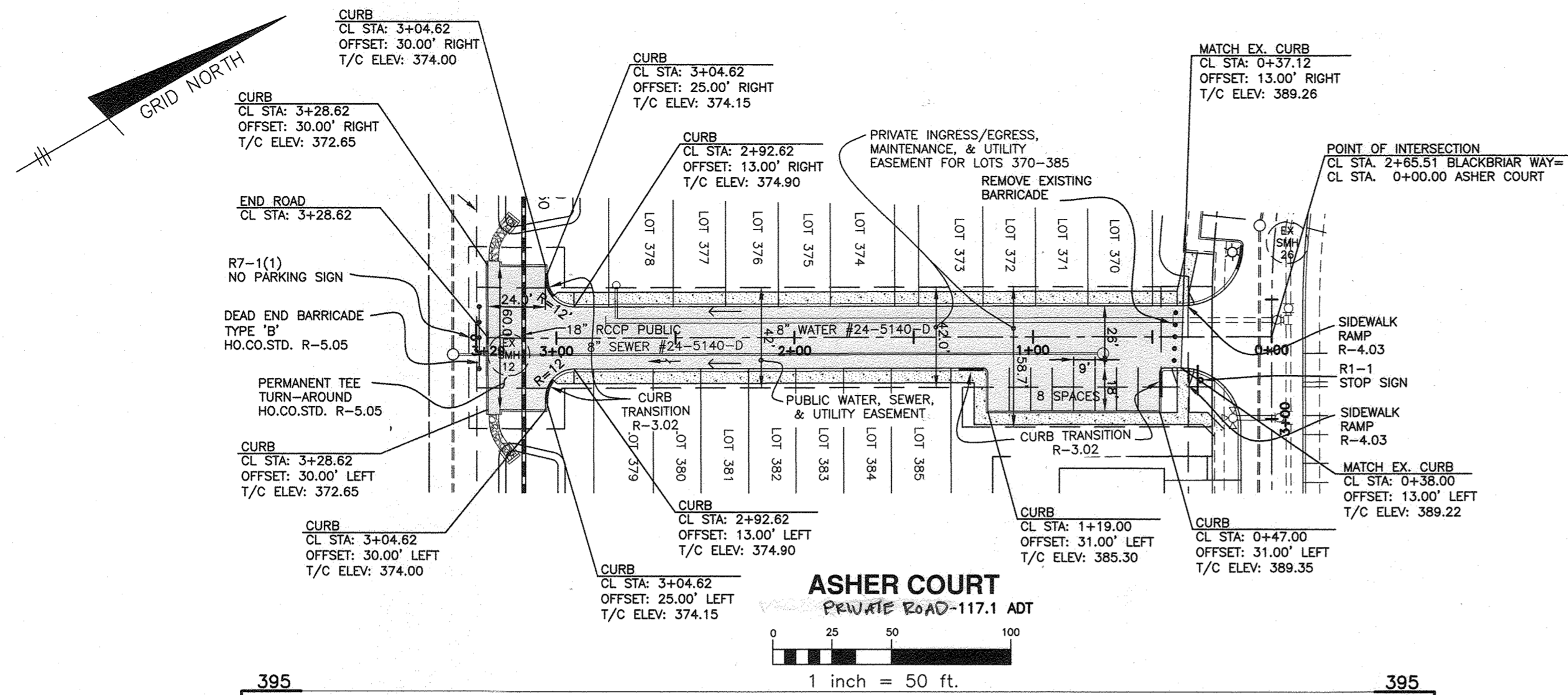
**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
3300 N. RIDGE ROAD & SUITE 140 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-8105 (F) 410-465-8644  
WWW.BE-CIVILENGINEERING.COM

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. 5-50-2023.



9-19-22

OWNER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021	<p><b>WELLINGTON FARMS</b> Phase 2 Lots 276 thru 419; Open Space Lots 420 thru 422; (A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)</p>
DEVELOPER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021	<p>TAX MAP: 46 - GRID: 6 - PARCEL: 163 ZONED: R-20 - MKD-3 / R-5C - MKD-3 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND</p> <p><b>ROAD PLAN</b> <b>BALD EAGLE COURT</b></p>
DESIGN: DBT	<p>DATE: AUGUST 15, 2022    BEI PROJECT NO. 2879 SCALE: AS SHOWN    SHEET 6 OF 44</p>



APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/29/2022 DATE  
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/7/22 DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT

CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO.	DATE	REVISION
2	9/12/23	REVISE TOTAL NUMBER OF SHEETS
1	1/24/2023	REVISE ASHER AND HUDSON COURTS TO BE "PRIVATE ROAD"

**BENCHMARK**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
3300 N. RIDGE ROAD & SUITE 140 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-8105 (F) 410-465-6644  
WWW.BE-CIVILENGINEERING.COM

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. 91922

**WELLINGTON FARMS**  
Phase 2  
Lots 276 thru 419; Open Space Lots 420 thru 422;  
(A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

TAX MAP: 46 - GRID: 6 - PARCEL: 163  
ZONED: R-20-MXD-3 / R-5C-MXD-3  
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

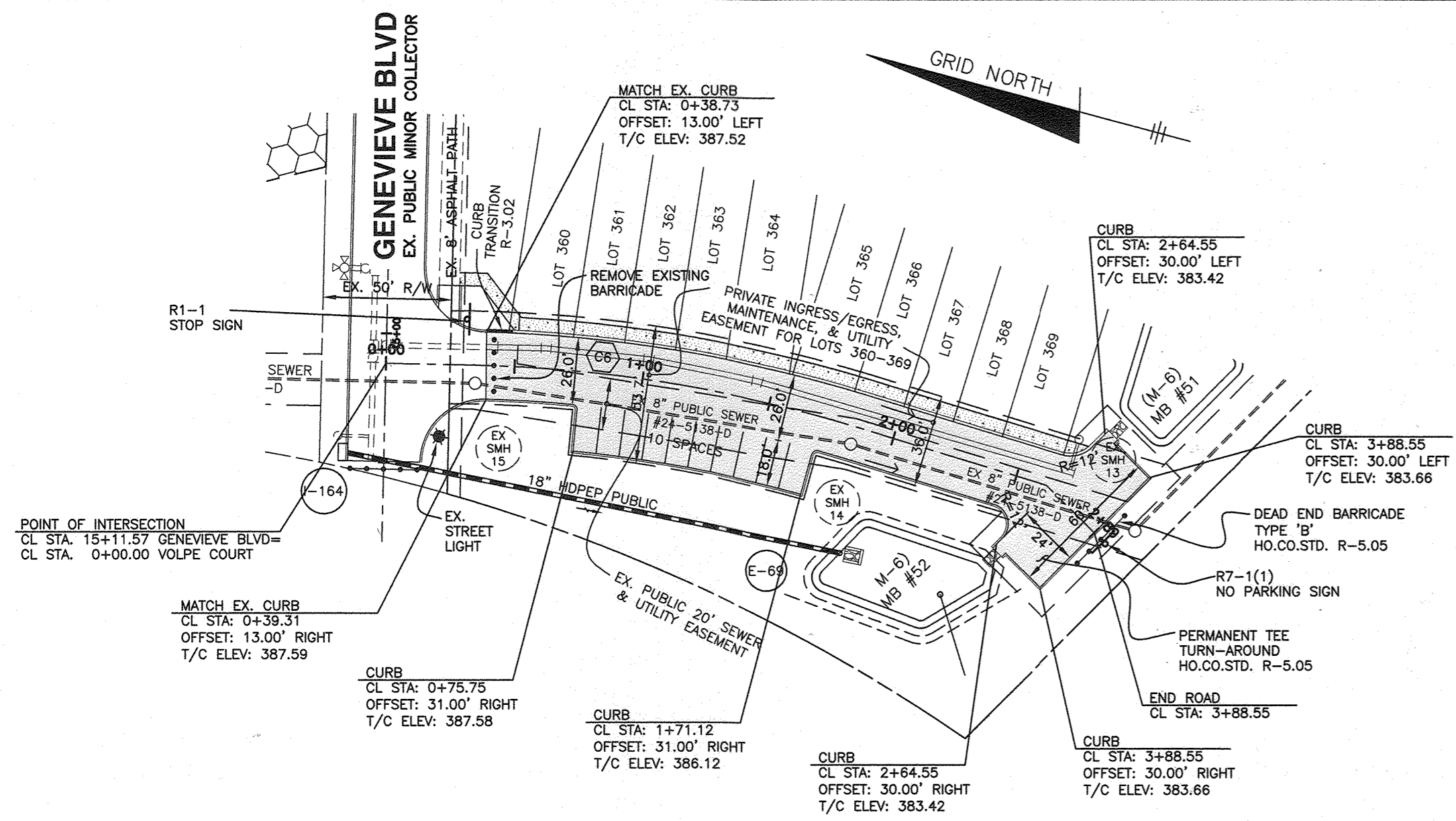
**ROAD PLAN**  
**ASHER COURT AND HUDSON COURT**

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

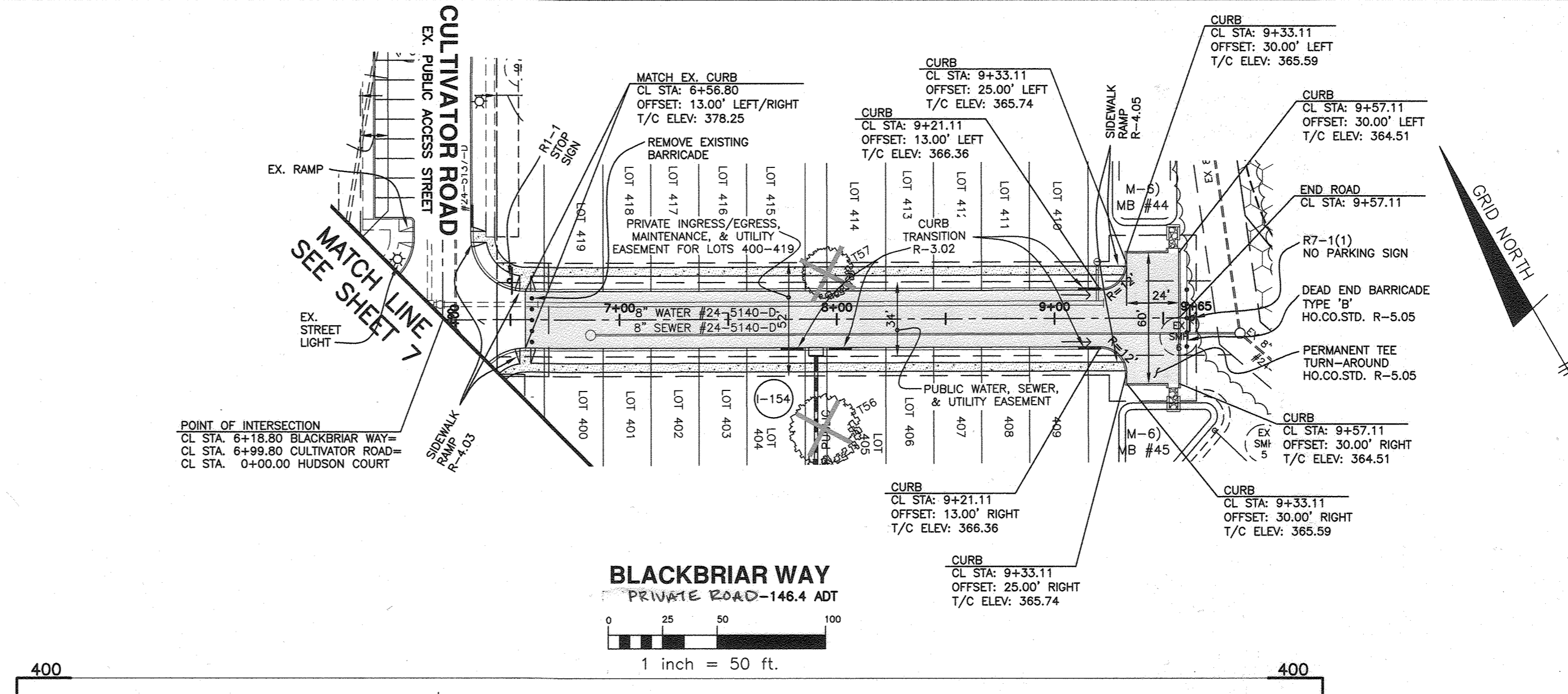
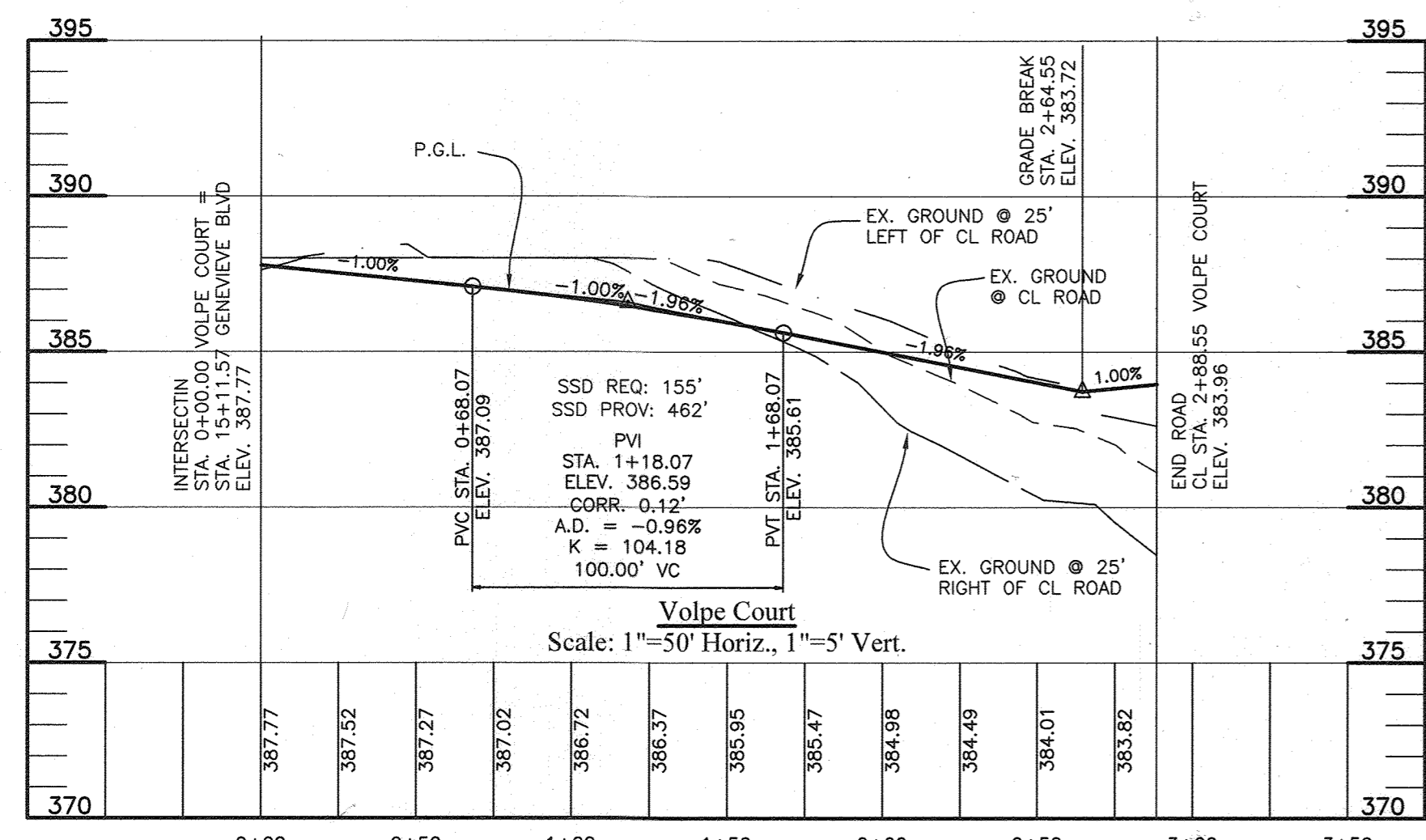
DEVELOPER:  
ESC WELLINGTON, L.C.  
5074 DORSEY HALL DRIVE, SUITE 205  
ELLICOTT CITY, MARYLAND 21042  
410-720-3021

DATE: AUGUST 15, 2022  
SCALE: AS SHOWN

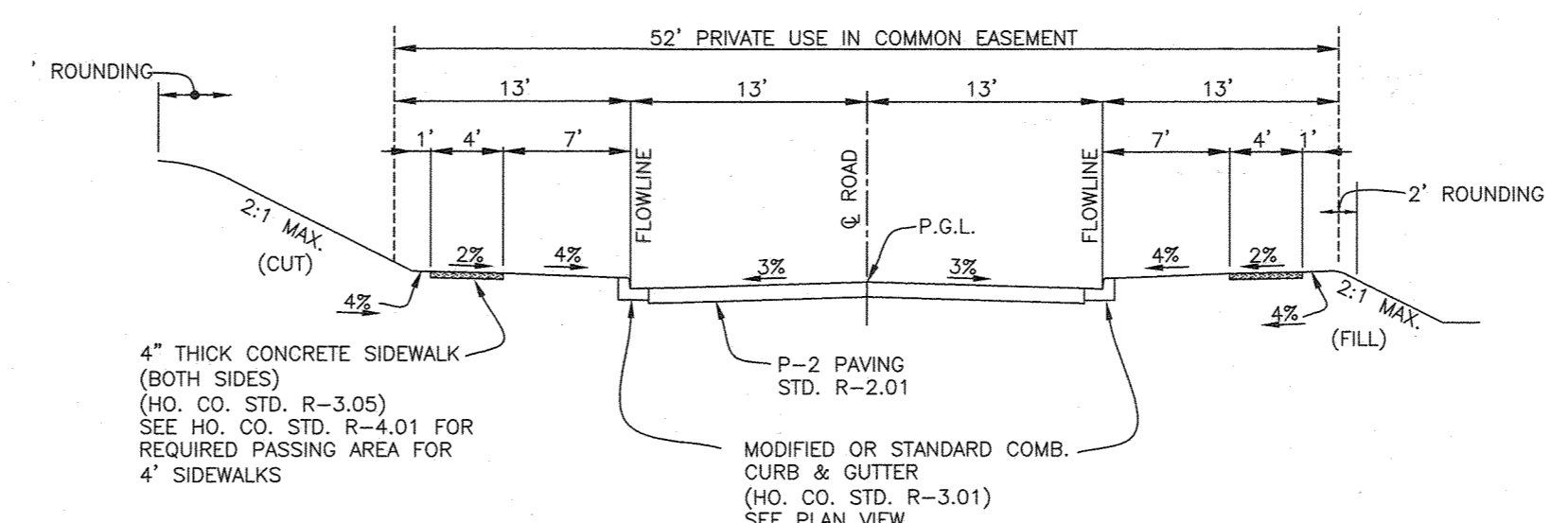
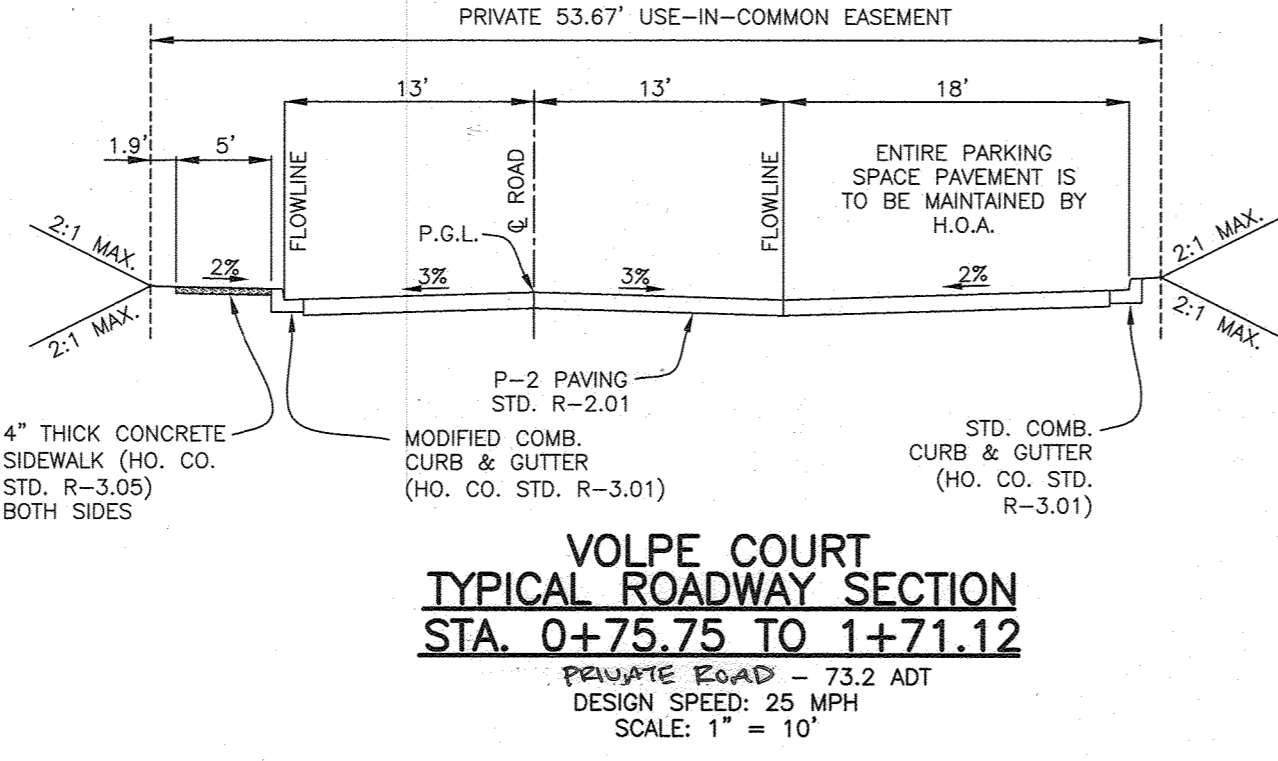
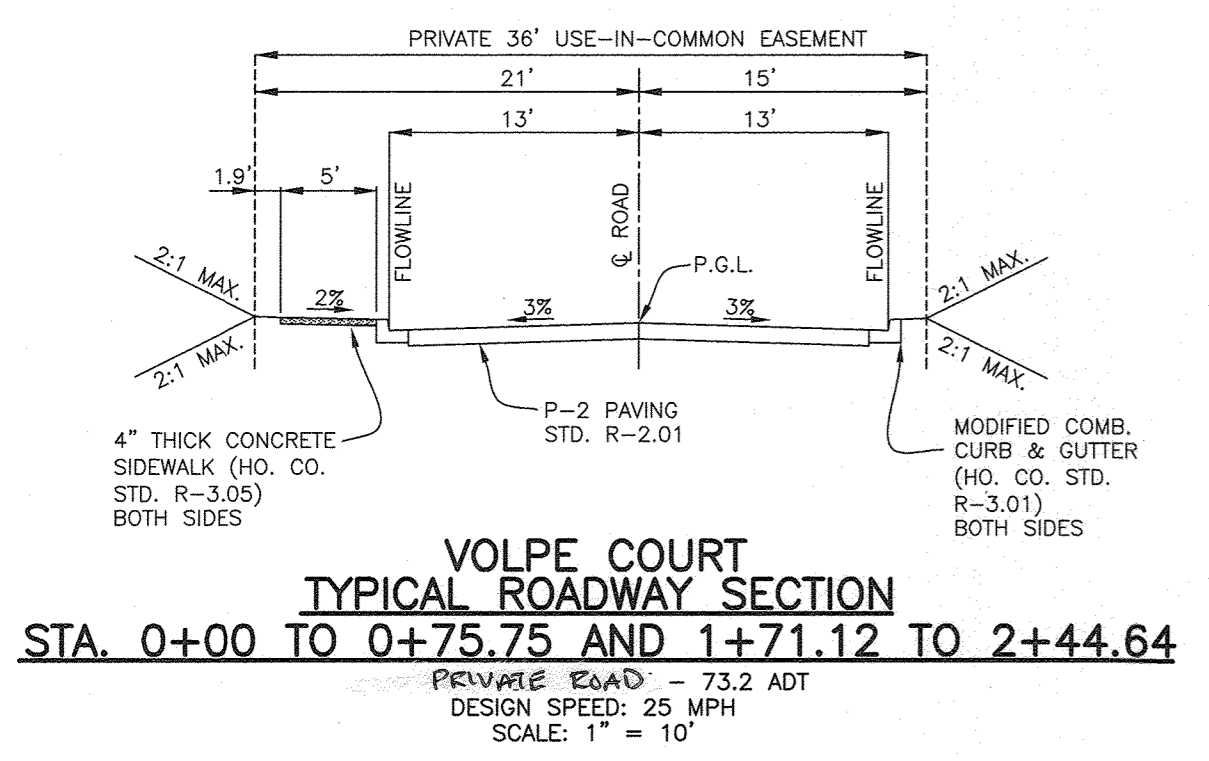
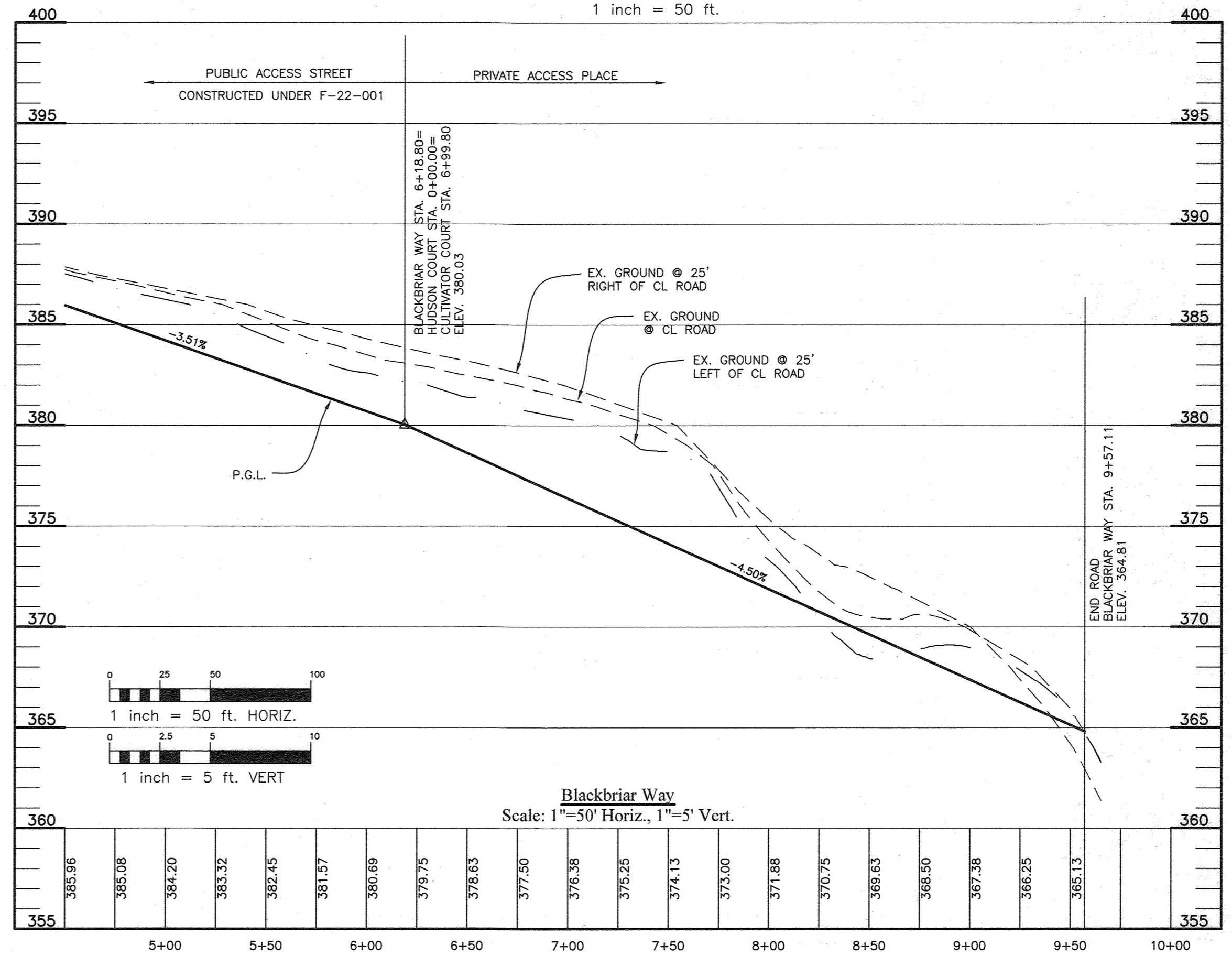
BEI PROJECT NO. 2879  
SHEET 7 OF 44



**VOLPE COURT**  
PRIVATE ROAD - 73.2 ADT  
Scale: 1" = 50 ft.



**BLACKBRIAR WAY**  
PRIVATE ROAD - 146.4 ADT  
Scale: 1 inch = 50 ft.



**CENTER LINE CURVE DATA**

CURVE	ALIGNMENT	STATION	RADIUS	ARC	DELTA	TANGENT	CHORD DIRECTION	CHORD LENGTH
C6	Volpe Court	0+34.79 TO 1+85.14	550.00'	150.36'	15°39'48"	75.65'	S05°53'31"E	149.89'

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/3/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO.	DATE	REVISION
2	9/1/2023	REVISE TOTAL NUMBER OF SHEETS
1	1/24/2023	REVISE VOLPE COURT AND BLACKBRIAR WAY TO BE "PRIVATE ROAD"

**BENCHMARK ENGINEERING, INC.**  
 3300 N. RIDGE ROAD SUITE 140 & ELLICOTT CITY, MARYLAND 21042  
 (P) 410-465-8105 (F) 410-465-6644  
 WWW.BE-CIVILENGINEERING.COM

**WELLINGTON FARMS**  
 Phase 2  
 Lots 276 thru 419; Open Space Lots 420 thru 422;  
 (A Resubdivision of Non-Buildable Bulk Parcel 'E'  
 previously recorded under F-21-044 and  
 Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

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

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

**ROAD PLAN**  
**VOLPE COURT AND BLACKBRIAR WAY**

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
 DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 8 OF 44



SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND					
SYMBOL	HYDRIC	HYDROLOGIC GROUP	NAME	K-VALUE	ERODIBLE
CeB		B	CHILLUM LOAM, 2 TO 5 PERCENT SLOPES	0.37	NO
GaB		B	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	0.20	NO
GmB		B	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	0.20	NO
GmB*	YES	C	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	0.37	YES
GmC		C	GLENVILLE SILT LOAM, 8 TO 15 PERCENT SLOPES	0.37	NO
GmB*	YES	C	GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	0.37/0.32	NO
MaC		B	MANOR LOAM, 8 TO 15 PERCENT SLOPES	0.24	YES
MaD		B	MANOR LOAM, 15 TO 25 PERCENT SLOPES	0.24	YES
RaB		C	RUSSETT FINE SANDY LOAM, 2 TO 5 PERCENT SLOPES	0.24	NO
RuB		C	RUSSETT AND BELTSVILLE SOIL, 2 TO 5 PERCENT SLOPES	0.24/0.37	NO
RuC		C	RUSSETT AND BELTSVILLE SOIL, 5 TO 10 PERCENT SLOPES	0.24/0.37	NO
SaC		B	SASSAFRAS LOAM, 5 TO 10 PERCENT SLOPE	0.24	NO
SiD		B	SASSAFRAS AND CROOM SOIL, 10 TO 15 PERCENT SLOPES	0.37/0.28	YES
W			WATER	0.00	

HSCD Newsletter dated April, 2013 defines erodible soils as those soils with a slope greater than 15 percent or those soils with a soil erodibility factor K greater than 0.35 and with a slope greater than 5%.

AREA AND 'C' FACTOR TABULATION

Phase	Inlet	Zoning (Z)	Area (ac)	'C' factor < 25yr	'C' factor 25yr >	% Impervious (I)
P2	I-114	R-SC-MXD-3	2.98	0.40	0.53	54
P2	I-115	R-SC-MXD-3	1.26	0.59	0.82	82
P2	I-116	R-SC-MXD-3	0.45	0.61	0.83	83
P2	I-119	R-SC-MXD-3	0.37	0.59	0.82	82
P2	I-120	R-SC-MXD-3	0.29	0.53	0.78	78
P2	I-121	R-SC-MXD-3	0.42	0.60	0.83	83
P2	I-122	R-SC-MXD-3	0.18	0.54	0.79	79
P2	I-123	R-SC-MXD-3	0.32	0.57	0.81	81
P2	I-124	R-SC-MXD-3	0.19	0.50	0.76	76
P2	I-125	R-SC-MXD-3	0.29	0.69	0.89	89
P2	I-126	R-SC-MXD-3	0.30	0.54	0.79	79
P2	I-127	R-SC-MXD-3	0.34	0.52	0.78	78
P2	I-128	R-SC-MXD-3	0.18	0.54	0.79	79
P2	I-129	R-SC-MXD-3	0.36	0.44	0.72	72
P2	I-130	R-SC-MXD-3	1.28	0.23	0.16	16
P2	I-131	R-SC-MXD-3	0.49	0.44	0.64	64
P2	I-132	R-SC-MXD-3	1.47	0.26	0.35	35
P2	I-133	R-SC-MXD-3	0.39	0.40	0.60	60
P2	I-134	R-SC-MXD-3	0.40	0.46	0.66	66
P2	I-135	R-SC-MXD-3	0.58	0.28	0.41	41
P2	I-136	R-SC-MXD-3	0.46	0.47	0.65	65
P2	I-137	R-SC-MXD-3	0.44	0.31	0.54	54
P2	I-138	R-SC-MXD-3	0.64	0.46	0.60	60
P2	I-139	R-SC-MXD-3	0.30	0.33	0.65	65
P2	I-140	R-SC-MXD-3	0.55	0.50	0.63	63
P2	I-141	R-SC-MXD-3	3.08	0.38	0.52	52
P2	I-145	R-SC-MXD-3	0.50	0.57	0.82	82
P2	I-146	R-SC-MXD-3	0.22	0.63	0.86	86
P2	I-147	R-SC-MXD-3	0.53	0.52	0.71	71
P2	I-148	R-SC-MXD-3	0.35	0.47	0.58	58
P2	I-149	R-SC-MXD-3	0.28	0.73	0.84	84
P2	I-150	R-SC-MXD-3	0.38	0.61	0.84	84
P2	I-151	R-SC-MXD-3	0.27	0.54	0.79	79
P2	I-152	R-SC-MXD-3	0.60	0.56	0.81	81
P2	I-153	R-SC-MXD-3	0.51	0.55	0.79	79
P2	I-154	R-SC-MXD-3	0.39	0.60	0.79	79
P2	I-155	R-SC-MXD-3	0.35	0.49	0.77	77
P2	I-156	R-SC-MXD-3	0.42	0.40	0.60	60
P2	I-157	R-SC-MXD-3	0.54	0.24	0.39	39
P2	I-158	R-SC-MXD-3	0.44	0.53	0.65	65
P2	I-159	R-SC-MXD-3	0.58	0.50	0.62	62
P2	I-160	R-SC-MXD-3	0.43	0.23	0.30	30
P2	I-161	R-SC-MXD-3	0.44	0.47	0.75	75
P2	I-162	R-SC-MXD-3	0.40	0.23	0.30	30
P2	I-163	R-SC-MXD-3	0.61	0.22	0.26	26
P2	I-164	R-SC-MXD-3	0.14	0.86	100	100



**LEGEND**

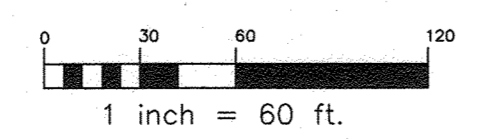
- DRAINAGE AREA DIVISION
- SOILS DELINEATION
- MaC SOILS TYPE

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS

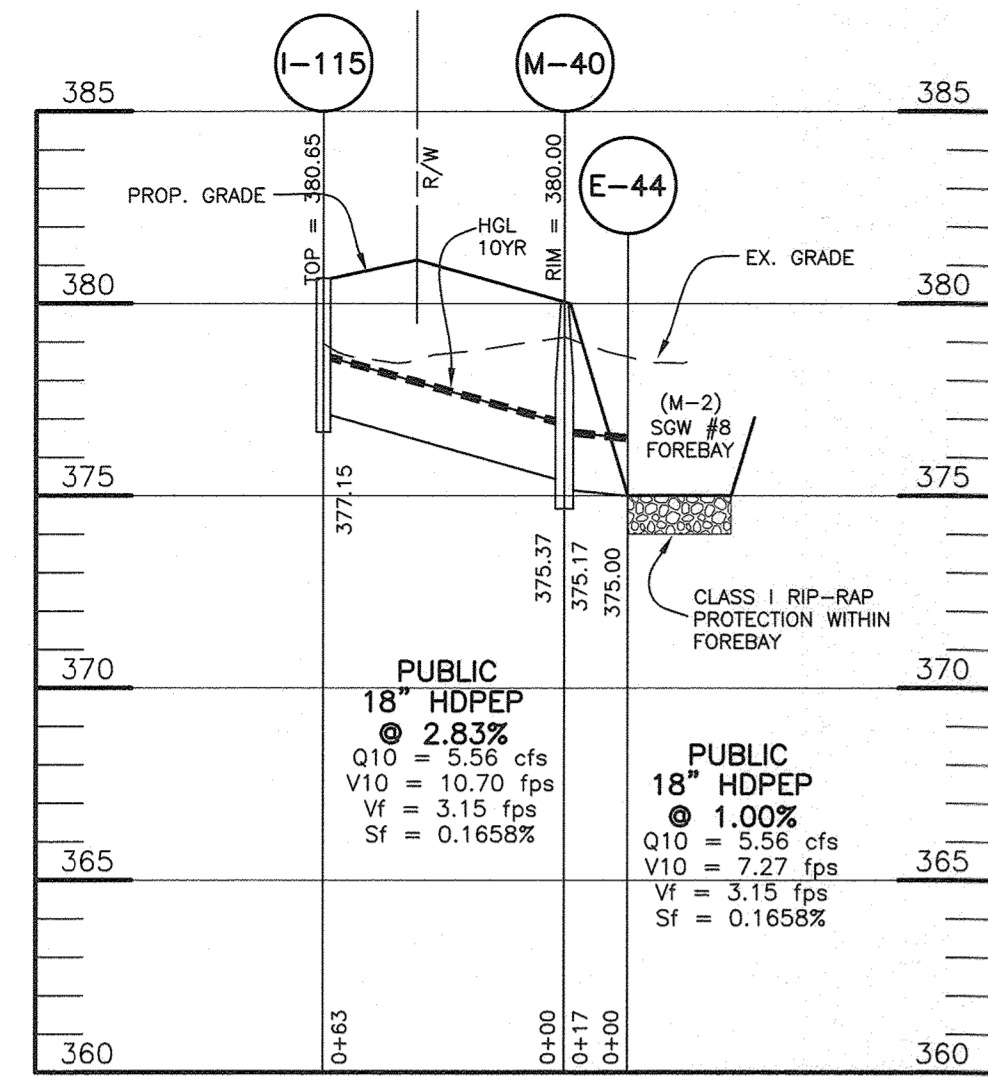
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APPROVED: DEPARTMENT OF ENGINEERING  
*[Signature]* 11/3/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

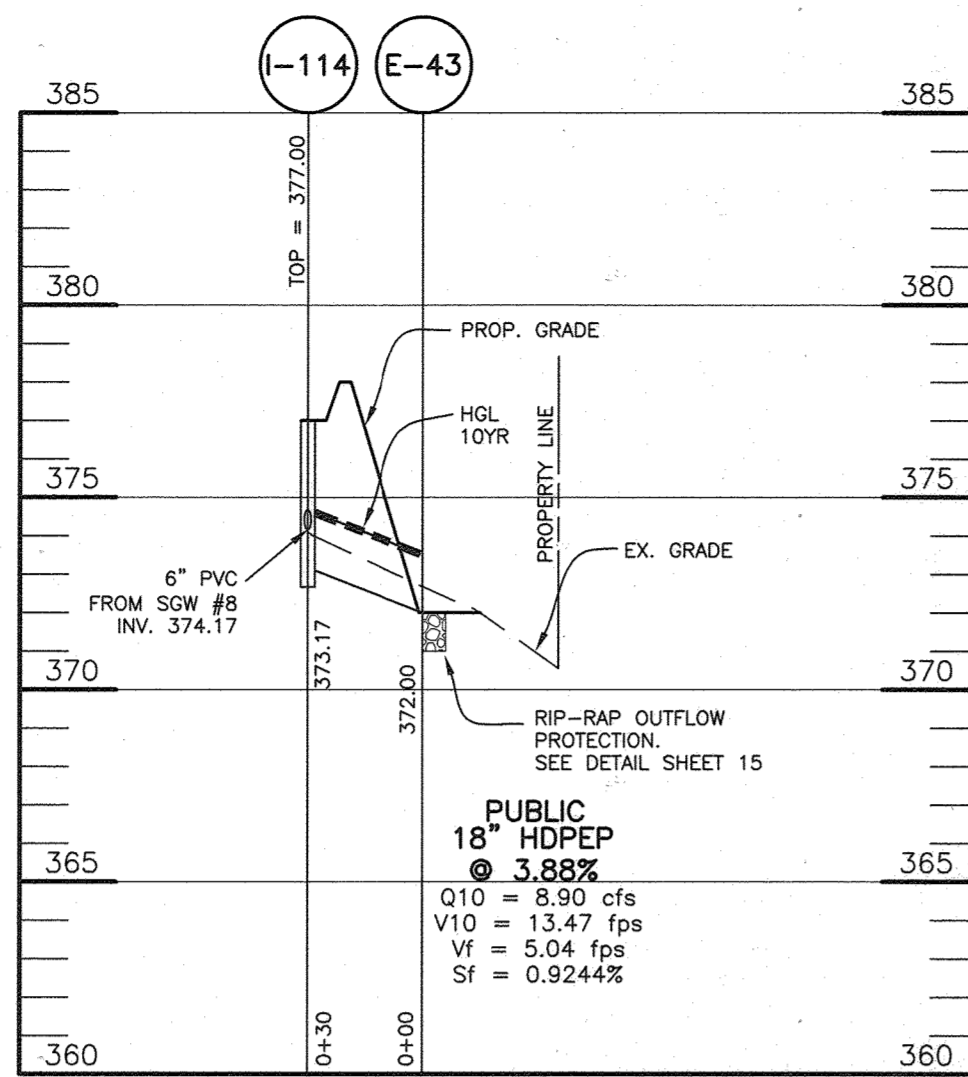
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<b>BENCHMARK ENGINEERING, INC.</b> ENGINEERS • LAND SURVEYORS & PLANNERS 3300 N. RIDGE ROAD SUITE 140 & ELLICOTT CITY, MARYLAND 21043 (P) 410-465-8105 (F) 410-465-8644 WWW.BE-CIVILENGINEERING.COM	
PROFESSIONAL CERTIFICATION: I hereby certify that these 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. 22390, exp. 6-30-2023.	
<b>WELLINGTON FARMS</b> Phase 2 Lots 276 thru 419; Open Space Lots 420 thru 422; (A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)	
OWNER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021	
DEVELOPER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021	
TAX MAP: 46 - GRID: 8 - PARCEL: 163 ZONED: R-20-MXD-3 / R-SC-MXD-3 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND	
<b>STORM DRAIN DRAINAGE AREA MAP</b>	
DATE: AUGUST 15, 2022	BEI PROJECT NO. 2879
DESIGN: DBT	DRAFT: DBT
SCALE: AS SHOWN	SHEET 9 OF 44



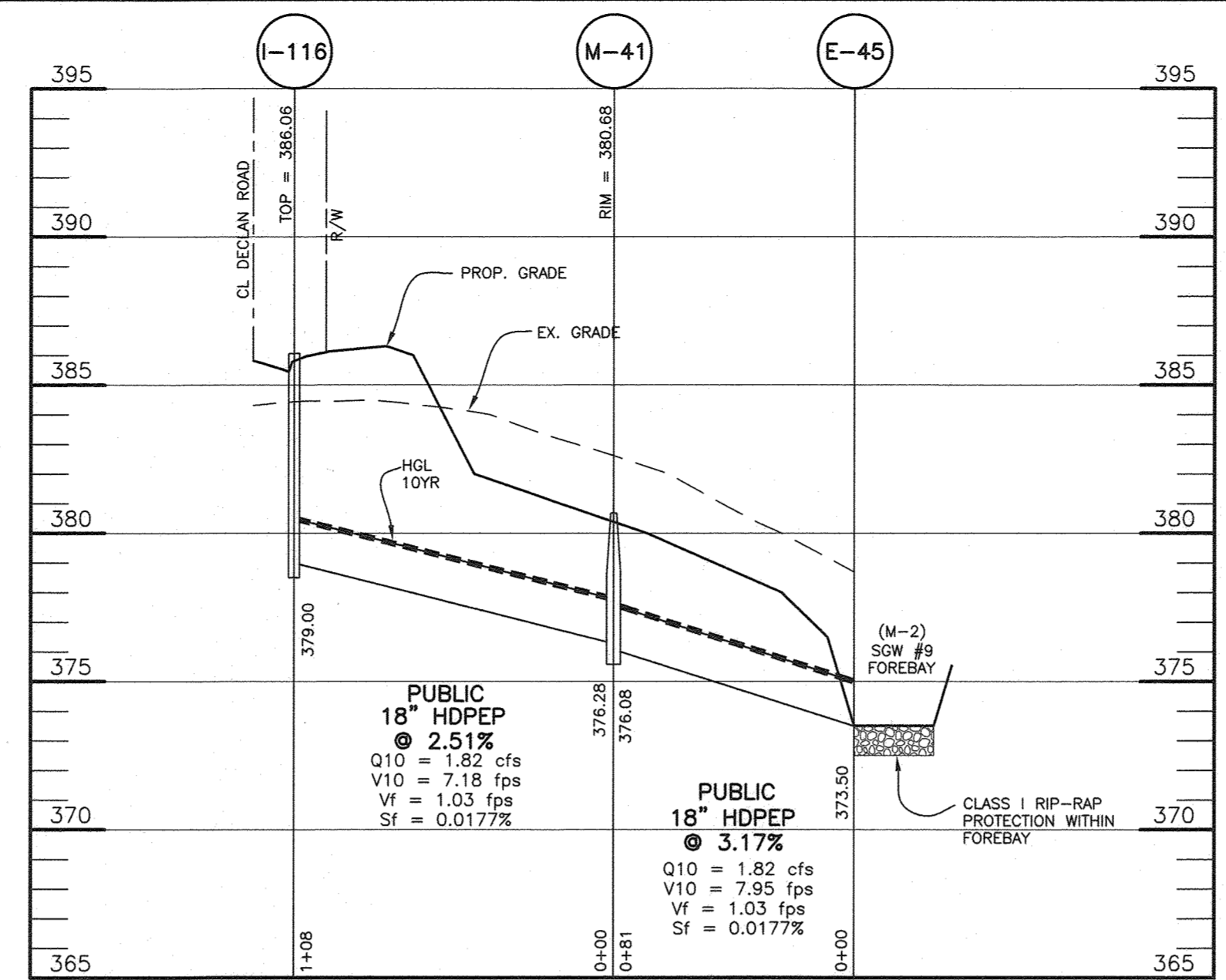




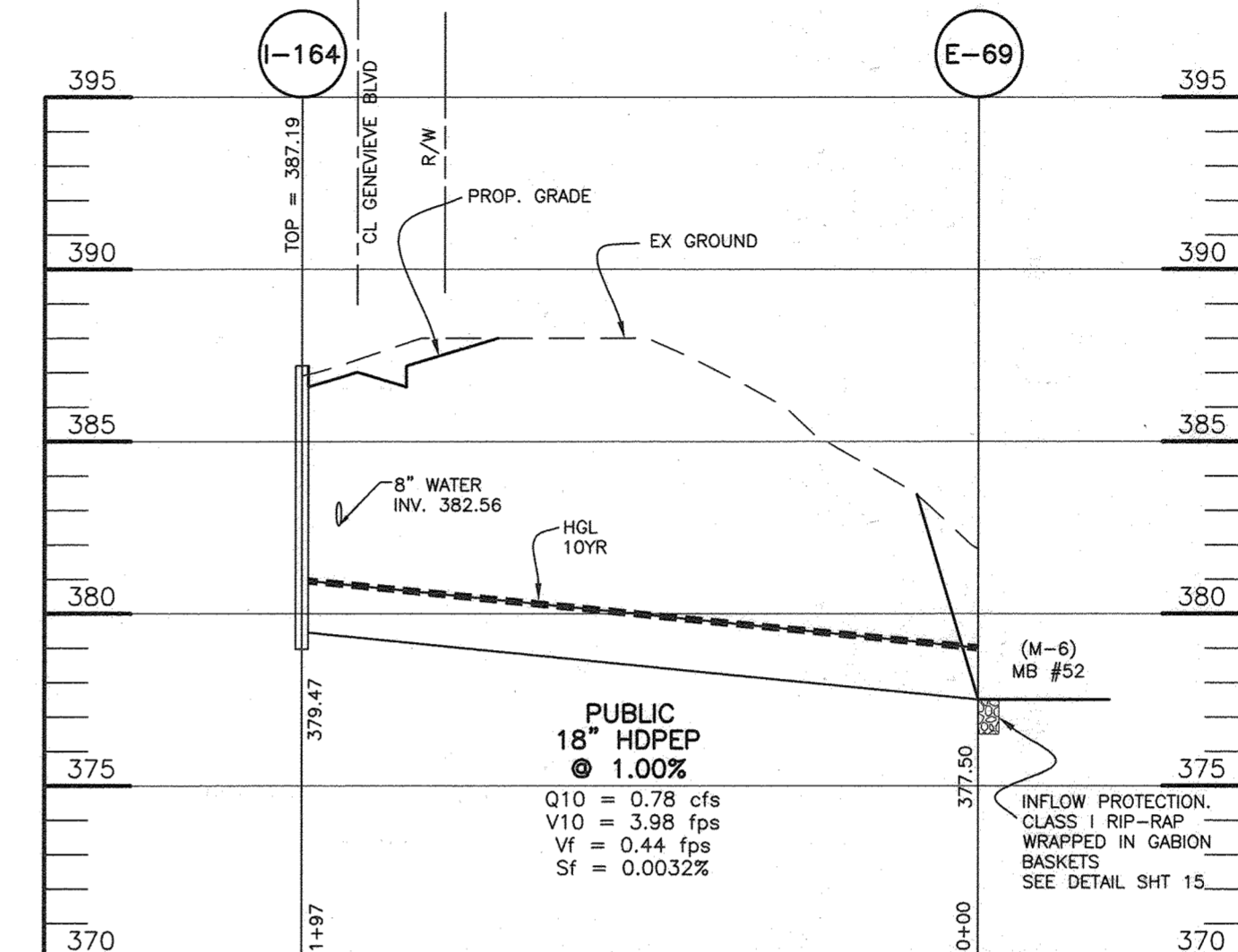
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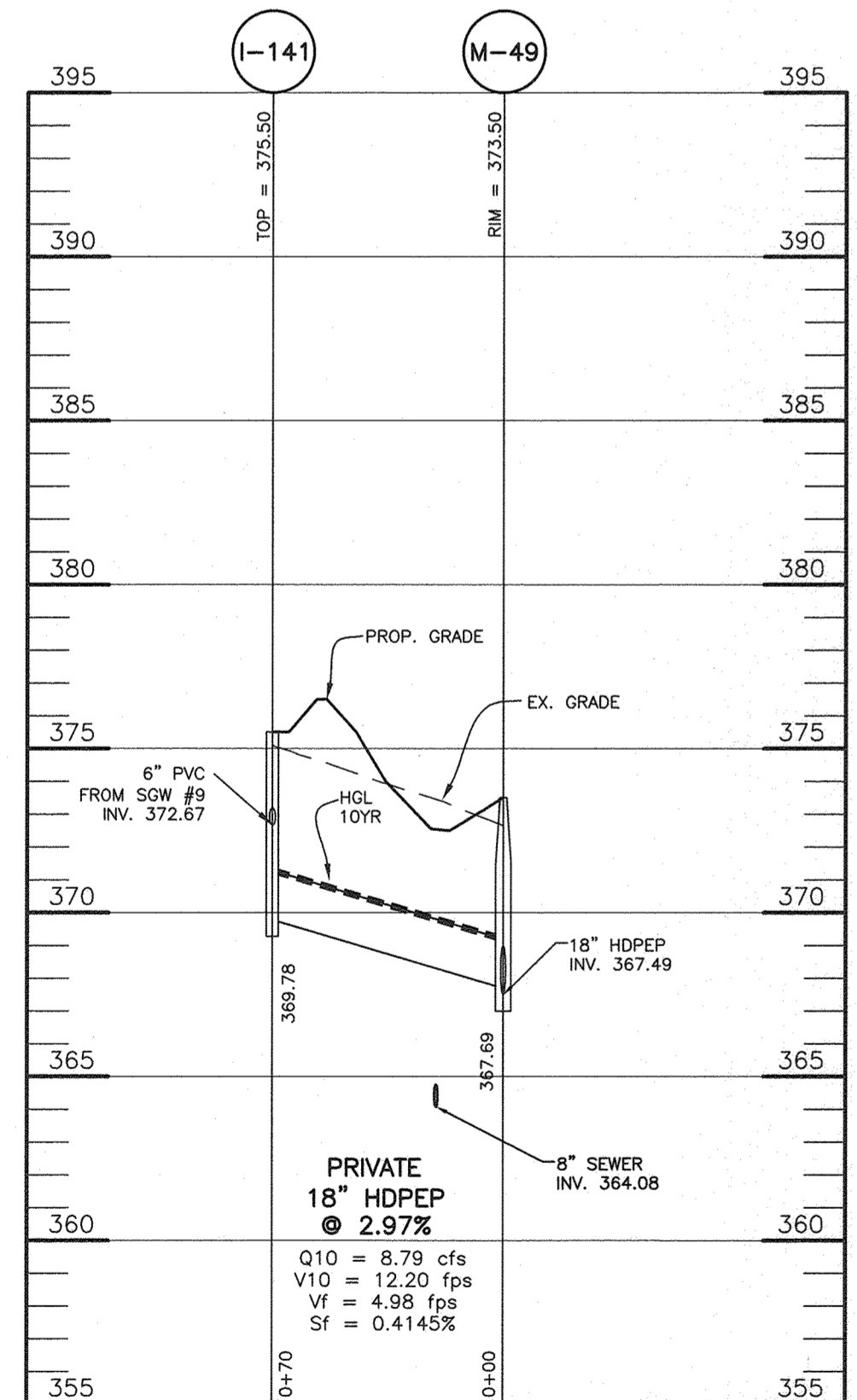
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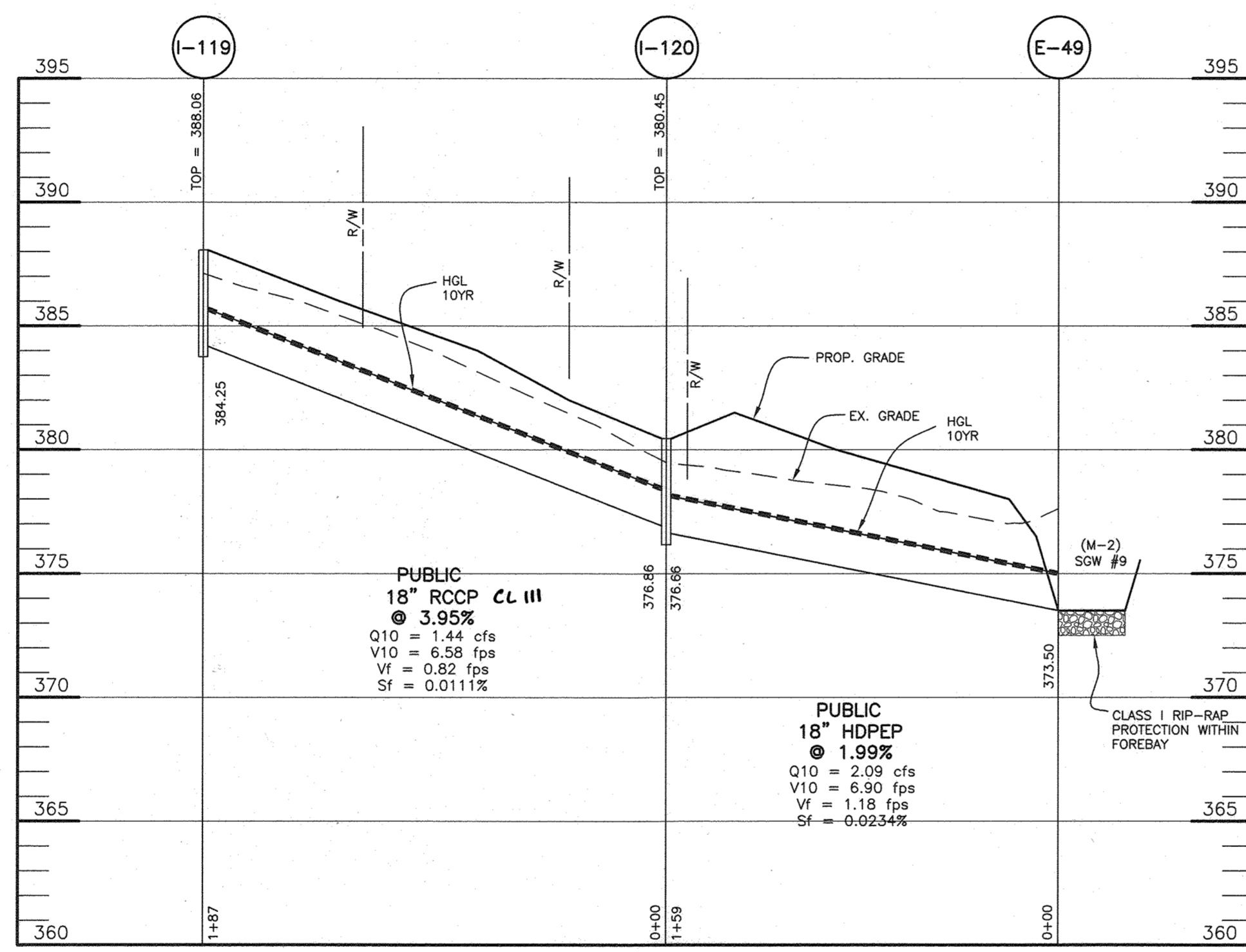
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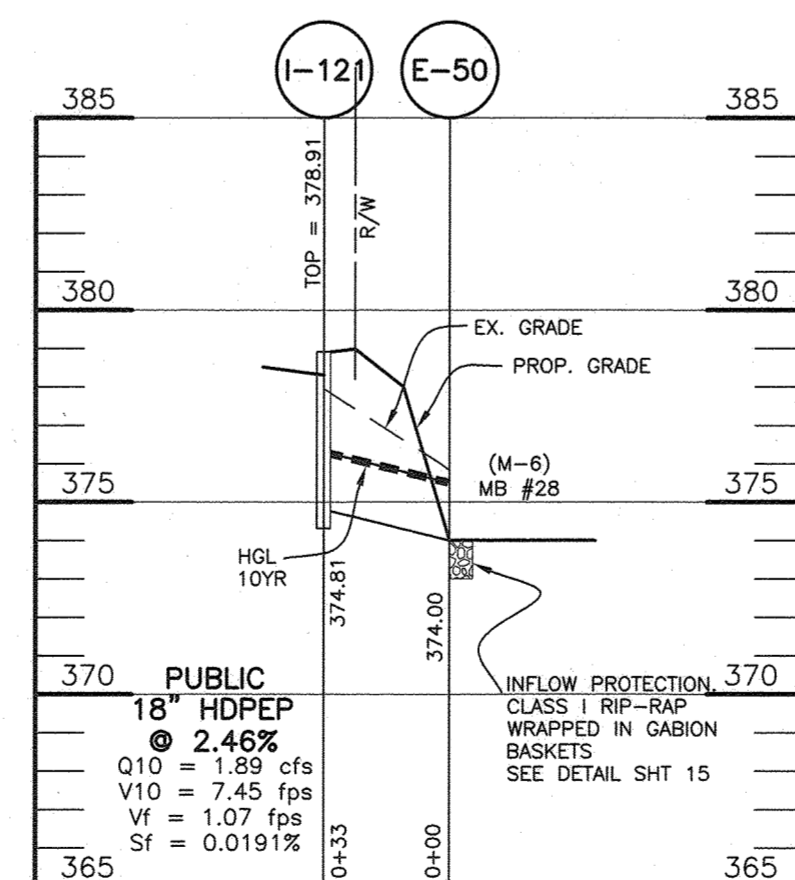
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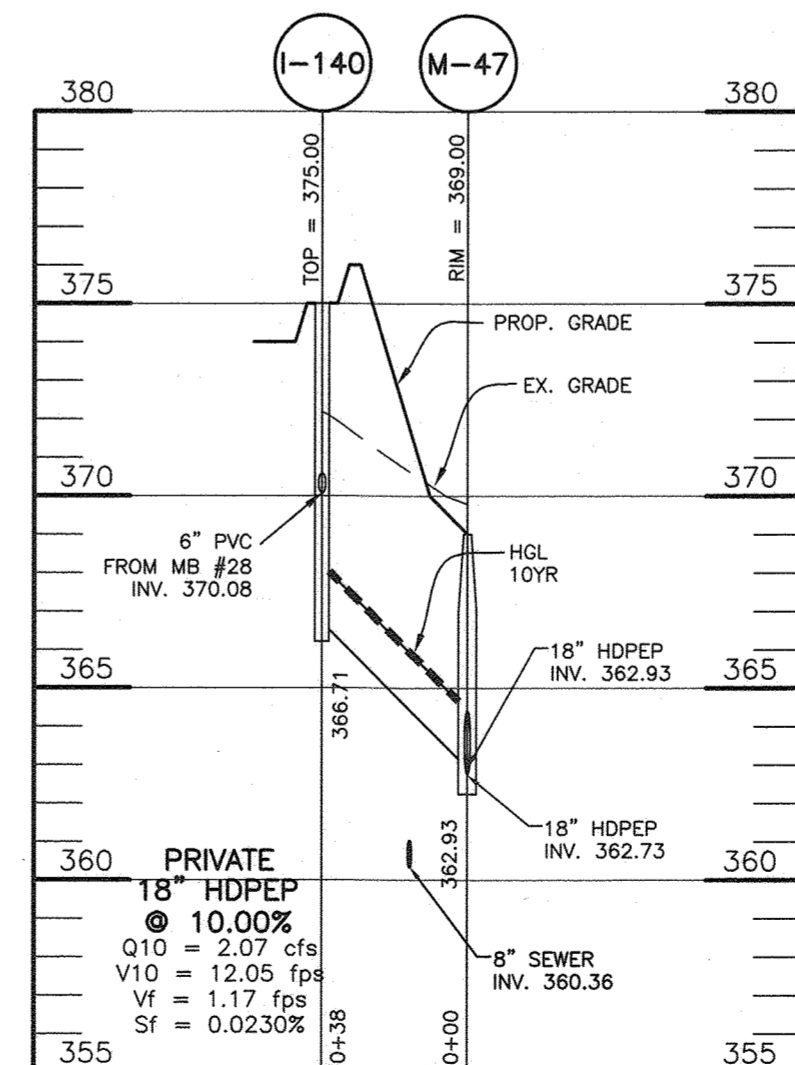
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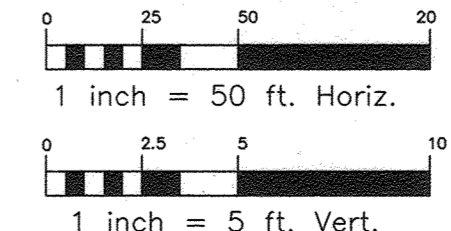


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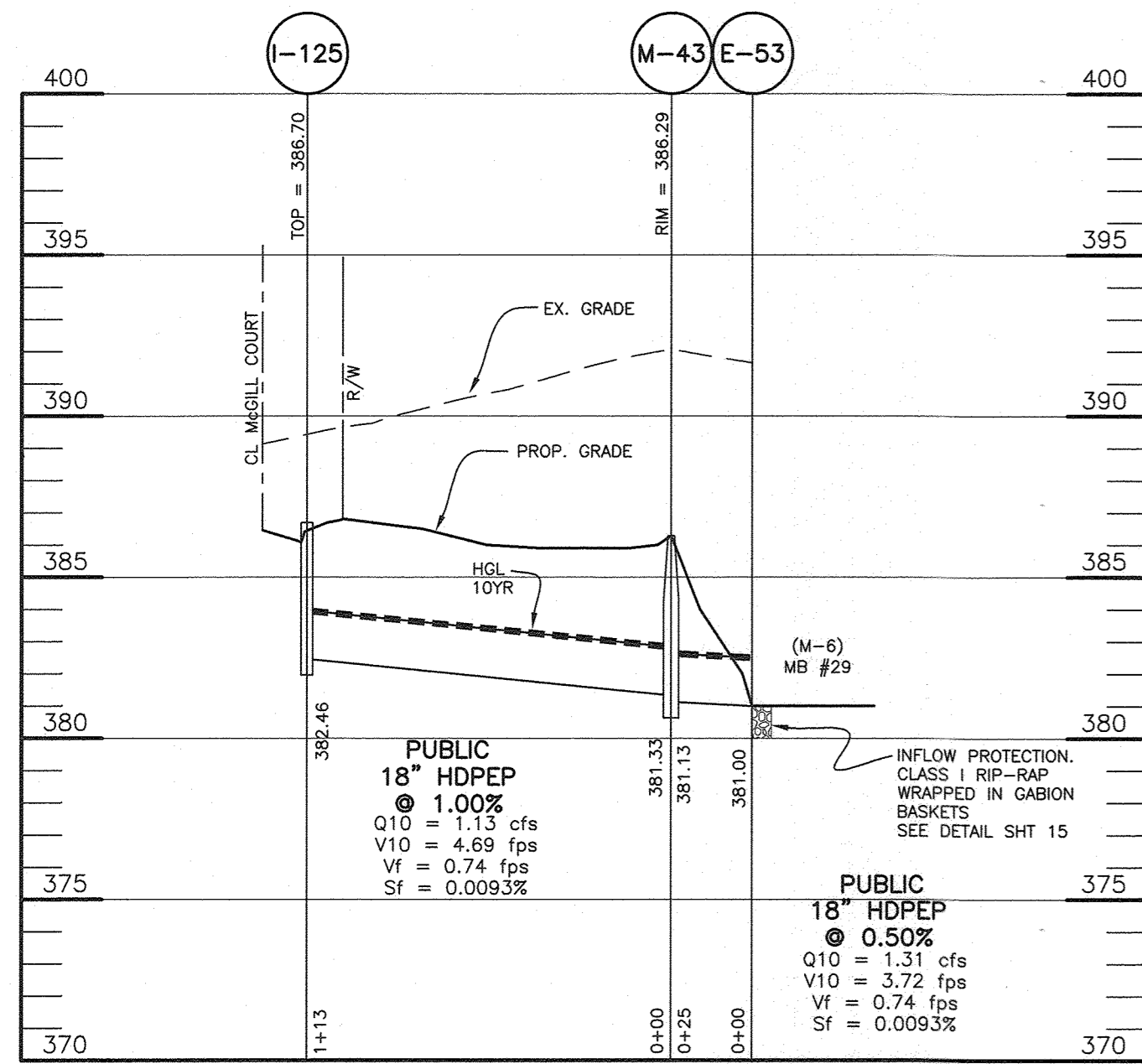


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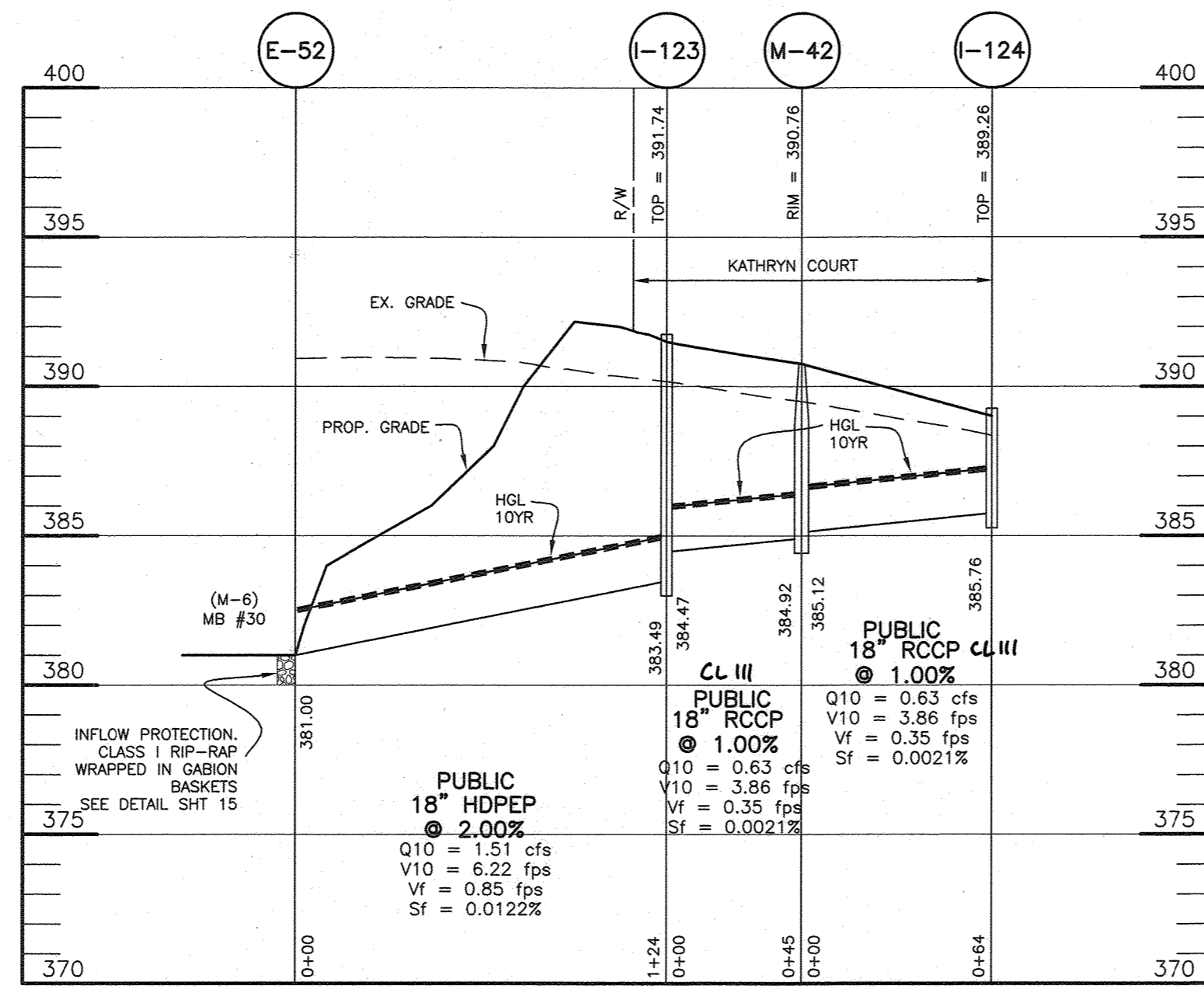
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*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/7/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*[Signature]* 11-3-22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



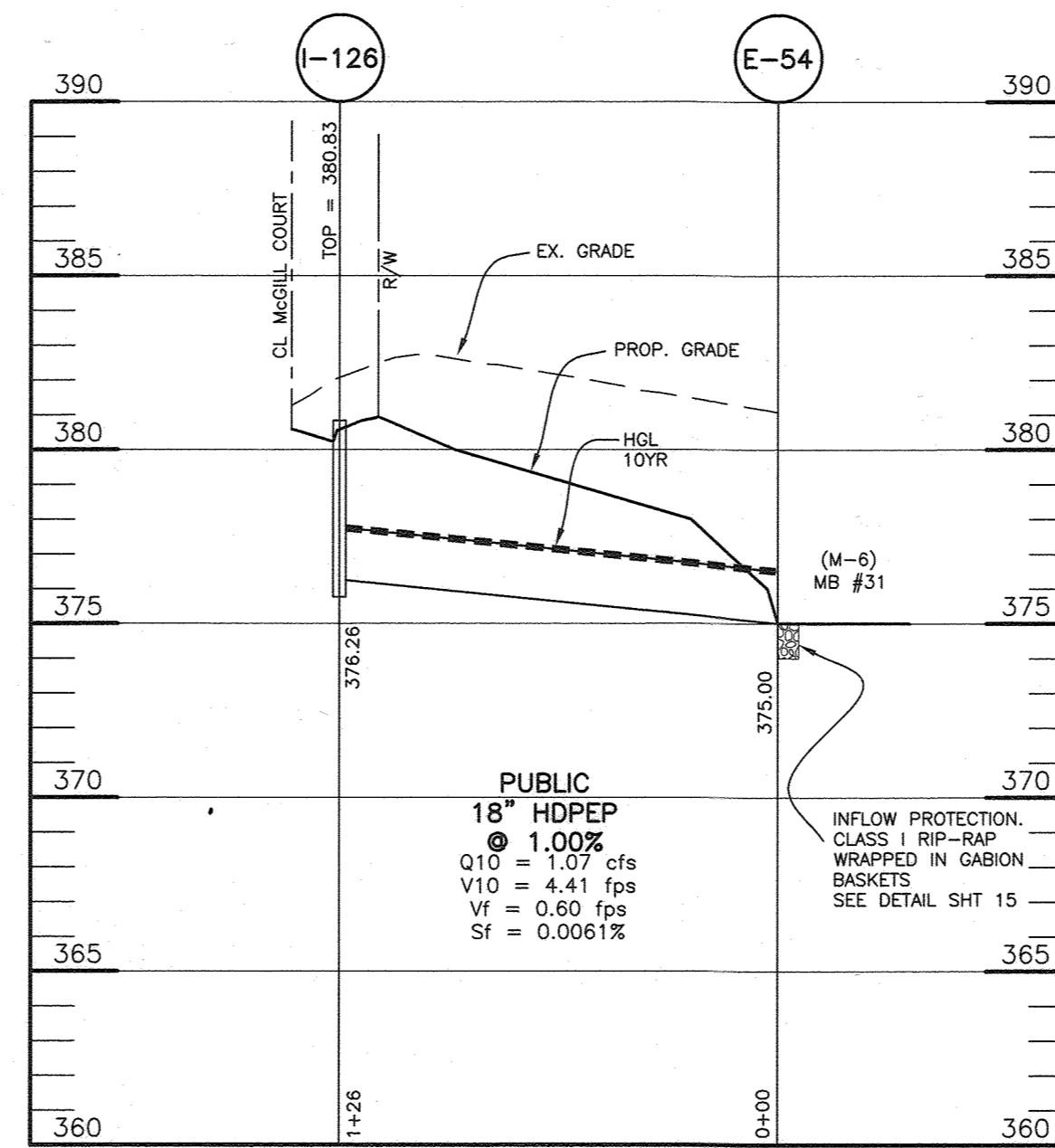
1 8.1.2023 REVISE TOTAL NUMBER OF SHEETS		Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer (in the State of Maryland, License No. 22350) 9-19-22
 3300 N. RIDGE ROAD SUITE 140 ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM		 9-19-22
OWNER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021		
DEVELOPER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021		WELLINGTON FARMS Phase 2 Lots 276 thru 419; Open Space Lots 420 thru 422; (A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001) TAX MAP: 46 - GRID: 6 - PARCEL: 163 ZONED: R-20-MKD-3 / R-SC-MKD-3 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND
DATE: AUGUST 15, 2022 SCALE: AS SHOWN		BEI PROJECT NO. 2879 SHEET 11 OF 44
DESIGN: DBT	DRAFT: DBT	



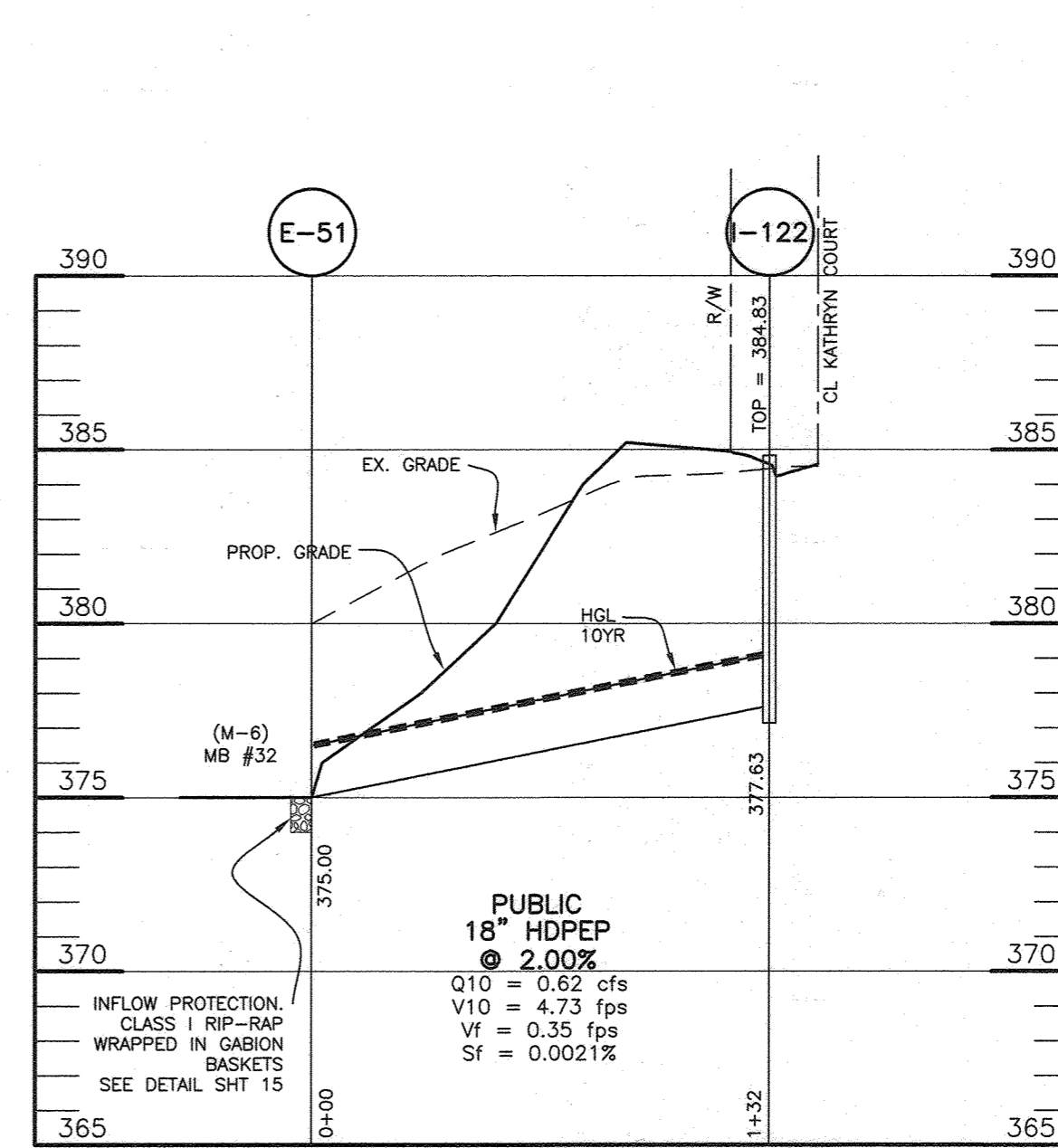
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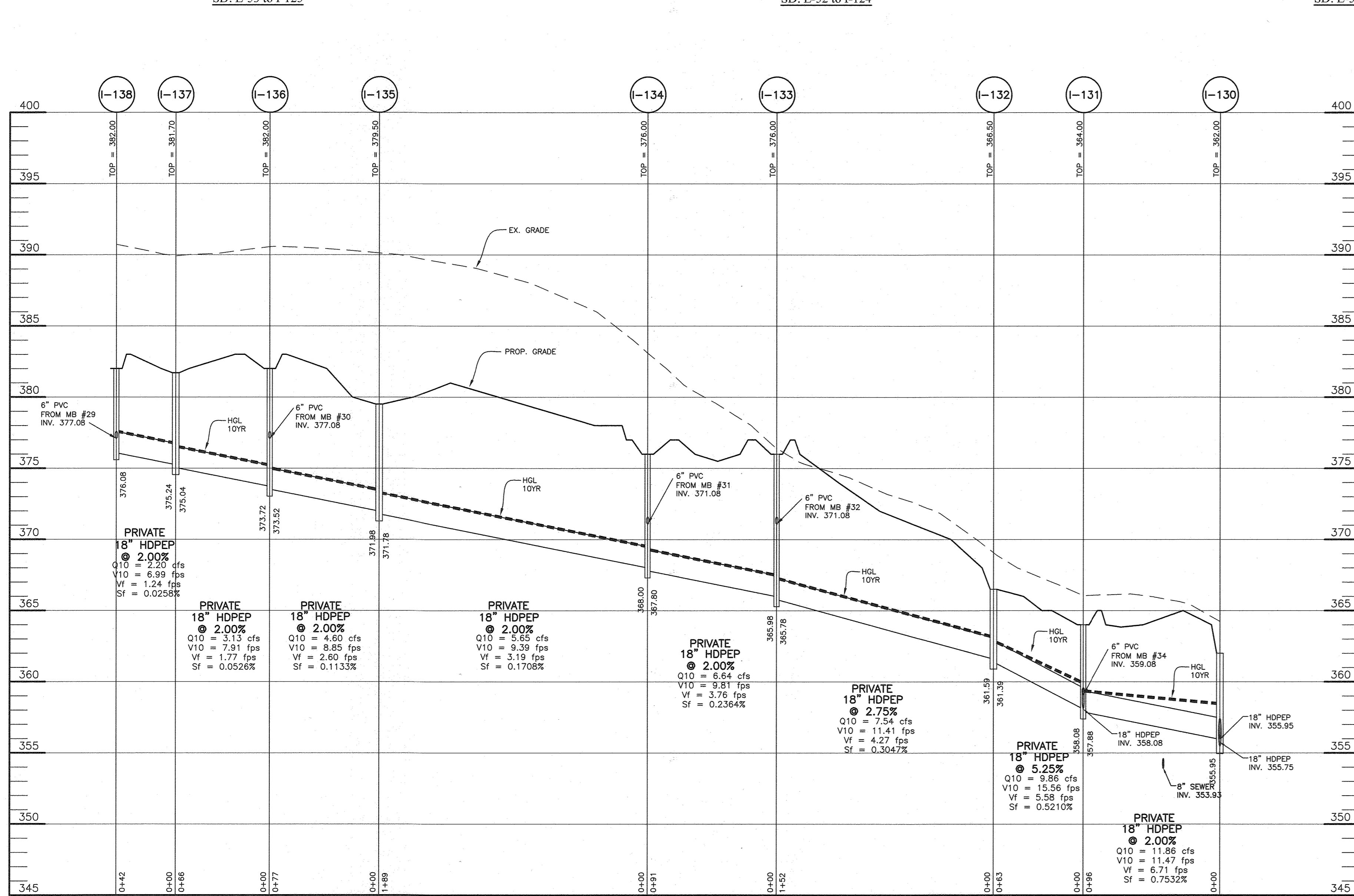
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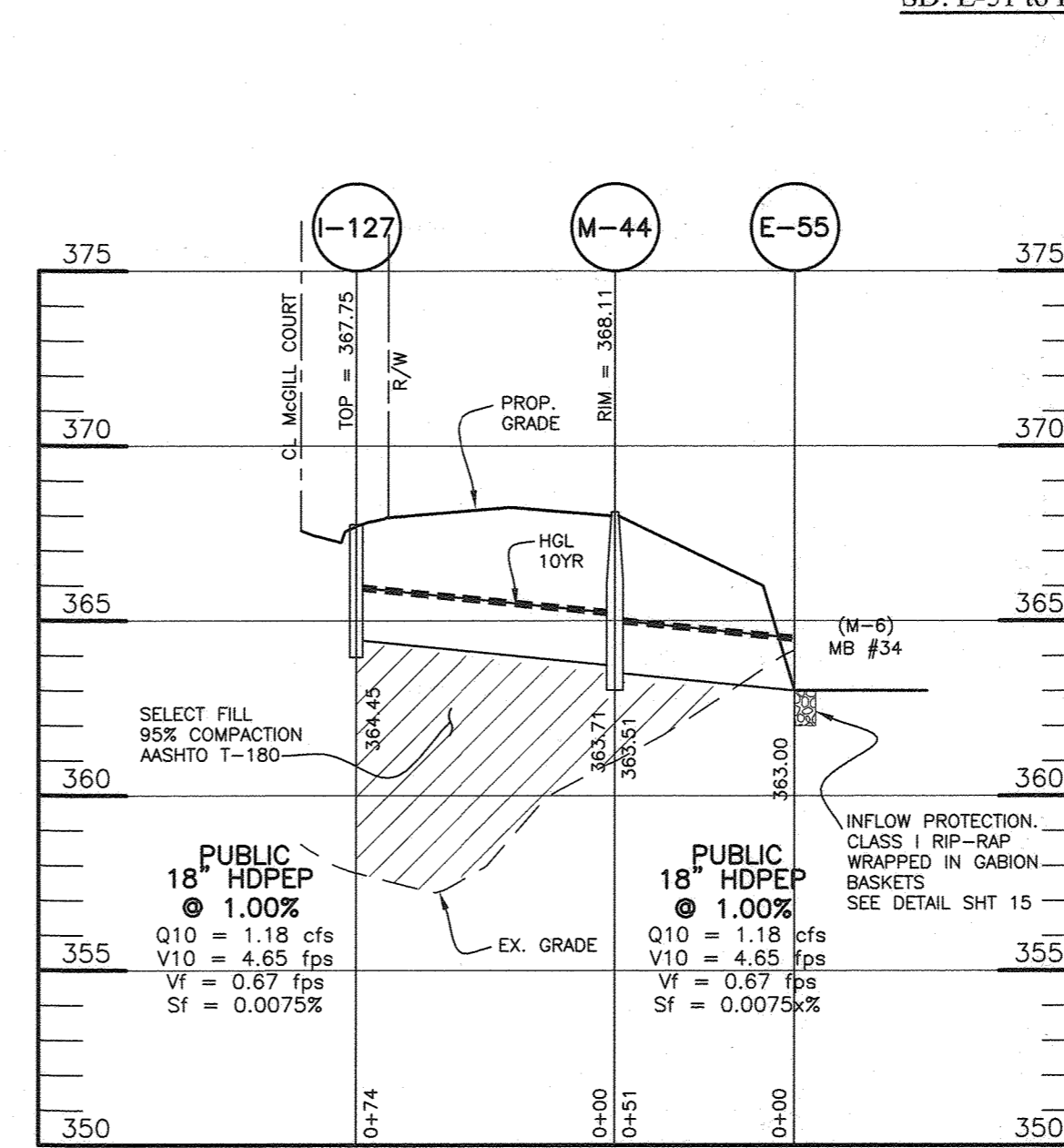
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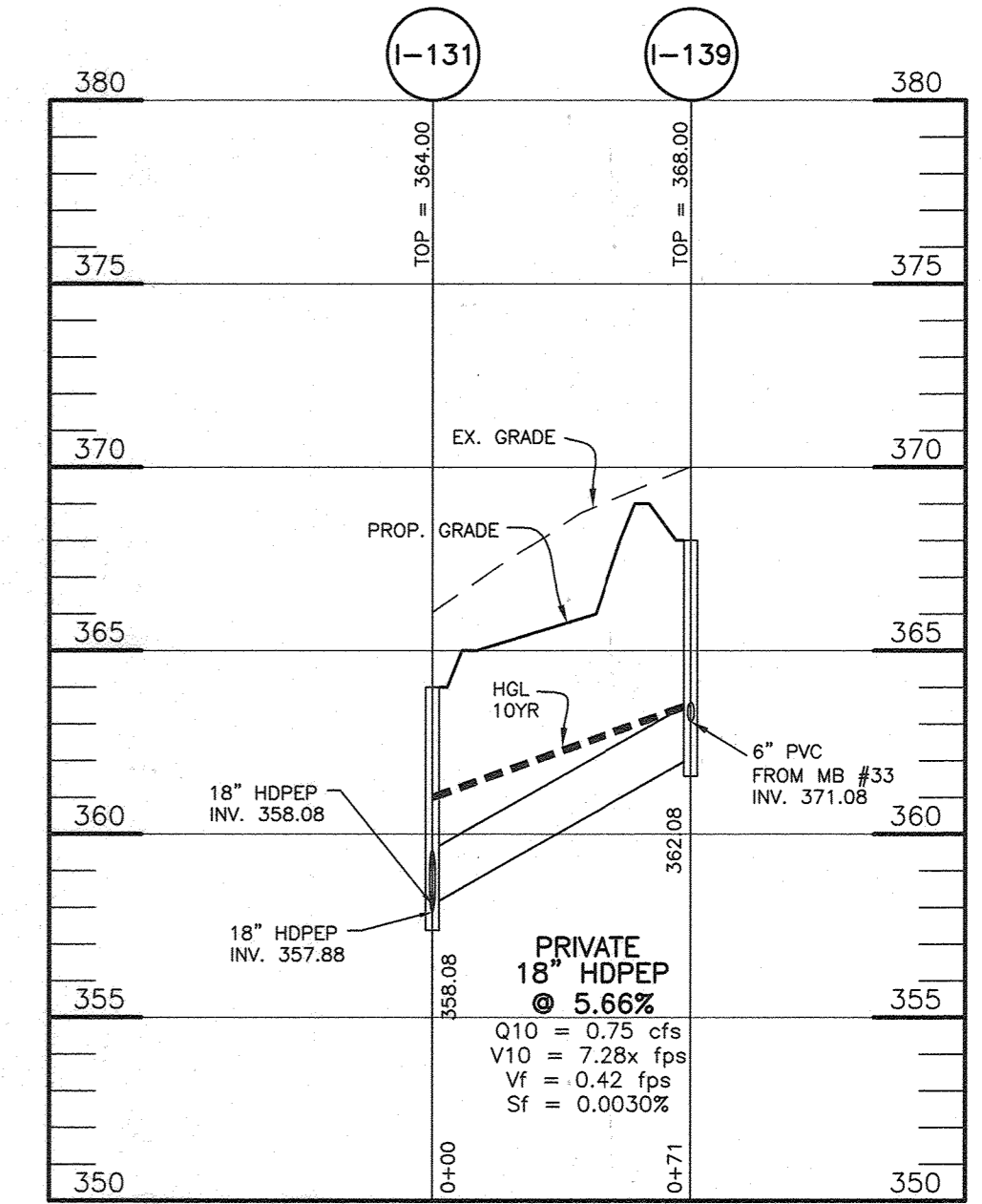
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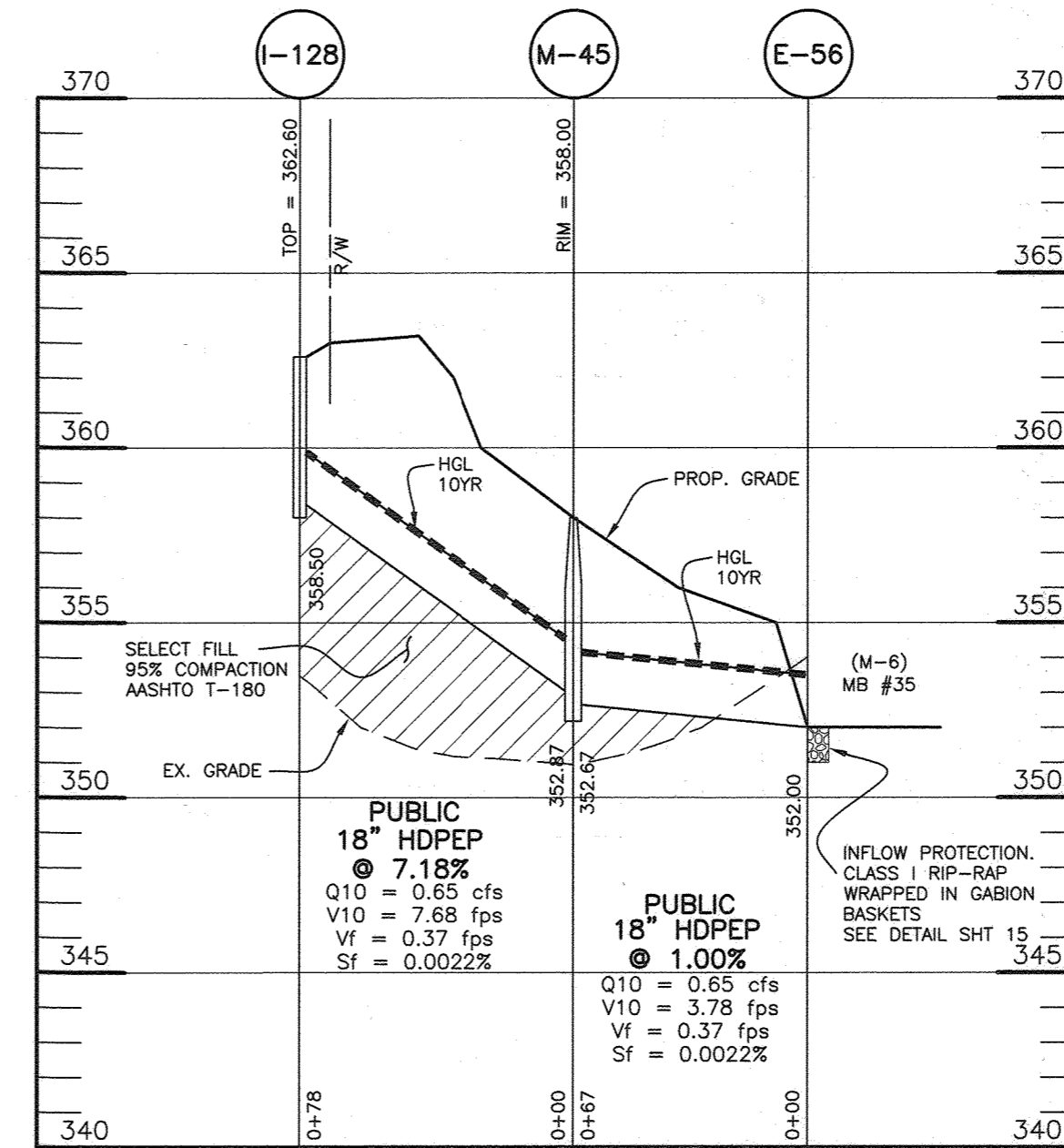
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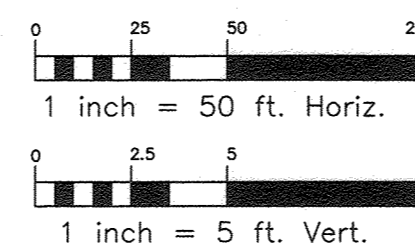


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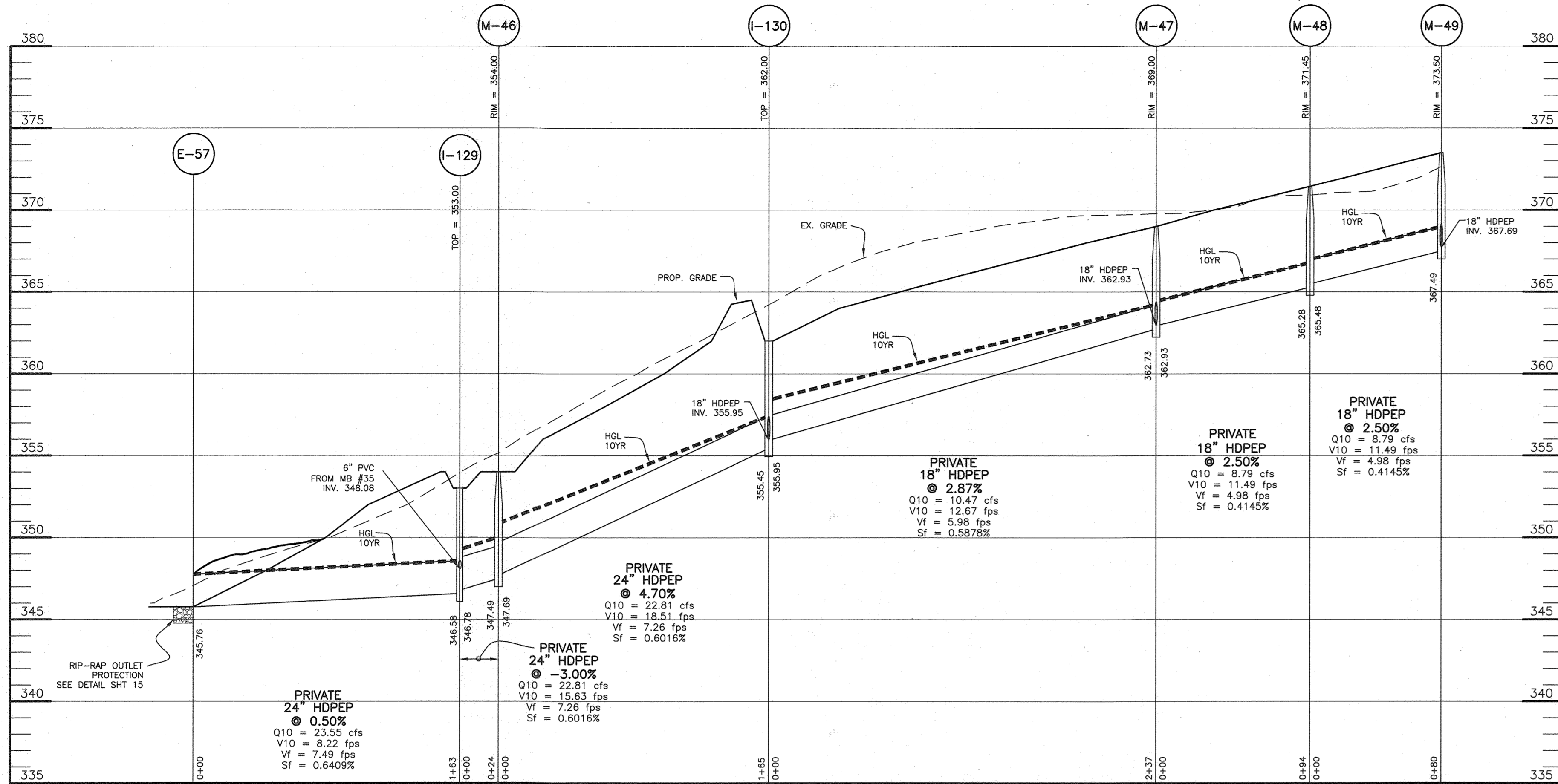


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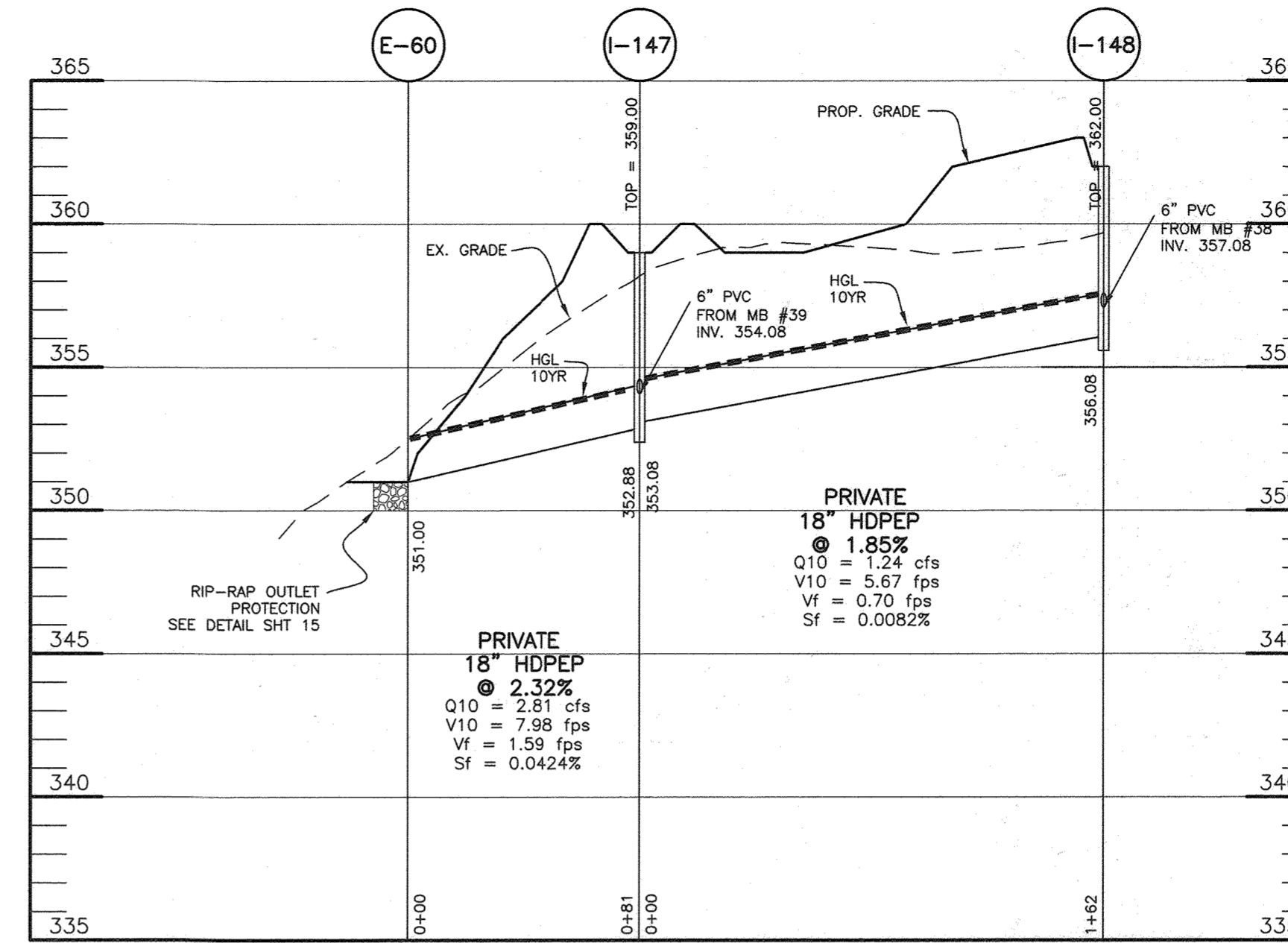
APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/7/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*[Signature]* 11/3/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



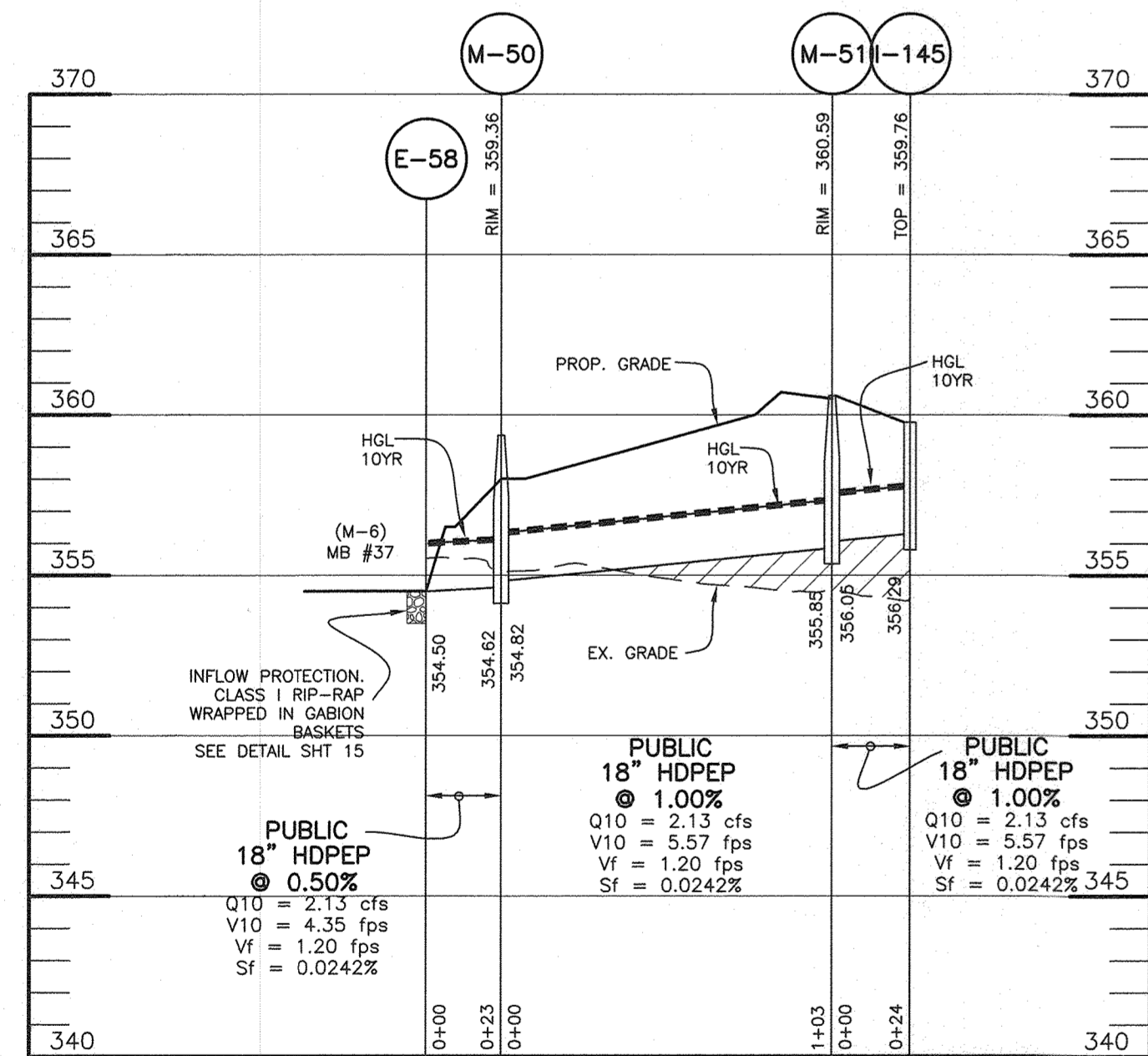
1 8.1.2023 REUSE TOTAL NUMBER OF SHEETS	
NO.	REVISION
<b>BENCHMARK</b> ENGINEERS & LAND SURVEYORS & PLANNERS <b>ENGINEERING, INC.</b> 3300 N. RIDGE ROAD & SUITE 140 & ELLICOTT CITY, MARYLAND 21043 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM	
PROFESSIONAL CERTIFICATION: I hereby certify 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. 22390. <i>[Signature]</i> 9-19-22	
<b>WELLINGTON FARMS</b> Phase 2 Lots 276 thru 419; Open Space Lots 420 thru 422; (A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)	
OWNER:	ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021
DEVELOPER:	ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021
<b>STORM DRAIN PROFILES</b>	
DATE:	AUGUST 15, 2022
DESIGN:	DBT
DRAFT:	DBT
SCALE:	AS SHOWN
BEI PROJECT NO.	2879
SHEET	12 OF 44



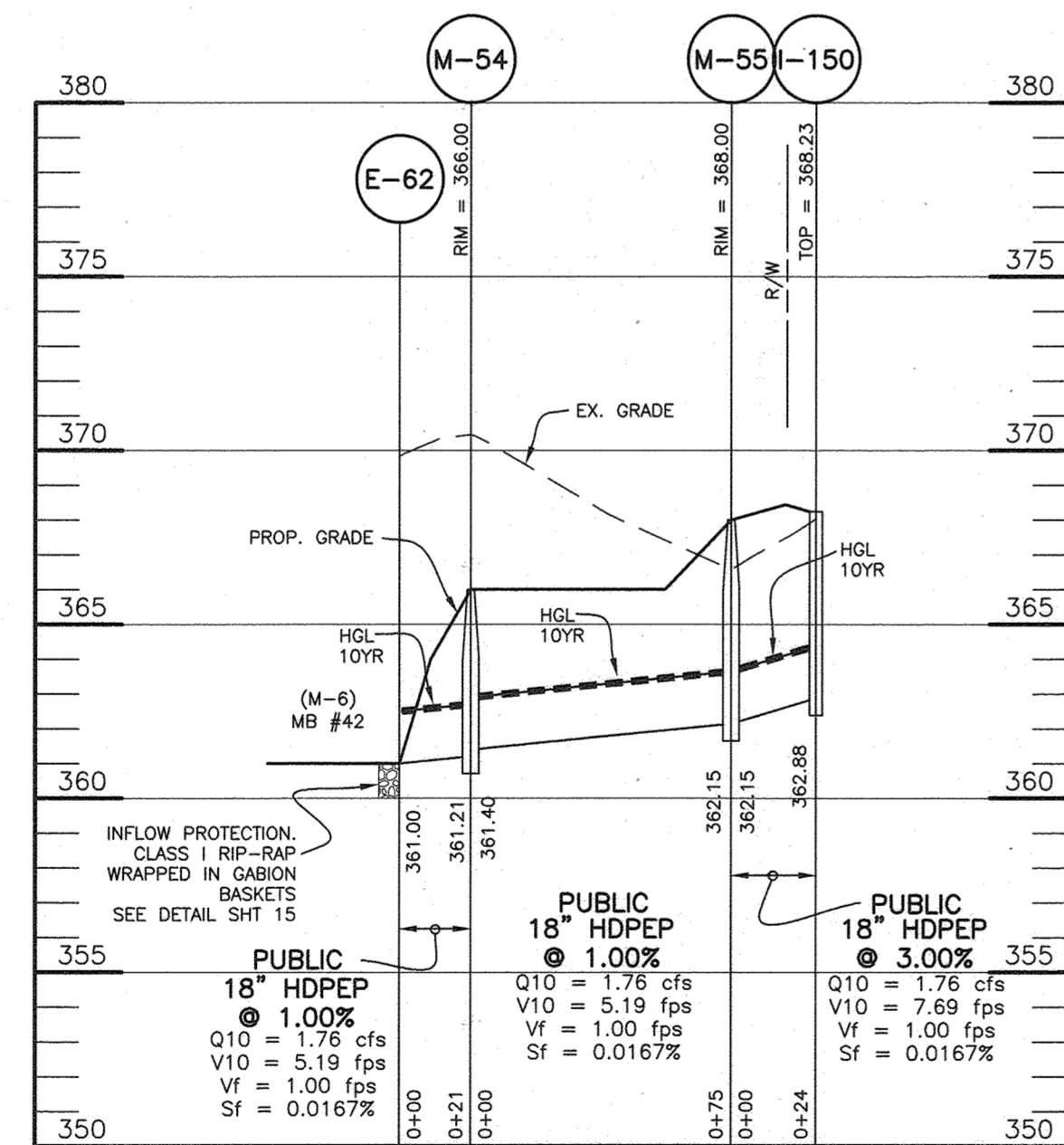
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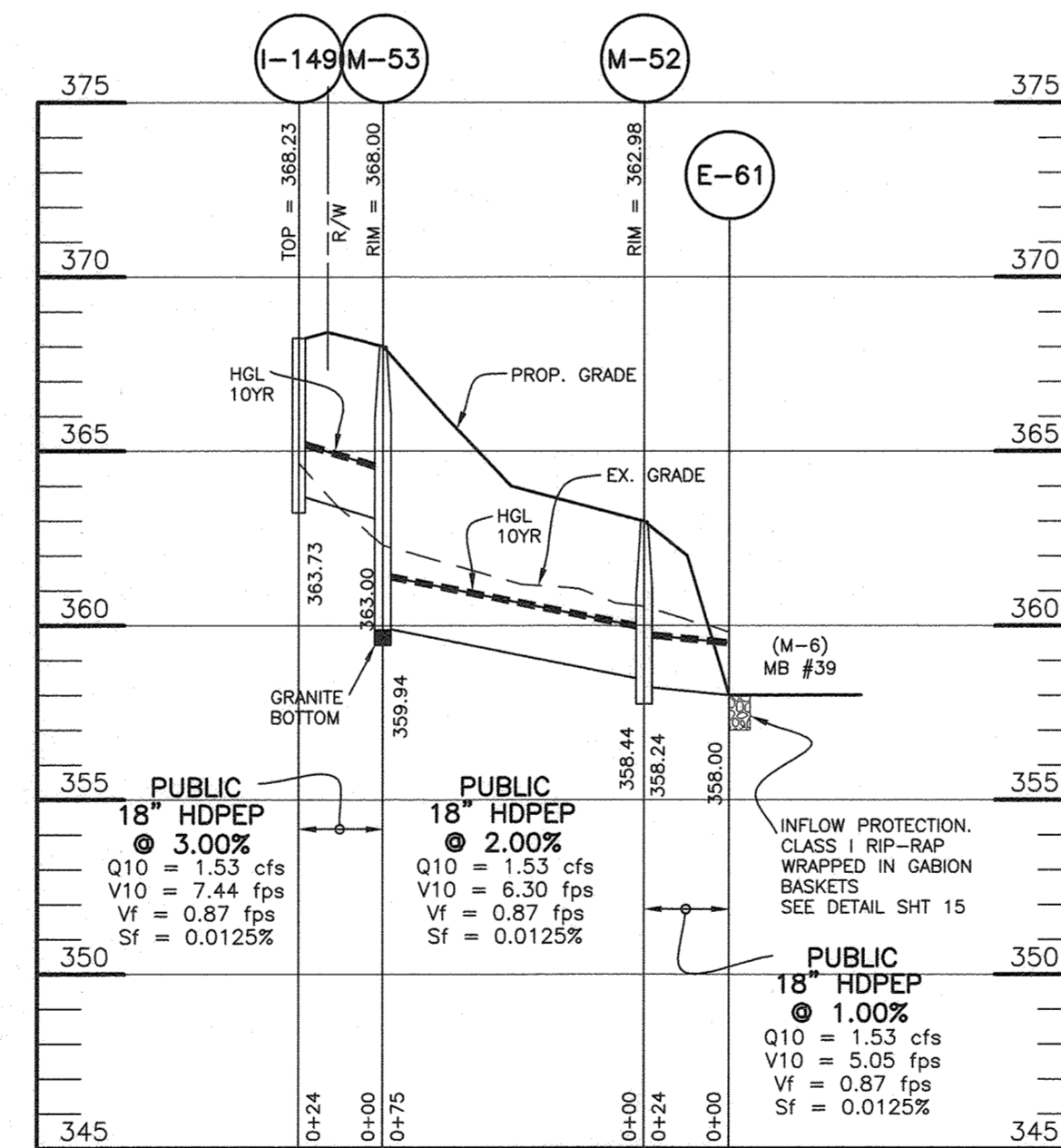
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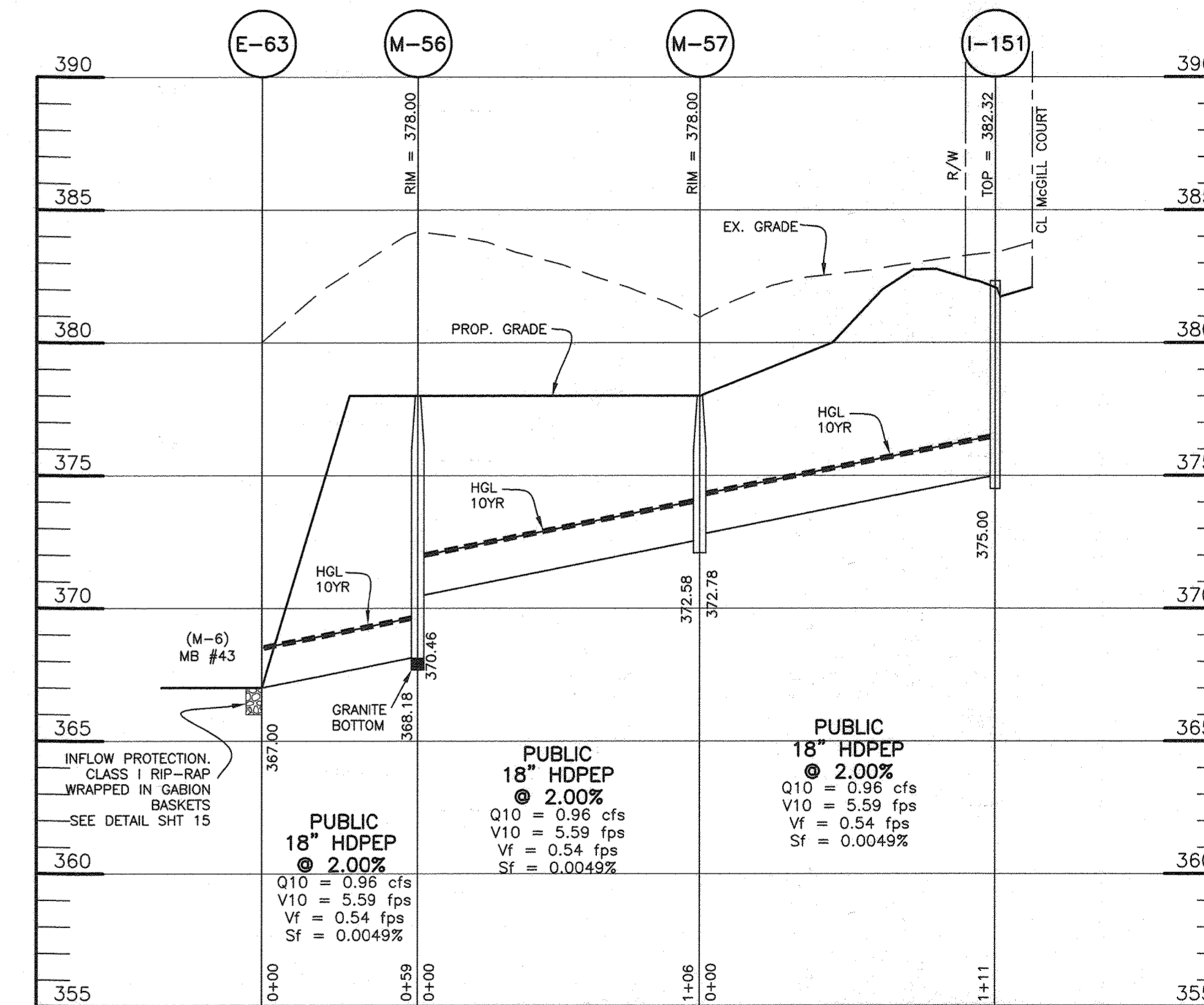
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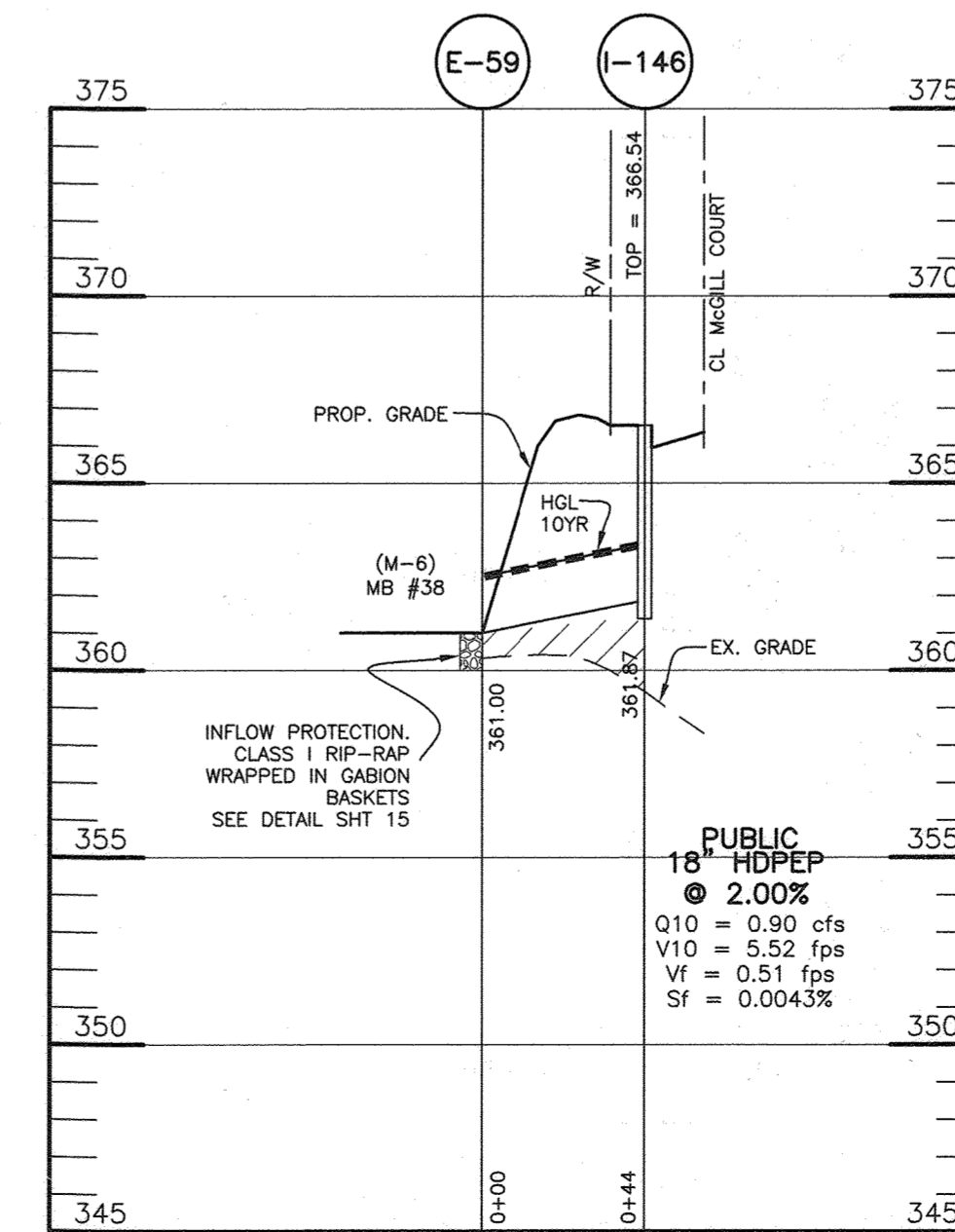
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SD: E-61 to I-149

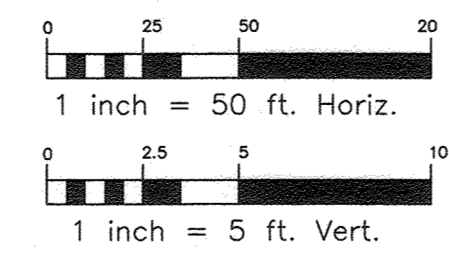


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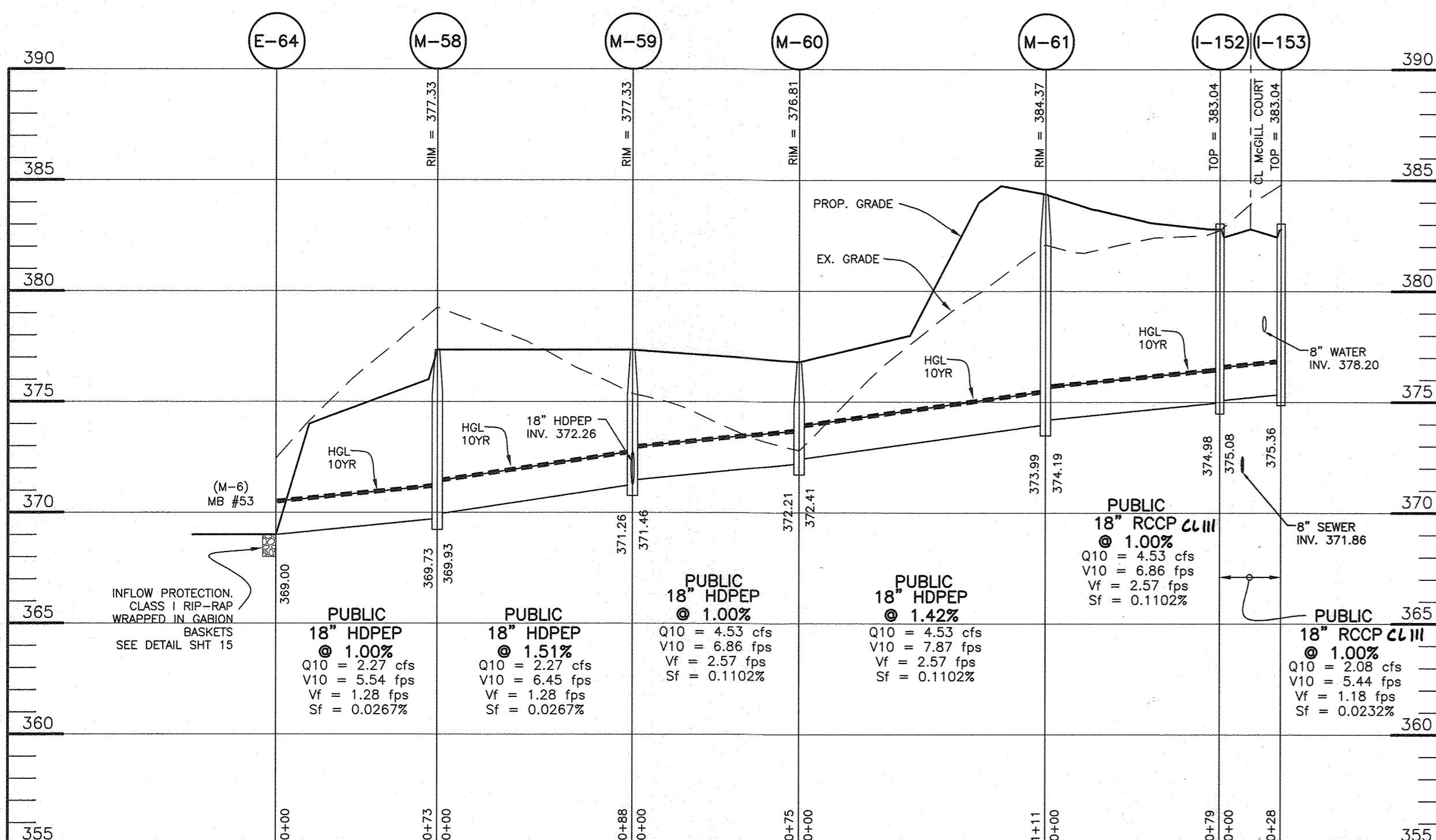


SD: E-59 to I-146

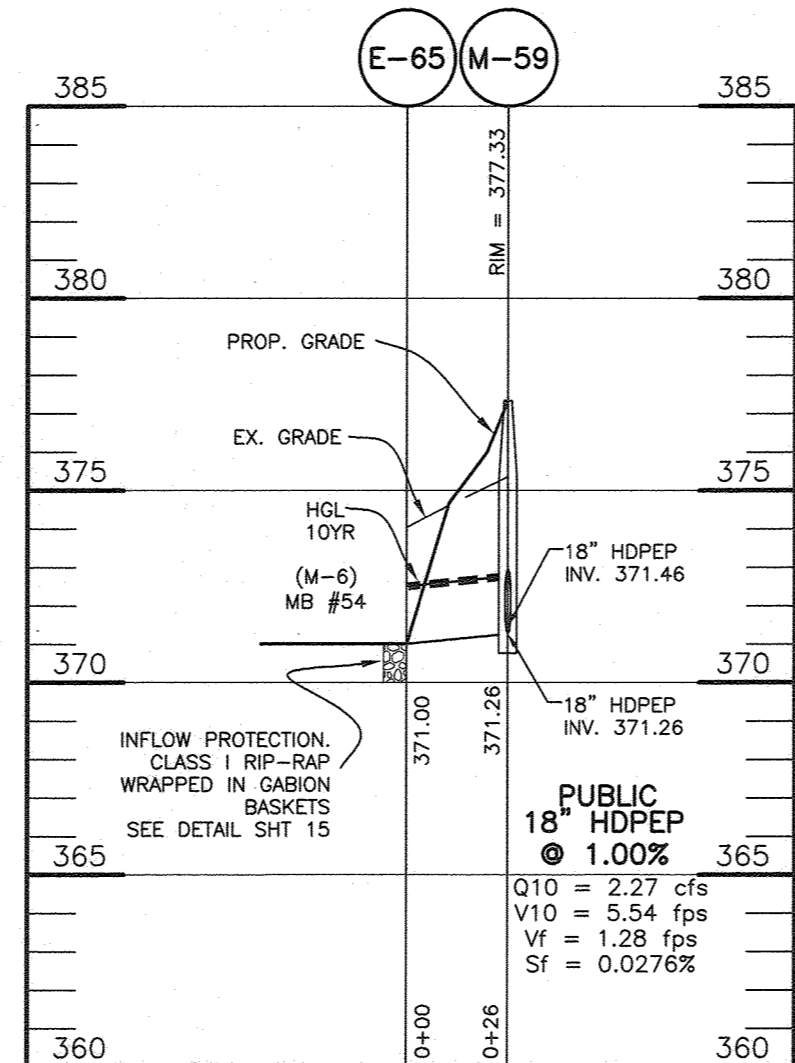
APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/3/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



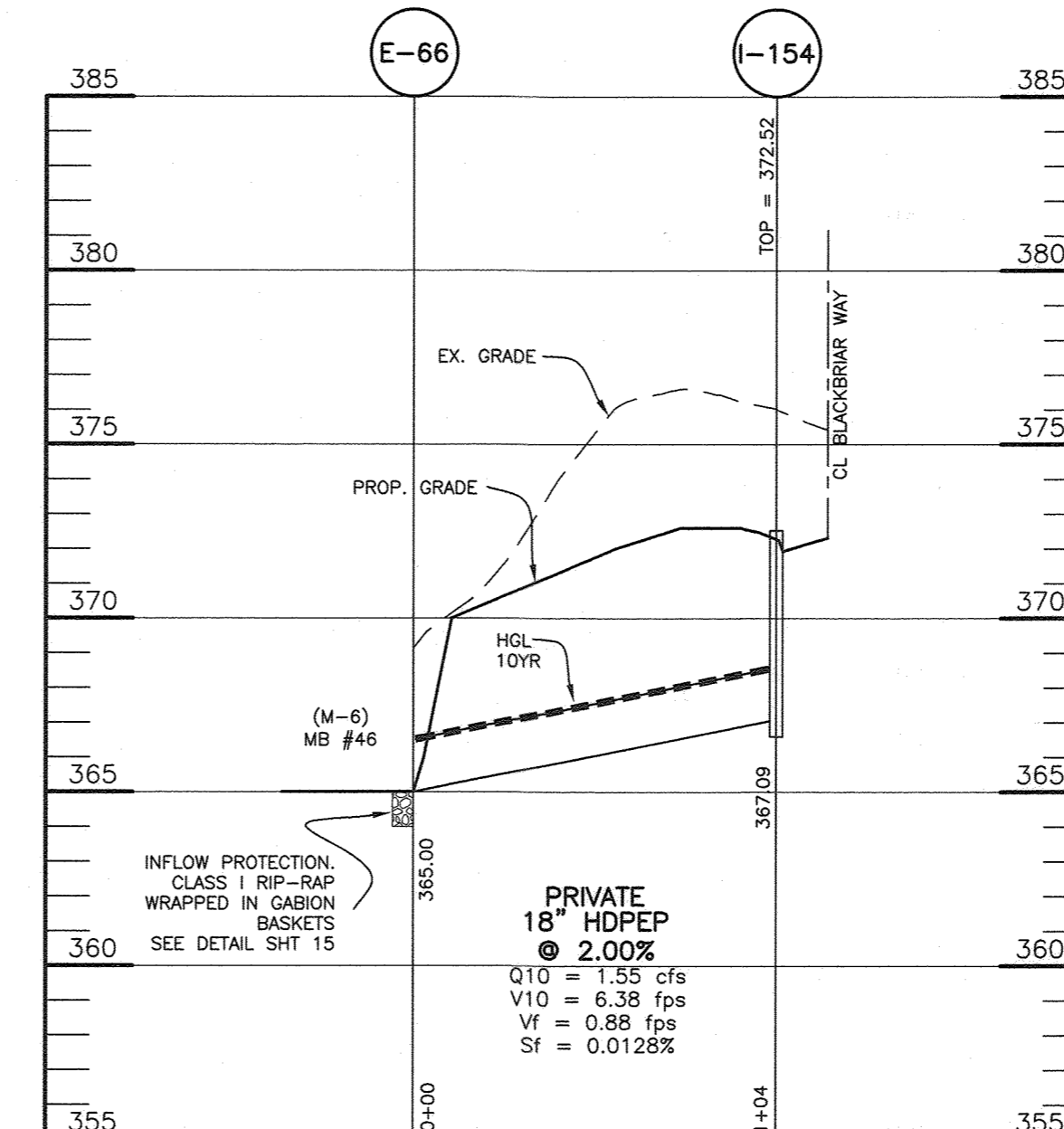
8.1.2023 REVISE TOTAL NUMBER OF SHEETS NO. DATE REVISION	
<b>BENCHMARK</b> ENGINEERS & LAND SURVEYORS & PLANNERS <b>ENGINEERING, INC.</b> 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21042 (P) 410-465-6105 (F) 410-465-6644 WWW.BEI-CIVILENGINEERING.COM	
PROFESSIONAL CERTIFICATION: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer in the State of Maryland, License No. 22390.	
<b>WELLINGTON FARMS</b> Phase 2 Lots 276 thru 419; Open Space Lots 420 thru 422; (A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)	
OWNER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021	
DEVELOPER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021	
<b>STORM DRAIN PROFILES</b>	
DATE: AUGUST 15, 2022	BEI PROJECT NO. 2879
DESIGN: DBT	DRAFT: DBT
SCALE: AS SHOWN	SHEET 13 OF 44



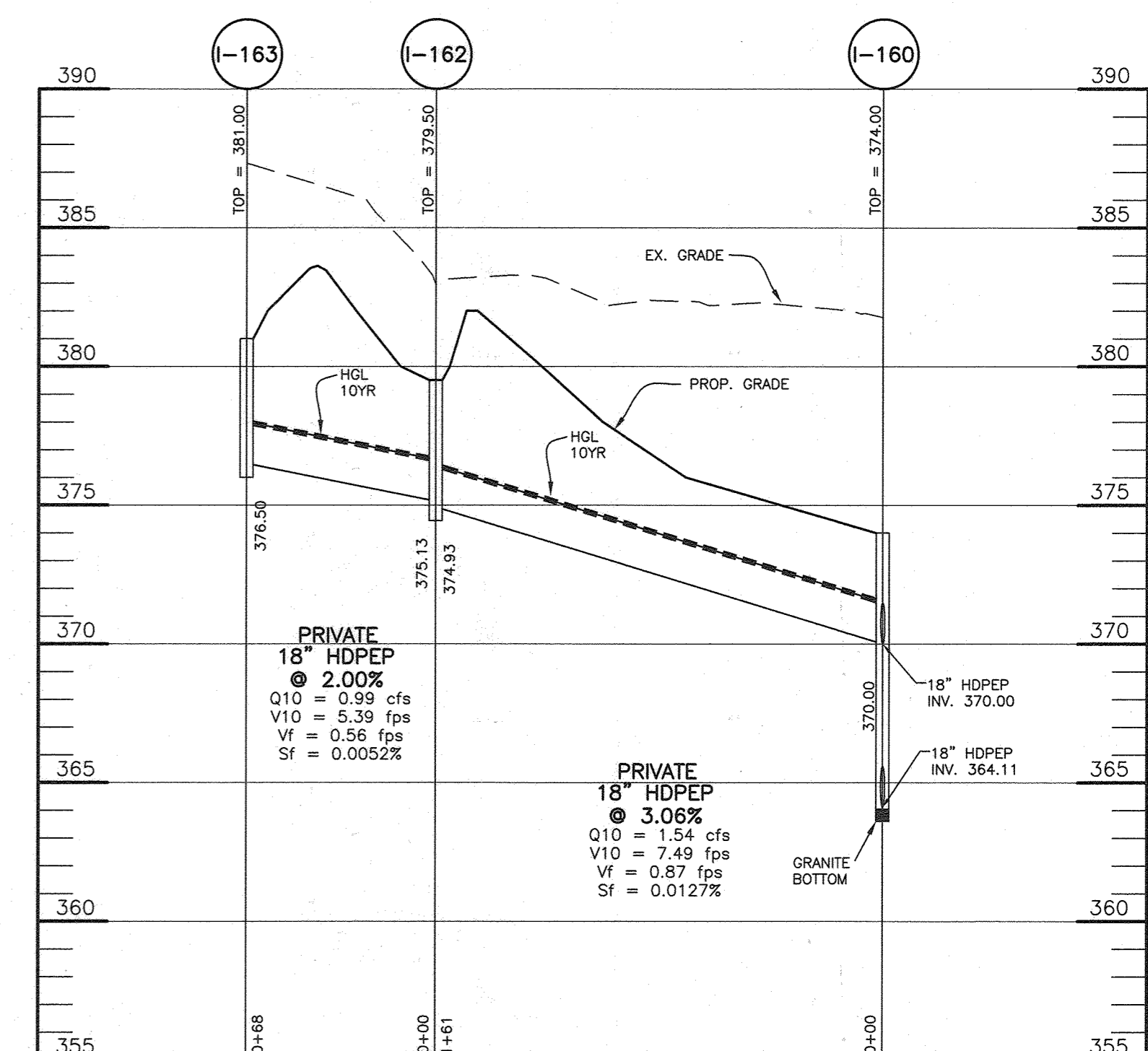
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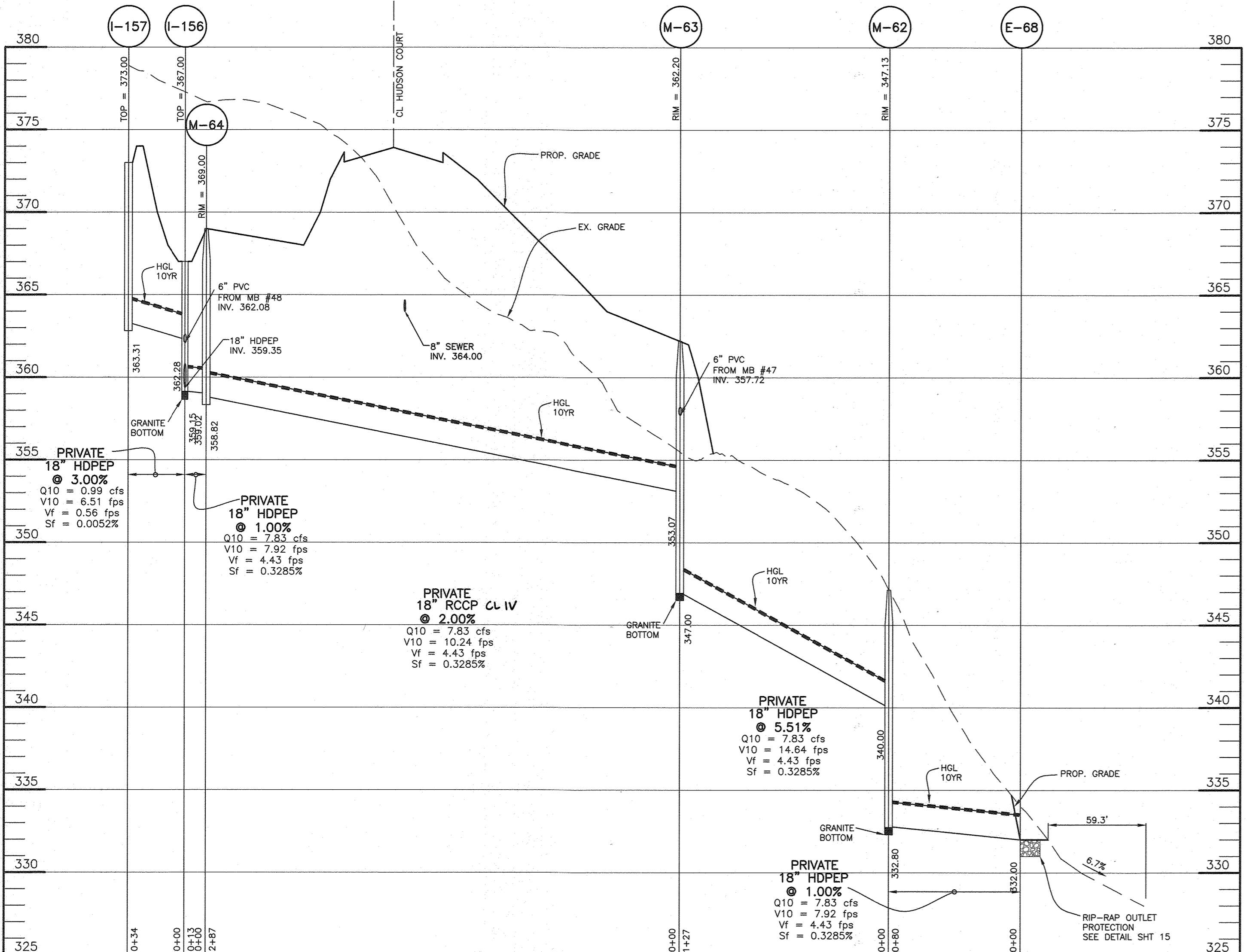
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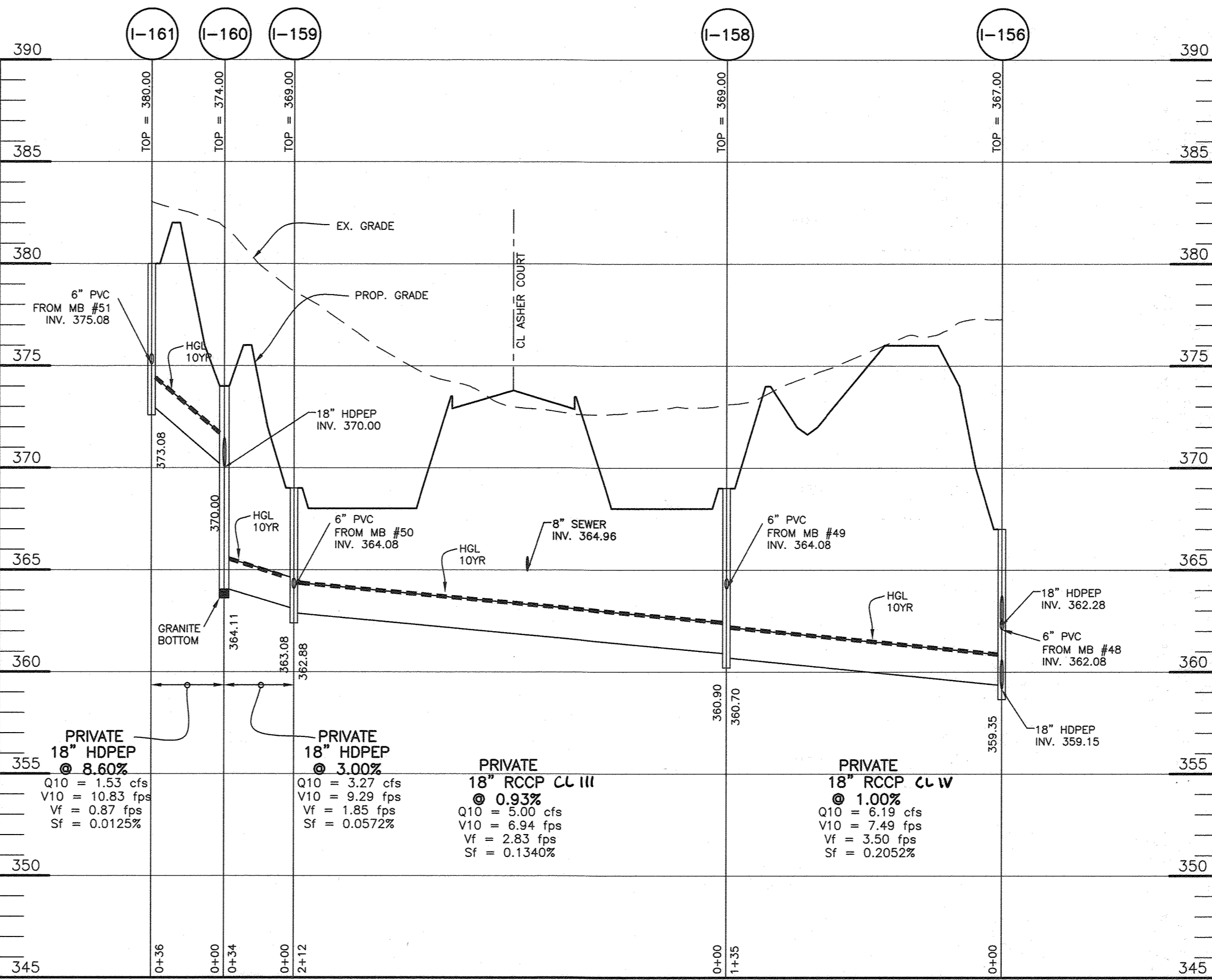
SD: E-66 to I-154



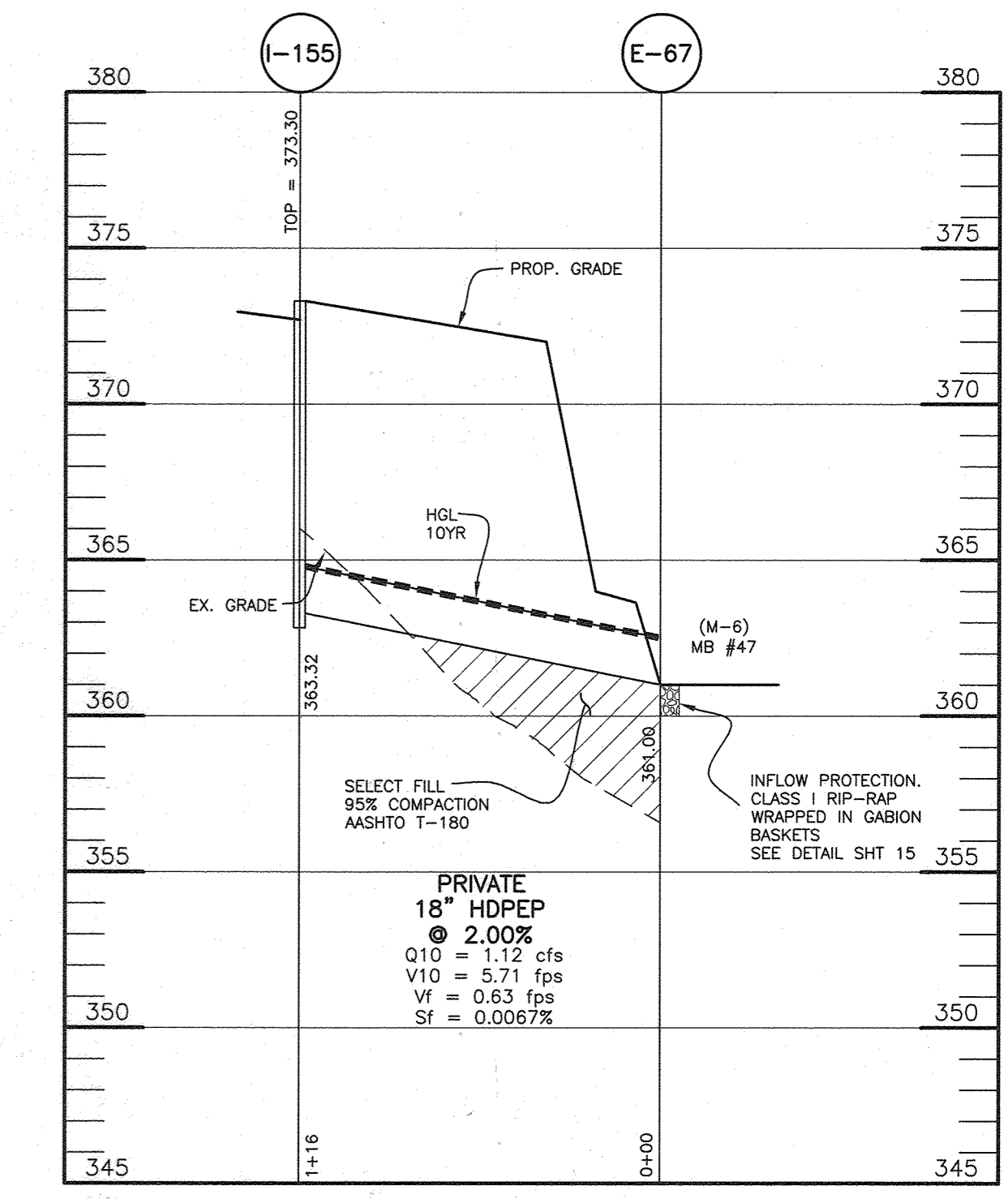
SD: I-160 to I-163



SD: E-68 to I-157

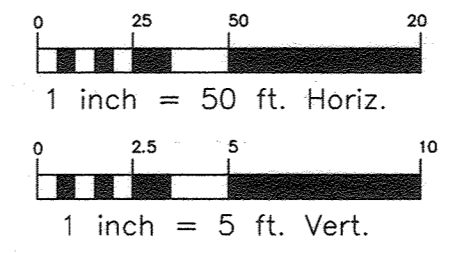


SD: I-156 to I-161

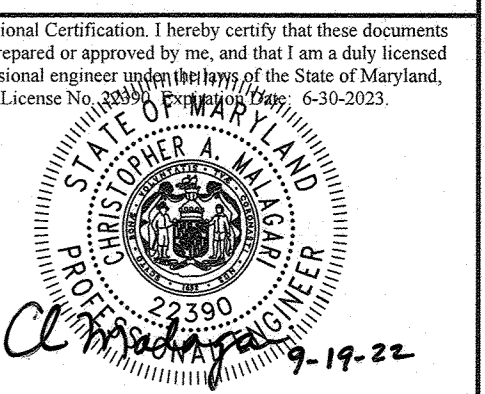


SD: E-67 to I-155

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/30/22  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/7/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*[Signature]* 11-3-22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION



1 8.1.2023 REVISE TOTAL NUMBER OF SHEETS NO. DATE REVISION	
<b>BENCHMARK</b> ENGINEERS & LAND SURVEYORS & PLANNERS <b>ENGINEERING, INC.</b> 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043 (P) 410-485-6105 (F) 410-485-6644 WWW.BEI-CIVILENGINEERING.COM	
<b>WELLINGTON FARMS</b> Phase 2 Lots 276 thru 419; Open Space Lots 420 thru 422; (A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001) TAX MAP: 46 - GRID: 6 - PARCEL: 163 ZONE: R-20-MXD-3 / R-SC-MXD-3 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND	
<b>STORM DRAIN PROFILES</b>	
OWNER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021	DEVELOPER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021
DATE: AUGUST 15, 2022 SCALE: AS SHOWN	BEI PROJECT NO. 2879 SHEET 14 OF 44



**ADS FLARED END SECTION SPECIFICATION**

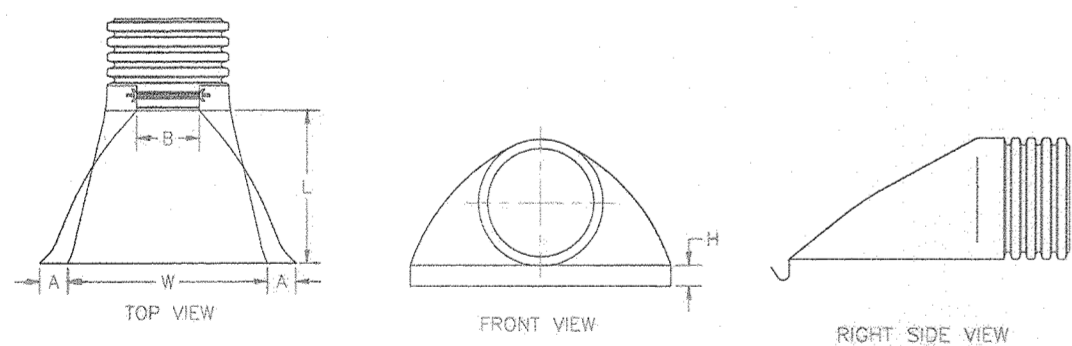
**Scope**  
This specification describes 12- through 36-inch (300 to 900mm) ADS Flared End Sections for use in culvert and drainage outlet applications.

**Requirements**  
The ADS Flared End Section shall be high density polyethylene meeting ASTM D3350 minimum cell classification 213320C; contact manufacturer for additional cell classification information. When provided, the metal threaded fastening rod shall be stainless steel.

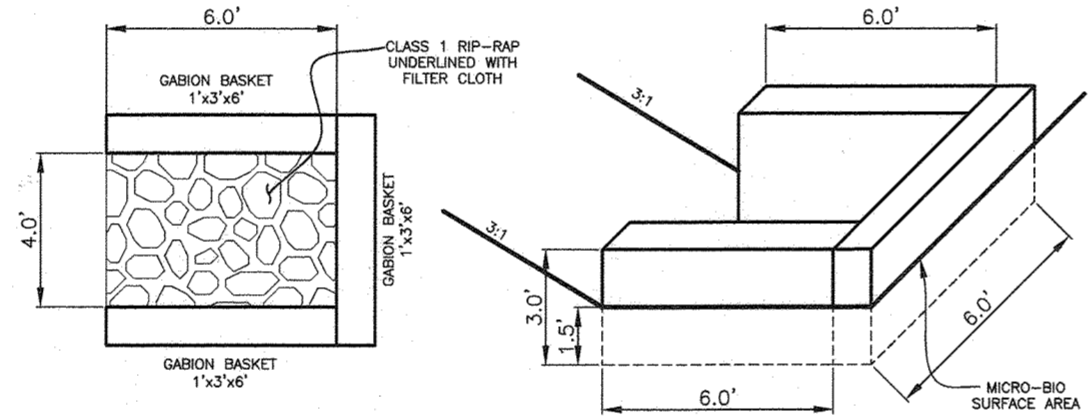
**Installation**  
Installation shall be in accordance with ADS installation instructions and with those issued by state or local authorities. Contact your local ADS representative or visit [www.ads-njps.com](http://www.ads-njps.com) for the latest installation instructions.

Diameter in (mm)	PIPE DIAMETER, in (mm)				
	12 (300)	15 (375)	18 (450)	24 (600)	30 (750)
A	6.5 (165)	6.5 (165)	7.5 (191)	7.5 (191)	7.5 (191)
B (max) in (mm)	10.0 (254)	10.0 (254)	15.0 (381)	18.0 (457)	22.0 (559)
H	6.5 (165)	6.5 (165)	6.5 (165)	6.5 (165)	6.6 (168)
L	25.0 (635)	25.0 (635)	32.0 (813)	38.0 (965)	58.0 (1473)
W	29.0 (737)	29.0 (737)	35.0 (889)	45.0 (1143)	63.0 (1600)

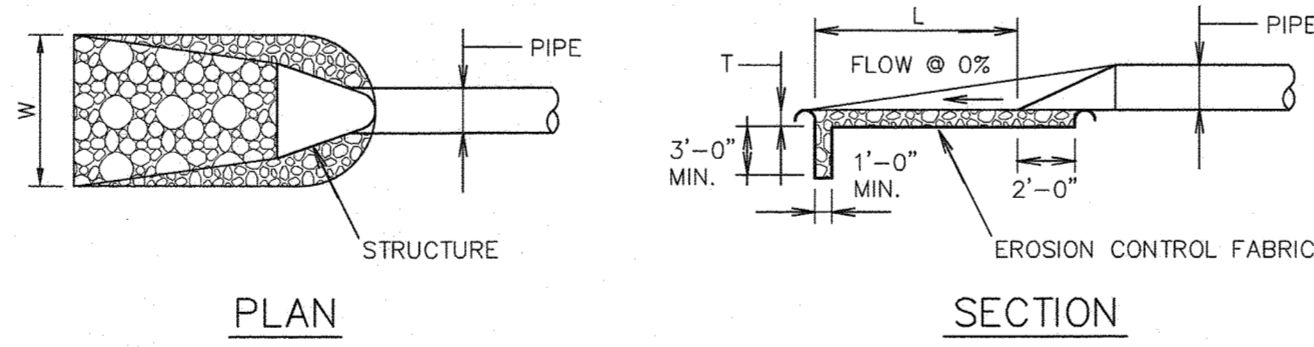
\*Product detail may differ slightly from actual product appearance.



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**RIP-RAP WITH GABION BASKETS INFLOW DETAIL**  
SCALE: 1" = 5'



**CONSTRUCTION SPECIFICATIONS**

- THE SUBGRADE FOR THE FILTER, RIP-RAP, OR GABION SHALL BE PREPARED TO THE REQUIRED LINES AND GRADES. ANY FILL REQUIRED IN THE SUBGRADE SHALL BE COMPACTED TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- THE ROCK OR GRAVEL SHALL CONFORM TO THE SPECIFIED GRADING LIMITS WHEN INSTALLED RESPECTIVELY IN THE RIP-RAP OR FILTER.
- GEOTEXTILE CLASS C28 OR BETTER SHALL BE PROTECTED FROM PUNCHING, CUTTING, OR TEARING. ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE SHALL BE PREPARED BY PLACING ANOTHER PIECE OF GEOTEXTILE FABRIC OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE FABRIC. ALL OVERLAPS WHETHER FOR REPAIRS OR FOR JOINING TWO PIECES OF GEOTEXTILE FABRIC SHALL BE A MINIMUM OF ONE FOOT.
- STONE FOR THE RIP-RAP OR GABION OUTLETS MAY BE PLACED BY EQUIPMENT. THEY SHALL BE CONSTRUCTED TO THE FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. THE STONE FOR THE RIP-RAP OR GABION OUTLETS SHALL BE DELIVERED AND PLACED IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENEOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOIDS BETWEEN THE LARGER STONES. RIP-RAP SHALL BE PLACED IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE FABRIC. HAND PLACEMENT WILL BE REQUIRED TO THE EXTENT NECESSARY TO PREVENT DAMAGE TO THE PERMANENT WORKS.
- THE STONE SHALL BE PLACED SO THAT IT BLENDS IN WITH THE EXISTING GROUND. IF THE STONE IS PLACED TOO HIGH THEN THE FLOW WILL BE FORCED OUT OF THE CHANNEL AND SCOUR ADJACENT TO THE STONE WILL OCCUR.

**OUTLET PROTECTION DETAIL**  
NOT TO SCALE

STRUCTURE TABLE							
NUMBER	TYPE	STD. DETAIL	LOCATION	INVERT IN	INVERT OUT	TOP ELEV.	OWNER
E-43	18" HDPE END SECTION	SEE ADS DETAIL	538967.23 1352199.31	372.00(18")		N/A	PUBLIC
E-44	18" HDPE END SECTION	SEE ADS DETAIL	538985.63 1352082.13	375.00(18")		N/A	PUBLIC
E-45	18" HDPE END SECTION	SEE ADS DETAIL	538740.05 1351831.21	373.50(18")		N/A	PUBLIC
E-49	18" HDPE END SECTION	SEE ADS DETAIL	538723.86 1351819.85	373.50(18")		N/A	PUBLIC
E-50	18" HDPE END SECTION	SEE ADS DETAIL	538538.80 1351700.91	374.00(18")		N/A	PUBLIC
E-51	18" HDPE END SECTION	SEE ADS DETAIL	538600.93 1351475.11	375.00(18")		N/A	PUBLIC
E-52	18" HDPE END SECTION	SEE ADS DETAIL	538866.84 1351358.44	381.00(18")		N/A	PUBLIC
E-53	18" HDPE END SECTION	SEE ADS DETAIL	539010.40 1351345.31	381.00(18")		N/A	PUBLIC
E-54	18" HDPE END SECTION	SEE ADS DETAIL	538590.44 1351399.58	375.00(18")		N/A	PUBLIC
E-55	18" HDPE END SECTION	SEE ADS DETAIL	538333.87 1351497.53	363.00(18")		N/A	PUBLIC
E-56	18" HDPE END SECTION	SEE ADS DETAIL	538164.26 1351480.40	352.00(18")		N/A	PUBLIC
E-57	18" HDPE END SECTION	SEE ADS DETAIL	538025.09 1351387.19	345.76(24")		N/A	PRIVATE
E-58	18" HDPE END SECTION	SEE ADS DETAIL	538126.58 1351135.72	354.50(18")		N/A	PUBLIC
E-59	18" HDPE END SECTION	SEE ADS DETAIL	538291.27 1351297.59	361.00(18")		N/A	PUBLIC
E-60	18" HDPE END SECTION	SEE ADS DETAIL	538184.20 1351031.63	351.00(18")		N/A	PRIVATE
E-61	18" HDPE END SECTION	SEE ADS DETAIL	538265.28 1351101.40	358.00(18")		N/A	PUBLIC
E-62	18" HDPE END SECTION	SEE ADS DETAIL	538531.59 1350981.54	361.00(18")		N/A	PUBLIC
E-63	18" HDPE END SECTION	SEE ADS DETAIL	538611.89 1351046.56	367.00(18")		N/A	PUBLIC
E-64	18" HDPE END SECTION	SEE ADS DETAIL	538689.83 1350971.47	369.00(18")		N/A	PUBLIC
E-65	18" HDPE END SECTION	SEE ADS DETAIL	538796.33 1351003.05	371.00(18")		N/A	PUBLIC
E-66	18" HDPE END SECTION	SEE ADS DETAIL	537806.75 1350666.52	365.00(18")		N/A	PRIVATE
E-67	18" HDPE END SECTION	SEE ADS DETAIL	537865.58 1350557.21	361.00(18")		N/A	PRIVATE
E-68	18" HDPE END SECTION	SEE ADS DETAIL	537572.84 1350760.54	332.00(18")		N/A	PRIVATE
E-69	18" HDPE END SECTION	SEE ADS DETAIL	538111.18 1349837.21	377.50(18")		N/A	PUBLIC
I-114	S	D-4.24	538961.52 1352169.73		373.17(18")	377.00	PUBLIC
I-115	A-5	D-4.02	538919.40 1352111.47		377.15(18")	380.65	PUBLIC
I-116	A-10	D-4.03	538902.31 1351924.21		379.00(18")	386.06	PUBLIC
I-119	A-10	D-4.03	538759.48 1351556.55		384.25(18")	388.06	PUBLIC
I-120	A-5	D-4.02	538630.16 1351691.93	376.86(18")	376.66(18")	380.45	PUBLIC
I-121	A-5	D-4.02	538565.34 1351681.49		374.81(18")	378.91	PUBLIC
I-122	A-5	D-4.02	538678.70 1351581.38		377.63(18")	384.83	PUBLIC
I-123	A-5	D-4.02	538878.00 1351482.41	384.47(18")	383.49(18")	391.74	PUBLIC
I-124	A-5	D-4.02	538775.21 1351513.62		385.76(18")	389.26	PUBLIC
I-125	A-5	D-4.02	539077.18 1351234.99		382.46(18")	386.70	PUBLIC
I-126	A-5	D-4.02	538537.46 1351285.07		376.26(18")	380.83	PUBLIC
I-127	A-10	D-4.03	538324.77 1351373.00		364.45(18")	367.75	PUBLIC
I-128	A-5	D-4.02	538192.96 1351347.73		358.50(18")	362.60	PUBLIC
I-129	S	D-4.24	538154.73 1351485.84		346.78(24") 346.58(24")	353.00	PRIVATE
I-130	D	D-4.10	538294.52 1351601.81		355.85(18") 355.95(18")	362.00	PRIVATE
I-131	S	D-4.24	538352.56 1351524.96		358.08(18") 358.08(18")	364.00	PRIVATE
I-132	S	D-4.24	538414.49 1351512.94	361.59(18")	361.39(18")	366.50	PRIVATE
I-133	S	D-4.24	538560.11 1351467.69	365.98(18")	365.78(18")	376.00	PRIVATE
I-134	S	D-4.24	538627.81 1351407.26	368.00(18")	367.80(18")	376.00	PRIVATE
I-135	S	D-4.24	538790.38 1351311.03	371.98(18")	371.78(18")	379.50	PRIVATE
I-136	S	D-4.24	538867.05 1351318.89	373.72(18")	373.52(18")	382.00	PRIVATE
I-137	S	D-4.24	538931.96 1351306.06	375.24(18")	375.04(18")	381.70	PRIVATE
I-138	S	D-4.24	538964.68 1351332.00		376.08(18")	382.00	PRIVATE
I-139	S	D-4.24	538395.66 1351581.03		362.08(18")	368.00	PRIVATE
I-140	S	D-4.24	538495.30 1351734.54		366.71(18")	375.00	PRIVATE
I-141	S	D-4.24	538662.70 1351875.79		369.78(18")	375.50	PRIVATE
I-145	A-5	D-4.02	538189.61 1351258.16		356.29(18")	359.76	PUBLIC
I-146	A-5	D-4.02	538305.49 1351338.79		361.87(18")	366.54	PUBLIC
I-147	S	D-4.24	538230.59 1351098.08	353.08(18")	352.88(18")	359.00	PRIVATE

STRUCTURE TABLE							
NUMBER	TYPE	STD. DETAIL	LOCATION	INVERT IN	INVERT OUT	TOP ELEV.	OWNER
I-148	S	D-4.24	538283.55 1351251.36		356.08(18")	362.00	PRIVATE
I-149	A-5	D-4.02	538380.54 1351077.81		363.73(18")	368.23	PUBLIC
I-150	A-5	D-4.02	538440.23 1351050.18		362.88(18")	368.23	PUBLIC
I-151	A-5	D-4.02	538548.69 1351249.39		375.00(18")	382.32	PUBLIC
I-152	A-5	D-4.02	538958.82 1351159.42	375.08(18")	374.98(18")	383.04	PUBLIC
I-153	A-5	D-4.02	538950.97 1351185.95		375.36(18")	383.04	PUBLIC
I-154	A-5	D-4.02	537897.24 1350718.45		367.09(18")	372.52	PRIVATE
I-155	A-5	D-4.02	537710.38 1350450.03		363.32(18")	373.30	PRIVATE
I-156	S	D-4.24	537780.42 1350322.81		359.35(18") 362.28(18")	367.00	PRIVATE
I-157	S	D-4.24	537813.56 1350332.37		363.31(18")	375.00	PRIVATE
I-158	S	D-4.24	537847.24 1350205.15	360.90(18")	360.70(18")	369.00	PRIVATE
I-159	S	D-4.24	537952.87 1350021.09	363.08(18")	362.88(18")	369.00	PRIVATE
I-160	S	D-4.24	537969.89 1349991.44	370.00(18") 370.00(18")	364.11(18")	374.00	PRIVATE
I-161	S	D-4.24	537987.43 1349960.23		373.08(18")	380.00	PRIVATE
I-162	S	D-4.24	538103.39 1350082.07	375.13(18")	374.93(18")	379.50	PRIVATE
I-163	S	D-4.24	538151.34 1350033.45		376.50(18")	381.00	PRIVATE
I-164	A-5	D-4.02	538307.46 1349824.91		379.47(18")	387.19	PUBLIC
M-40	48" MH	D-4.02	538970.88 1352075.13	375.37(18")	375.17(18")	380.00	PUBLIC
M-41	48" MH	G-5.12	538801.92 1351883.92	376.28(18")	376.08(18")	380.68	PUBLIC
M-42	48" MH	G-5.12	538832.95 1351486.54	385.12(18")	384.92(18")	390.76	PUBLIC
M-43	48" MH	G-5.12	539035.03 1351340.02	381.33(18")	381.13(18")	386.29	PUBLIC
M-44	48" MH	G-5.12	538323.63 1351447.15	363.71(18")	363.51(18")	368.11	PUBLIC
M-45	48" MH	G-5.12	538151.69 1351414.46	352.87(18")	352.67(18")	358.00	PUBLIC
M-46	48" MH	G-5.12	538157.61 1351509.29	347.69(24") 347.49(24")		354.00	PRIVATE
M-47	48" MH	G-5.12	538468.95 1351761.67	362.93(18") 362.93(18")	362.73(18")	369.00	PRIVATE
M-48	48" MH	G-5.12	538531.46 1351831.92	365.48(18")	365.28(18")	371.45	PRIVATE
M-49	48" MH	G-5.12	538592.72 1351883.96	367.69(18")	367.49(18")	373.50	PRIVATE
M-50	48" MH	G-5.12	538117.51 1351157.35	354.82(18")	354.62(18")	359.36	PUBLIC
M-51	48" MH	G-5.12	538186.58 1351234.04	356.05(18")	355.85(18")	360.59	PUBLIC
M-52	48" MH	G-5.12	538289.66 1351100.75	358.44(18")	358.24(18")	362.98	PUBLIC
M-53	48" MH	G-5.12	538357.66 1351069.29	363.00(18")	359.94(18")	368.00	PUBLIC
M-54	48" MH	G-5.12	538516.37 1350995.38	361.40(18")	361.21(18")	366.00	PUBLIC
M-55	48" MH	G-5.12	538448.54 1351027.24	362.15(18")	362.15(18")	368.00	PUBLIC
M-56	48" MH	G-5.12	538598.41 1351103.90	370.46(18")	368.18(18")	378.00	PUBLIC
M-57	48" MH	G-5.12	538502.01 1351148.50	372.78(18")	372.58(18")	378.00	PUBLIC
M-58	48" MH	G-5.12	538730.62 1351031.74	369.93(18")	369.73(18")	377.33	PUBLIC
M-59	48" MH	G-5.12	538817.84 1351018.34	371.46(18")	371.26(18")	377.33	PUBLIC
M-60	48" MH	G-5.12	538892.76 1351023.29	372.41(18")	372.21(18")	376.81	PUBLIC
M-61	48" MH	G-5.12	538984.25 1351134.38	374.19(18")	373.99(18")	384.37	PUBLIC
M-62	48" MH	G-5.12	537571.48 1350680.80	340.00(18")	332.80(18")	347.13	PRIVATE
M-63	48" MH	G-5.12	537632.32 1350569.09	353.07(18")	347.00(18")	362.20	PRIVATE
M-64	48" MH	G-5.12	537769.22 1350316.39	359.02(18")	358.82(18")	369.00	PRIVATE

STORM DRAIN PIPE SCHEDULE			
SIZE	MATERIAL	LINEAR FEET	MAINTENANCE
18"	RCPP CL III	403	PUBLIC
18"	HDPEP	2564	PUBLIC
18"	RCPP CL III	212	PRIVATE
18"	HDPEP	2382	PRIVATE
24"	HDPEP	352	PRIVATE
18"	RCPP CL IV	426	PRIVATE

All HDPE pipes shall have smooth interior. No interior corrugations.

8-1-2023 REVISE TOTAL NUMBER OF SHEETS

NO. DATE REVISION

**BENCHMARK ENGINEERING, INC.**

3300 N. RIDGE ROAD SUITE 140 & ELLICOTT CITY, MARYLAND 21043  
(P) 410-485-6105 (F) 410-485-8644  
WWW.BEI-CIVILENGINEERING.COM

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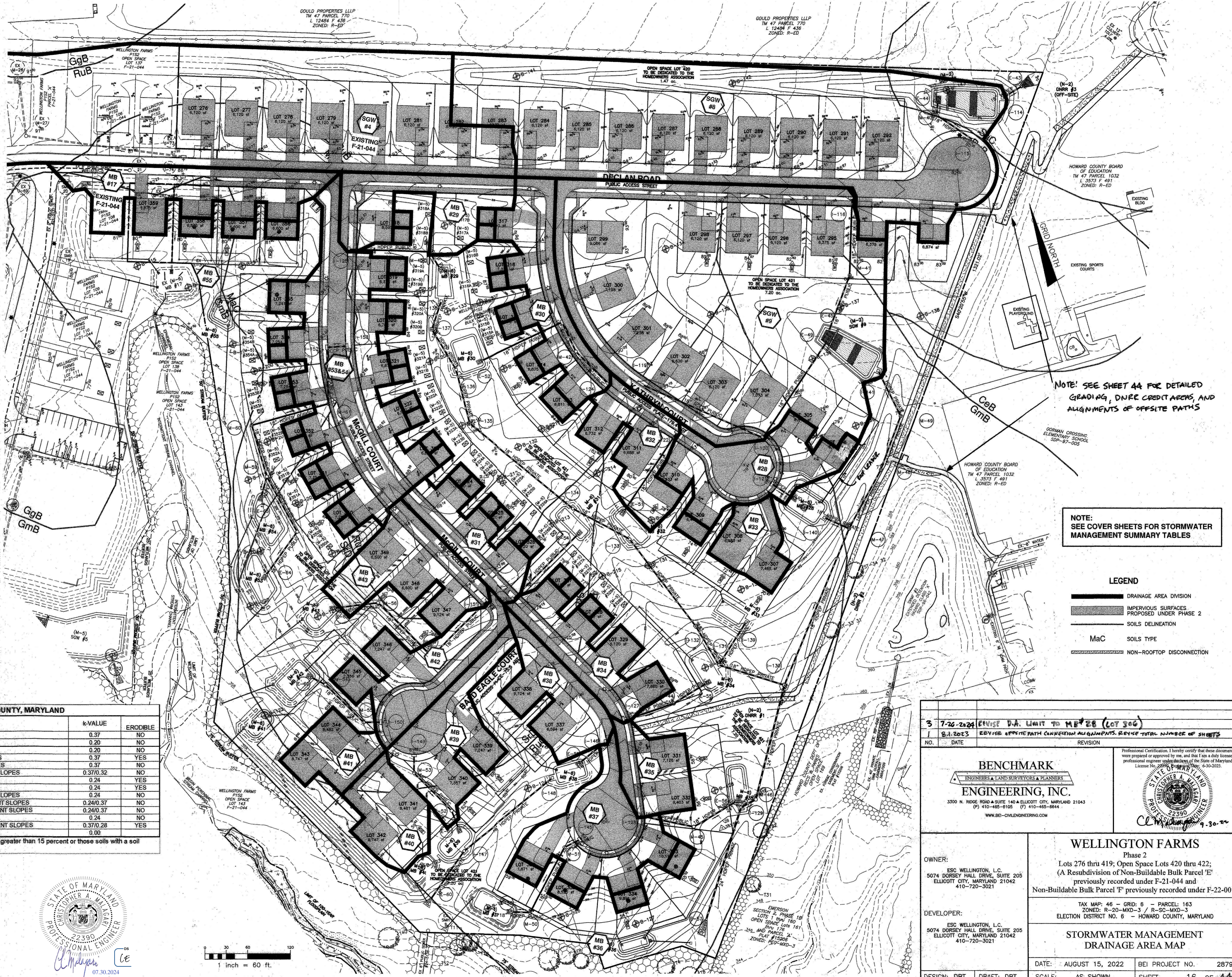
OWNER: ESC WELLINGTON, L.C.  
5074 DORSEY HALL DRIVE, SUITE 205  
ELLICOTT CITY, MARYLAND 21042  
410-720-3021

Phase 2  
Lots 276 thru 419; Open Space Lots 420 thru 422;  
(A Resubdivision of Non-Buildable Bulk Parcel 'E'  
previously recorded under F-21-044 and  
Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

---

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

TAX MAP: 46 - GRID: 6 - PARCEL: 163  
ZONED: R-20-MD-3 / E-SC-MD-3  
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND



NOTE: SEE SHEET 44 FOR DETAILED GRADING, DNR CREDIT AREAS, AND ALIGNMENTS OF OFFSITE PATHS

NOTE: SEE COVER SHEETS FOR STORMWATER MANAGEMENT SUMMARY TABLES

**LEGEND**

- DRAINAGE AREA DIVISION
- IMPERVIOUS SURFACES PROPOSED UNDER PHASE 2
- SOILS DELINEATION
- MaC SOILS TYPE
- NON-ROOFTOP DISCONNECTION

**SOILS CHART - SOIL SURVEY HOWARD COUNTY, MARYLAND**

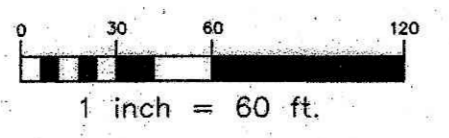
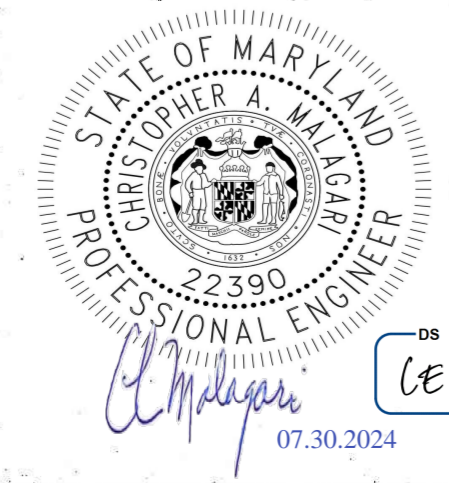
SYMBOL	HYDRIC	HYDROLOGIC GROUP	NAME	K-VALUE	ERODIBLE
GgB		B	CHILLUM LOAM, 2 TO 5 PERCENT SLOPES	0.37	NO
GnA		B	GLENELG LOAM, 0 TO 3 PERCENT SLOPES	0.20	NO
GnB		B	GLENELG LOAM, 3 TO 8 PERCENT SLOPES	0.20	NO
GmB*	YES	C	GLENVILLE SILT LOAM, 3 TO 8 PERCENT SLOPES	0.37	YES
GmC		C	GLENVILLE SILT LOAM, 8 TO 15 PERCENT SLOPES	0.37	NO
GnB*	YES	C	GLENVILLE-BAILE SILT LOAM, 0 TO 8 PERCENT SLOPES	0.37/0.32	NO
MaC		B	MANOR LOAM, 8 TO 15 PERCENT SLOPES	0.24	YES
MaD		B	MANOR LOAM, 15 TO 25 PERCENT SLOPES	0.24	YES
RnB		C	RUSSETT FINE SANDY LOAM, 2 TO 5 PERCENT SLOPES	0.24	NO
RuB		C	RUSSETT AND BELTSVILLE SOIL, 2 TO 5 PERCENT SLOPES	0.24/0.37	NO
RuC		C	RUSSETT AND BELTSVILLE SOIL, 5 TO 10 PERCENT SLOPES	0.24/0.37	NO
SaC		B	SASSAFRAS LOAM, 5 TO 10 PERCENT SLOPE	0.24	NO
ShD		B	SASSAFRAS AND CROOM SOIL, 10 TO 15 PERCENT SLOPES	0.37/0.28	YES
W			WATER	0.00	

HSCD Newsletter dated April, 2013 defines erodible soils as those soils with a slope greater than 15 percent or those soils with a soil erodibility factor K greater than 0.35 and with a slope greater than 5%.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 11-3-22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

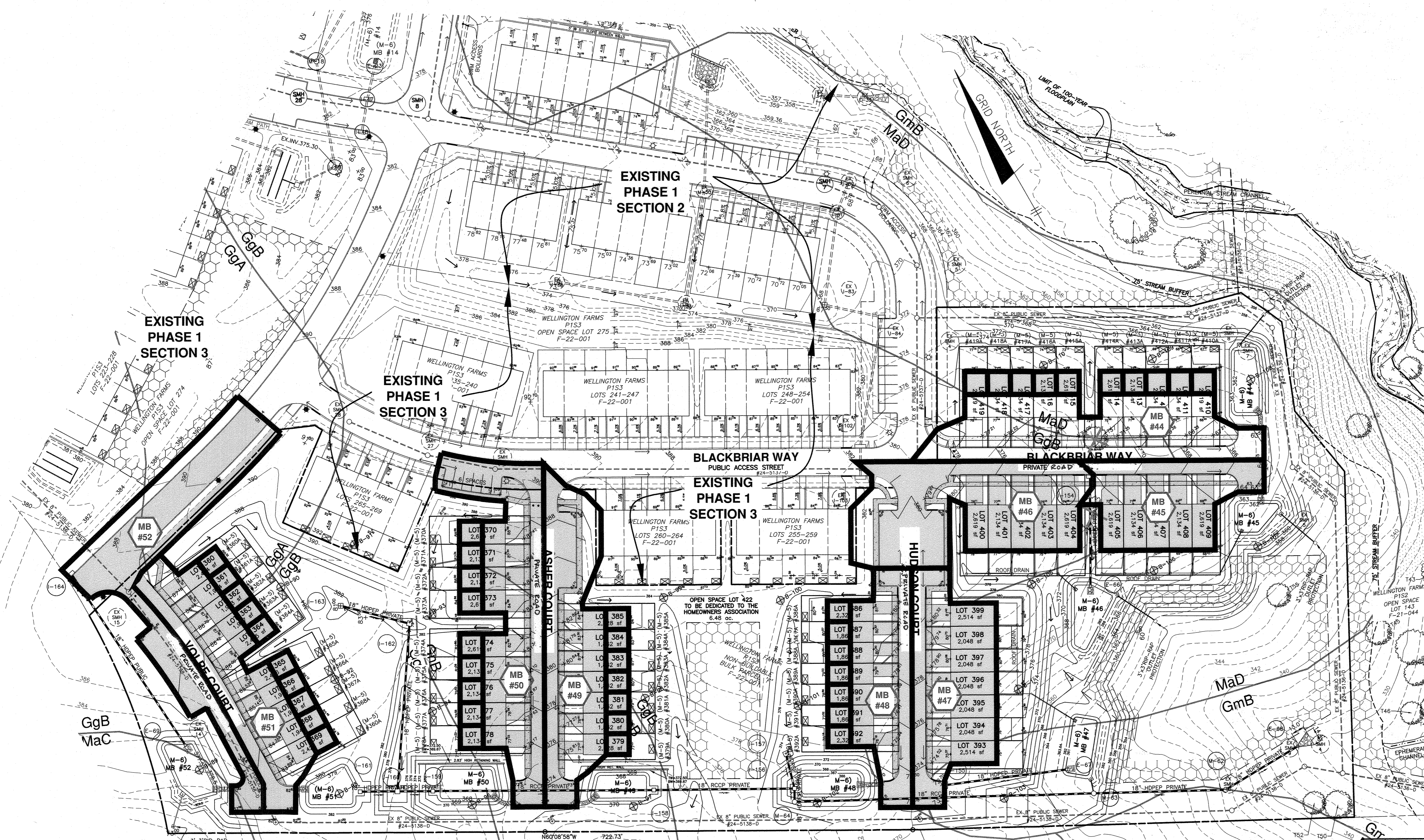


<p>3 7-26-2024 REVISE D.A. LIMIT TO MB#28 (LOT 306)</p> <p>1 8-1-2023 REVISE OFFSITE PATH CONNECTION ALIGNMENTS. REVISE TOTAL NUMBER OF SHEETS</p>	
<p>NO. DATE REVISION</p>	
<p><b>BENCHMARK</b>                  ENGINEERS &amp; LAND SURVEYORS &amp; PLANNERS  <b>ENGINEERING, INC.</b>                  3300 N. RIDGE ROAD &amp; SUITE 140 • ELLICOTT CITY, MARYLAND 21043                  (P) 410-466-9108 (F) 410-466-9544                  WWW.BE-CVLENGINEERING.COM</p>	
<p>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. 20818, Expiration Date: 6-30-2023.</p> <p><i>[Signature]</i> 9.30.22</p>	
<p><b>WELLINGTON FARMS</b>                  Phase 2                  Lots 276 thru 419; Open Space Lots 420 thru 422;                  (A Resubdivision of Non-Buildable Bulk Parcel T)                  previously recorded under F-21-044 and                  Non-Buildable Bulk Parcel T' previously recorded under F-22-001)</p>	
<p>TAX MAP: 46 - GRID: 6 - PARCEL: 163                  ZONED: R-20-MXD-3 / R-SC-MXD-3                  ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND</p>	
<p><b>STORMWATER MANAGEMENT DRAINAGE AREA MAP</b></p>	
OWNER:	ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021
DEVELOPER:	ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021
DATE:	AUGUST 15, 2022
DESIGN:	DBT
DRAFT:	DBT
BEI PROJECT NO.	2879
SCALE:	AS SHOWN
SHEET	16 OF 44



**LEGEND**

	DRAINAGE AREA DIVISION
	IMPERVIOUS SURFACES PROPOSED UNDER PHASE 2
	SOILS DELINEATION
	SOILS TYPE
	NON-ROOFTOP DISCONNECTION



**NOTE:**  
SEE COVER SHEETS FOR STORMWATER  
MANAGEMENT SUMMARY TABLES

2	8.1.2023	REVISE TOTAL NUMBER OF SHEETS
1	1/24/2023	REVISE VOLPE, ASHER, HUDSON COURTS AND BLACKBRIAR WAY TO BE "PRIVATE ROAD"
NO.	DATE	REVISION

**BENCHMARK**  
ENGINEERS • LAND SURVEYORS • PLANNERS  
**ENGINEERING, INC.**  
3300 N. RIDGE ROAD & SUITE 140 ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-8105 (F) 410-465-6644  
WWW.BE-CIVILENGINEERING.COM

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. 20397, Exp. 6-30-2023.

<p><b>WELLINGTON FARMS</b> Phase 2 Lots 276 thru 419; Open Space Lots 420 thru 422; (A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)</p>	
OWNER:	ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021
DEVELOPER:	ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021
<p><b>STORMWATER MANAGEMENT DRAINAGE AREA MAP</b></p>	
DATE:	AUGUST 15, 2022
DESIGN:	DBT
DRAFT:	DBT
SCALE:	AS SHOWN
BEI PROJECT NO.	2879
SHEET	17 OF 44

APPROVED: DEPARTMENT OF PUBLIC WORKS

CHIEF, BUREAU OF HIGHWAYS

10/20/2022  
DATE

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APPROVED: DEPARTMENT OF PLANNING AND ZONING

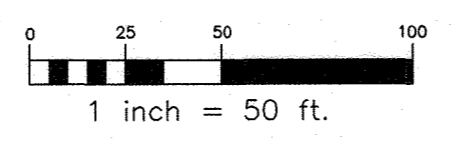
CHIEF, DIVISION OF LAND DEVELOPMENT

11/7/22  
DATE

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CHIEF, DEVELOPMENT ENGINEERING DIVISION

11.7.22  
DATE



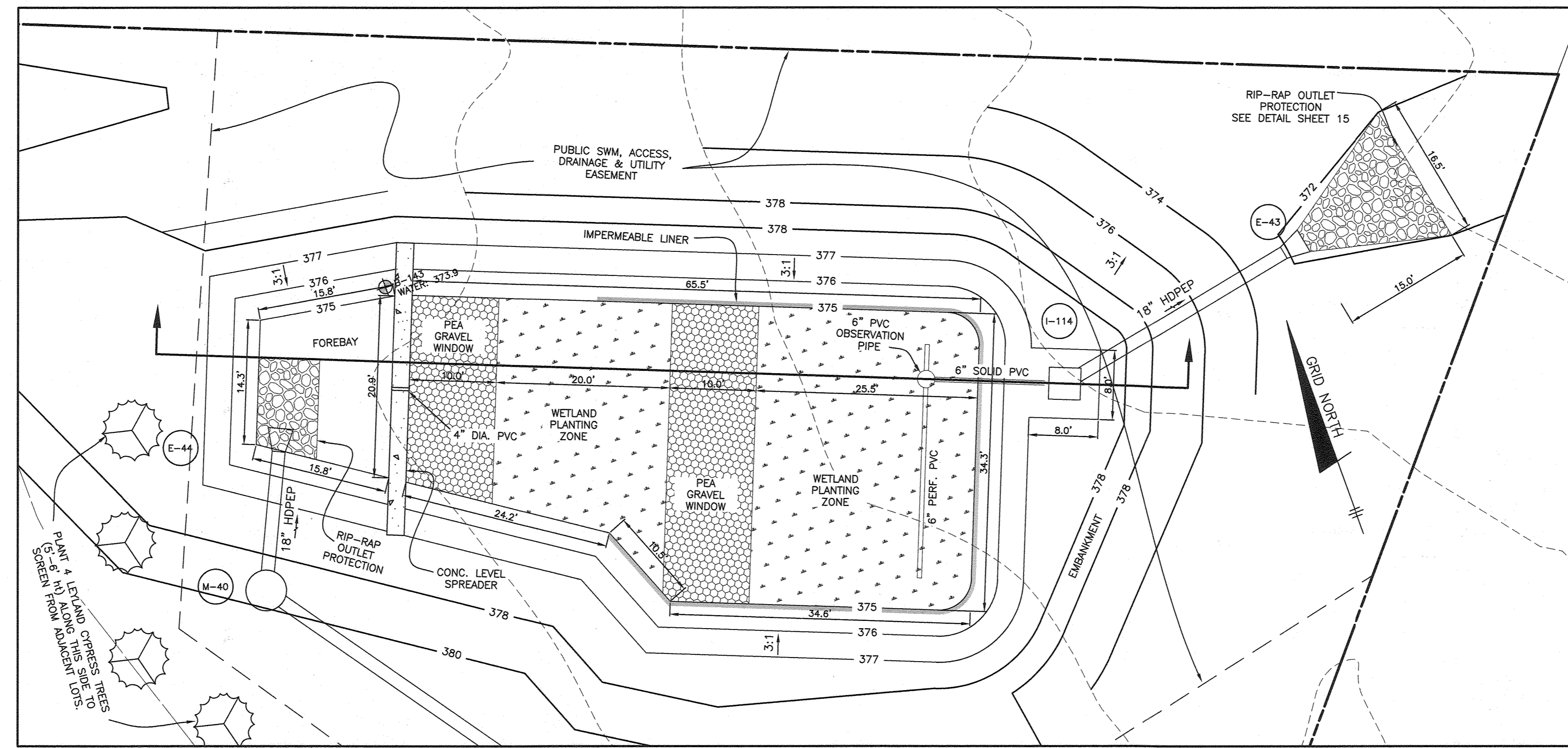
**OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND JOINTLY MAINTAINED (M-2) SUBMERGED GRAVEL WETLANDS**

**Routine Maintenance (By HOA):**

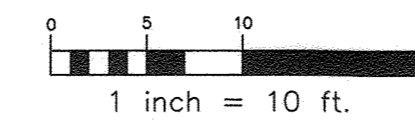
1. During the first year of operation the owner shall inspect the facility after every heavy storm and replace vegetation as needed.
2. The owner shall remove sediment accumulated in the pretreatment areas as needed.
3. Signs of uneven flow within the wetlands may mean that the gravel or underdrain is clogged. The gravel or underdrain shall be removed, cleaned, and replaced, as needed.
4. The owner shall ensure a dense stand of wetland vegetation is maintained through the life of the facility and replace vegetation as needed.
5. The owner shall ensure the inlets and outlets to each gravel wetland cell are free from debris.
6. The owner shall repair erosion at inflow points and ensure flow splitters are functional to prevent storm water from bypassing the facility.

**Non-Routine Maintenance (By County):**

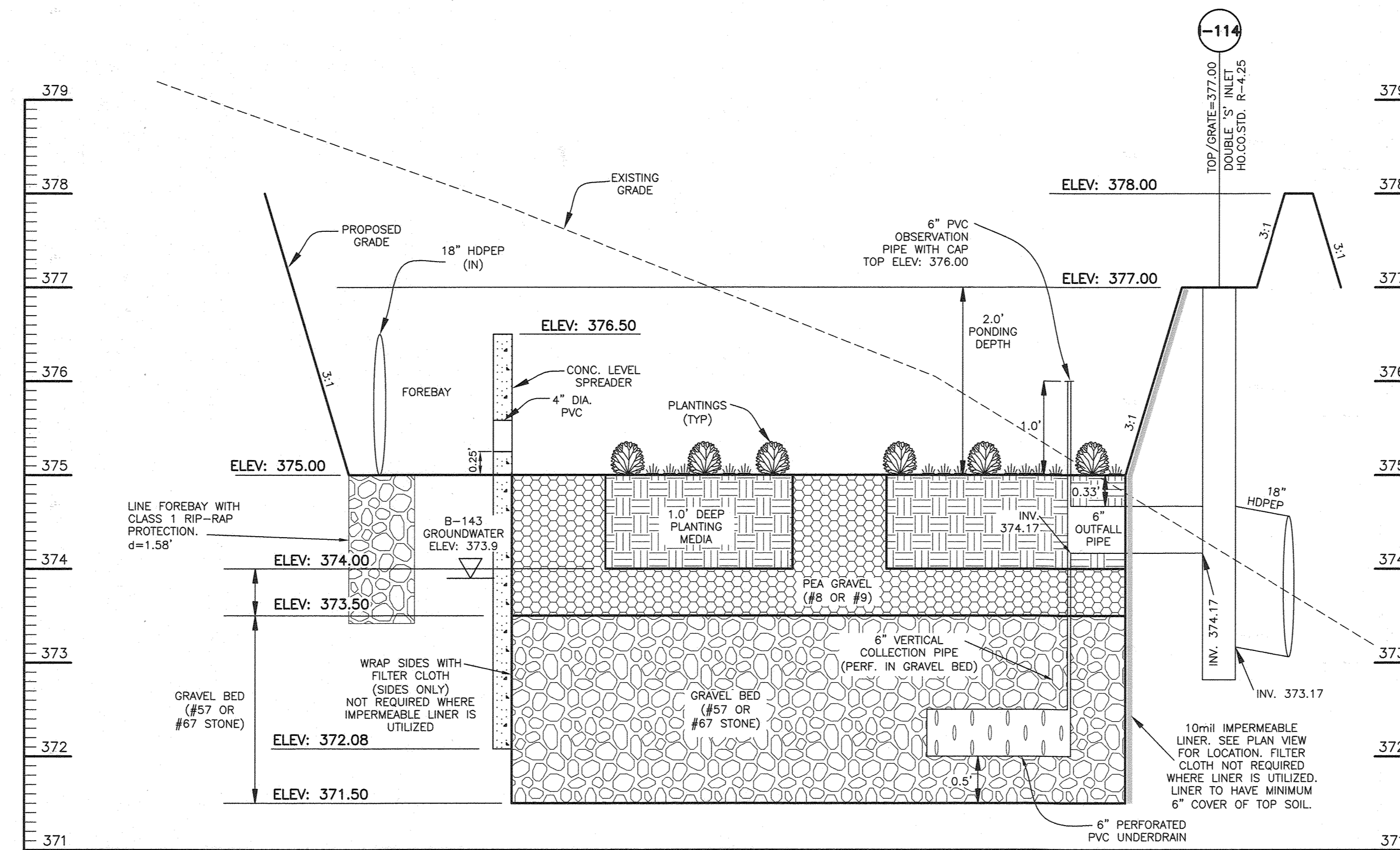
1. County shall be responsible for the drain pipes and outfall structures adjacent to a public road. The components shall be inspected during routine maintenance operations.



**SUBMERGED GRAVEL WETLANDS #8**

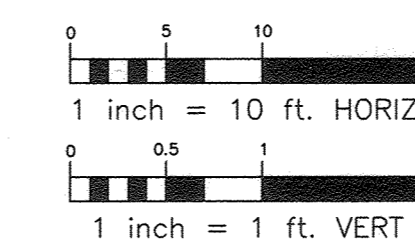


(M-2) Submerged Gravel Wetlands Landscaping Chart					
PLANT NAME	COMMON NAME	TYPE	SIZE	QUANTITY	SGW #
Ranunculus Subrigidus	Pond Buttercup	perennial	1 qt.	37	1575
Phlox Maculata	Meadow Phlox	perennial	1 qt.	26	1490
Lobelia Cardinalis	Cardinal Flower	perennial	1 qt.	42	35
Salix Sericea	Silky Willow	tree	18-24" ht. #3 CAN	8	25
Viburnum Nudum	Viburnum, Possum-Haw	shrub	18-24" ht.	16	40
					7
					15



**(M-2) SUBMERGED GRAVEL WETLANDS #8**

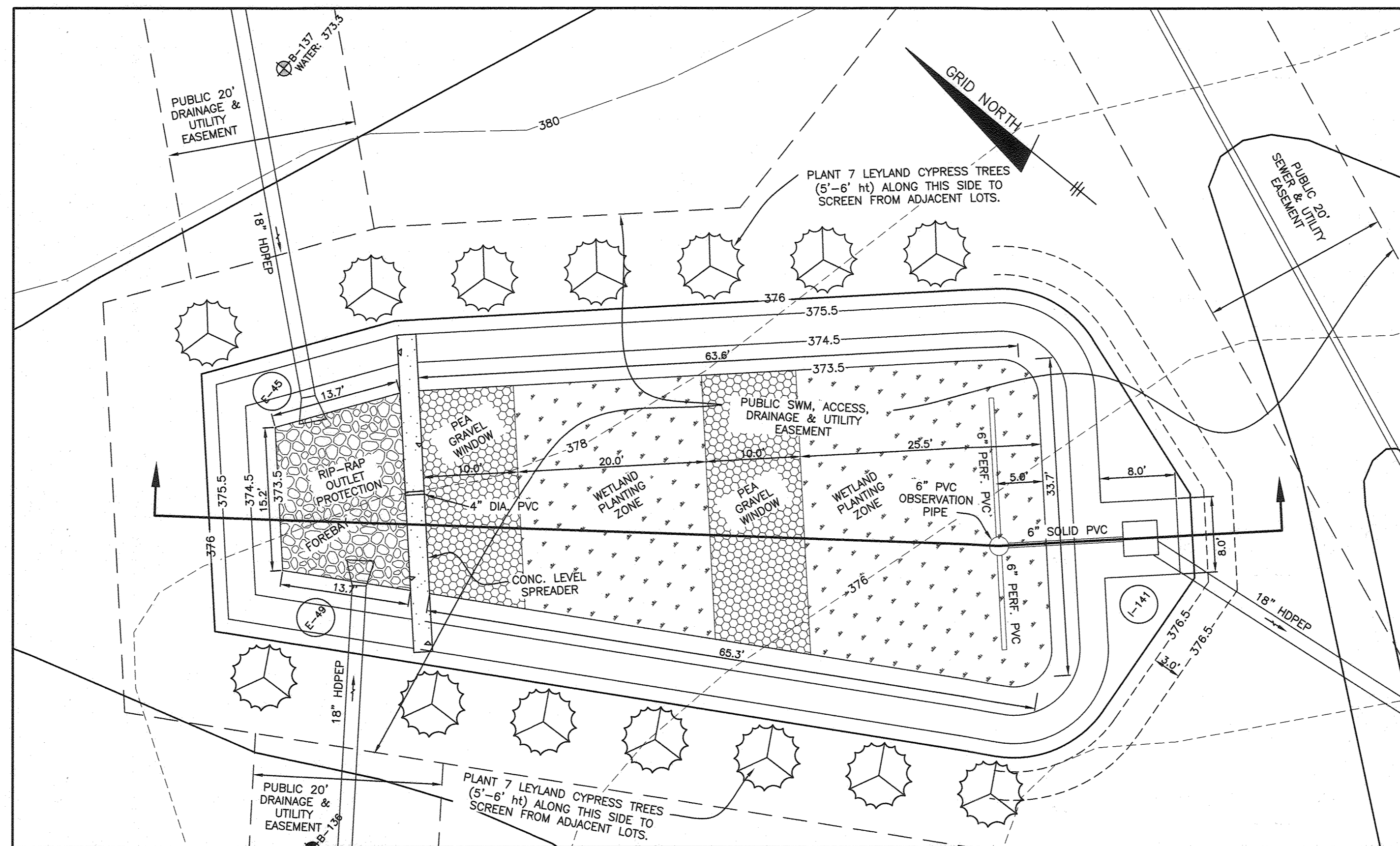
SCALE: 1"=10'HORIZ., 1"=1' VERT.



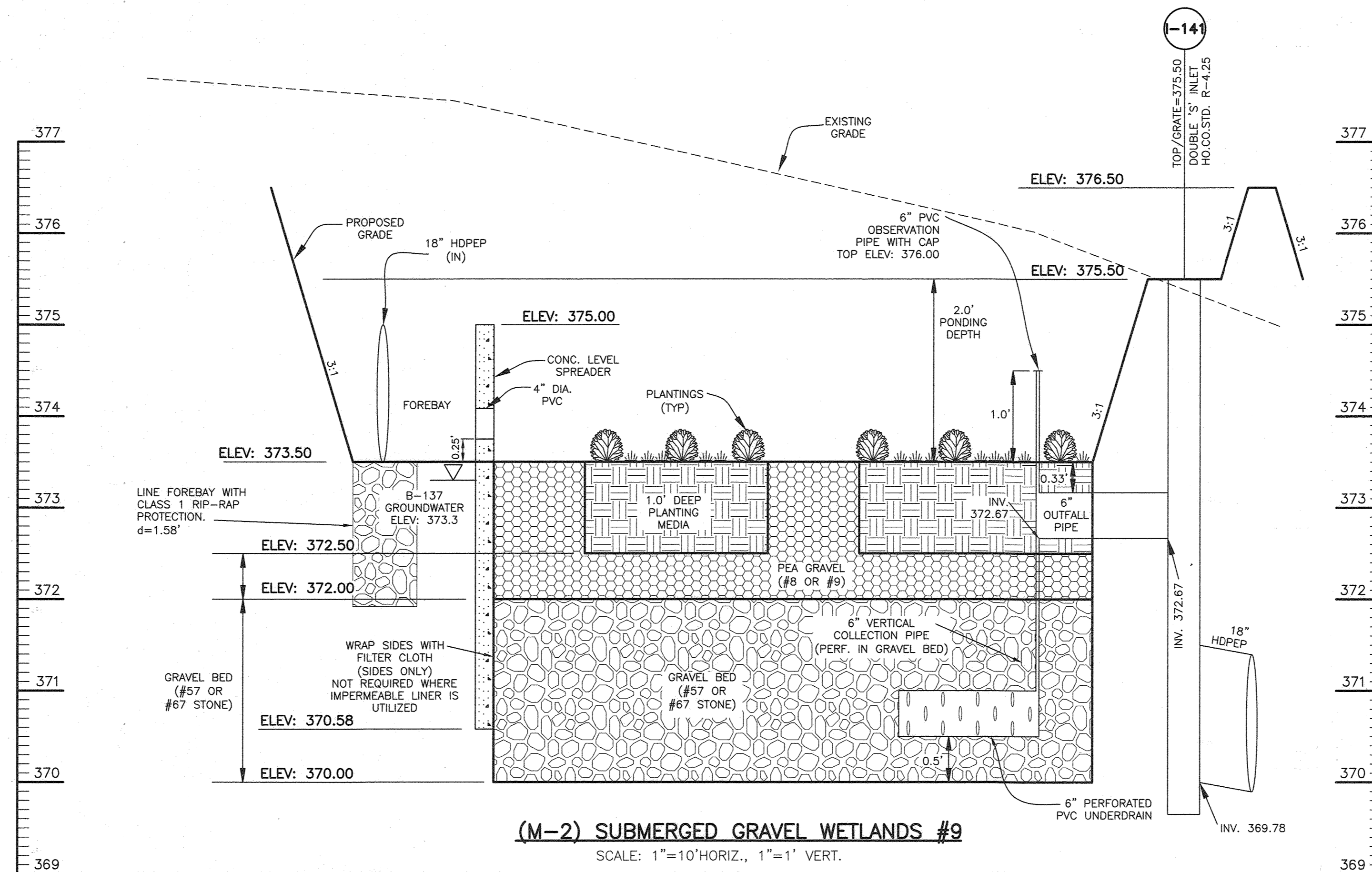
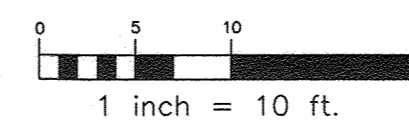
<p>Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 22390.</p>	
<p><b>BENCHMARK ENGINEERING, INC.</b>          ENGINEERS &amp; LAND SURVEYORS &amp; PLANNERS          3300 N. RIDGE ROAD &amp; SUITE 140 • ELLICOTT CITY, MARYLAND 21043          (P) 410-465-6105 (F) 410-465-6644          WWW.BEI-CIVILENGINEERING.COM</p>	
<p>Professional Seal: <i>[Seal]</i></p>	

<p><b>WELLINGTON FARMS</b>          Phase 2          Lots 276 thru 419; Open Space Lots 420 thru 422;          (A Resubdivision of Non-Buildable Bulk Parcel 'E'          previously recorded under F-21-044 and          Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)</p>	
<p>TAX MAP: 46 - GRID: 6 - PARCEL: 163          ZONED: R-20-MXD-3 / R-SC-MXD-3          ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND</p>	
<p><b>STORMWATER MANAGEMENT DETAILS</b>  <b>SUBMERGED GRAVEL WETLANDS</b></p>	
<p>OWNER:          ESC WELLINGTON, L.C.          5074 DORSEY HALL DRIVE, SUITE 205          ELLICOTT CITY, MARYLAND 21042          410-720-3021</p>	<p>DEVELOPER:          ESC WELLINGTON, L.C.          5074 DORSEY HALL DRIVE, SUITE 205          ELLICOTT CITY, MARYLAND 21042          410-720-3021</p>
<p>DATE: AUGUST 15, 2022</p>	<p>BEI PROJECT NO. 2879</p>
<p>DESIGN: DBT</p>	<p>DRAFT: DBT</p>
<p>SCALE: AS SHOWN</p>	<p>SHEET 18 OF</p>

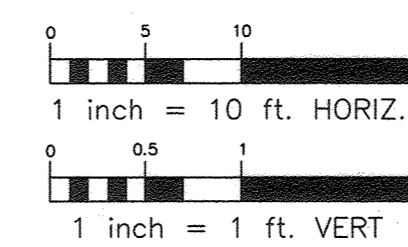
<p>APPROVED: DEPARTMENT OF PUBLIC WORKS  <i>[Signature]</i>          CHIEF, BUREAU OF HIGHWAYS          10/20/2022          DATE</p>	<p>APPROVED: DEPARTMENT OF PLANNING AND ZONING  <i>[Signature]</i>          CHIEF, DIVISION OF LAND DEVELOPMENT          11/3/22          DATE</p>
<p>APPROVED: DEPARTMENT OF PLANNING AND ZONING  <i>[Signature]</i>          CHIEF, DEVELOPMENT ENGINEERING DIVISION          11/3/22          DATE</p>	<p>APPROVED: DEPARTMENT OF PLANNING AND ZONING  <i>[Signature]</i>          CHIEF, DEVELOPMENT ENGINEERING DIVISION          11/3/22          DATE</p>



**SUBMERGED GRAVEL WETLANDS #9**



**(M-2) SUBMERGED GRAVEL WETLANDS #9**



APPROVED: DEPARTMENT OF PUBLIC WORKS  
 [Signature] 10/20/2022 DATE  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 11/3/22 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT

[Signature] 11/3/22 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO.	DATE	REVISION
1	8.1.2023	REVISE TOTAL NUMBER OF SHEETS

**BENCHMARK ENGINEERING, INC.**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 3300 N. RIDGE ROAD SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-485-6105 (F) 410-485-8644  
 WWW.BEI-CIVILENGINEERING.COM

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. 22390.

**WELLINGTON FARMS**  
 Phase 2  
 Lots 276 thru 419; Open Space Lots 420 thru 422;  
 (A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

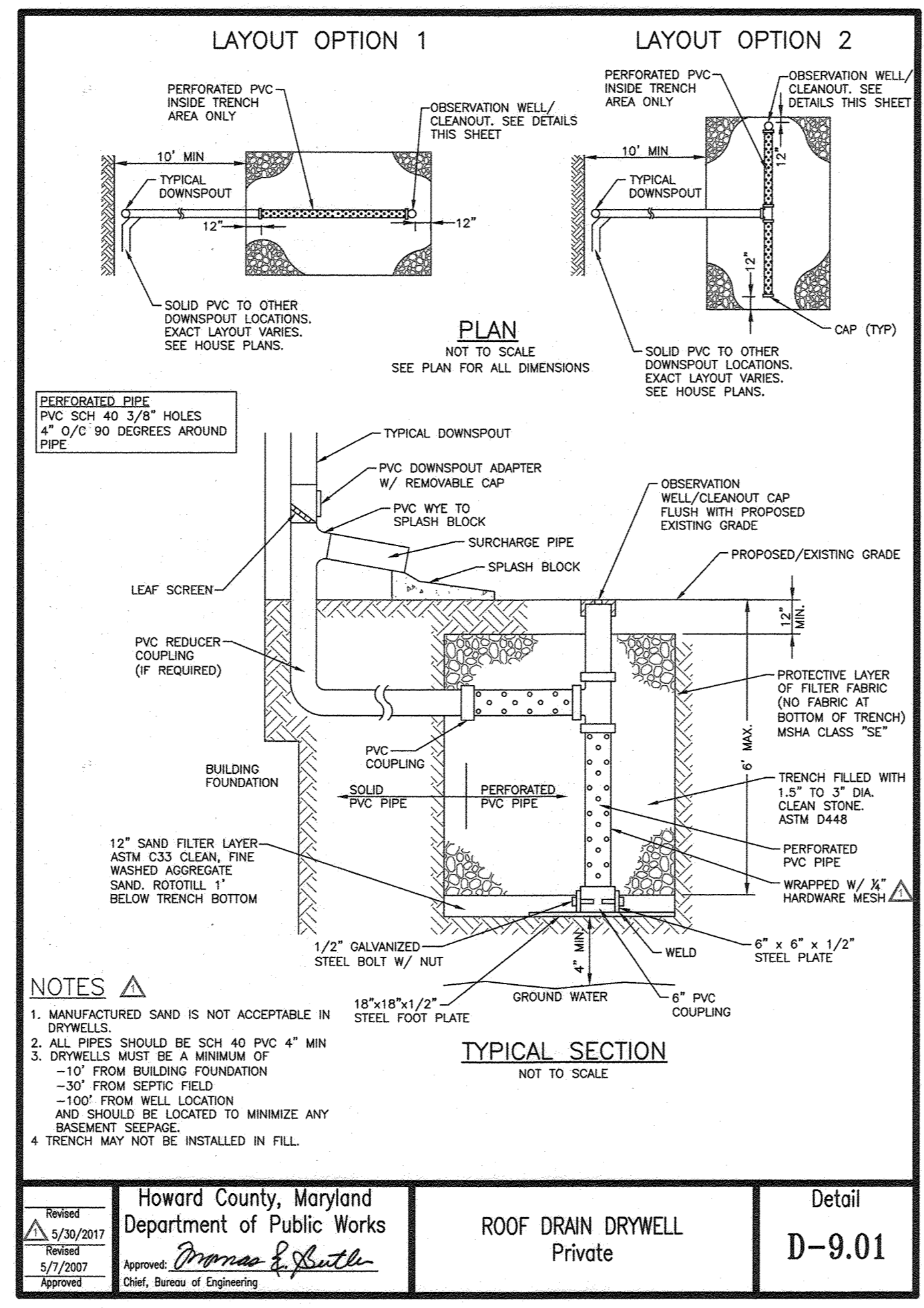
TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONED: R-20-MKD-3 / R-SC-MKD-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

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

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

**STORMWATER MANAGEMENT DETAILS**  
**SUBMERGED GRAVEL WETLANDS**

DATE: AUGUST 15, 2022    BEI PROJECT NO. 2879  
 SCALE: AS SHOWN    SHEET 19 OF 44



Howards County, Maryland  
Department of Public Works  
Roof Drain Drywell  
Private  
Detail  
D-9.01

**OPERATION AND MAINTENANCE SCHEDULE FOR PRIVATELY OWNED AND MAINTAINED (M-5) DRY WELLS**

- The monitoring wells and structures shall be inspected on a quarterly basis and after every large storm event.
- Water levels and sediment build up in the monitoring wells shall be recorded over a period of several days to insure trench drainage.
- A log book shall be maintained to determine the rate at which the facility drains.
- When the facility becomes clogged so that it does not drain down within the 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.
- Once the performance characteristics of the infiltration facility have been verified, the monitoring schedule can be reduced to an annual basis unless the performance data indicates that a more frequent schedule is required.

MATERIALS & SPECIFICATIONS FOR DRY WELLS			
MATERIAL	SPECIFICATION	SIZE	NOTES:
GEOTEXTILE (CLASS "C")	N/A	N/A	PE TYPE 1 NONWOVEN
GRAVEL	AASHTO M 43	1 1/2" TO 2 1/2"	
UNDERDRAIN PIPING	F758, TYPE PS28 OR AASHTO M-278	4" TO 6" RIGID SCH.40 PVC, SDR35 OR HDPE	3/8" PERF. @ 6" O/C, 4 HOLES PER ROW; MINIMUM OF 2" OF GRAVEL OVER PIPES.
SAND	AASHTO M-6 OR ASTM-C-33	.02" TO .04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRAYSTONE (ASH10) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATED OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NT ROCK DUST CAN BE USED FOR SAND.

STORMWATER MANAGEMENT SUMMARY TABLE: (M-5) DRY WELLS											
Lot	DW	DA (sf)	Imp Area (sf)	% Imp	Rv	Pe required	ESDv (cf)		Pe Provided	Maintenance	
							Required	Provided			
315	315A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
315	315B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
316	316A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
316	316B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
317	317A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
317	317B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
318	318A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
318	318B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
319	319A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
319	319B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
320	320A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
320	320B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
321	321A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
321	321B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
322	322A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
322	322B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
323	323A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
323	323B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
324	324A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
324	324B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
325	325A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
325	325B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
326	326A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
326	326B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
327	327A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
327	327B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
328	328A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
328	328B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
350	350A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
350	350B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
351	351A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
351	351B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
352	352A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
352	352B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
353	353A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
353	353B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
354	354A	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
354	354B	563	563	100%	0.95	1.7	76	80	1.8	PRIVATE	
360	360A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
361	361A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
362	362A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
363	363A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
364	364A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
365	365A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
366	366A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
367	367A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
368	368A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
369	369A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
370	370A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
371	371A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
372	372A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
373	373A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
374	374A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
375	375A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
376	376A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
377	377A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
378	378A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
379	379A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
380	380A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
381	381A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
382	382A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
383	383A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
384	384A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
385	385A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
386	386A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
387	387A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
388	388A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
389	389A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
390	390A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
391	391A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
392	392A	440	440	100%	0.95	1.7	59	64	1.8	PRIVATE	
410	410A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
411	411A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
412	412A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
413	413A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
414	414A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
415	415A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
416	416A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
417	417A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
418	418A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
419	419A	484	484	100%	0.95	1.7	65	68	1.8	PRIVATE	
TOTALS		41,150	41,150				5538	5868			

Notes:  
1. The Pe required column is based on total site Pe calculation. The Rv is based on individual drainage area percent impervious

NOTE:  
DRY WELLS TO BE INSTALLED DURING HOUSE CONSTRUCTION AT THE SITE DEVELOPMENT PLAN STAGE. GROUND ELEVATION, TOP OF STORAGE ELEVATION, BOTTOM ELEVATION, ETC. SHALL BE PROVIDED ON THE FUTURE SITE DEVELOPMENT PLAN.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
CHIEF, BUREAU OF HIGHWAYS  
APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/3/22  
CHIEF, DIVISION OF LAND DEVELOPMENT  
CHIEF, DEVELOPMENT ENGINEERING DIVISION HDA

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. 28990

**BENCHMARK ENGINEERING, INC.**  
3300 N. RIDGE ROAD SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6844  
WWW.BE-CIVILENGINEERING.COM

**WELLINGTON FARMS**  
Phase 2  
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(A Resubdivision of Non-Buildable Bulk Parcel 'E'  
previously recorded under F-21-044 and  
Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

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

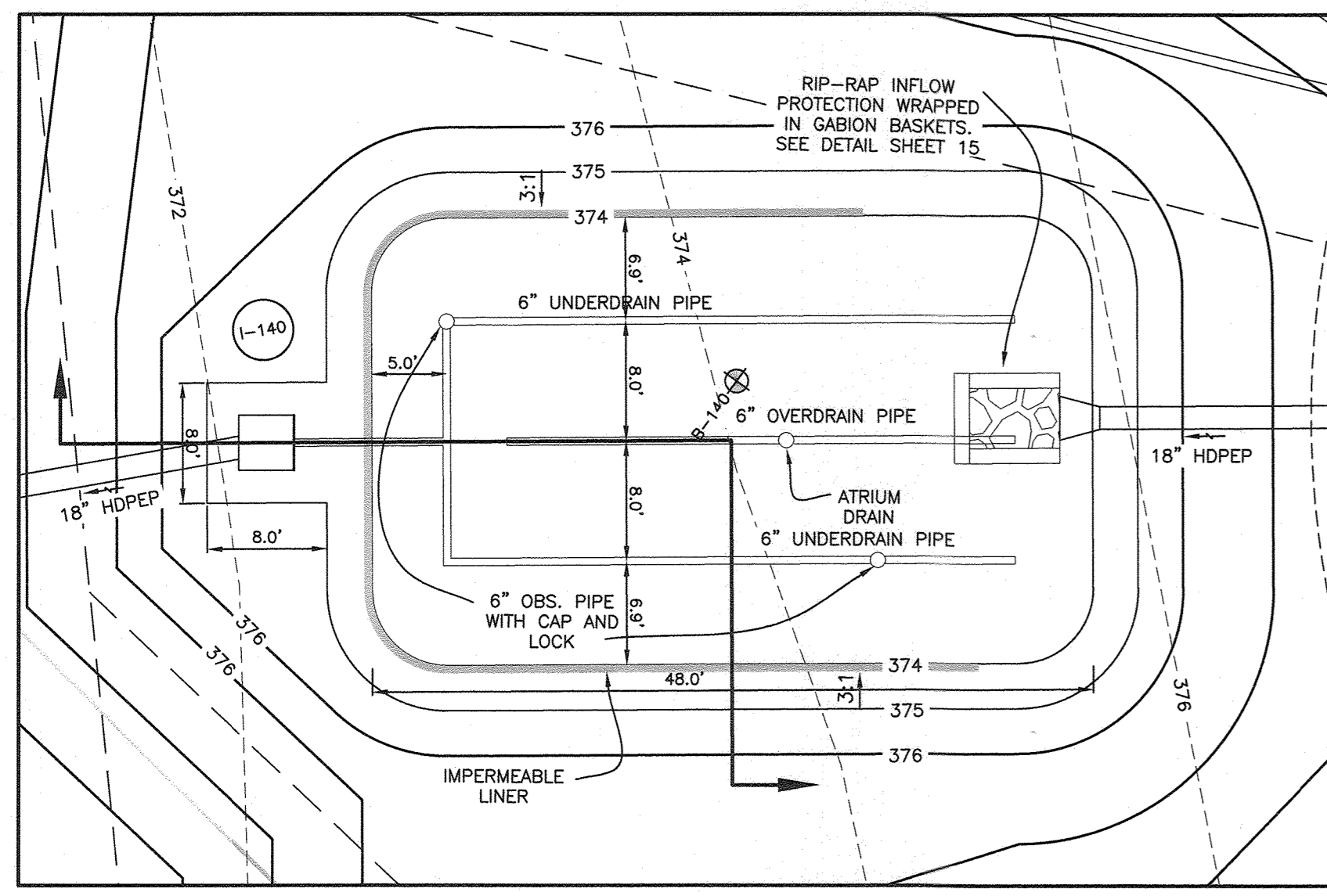
DEVELOPER:  
ESC WELLINGTON, L.C.  
5074 DORSEY HALL DRIVE, SUITE 205  
ELLICOTT CITY, MARYLAND 21042  
410-720-3021

TAX MAP: 46 - GRID: 6 - PARCEL: 163  
ZONED: R-20-MXD-3 / R-SC-MXD-3  
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

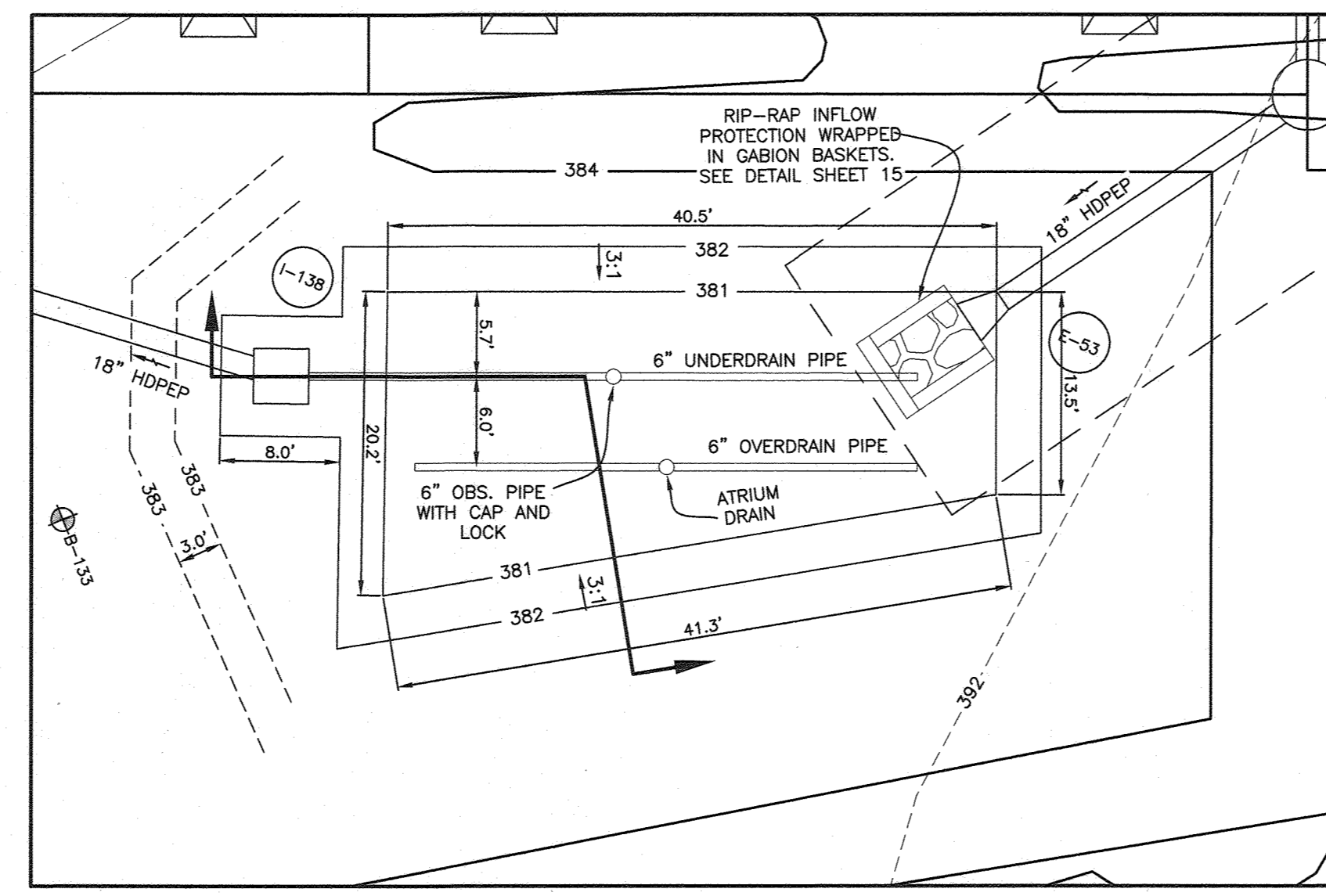
**STORMWATER MANAGEMENT DETAILS DRY WELLS**

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
SCALE: AS SHOWN SHEET 20 OF 44

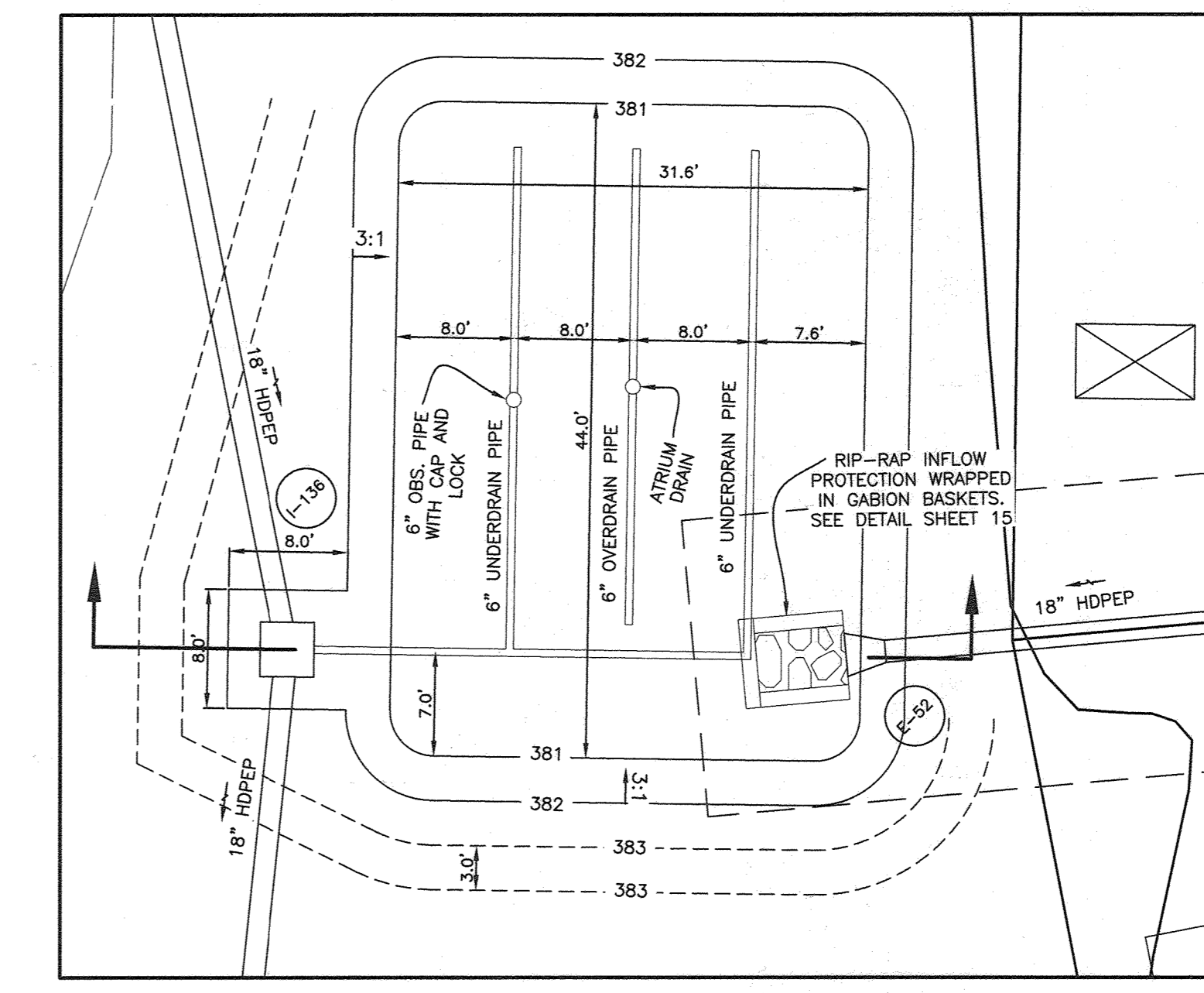




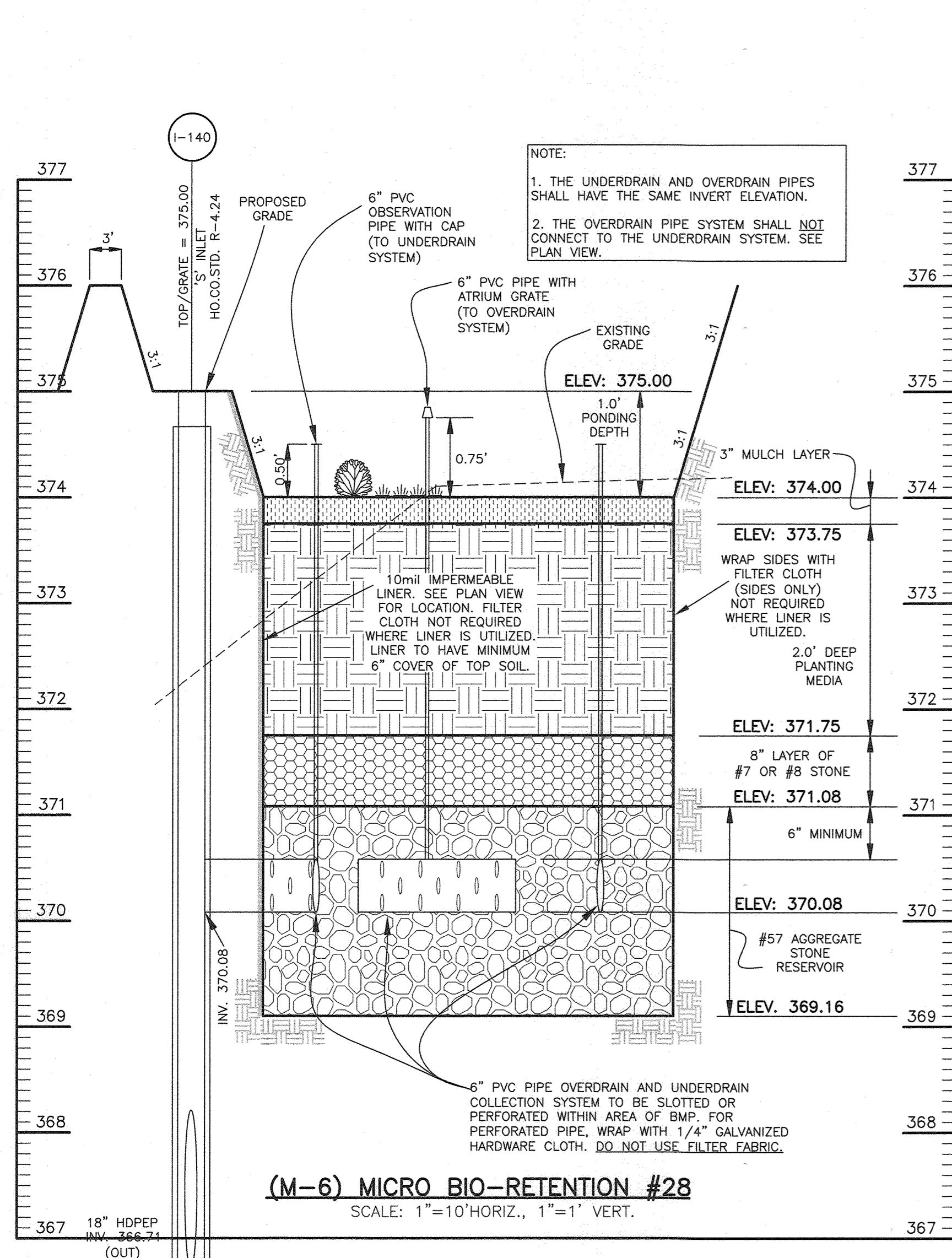
**MICRO BIO-RETENTION #28**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



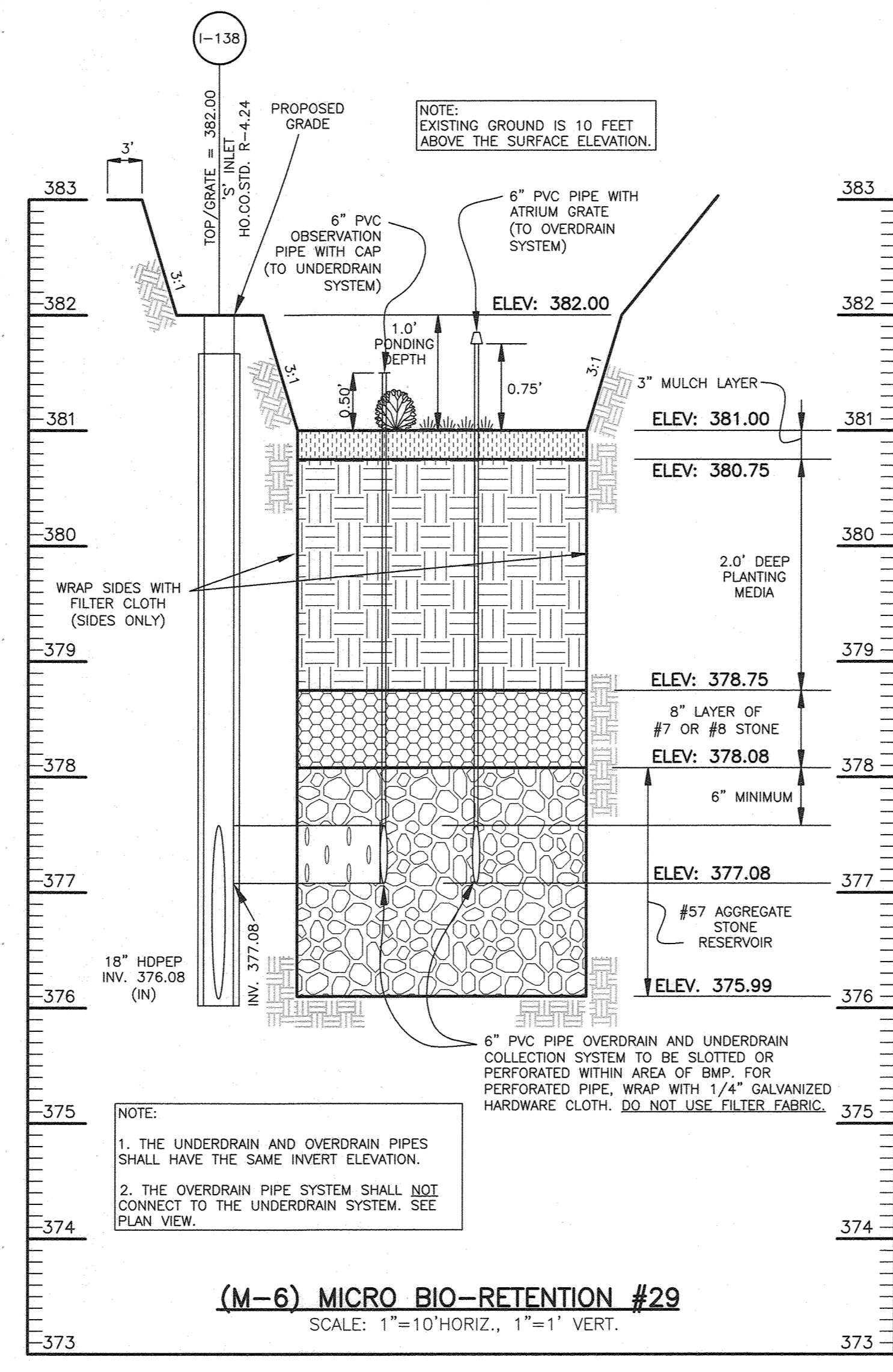
**MICRO BIO-RETENTION #29**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



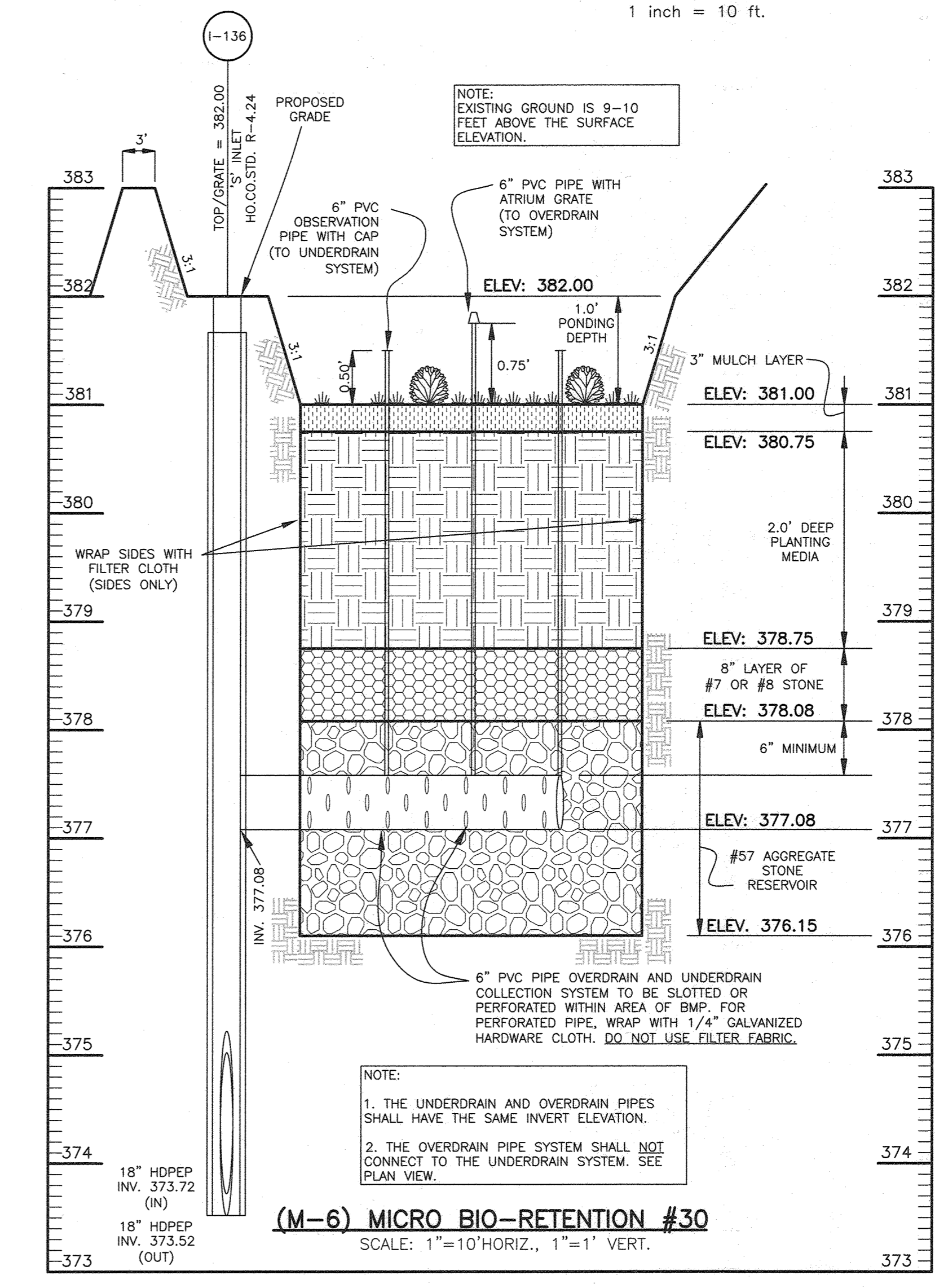
**MICRO BIO-RETENTION #30**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #28**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #29**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #30**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/7/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*[Signature]* 11/3/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO.	DATE	REVISION
1	8.1.2023	REVISE TOTAL NUMBER OF SHEETS.

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
 3300 N. RIDGE ROAD SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-8108 (F) 410-465-8644  
 WWW.BE-CVLENGINEERING.COM

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. 22390, Expiration Date: 6/30/2023.

*[Signature]* 9-19-22

**WELLINGTON FARMS**  
 Phase 2  
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 (A Resubdivision of Non-Buildable Bulk Parcel 'E'  
 previously recorded under F-21-044 and  
 Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

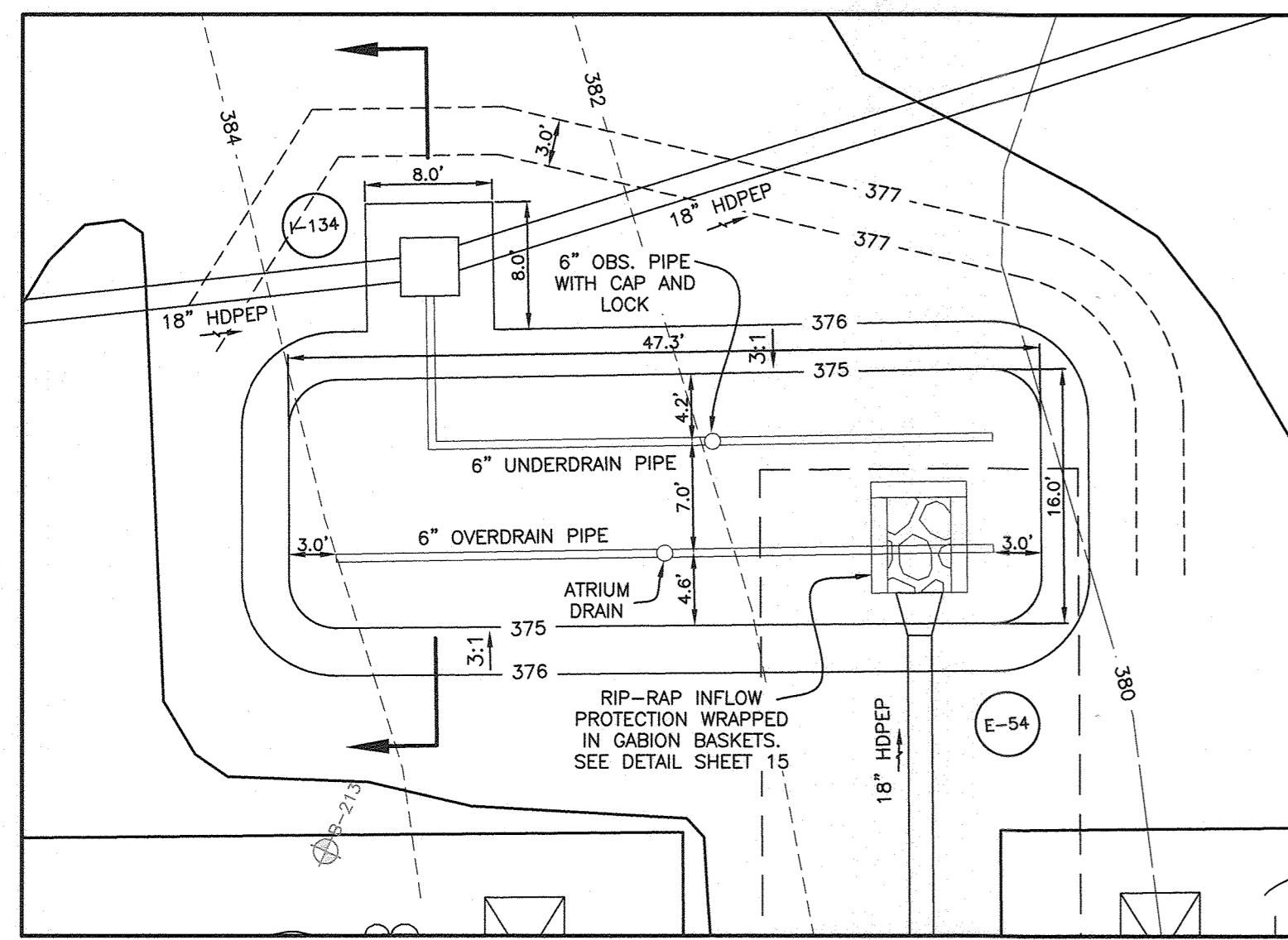
OWNER:  
 ESC WELLINGTON, L.C.  
 5074 DORSEY HALL DRIVE, SUITE 205  
 ELLICOTT CITY, MARYLAND 21042  
 410-720-3021

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

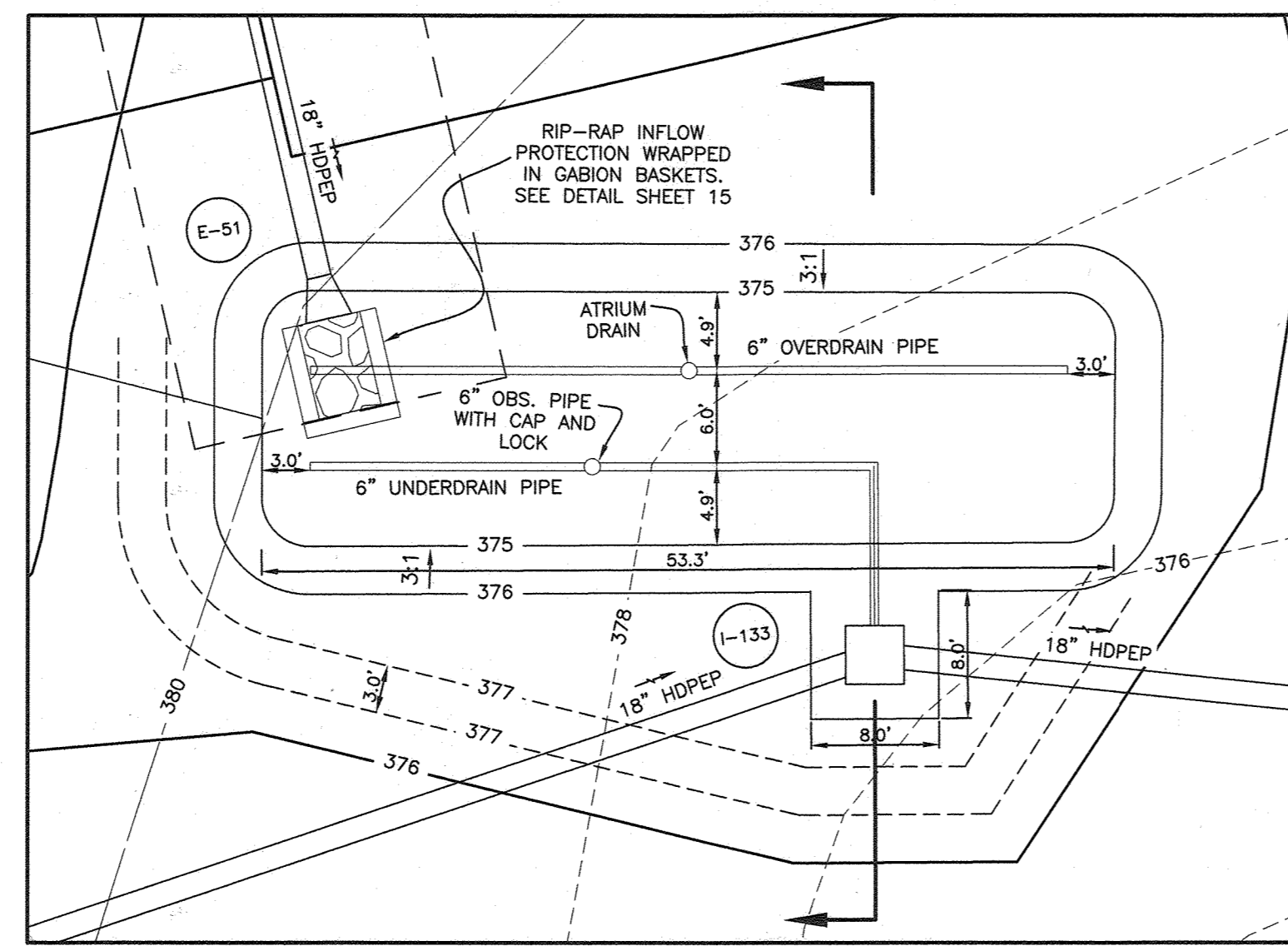
TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONED: R-20-MMD-3 / R-SC-MMD-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

**STORMWATER MANAGEMENT DETAILS**

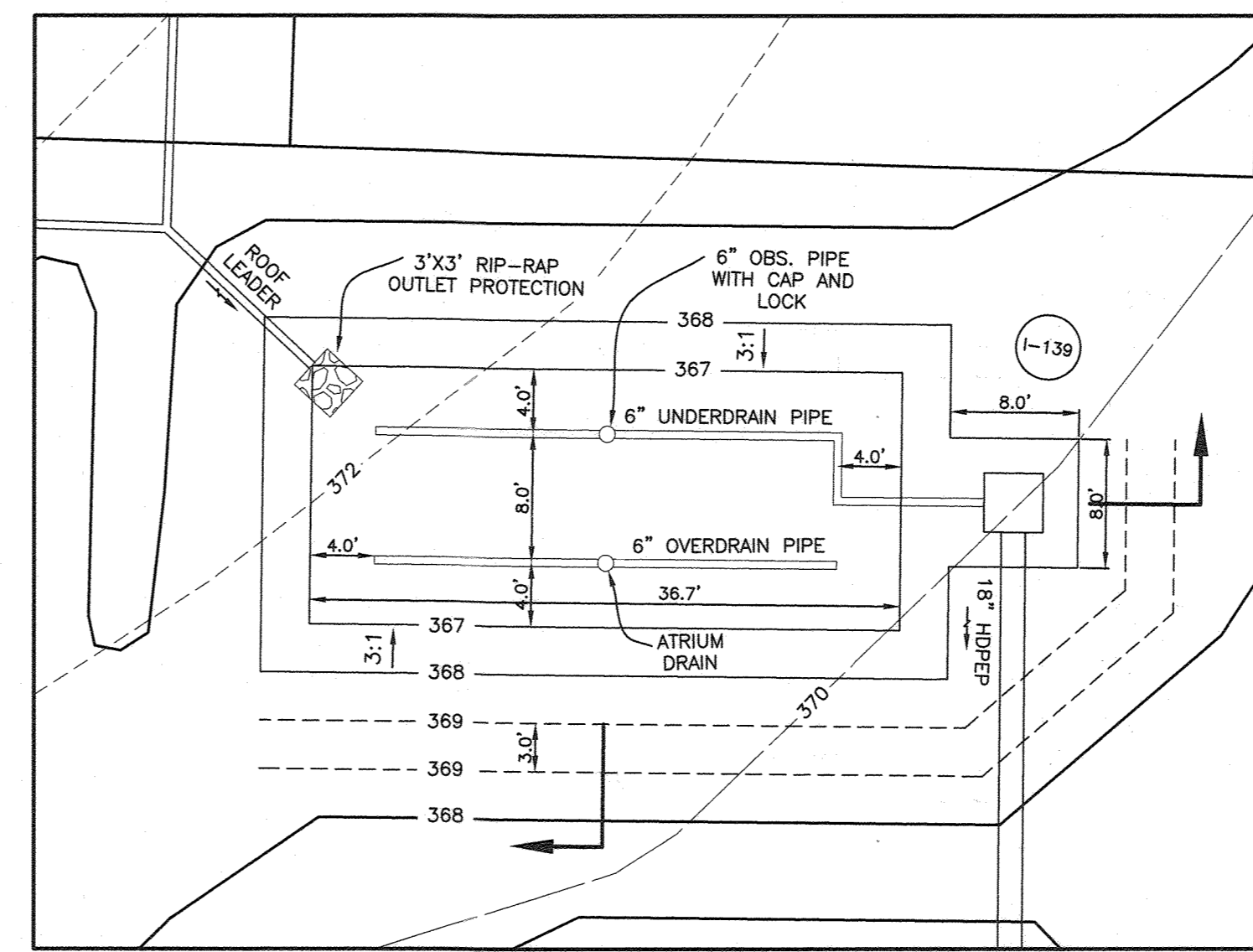
DATE: AUGUST 15, 2022  
 SCALE: AS SHOWN  
 BEI PROJECT NO. 2879  
 SHEET 22 OF 44



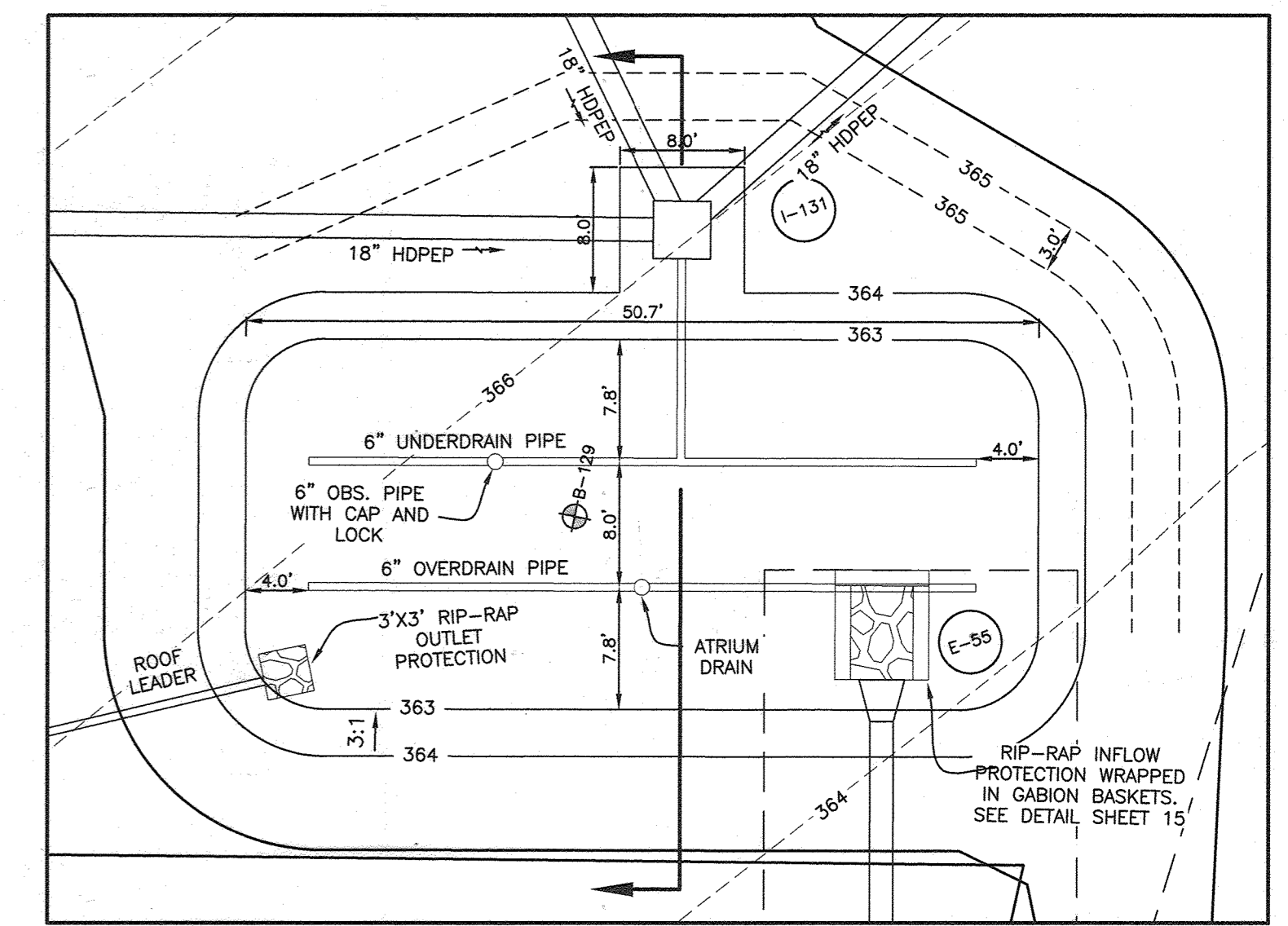
**MICRO BIO-RETENTION #31**  
1 inch = 10 ft.



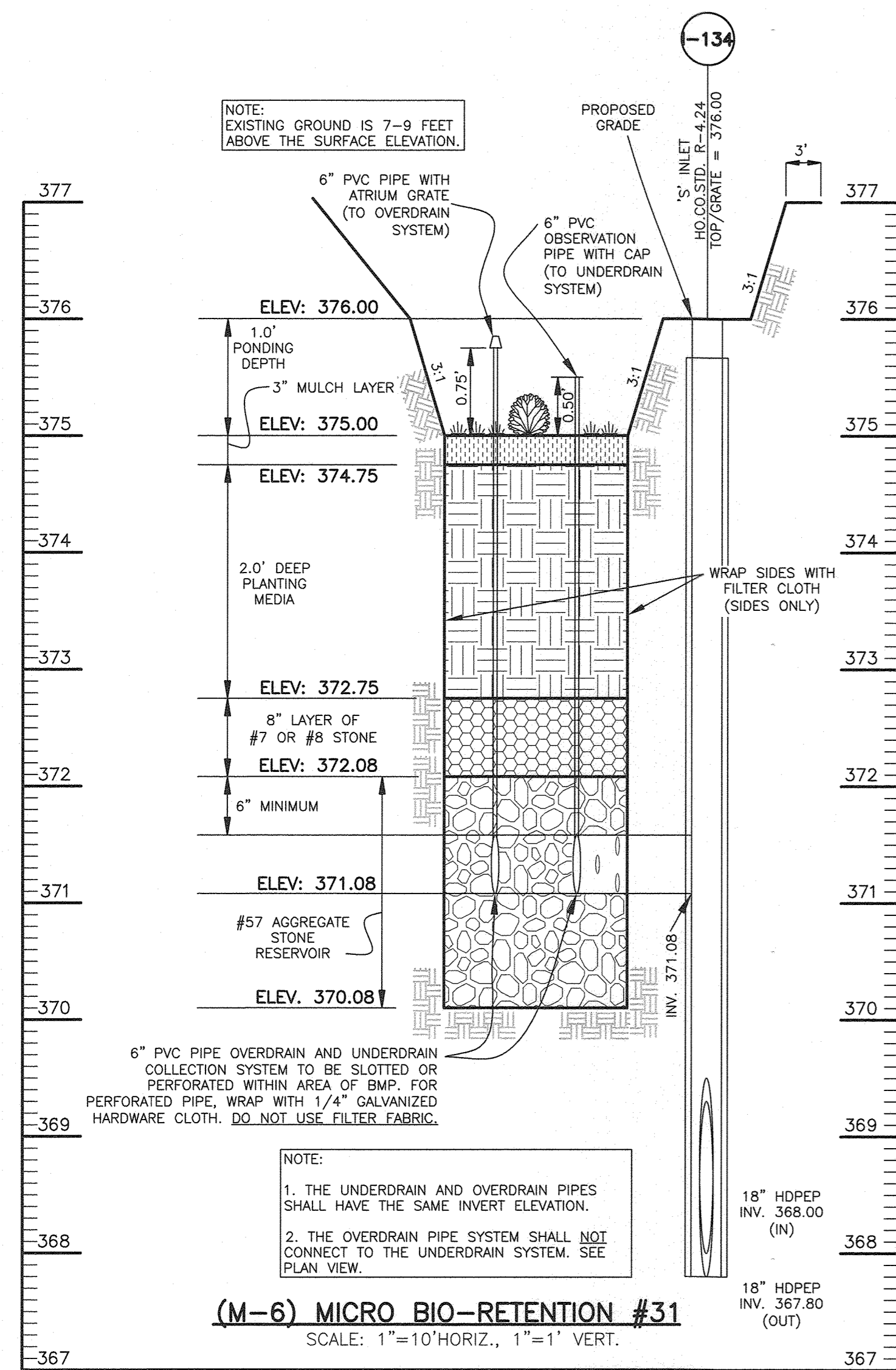
**MICRO BIO-RETENTION #32**  
1 inch = 10 ft.



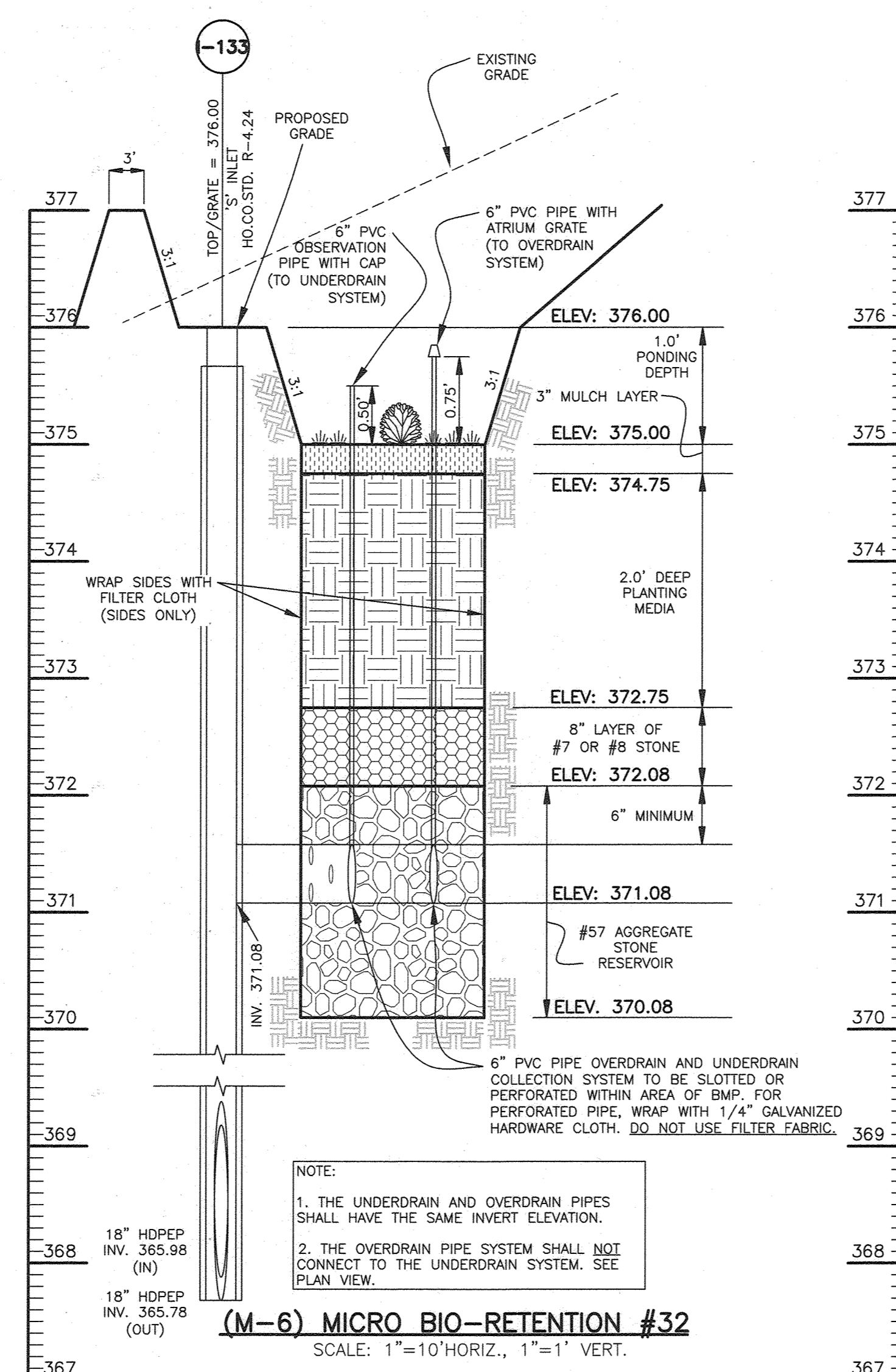
**MICRO BIO-RETENTION #33**  
1 inch = 10 ft.



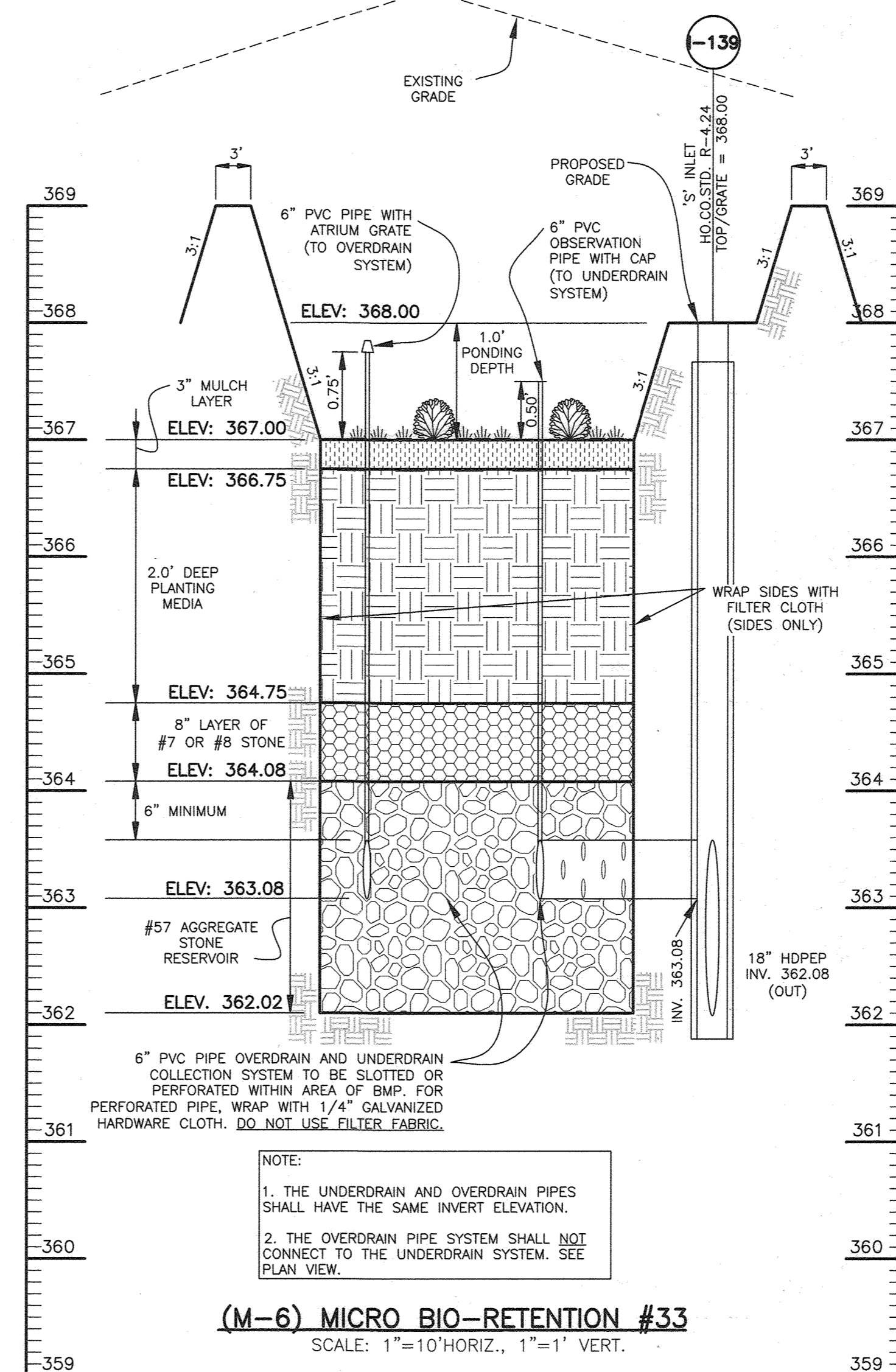
**MICRO BIO-RETENTION #34**  
1 inch = 10 ft.



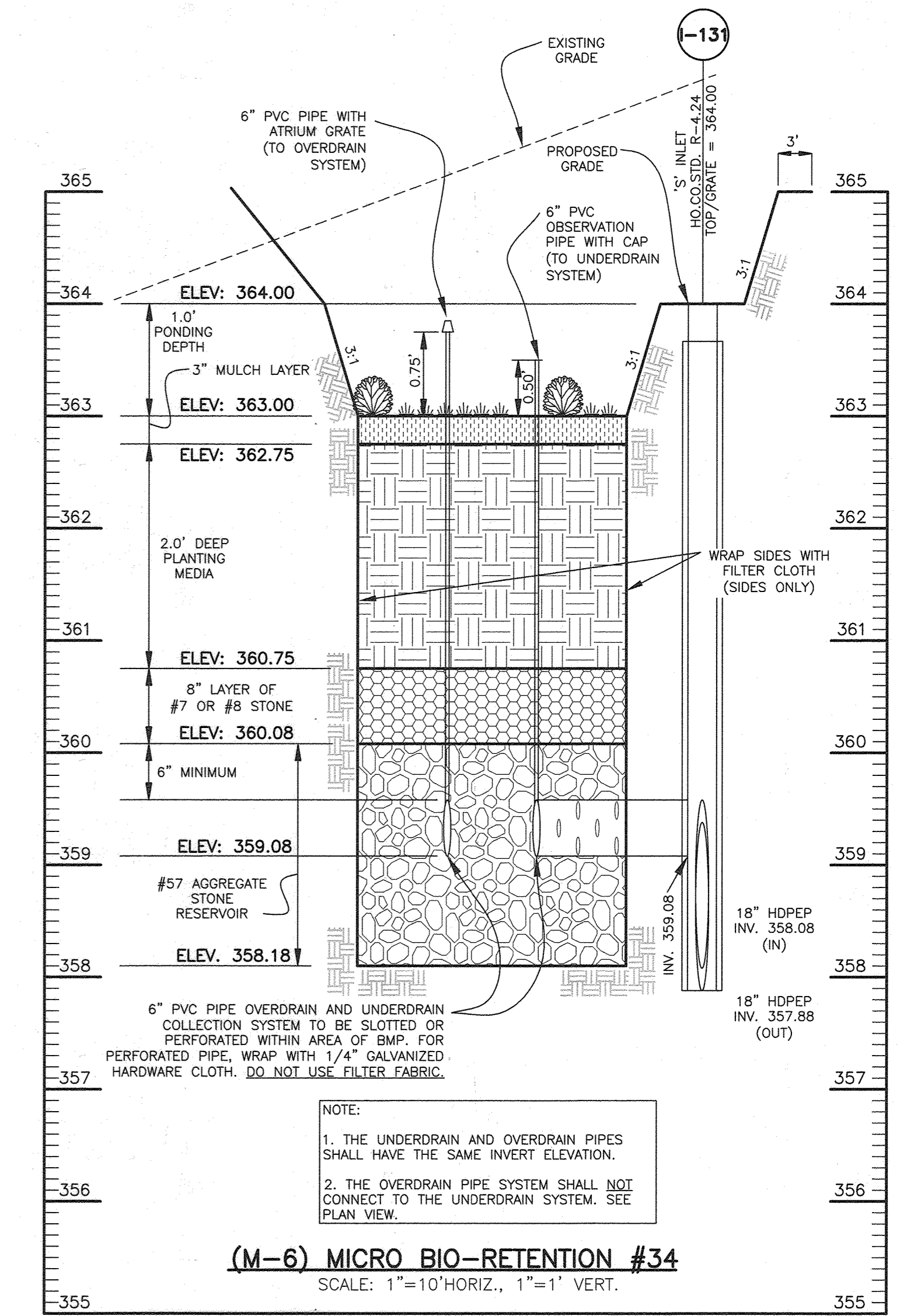
**(M-6) MICRO BIO-RETENTION #31**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #32**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #33**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #34**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/3/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE

APPROVED: CHIEF, DEVELOPMENT ENGINEERING DIVISION  
*[Signature]* 11/3/22  
 DATE

NO.	DATE	REVISION
1	8.1.2023	REVISE TOTAL NUMBER OF SHEETS

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 ENGINEERING, INC.  
 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-4105 (F) 410-465-6644  
 WWW.BE-CVLENGINEERING.COM

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. 23390, Expiration Date: 6-30-2023.

*[Signature]* 9-19-22

**WELLINGTON FARMS**  
 Phase 2  
 Lots 276 thru 419; Open Space Lots 420 thru 422;  
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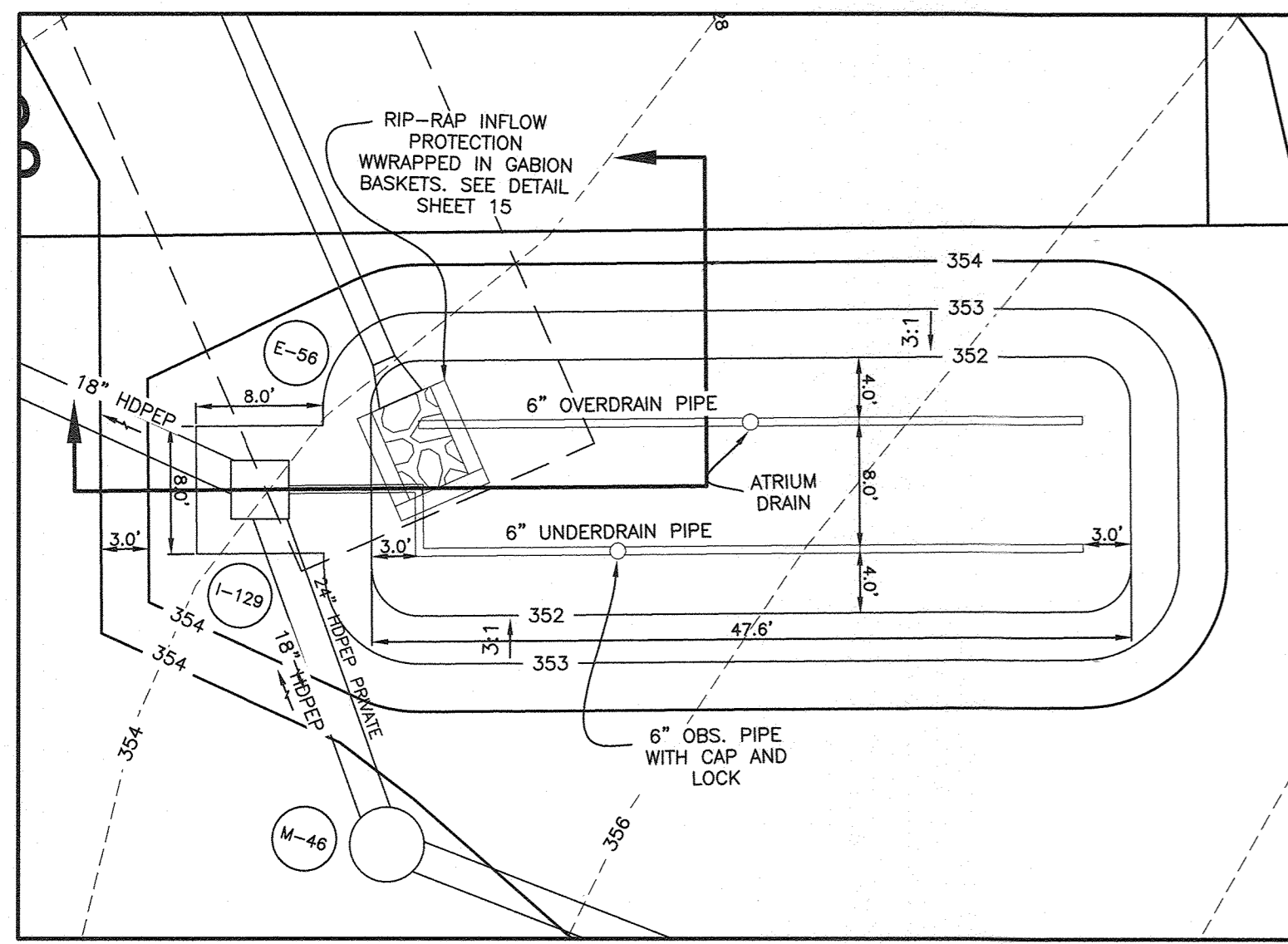
TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONED: R-20-MXO-3 / R-SC-MXO-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

**STORMWATER MANAGEMENT DETAILS**

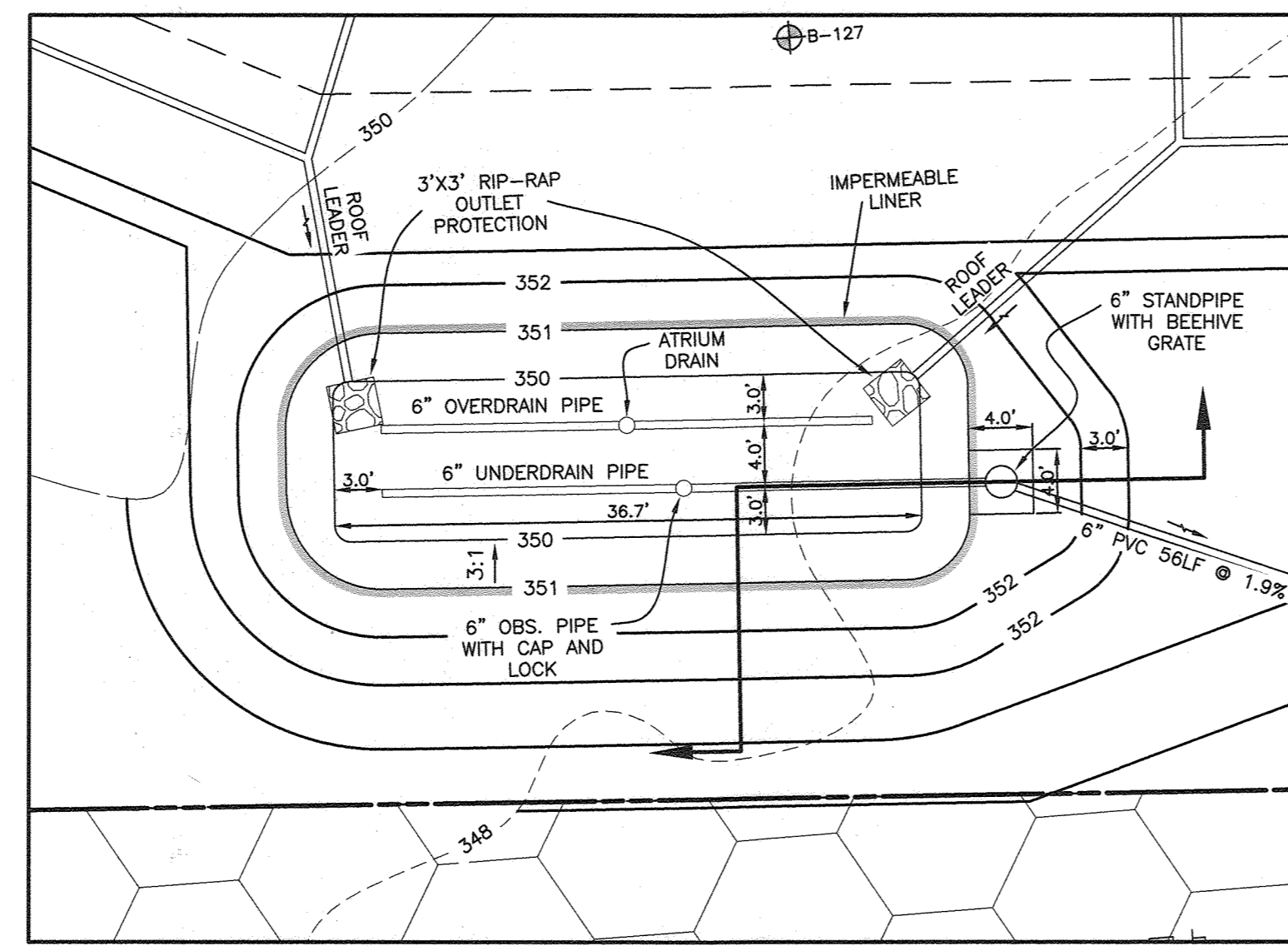
OWNER:  
 ESC WELLINGTON, L.C.  
 5074 DORSEY HALL DRIVE, SUITE 205  
 ELLICOTT CITY, MARYLAND 21042  
 410-720-3021

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

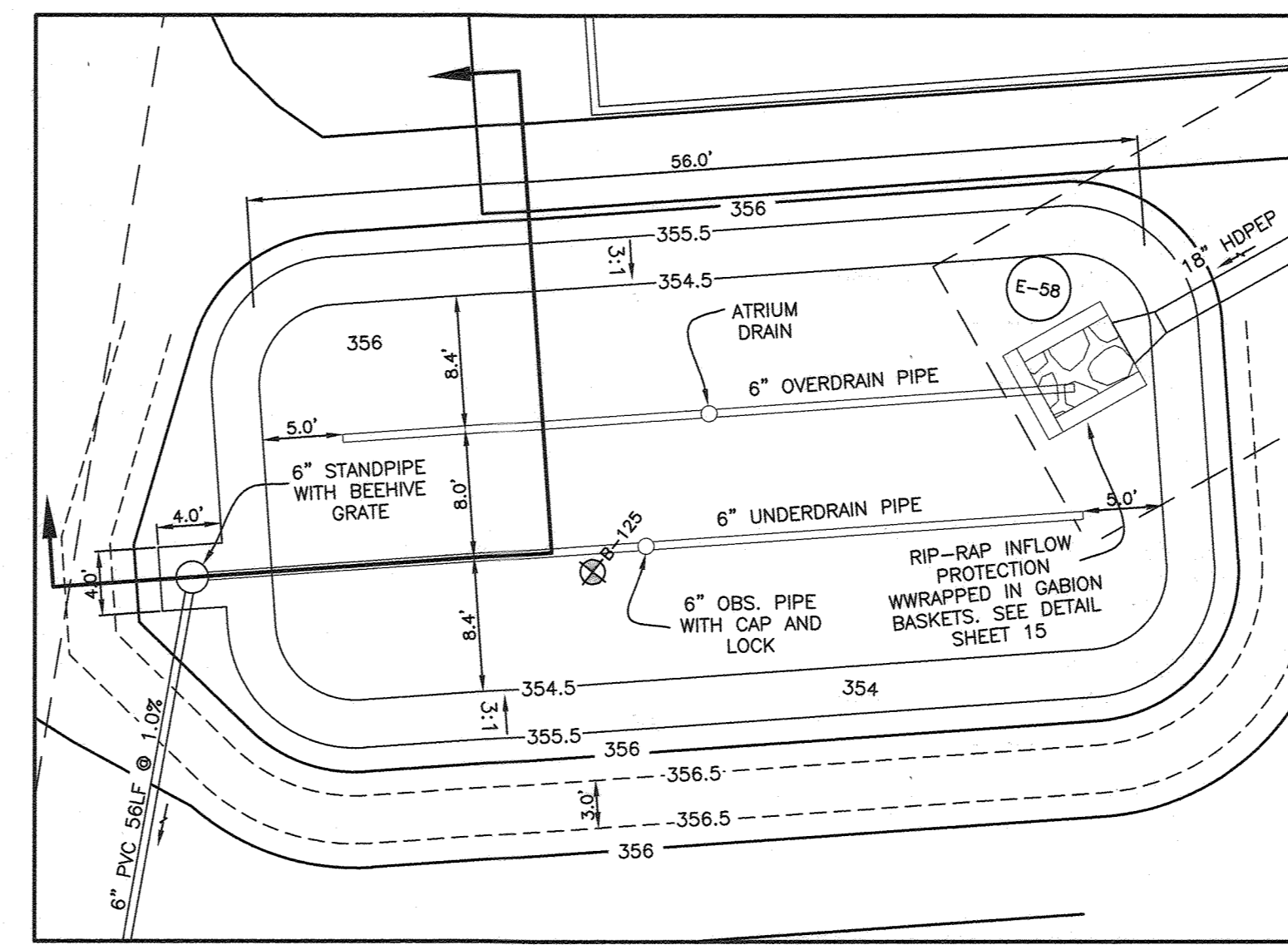
DATE: AUGUST 15, 2022  
 SCALE: AS SHOWN  
 BEI PROJECT NO. 2879  
 SHEET 23 OF 44



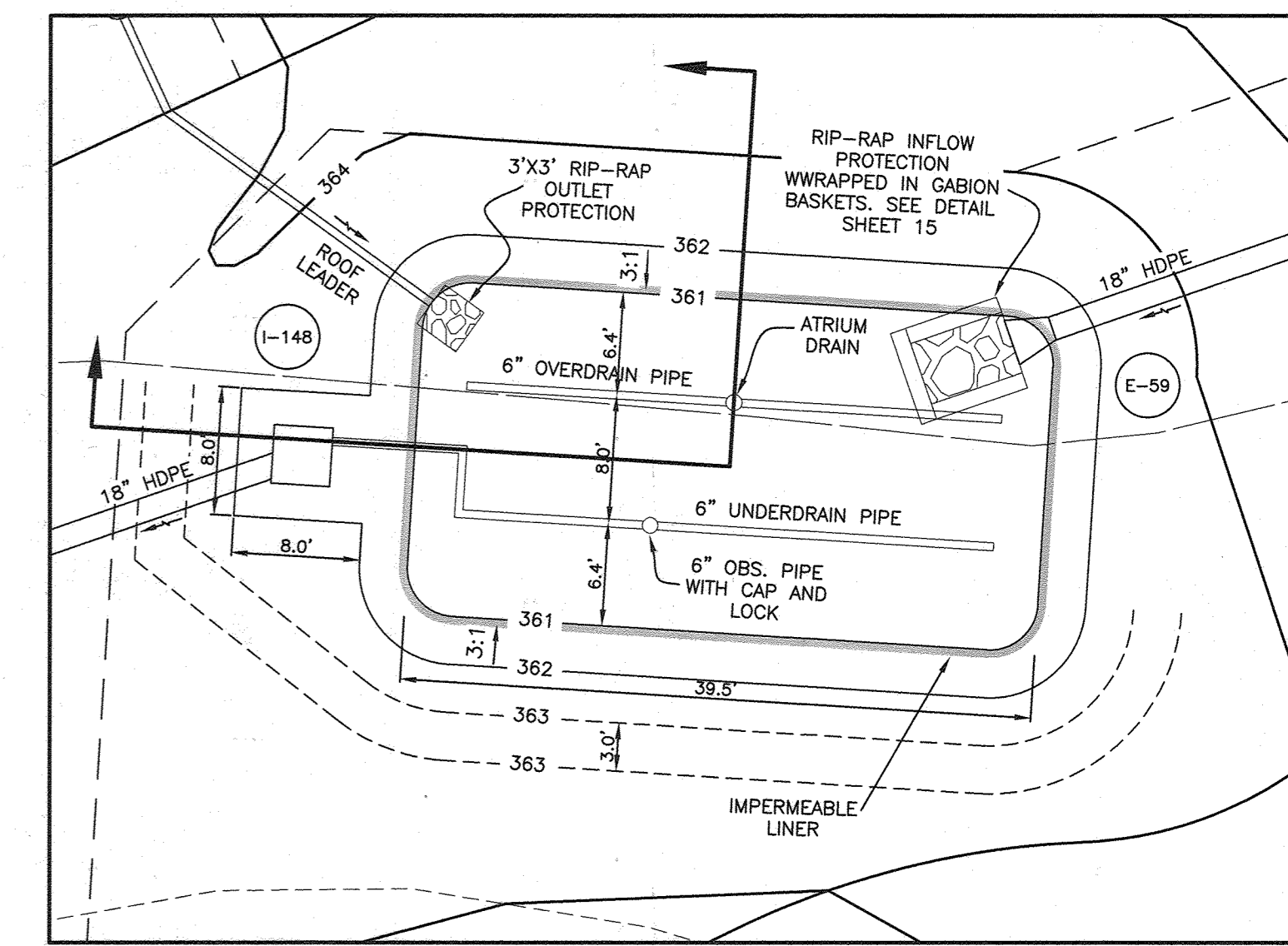
**MICRO BIO-RETENTION #35**  
1 inch = 10 ft.



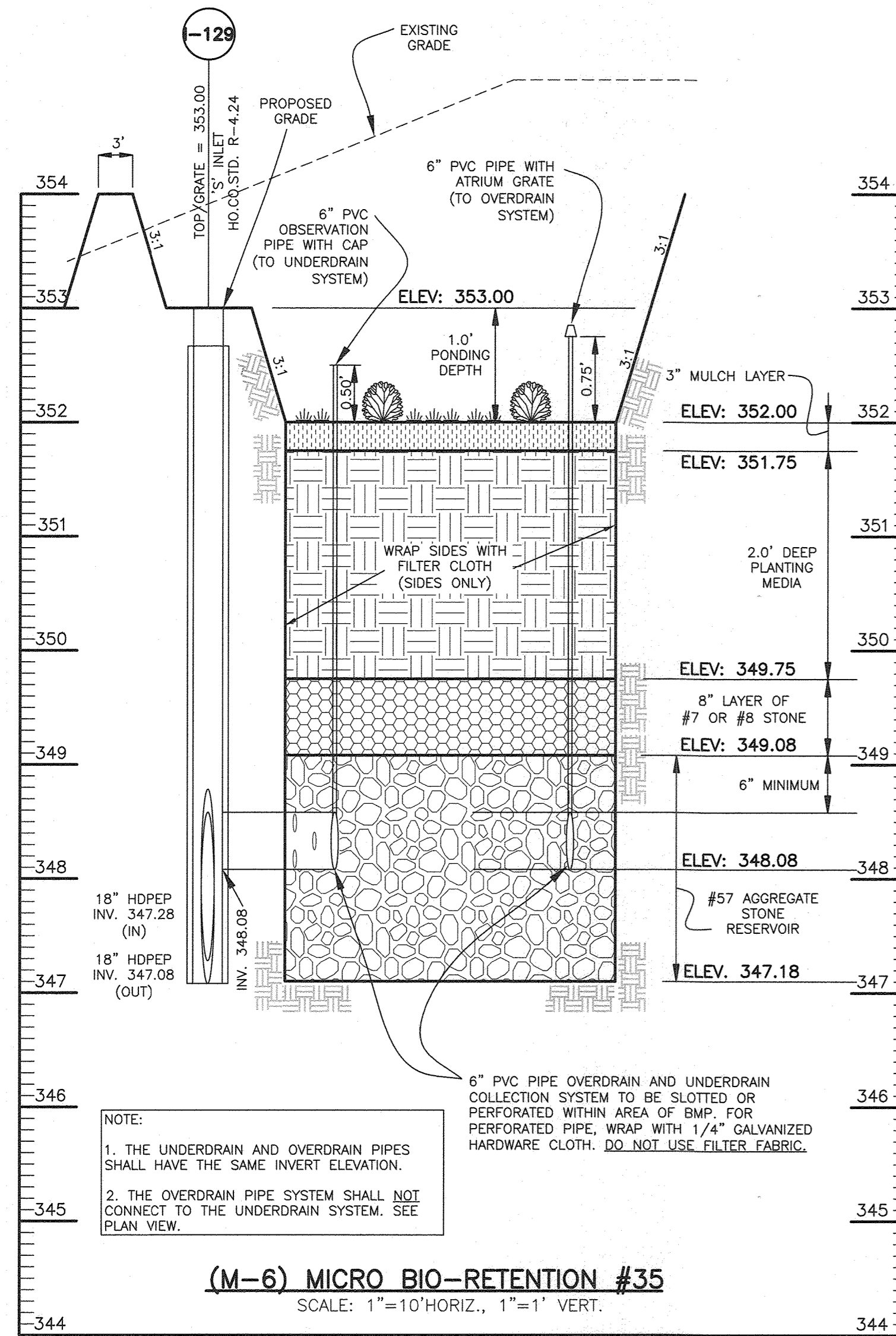
**MICRO BIO-RETENTION #36**  
1 inch = 10 ft.



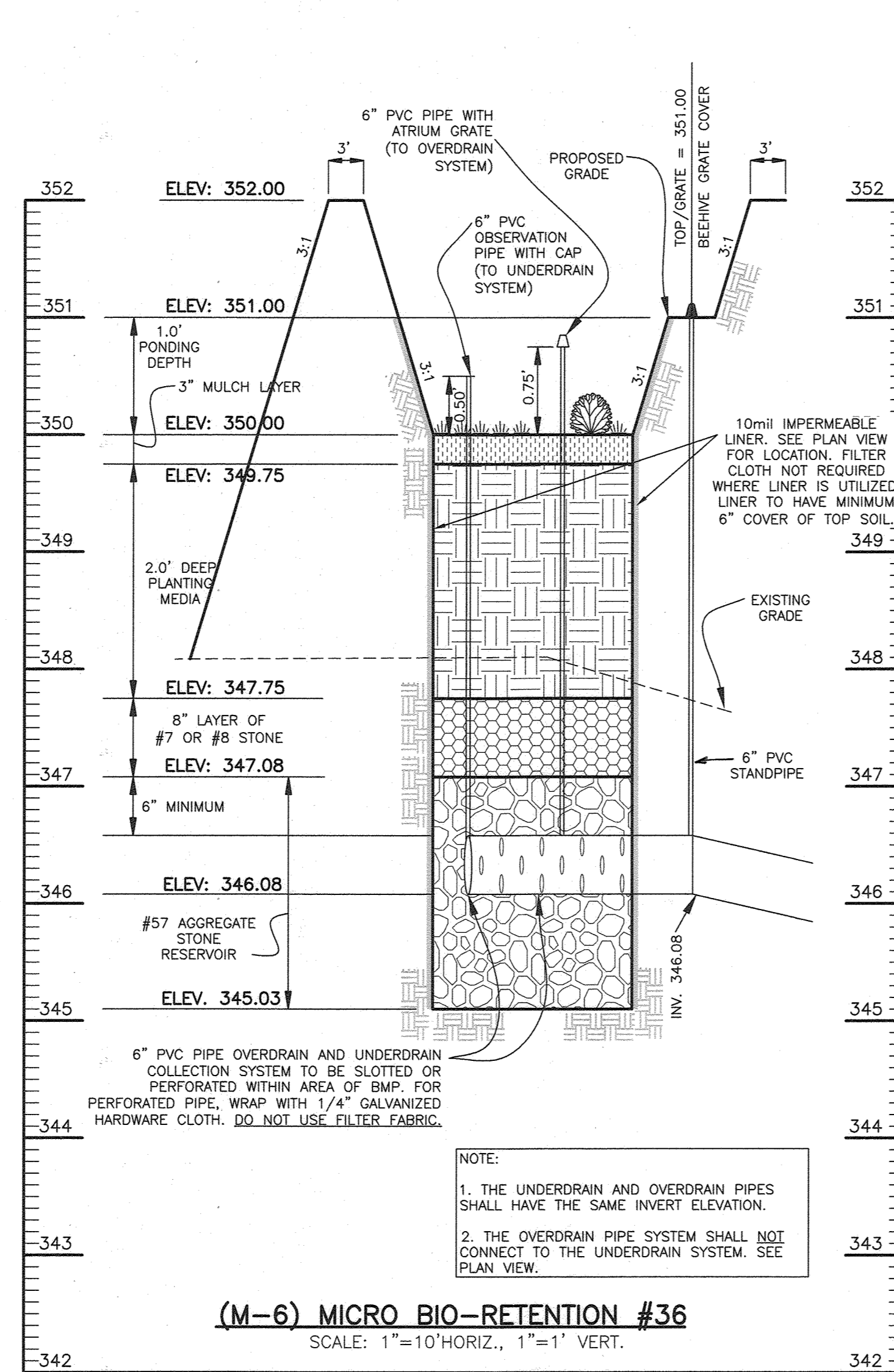
**MICRO BIO-RETENTION #37**  
1 inch = 10 ft.



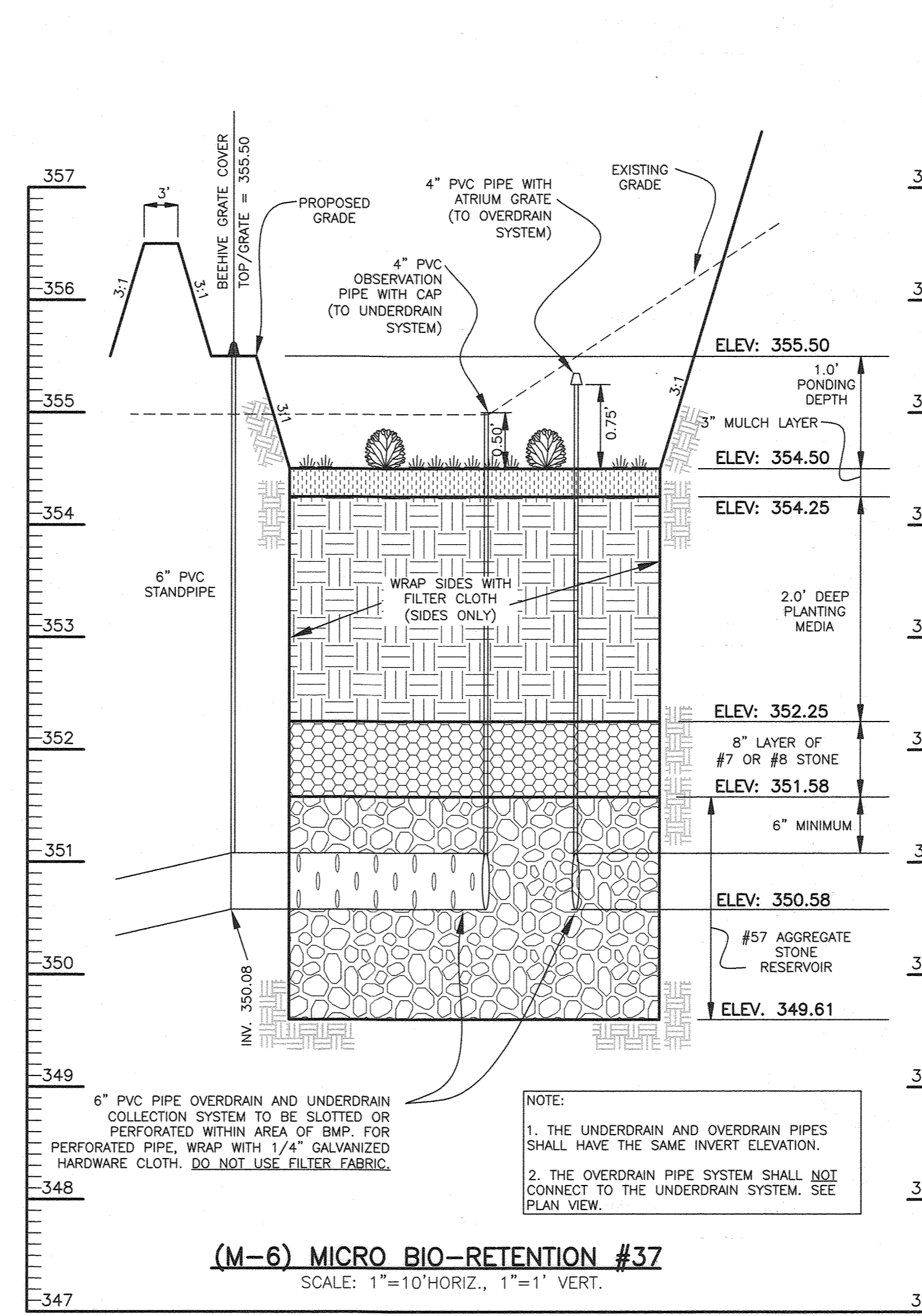
**MICRO BIO-RETENTION #38**  
1 inch = 10 ft.



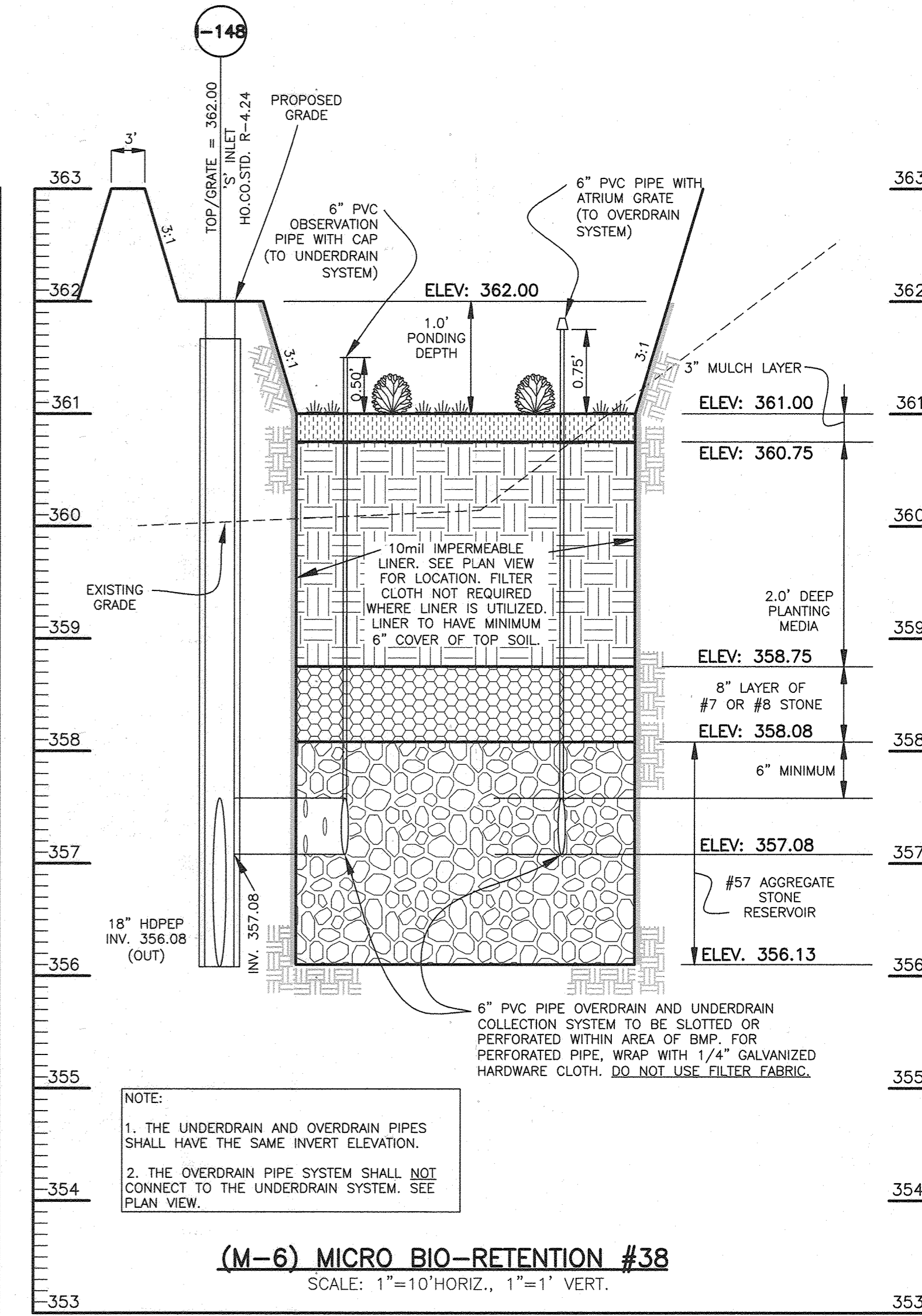
**(M-6) MICRO BIO-RETENTION #35**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #36**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #37**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #38**  
SCALE: 1"=10'HORIZ., 1"=1' VERT.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/3/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE

*[Signature]* 11/3/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE

NO.	DATE	REVISION
1	8.1.2023	REVISE TOTAL NUMBER OF SHEETS

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. 22390, Expiration Date: 6-30-2023.

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 ENGINEERING, INC.  
 3300 N. RIDGE ROAD SUITE 140 & ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-8102 (F) 410-465-8644  
 WWW.BEI-CVLENGINEERING.COM

*[Signature]* 9-19-22

**WELLINGTON FARMS**  
 Phase 2  
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TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONE: R-20-MXD-3 / R-SC-MXD-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

**STORMWATER MANAGEMENT DETAILS**

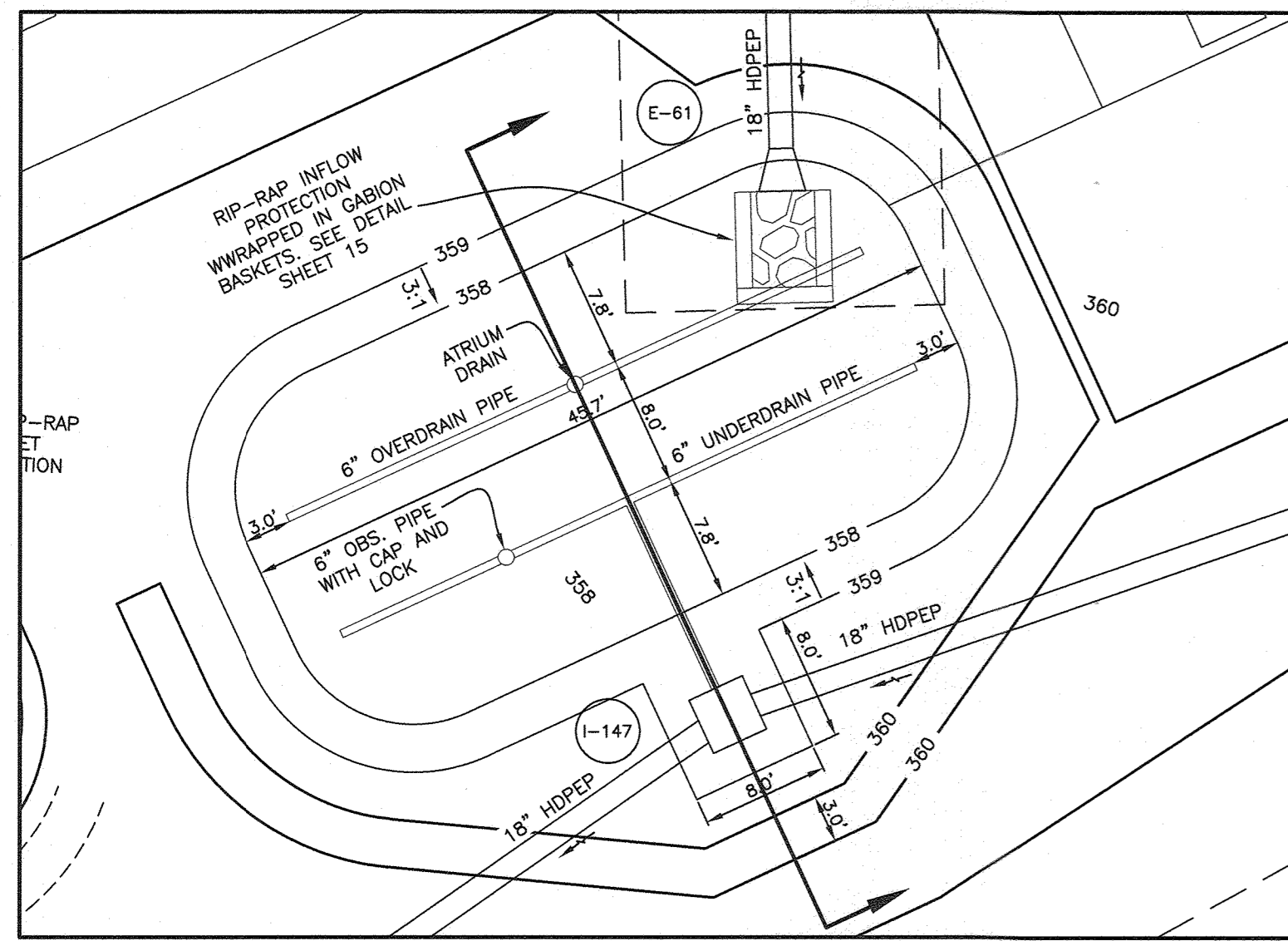
OWNER:  
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 5074 DORSEY HALL DRIVE, SUITE 205  
 ELLICOTT CITY, MARYLAND 21042  
 410-720-3021

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

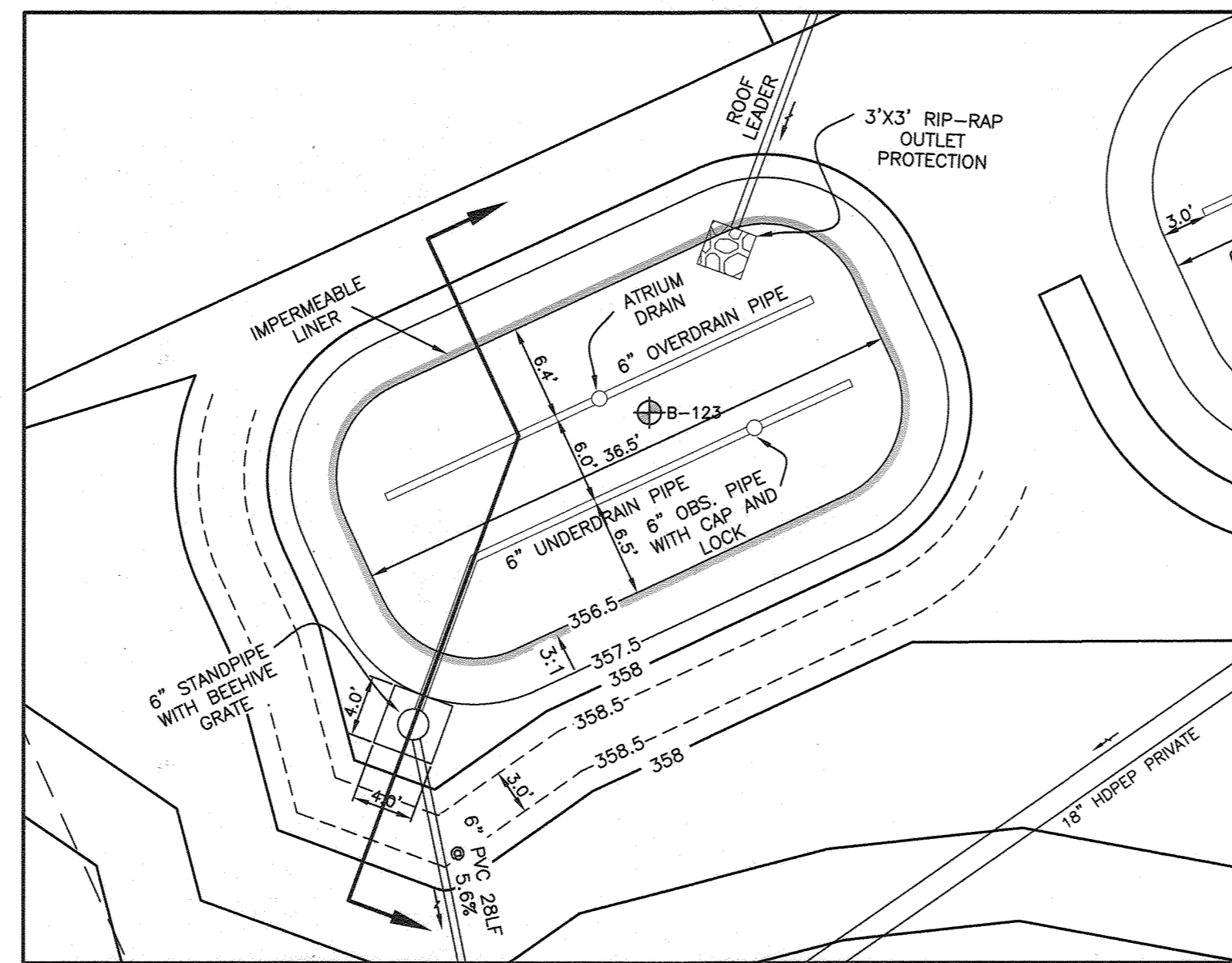
DATE: AUGUST 15, 2022  
 SCALE: AS SHOWN  
 SHEET 24 OF 44

BEI PROJECT NO. 2879

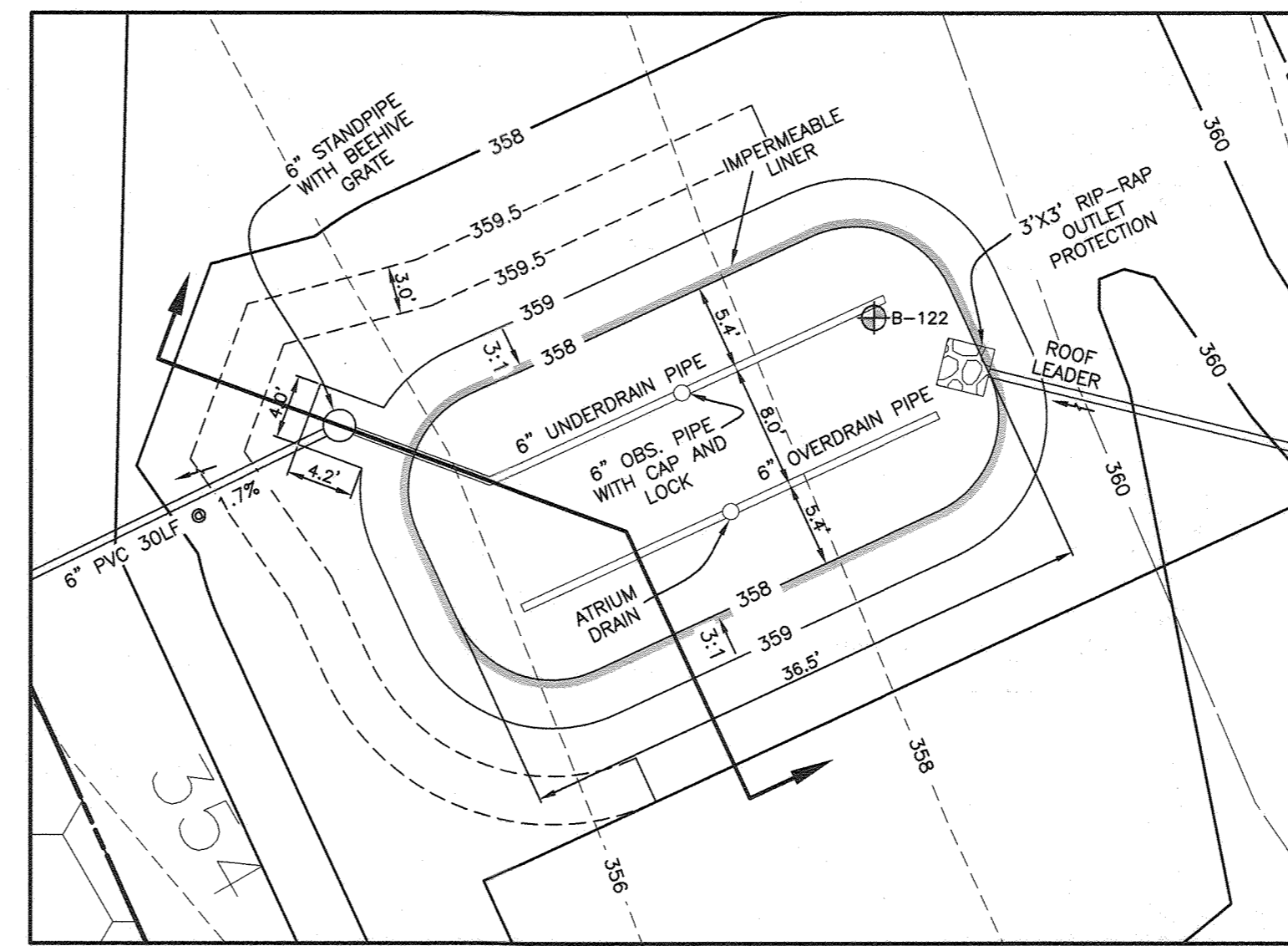




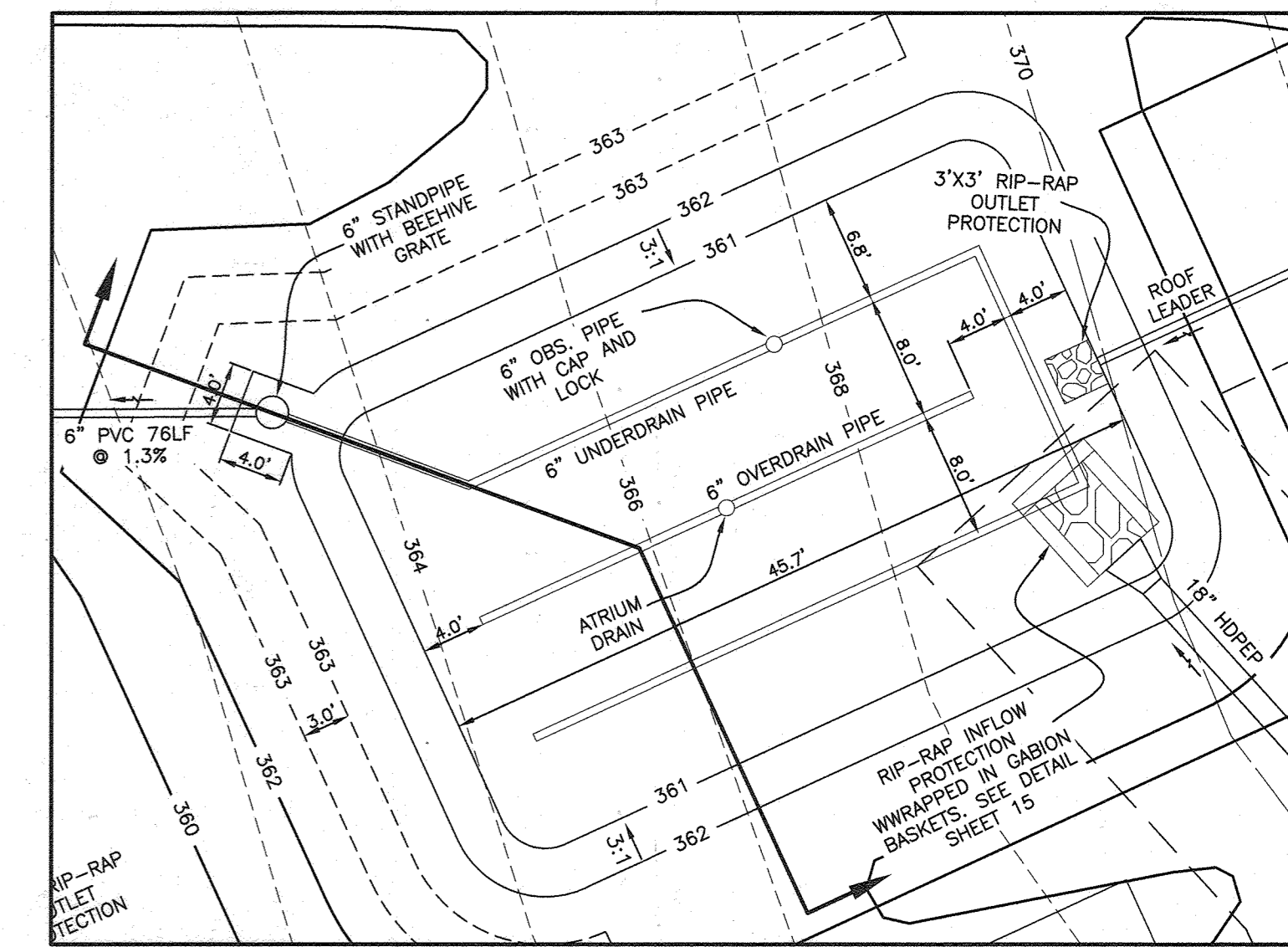
**MICRO BIO-RETENTION #39**  
1 inch = 10 ft.



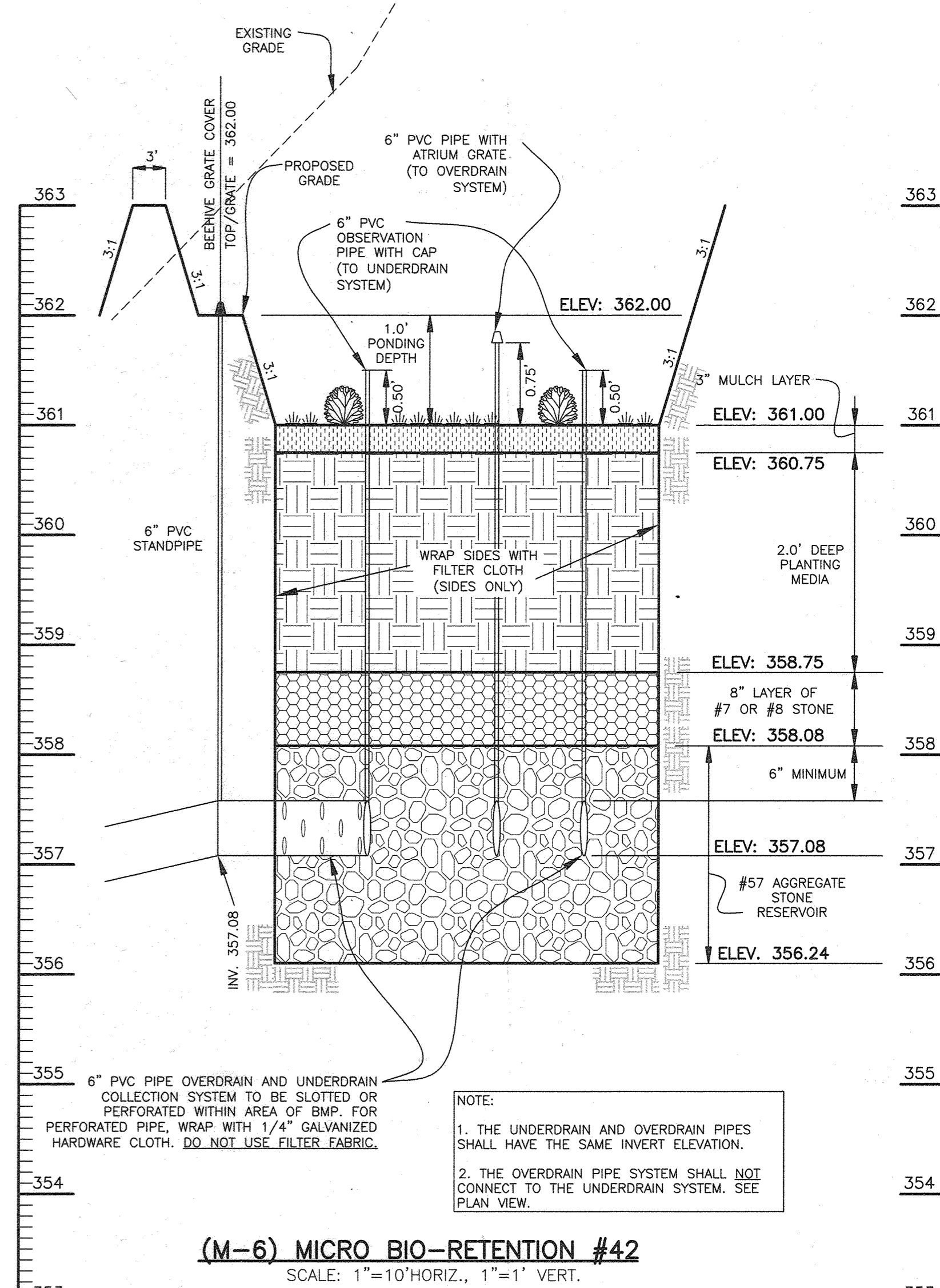
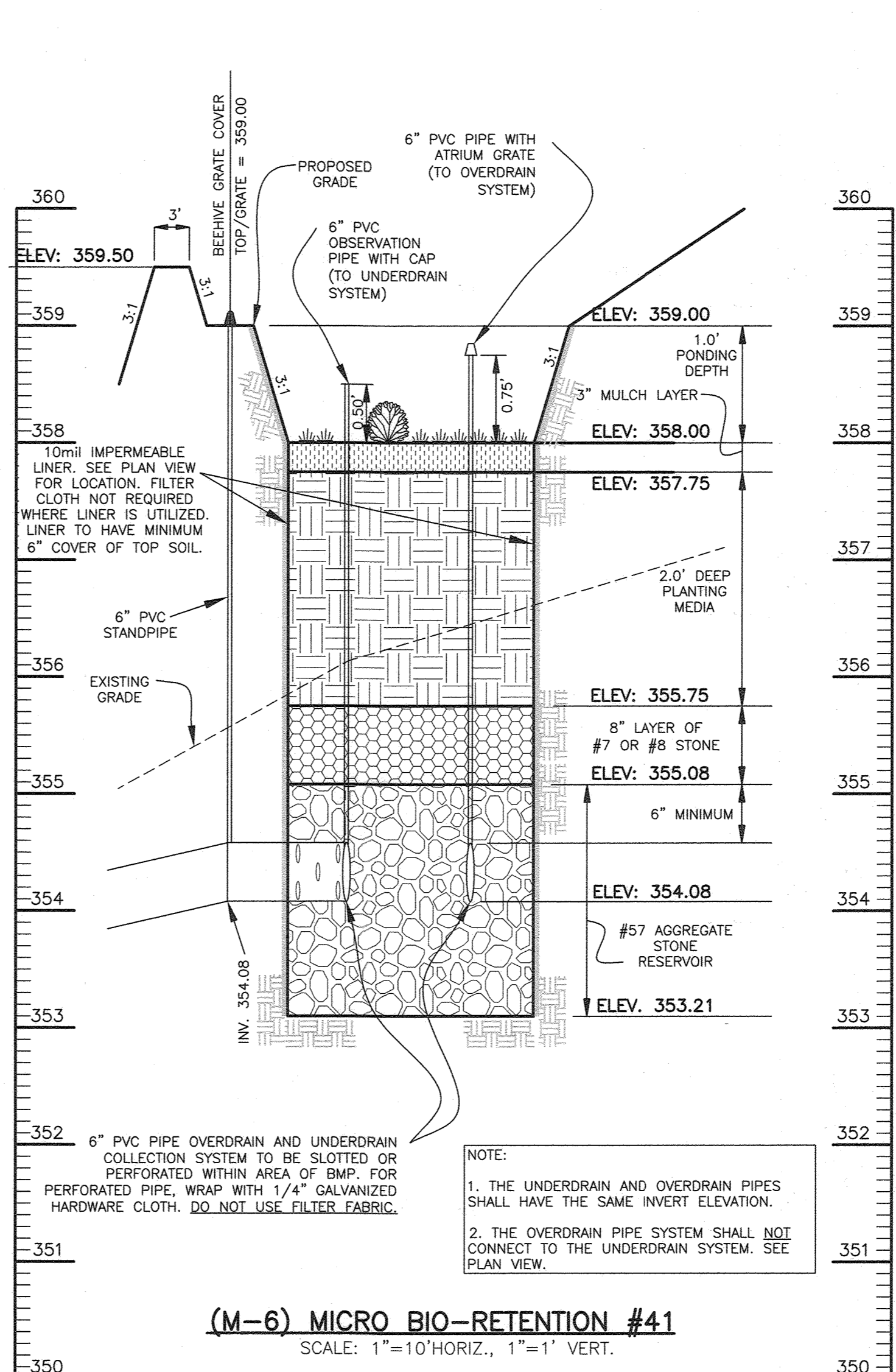
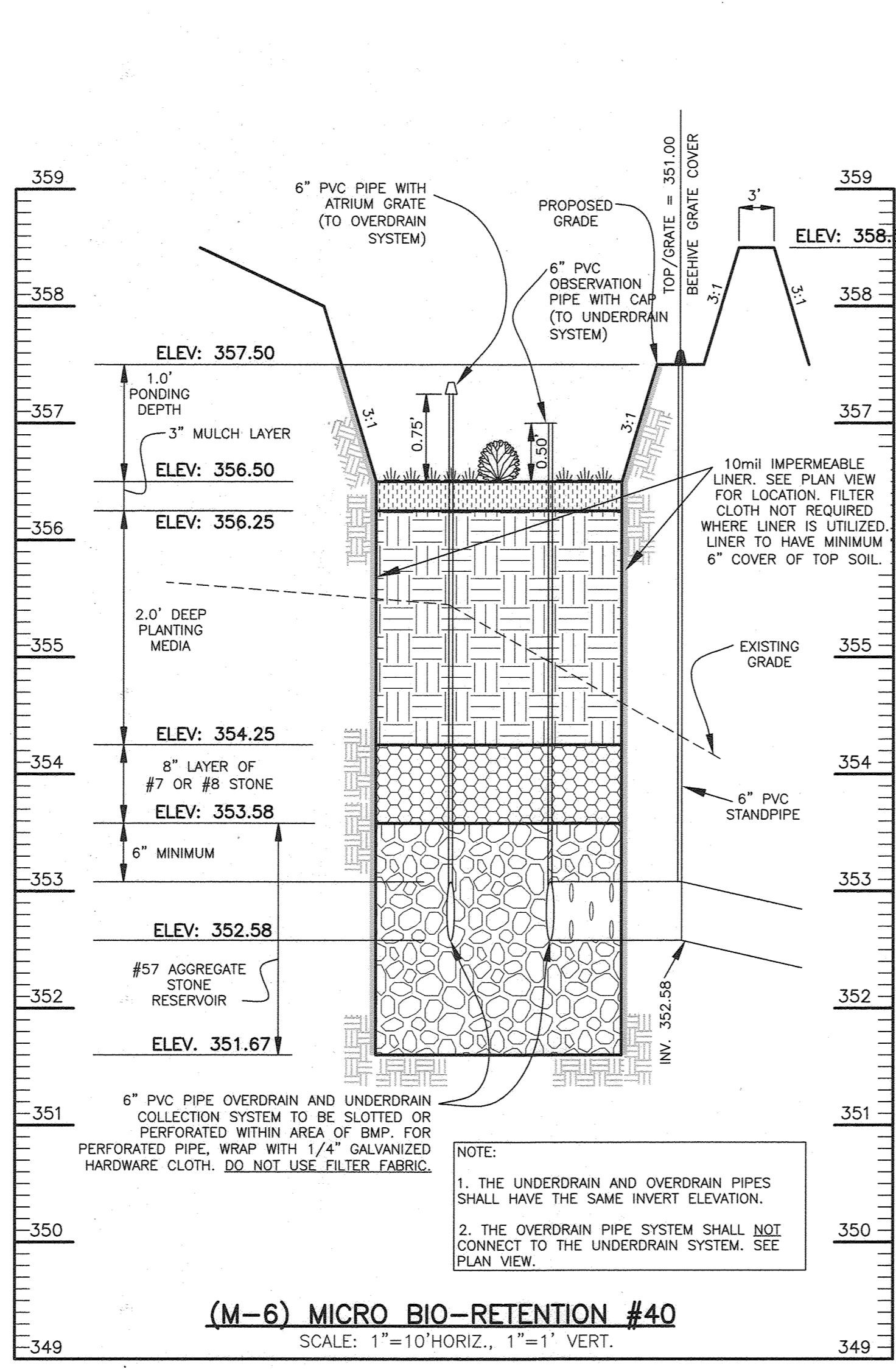
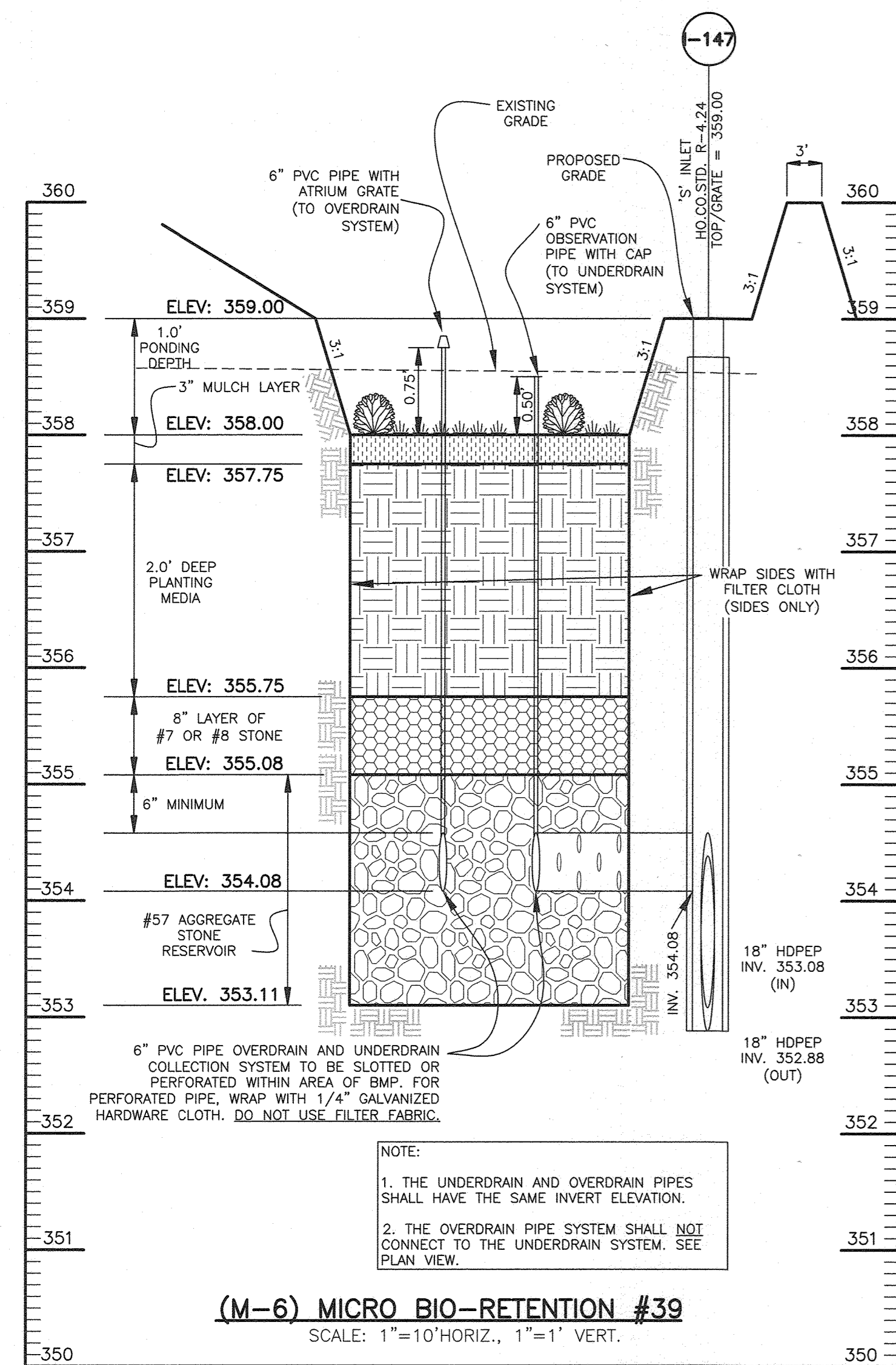
**MICRO BIO-RETENTION #40**  
1 inch = 10 ft.



**MICRO BIO-RETENTION #41**  
1 inch = 10 ft.



**MICRO BIO-RETENTION #42**  
1 inch = 10 ft.



APPROVED: DEPARTMENT OF PUBLIC WORKS  
  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE: 10/20/2022

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE: 11/3/22

APPROVED: DEPARTMENT OF ENGINEERING DIVISION  
  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE: 11/3/22

NO.	DATE	REVISION
1	8.1.2023	REVISE TOTAL NUMBER OF SHEETS

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
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 (P) 410-465-8108 (F) 410-465-8644  
 WWW.BE-CVLENGINEERING.COM

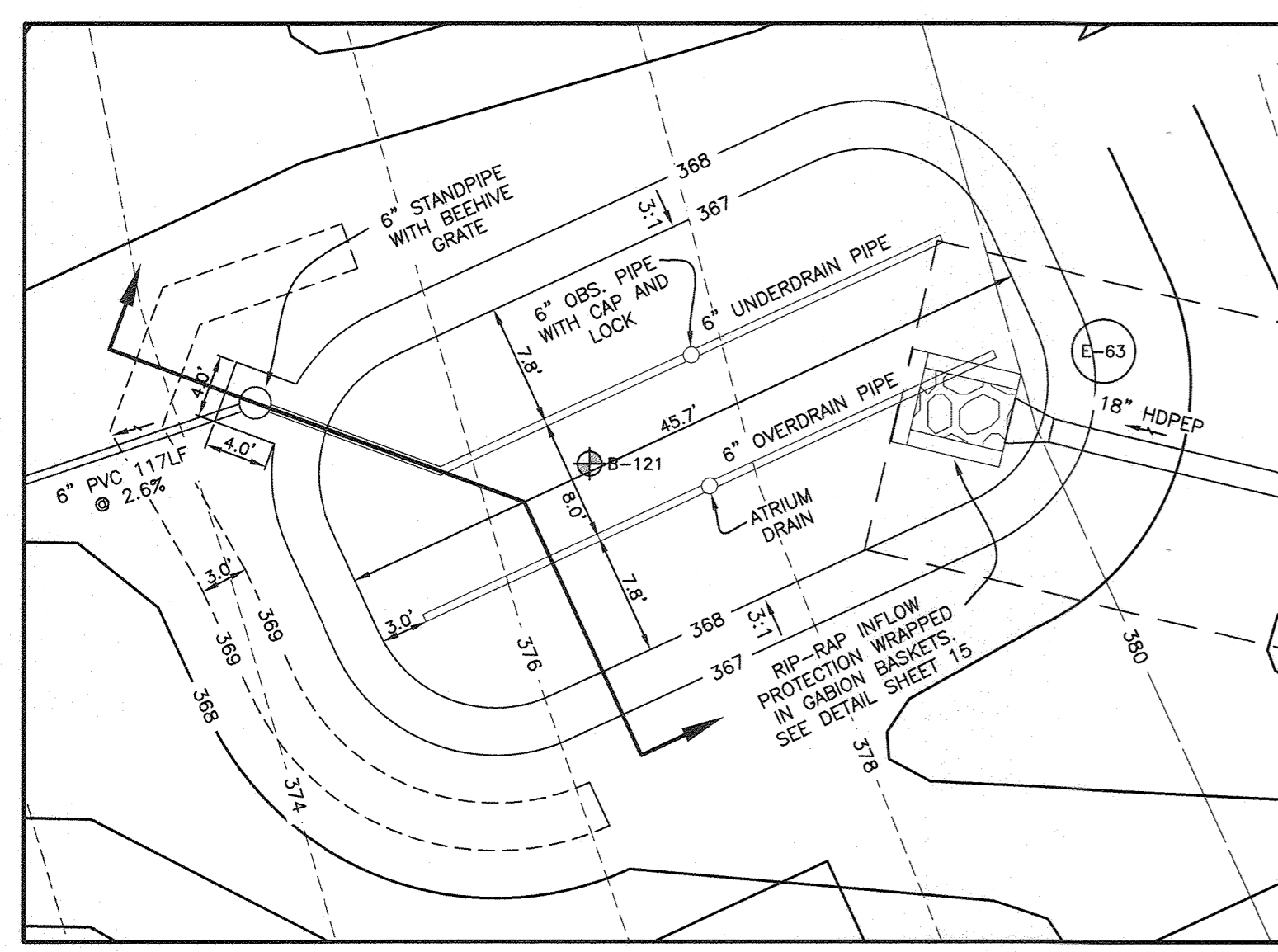
Professional Certification: I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland, License No. 22390, Expiration Date: 6-30-2023.

**WELLINGTON FARMS**  
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TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONE: R-20-MXD-3 / R-SC-MXD-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

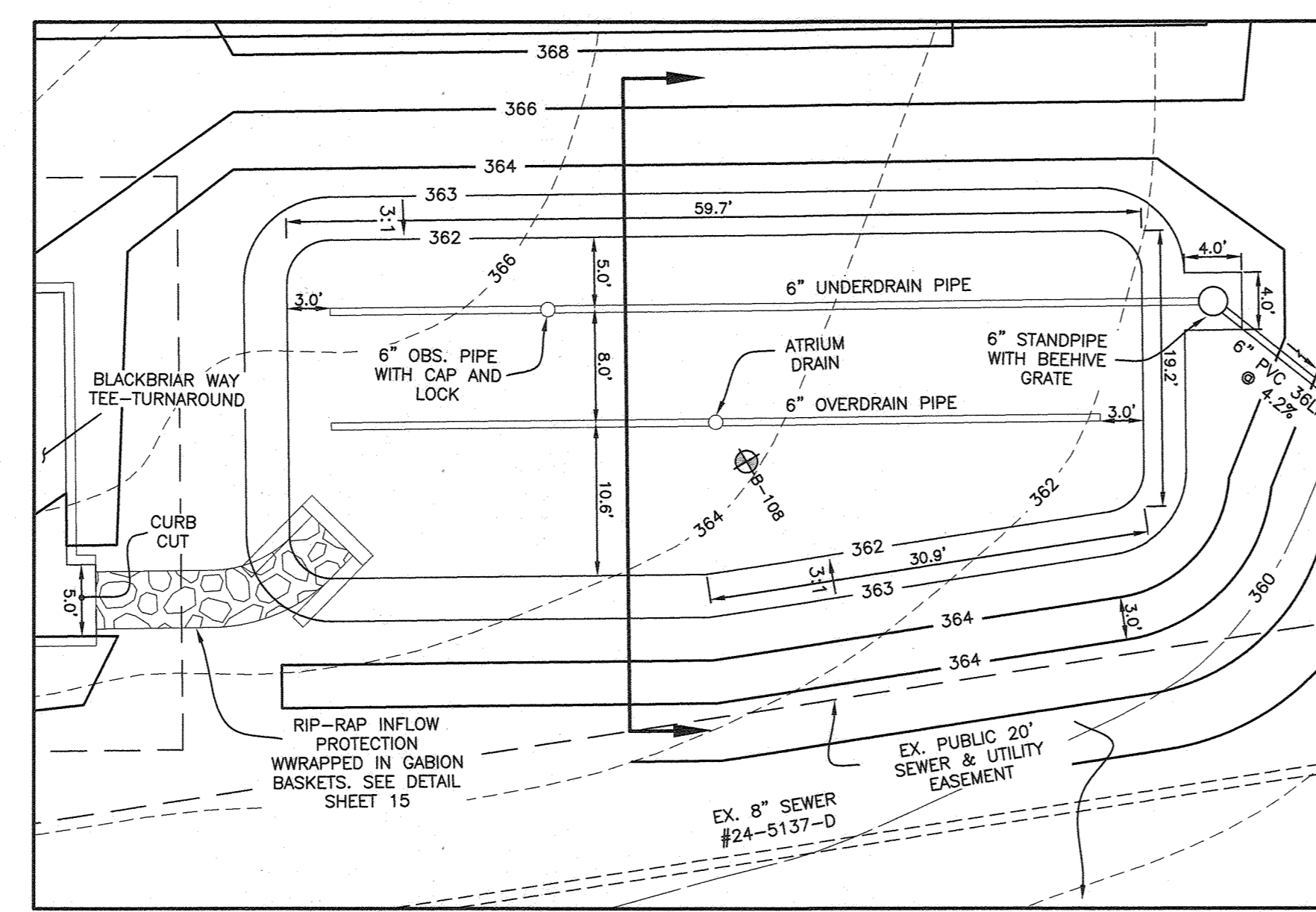
**STORMWATER MANAGEMENT DETAILS**

DATE: AUGUST 15, 2022  
 SCALE: AS SHOWN  
 BEI PROJECT NO. 2879  
 SHEET 25 OF 44



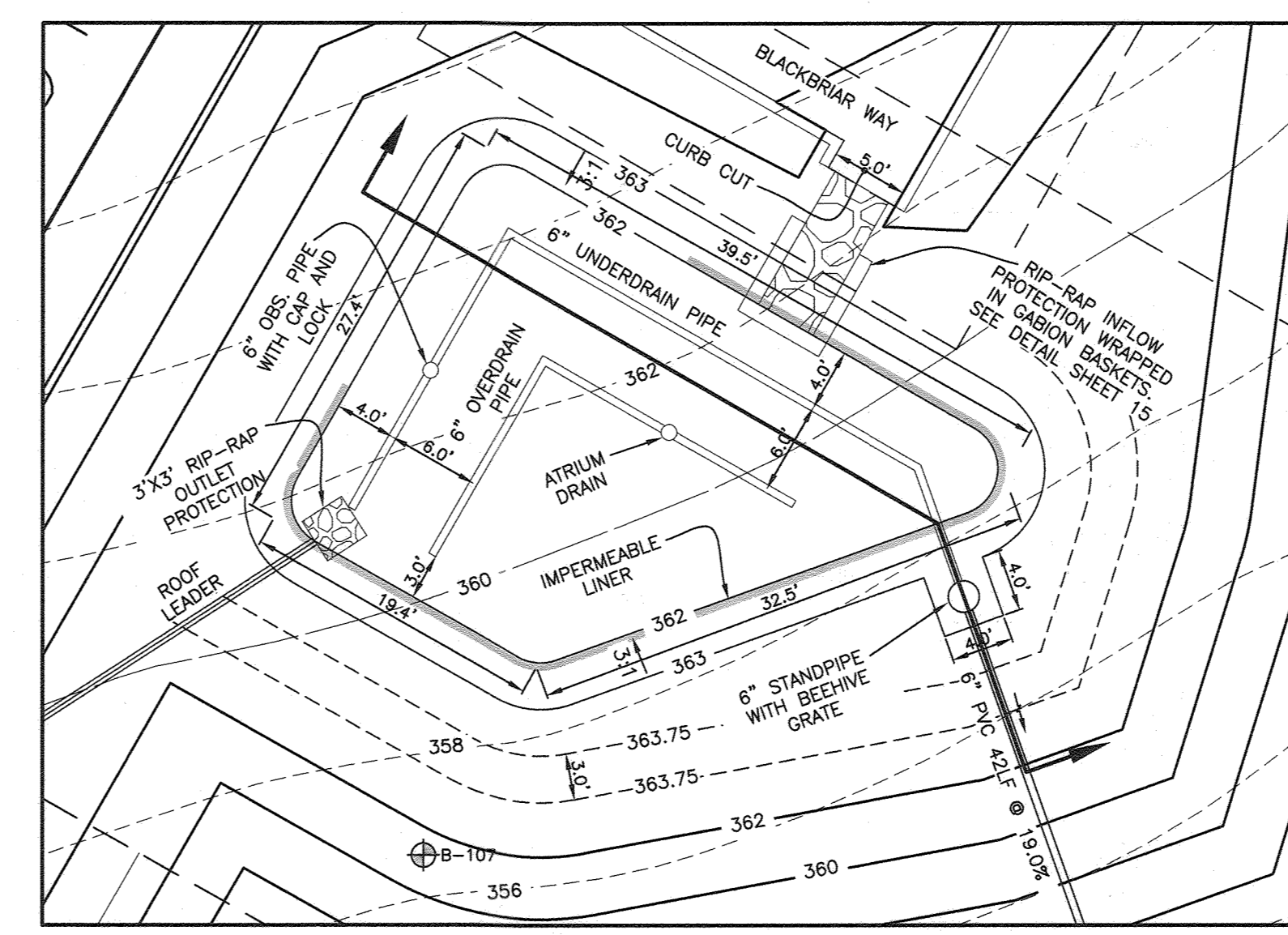
**MICRO BIO-RETENTION #43**

1 inch = 10 ft.



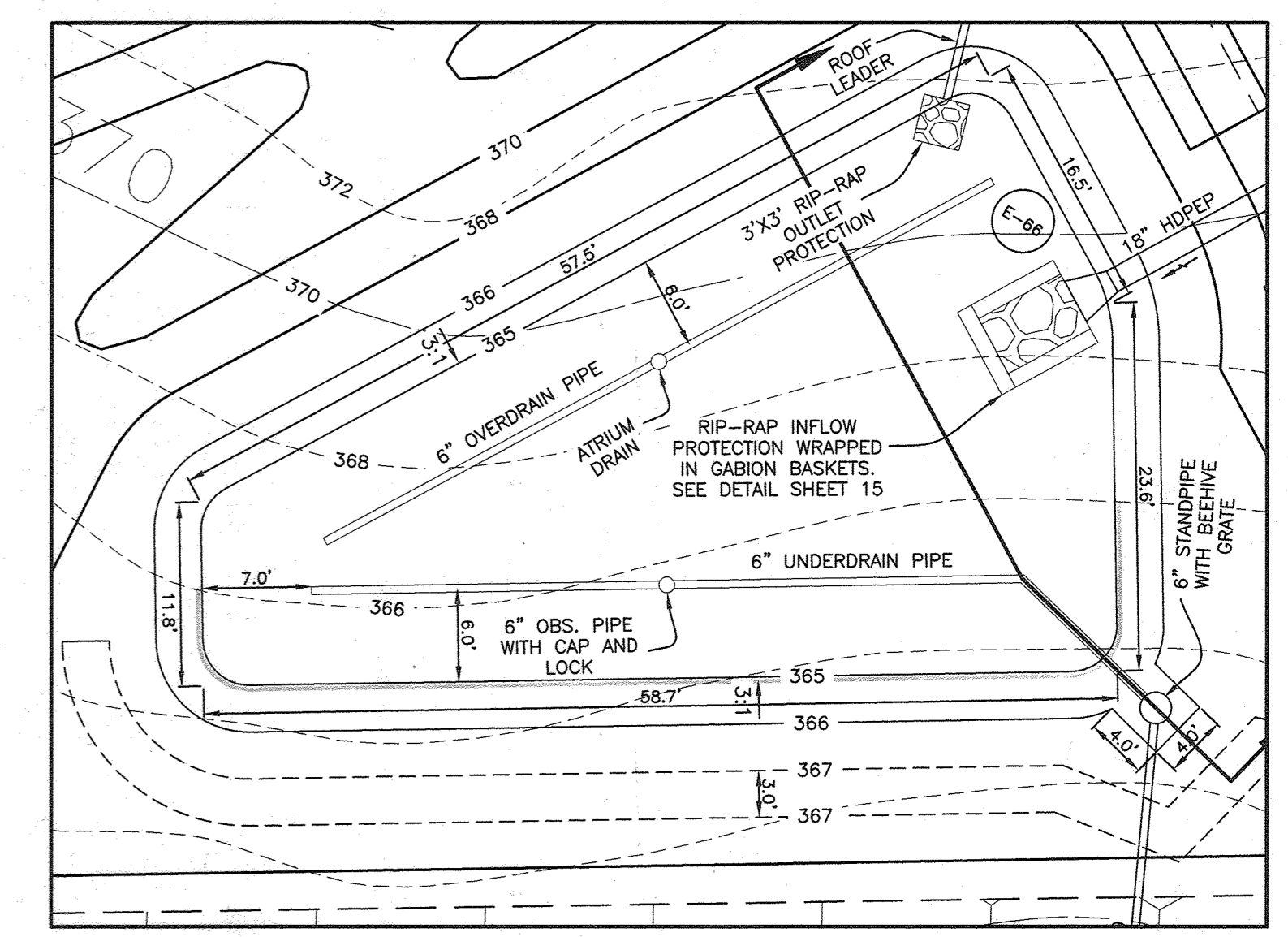
**MICRO BIO-RETENTION #44**

1 inch = 10 ft.



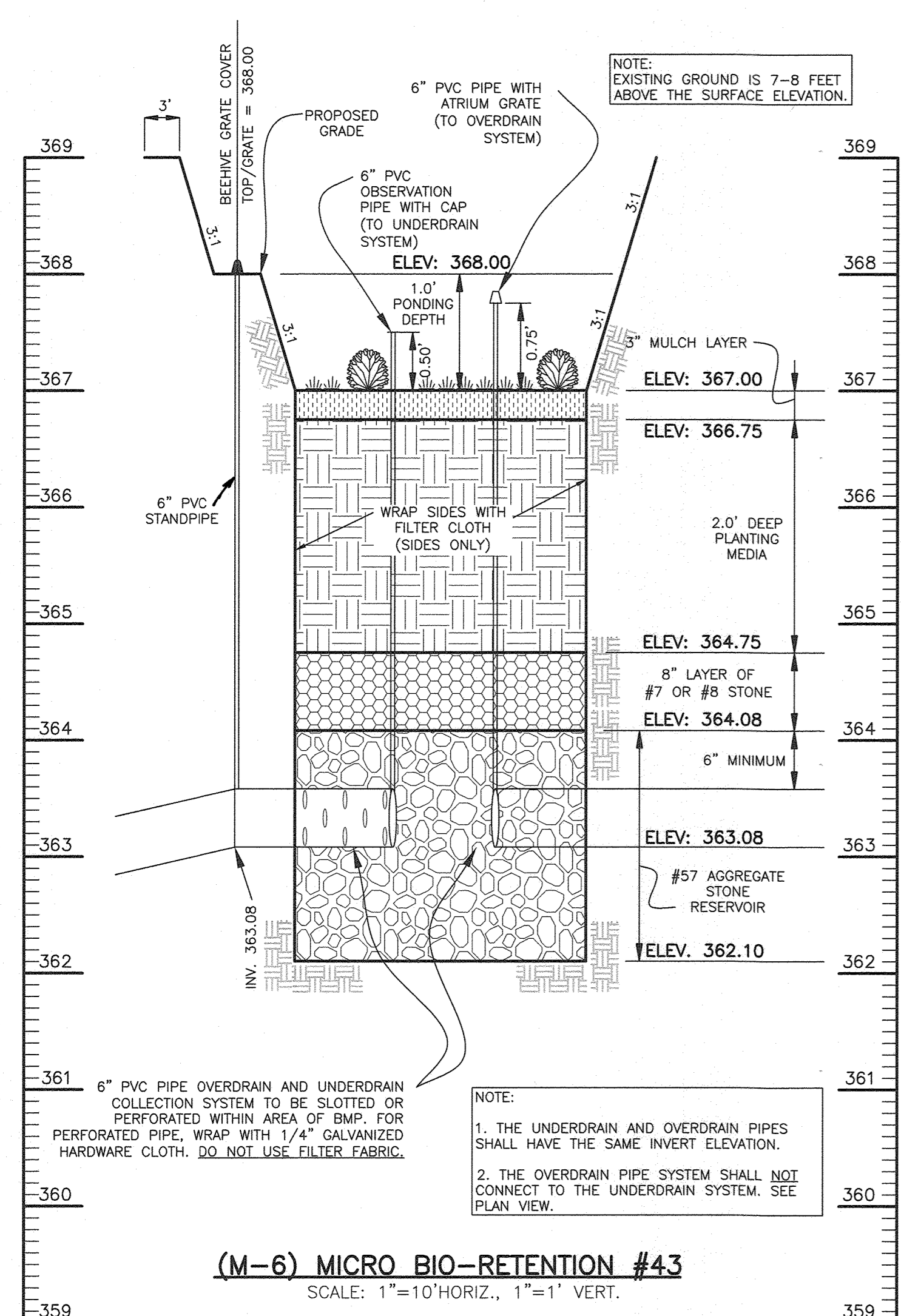
**MICRO BIO-RETENTION #45**

1 inch = 10 ft.



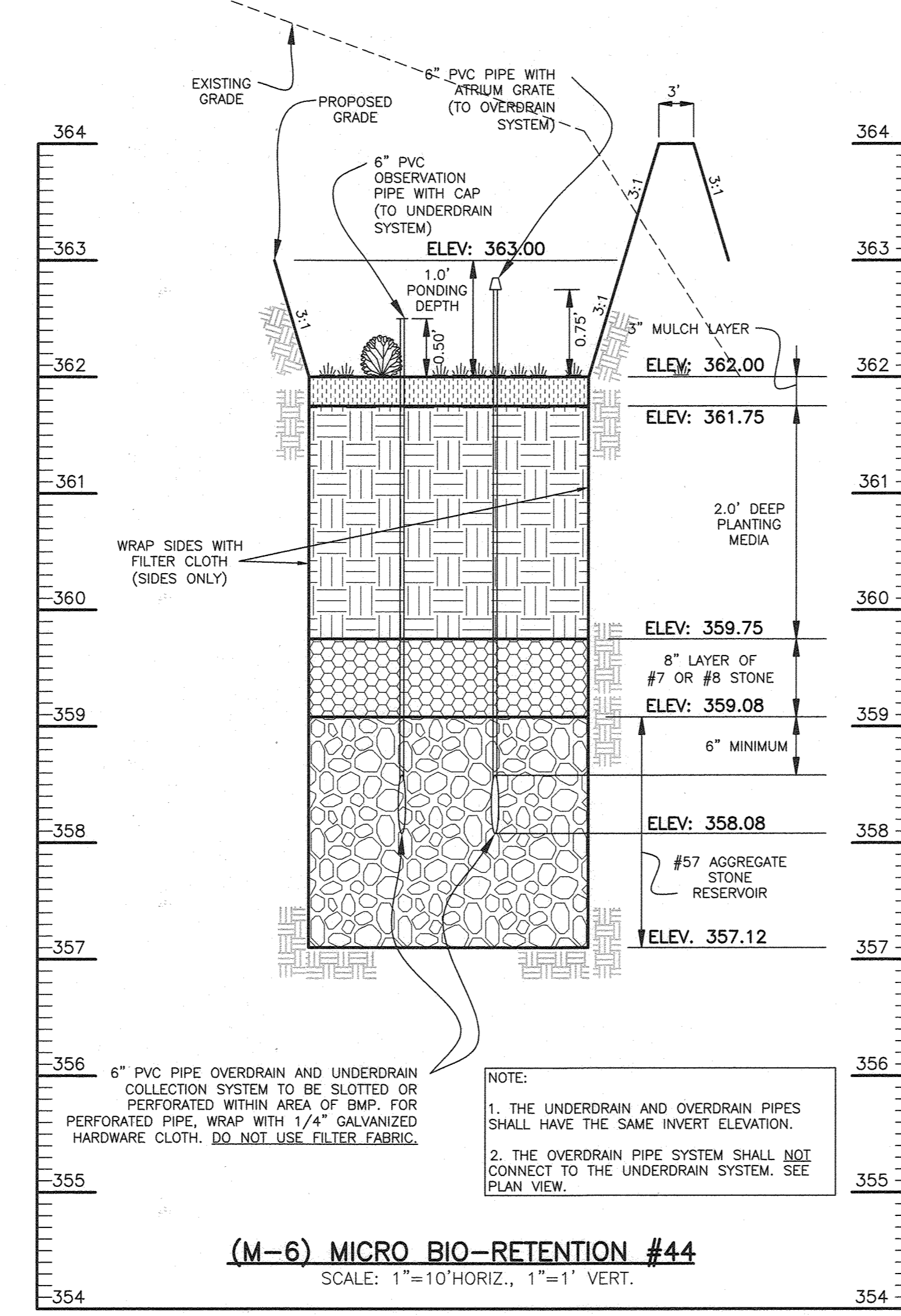
**MICRO BIO-RETENTION #46**

1 inch = 10 ft.



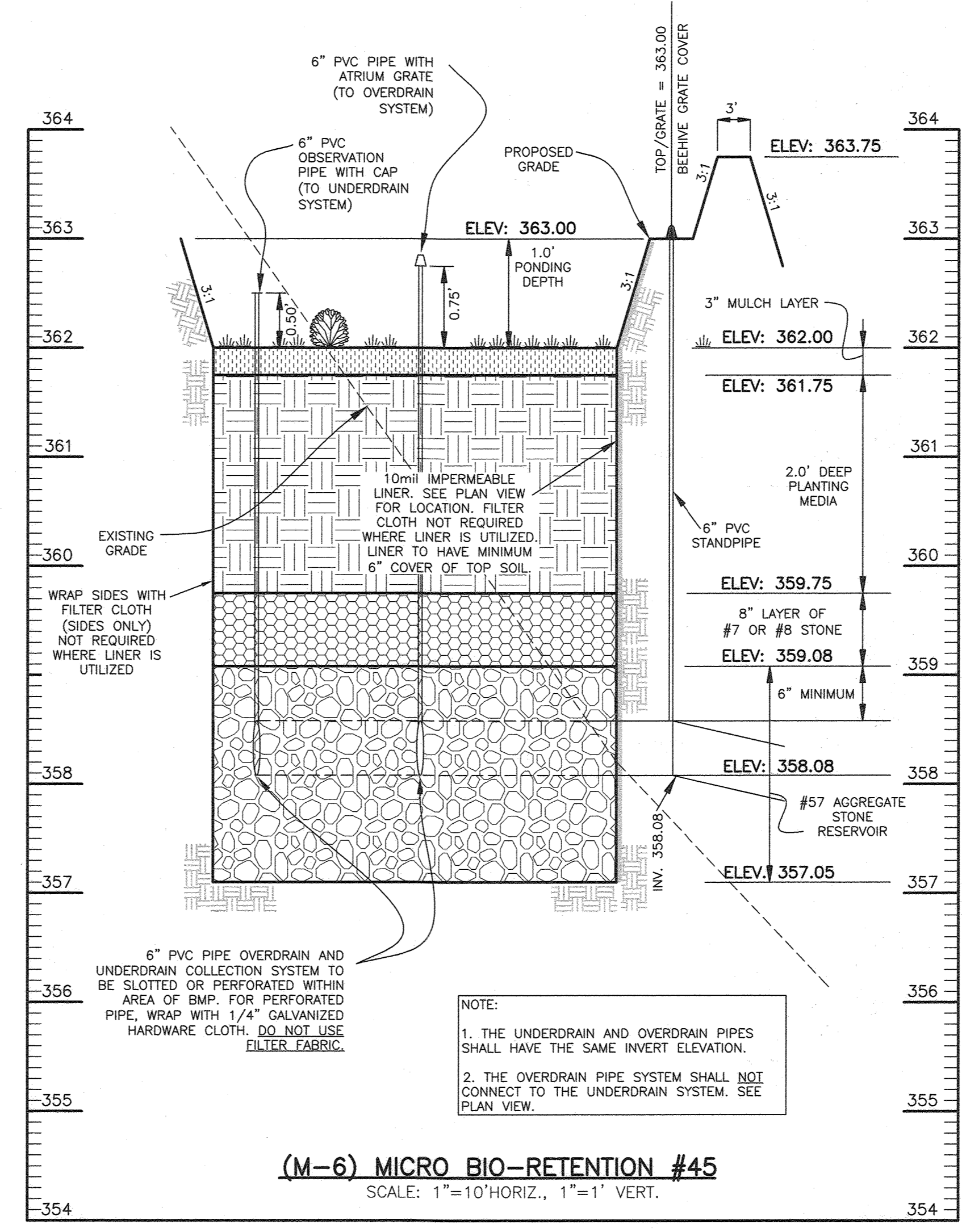
**(M-6) MICRO BIO-RETENTION #43**

SCALE: 1"=10'HORIZ., 1"=1' VERT.



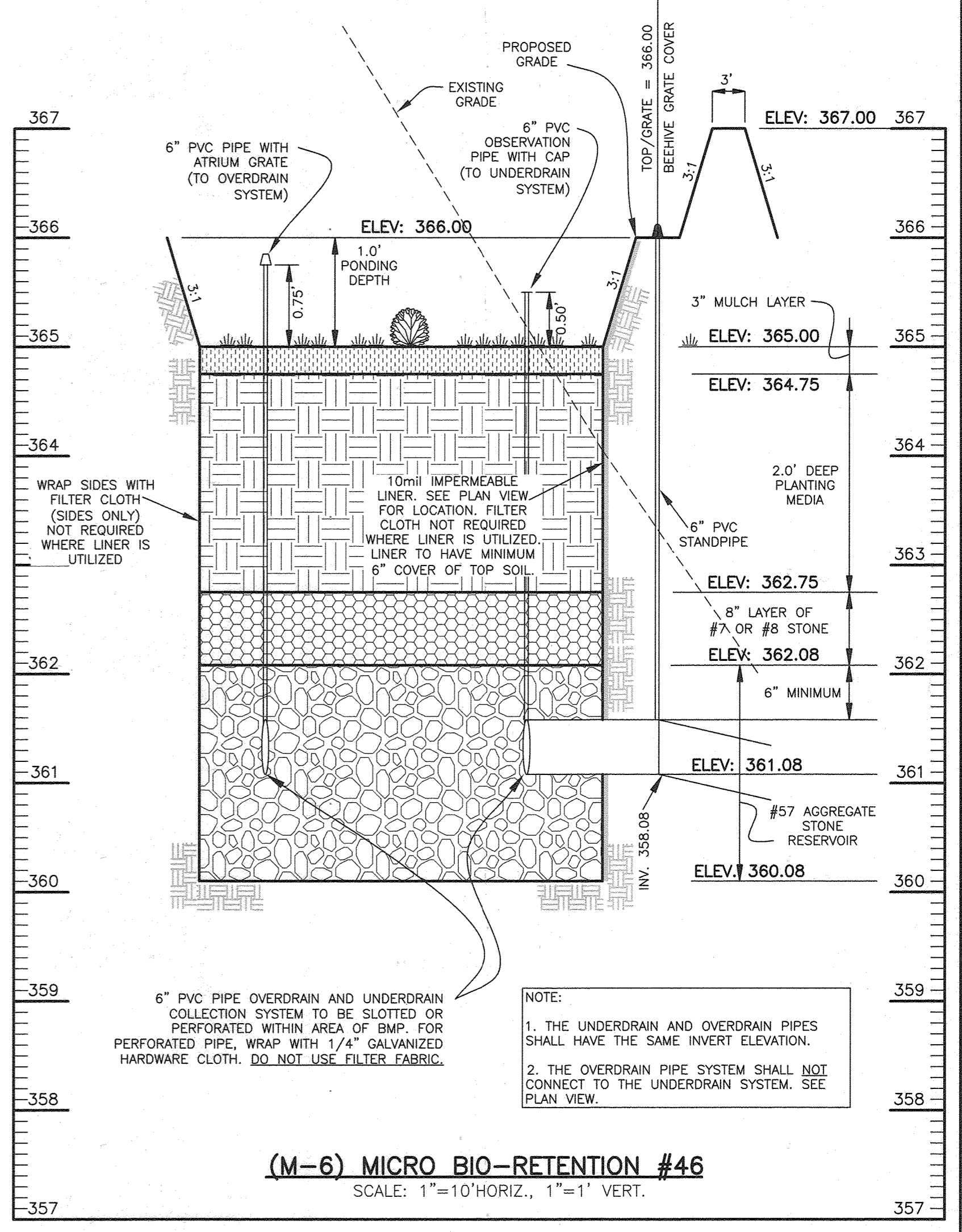
**(M-6) MICRO BIO-RETENTION #44**

SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #45**

SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #46**

SCALE: 1"=10'HORIZ., 1"=1' VERT.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 [Signature] 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 11/16/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 APPROVED: [Signature] 11.2.22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO.	DATE	REVISION
1	8.1.2023	REVISE TOTAL NUMBER OF SHEETS

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. 22390, Expiration Date: 6-30-2023.

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-8105 (F) 410-465-8644  
 WWW.BE-CVLENGINEERING.COM

Professional Engineer Seal: ESC WELLINGTON, L.C. License No. 22390, Expiration Date: 6-30-2023.

**WELLINGTON FARMS**  
 Phase 2  
 Lots 276 thru 419; Open Space Lots 420 thru 422;  
 (A Resubdivision of Non-Buildable Bulk Parcel 'E'  
 previously recorded under F-21-044 and  
 Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

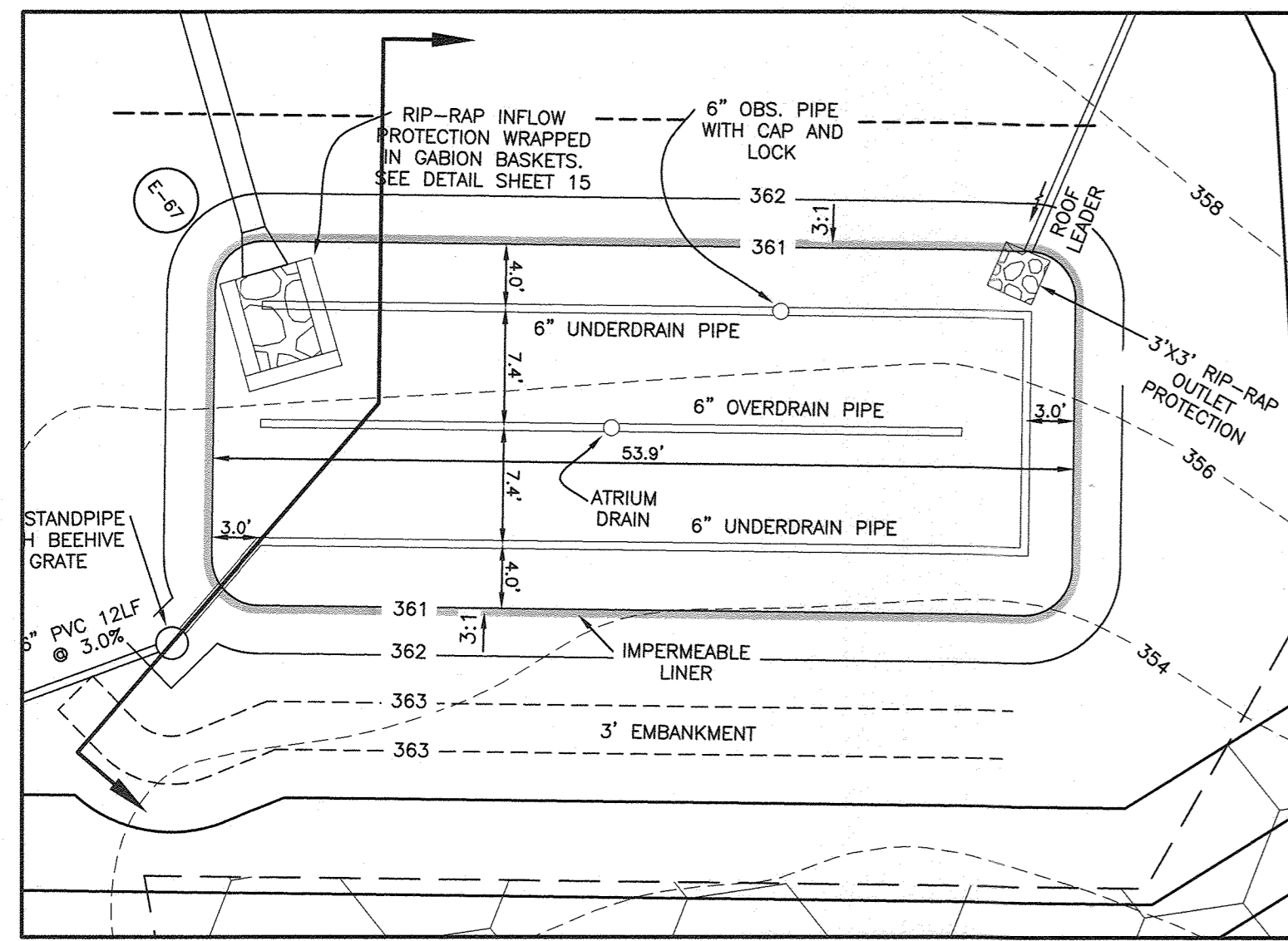
TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONED: R-20-MD-3 / R-SC-MD-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

**STORMWATER MANAGEMENT DETAILS**

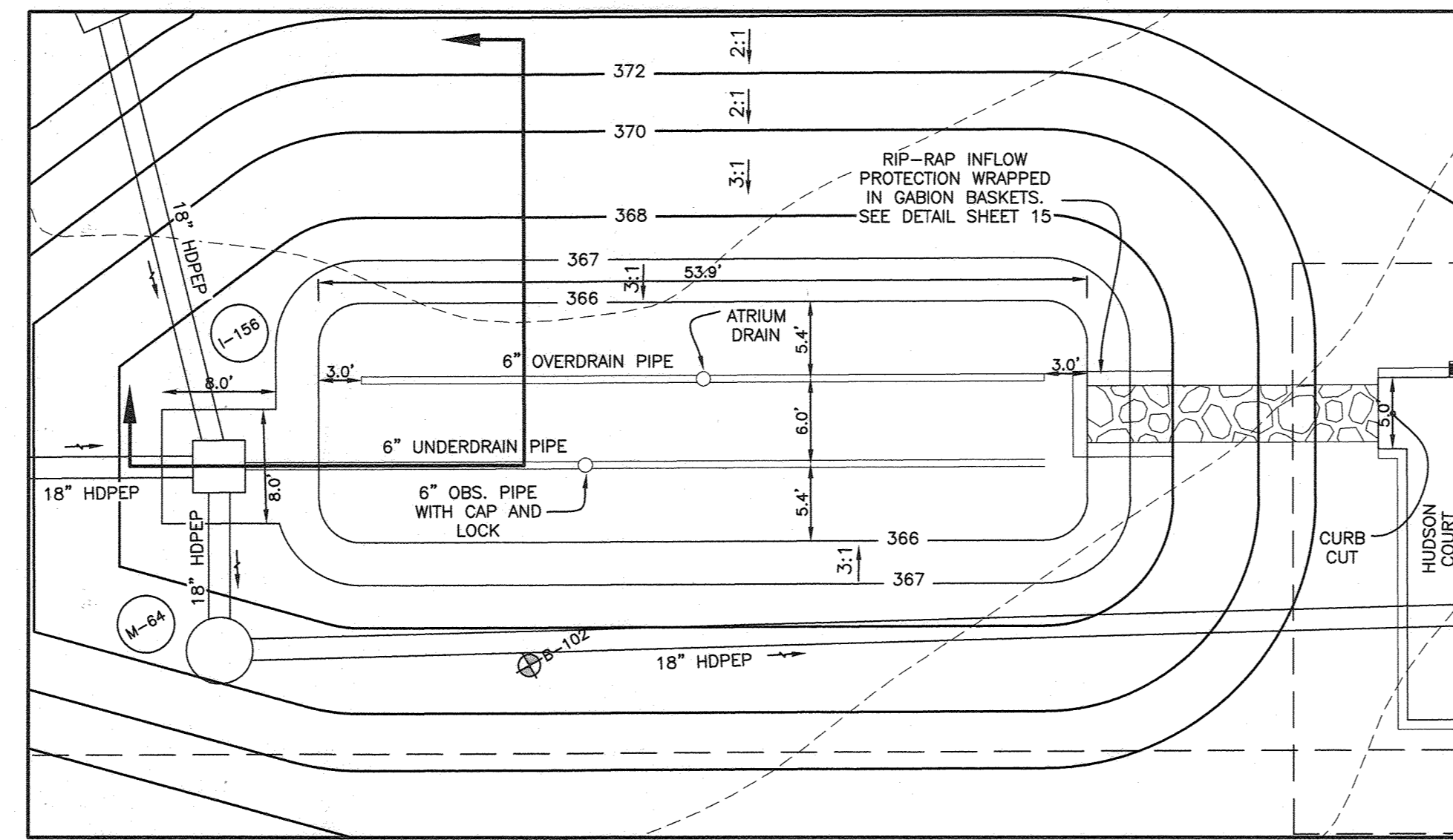
OWNER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021

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

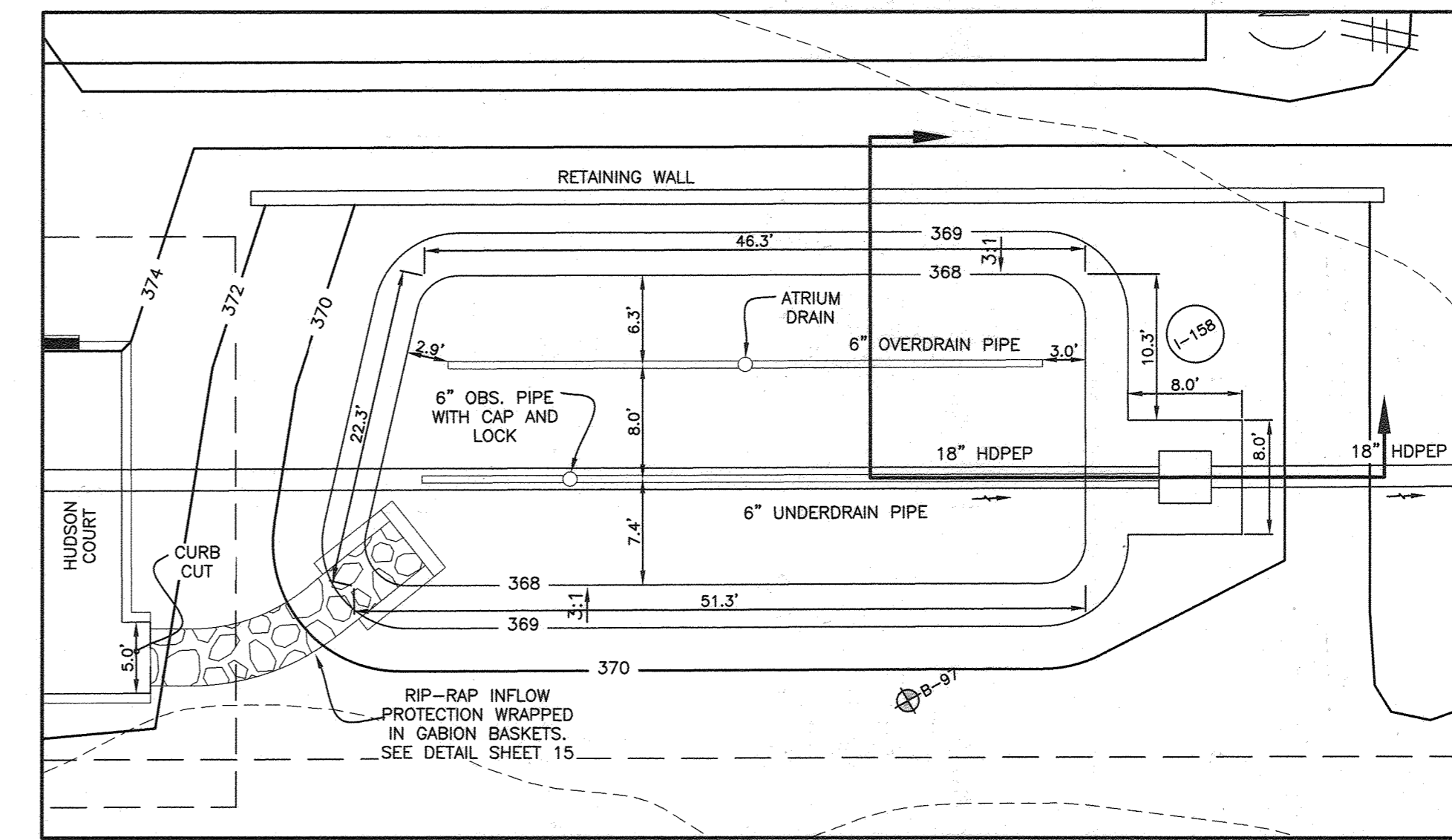
DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
 SCALE: AS SHOWN SHEET 26 OF 44  
 DESIGN: DBT DRAFT: DBT



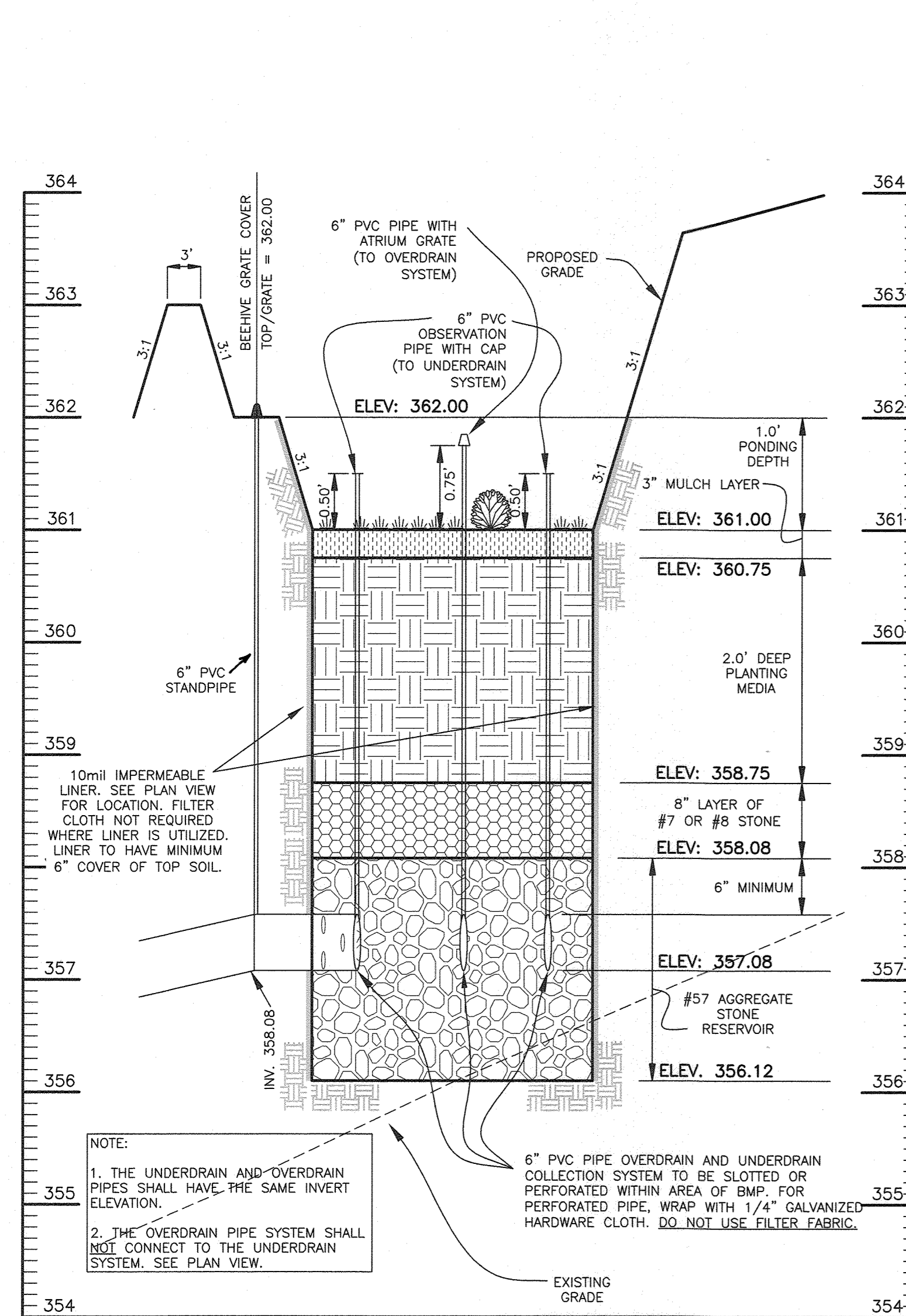
**MICRO BIO-RETENTION #47**  
 SCALE: 1"=10'HORIZ., 1"=1' VERT.



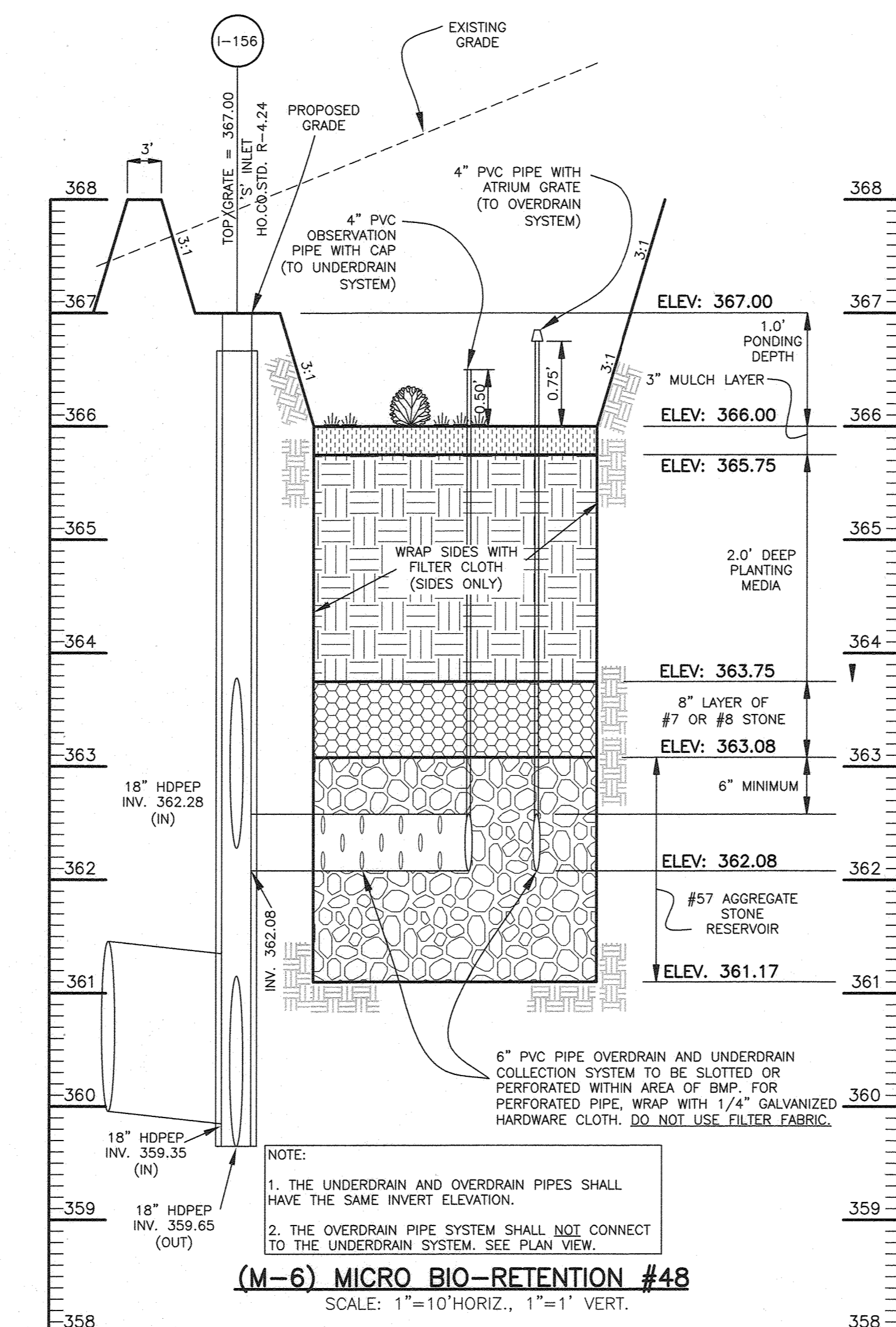
**MICRO BIO-RETENTION #48**  
 SCALE: 1"=10'HORIZ., 1"=1' VERT.



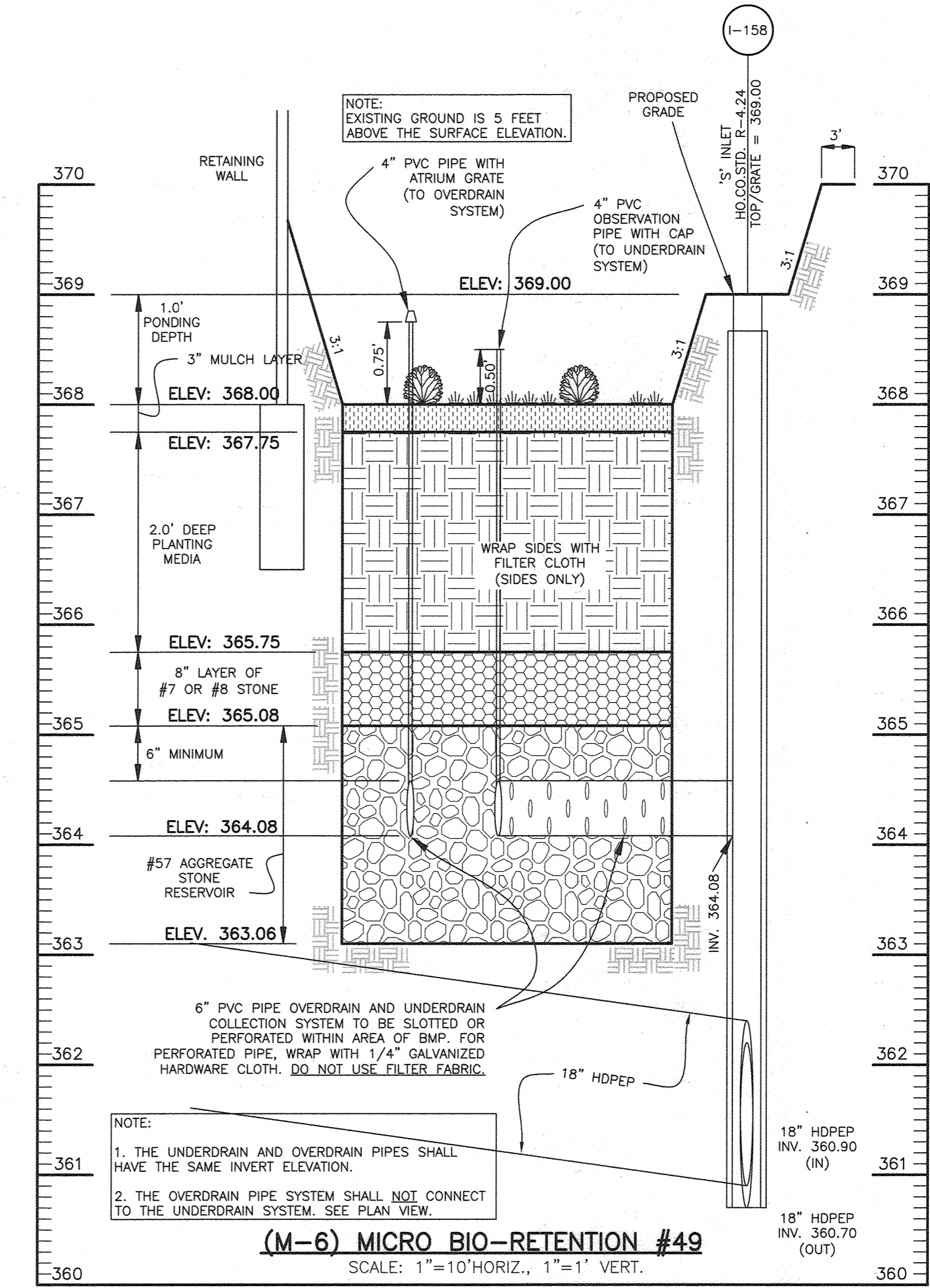
**MICRO BIO-RETENTION #49**  
 SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #47**  
 SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #48**  
 SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #49**  
 SCALE: 1"=10'HORIZ., 1"=1' VERT.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 [Signature] 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 11/3/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

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. 22390, Expiration Date: 6-30-2023.

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 ENGINEERING, INC.  
 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-8108 (F) 410-465-0944  
 WWW.BE-CVLENGINEERING.COM

Professional Engineer  
 [Signature] 10-19-22

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

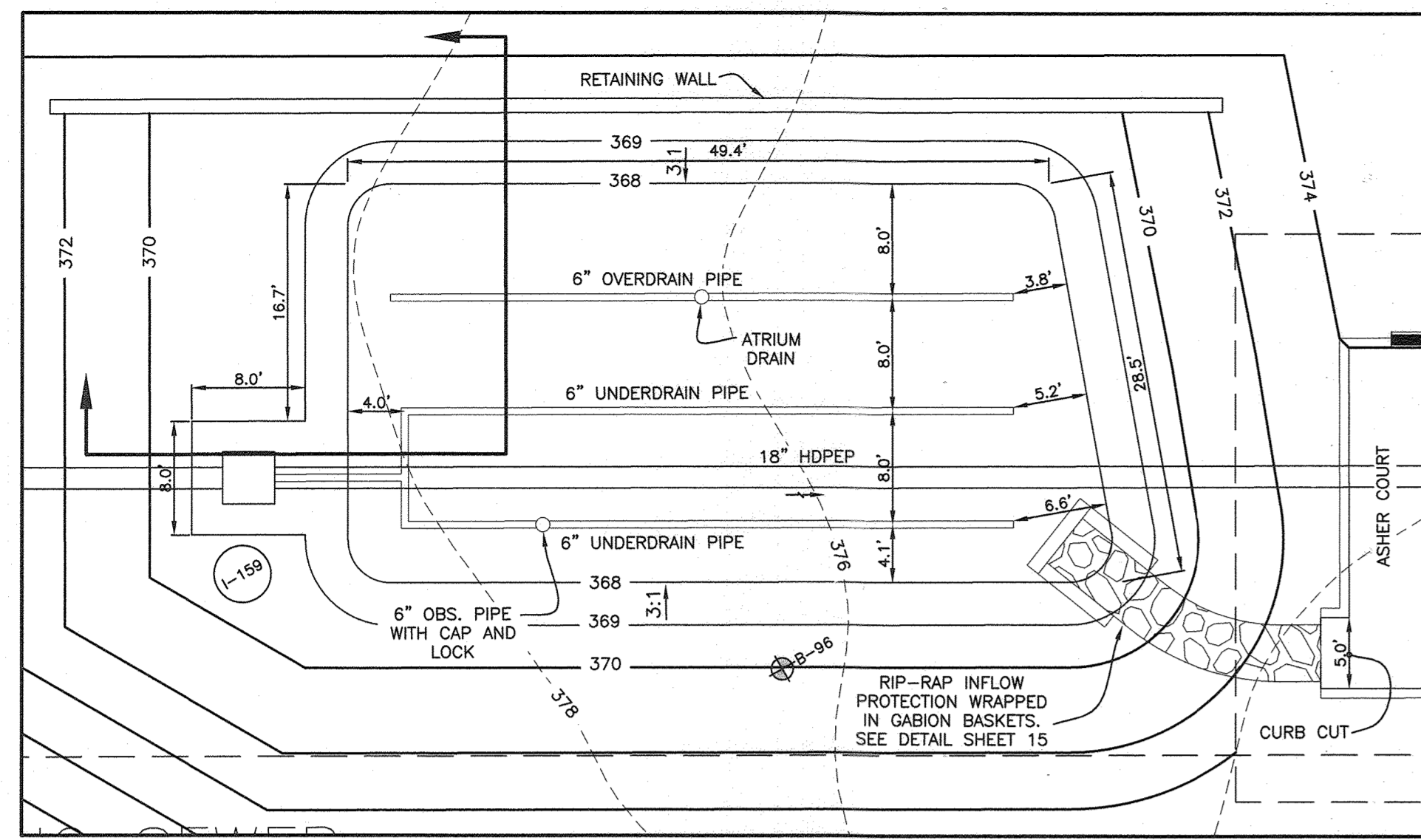
DEVELOPER:  
 ESC WELLINGTON, L.C.  
 5074 DORSEY HALL DRIVE, SUITE 205  
 ELLICOTT CITY, MARYLAND 21042  
 410-720-3021

**WELLINGTON FARMS**  
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 previously recorded under F-21-044 and  
 Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONED: R-20-MXO-3 / R-SC-MXO-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

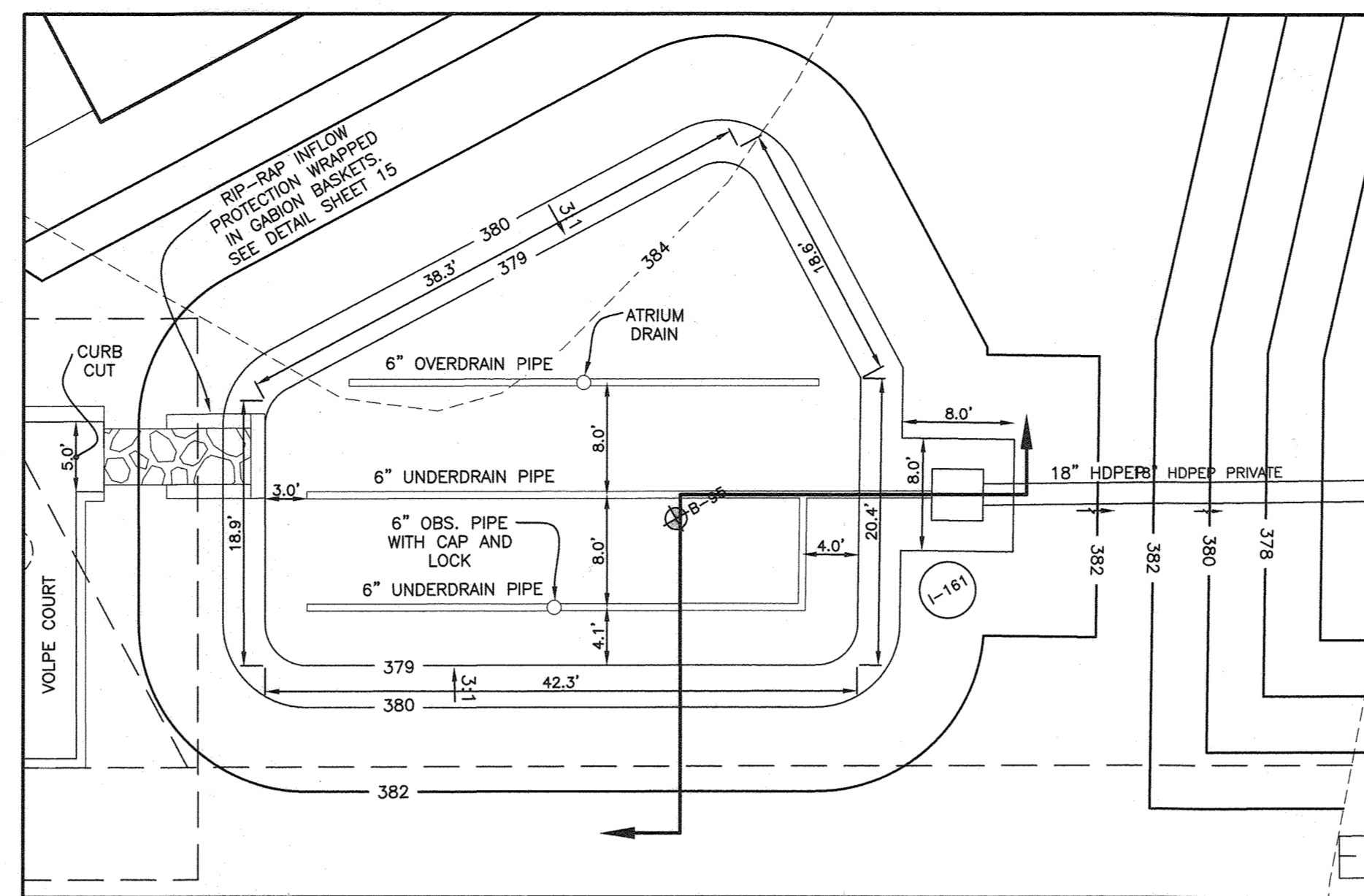
**STORMWATER MANAGEMENT DETAILS**

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
 SCALE: AS SHOWN SHEET 27 OF 44



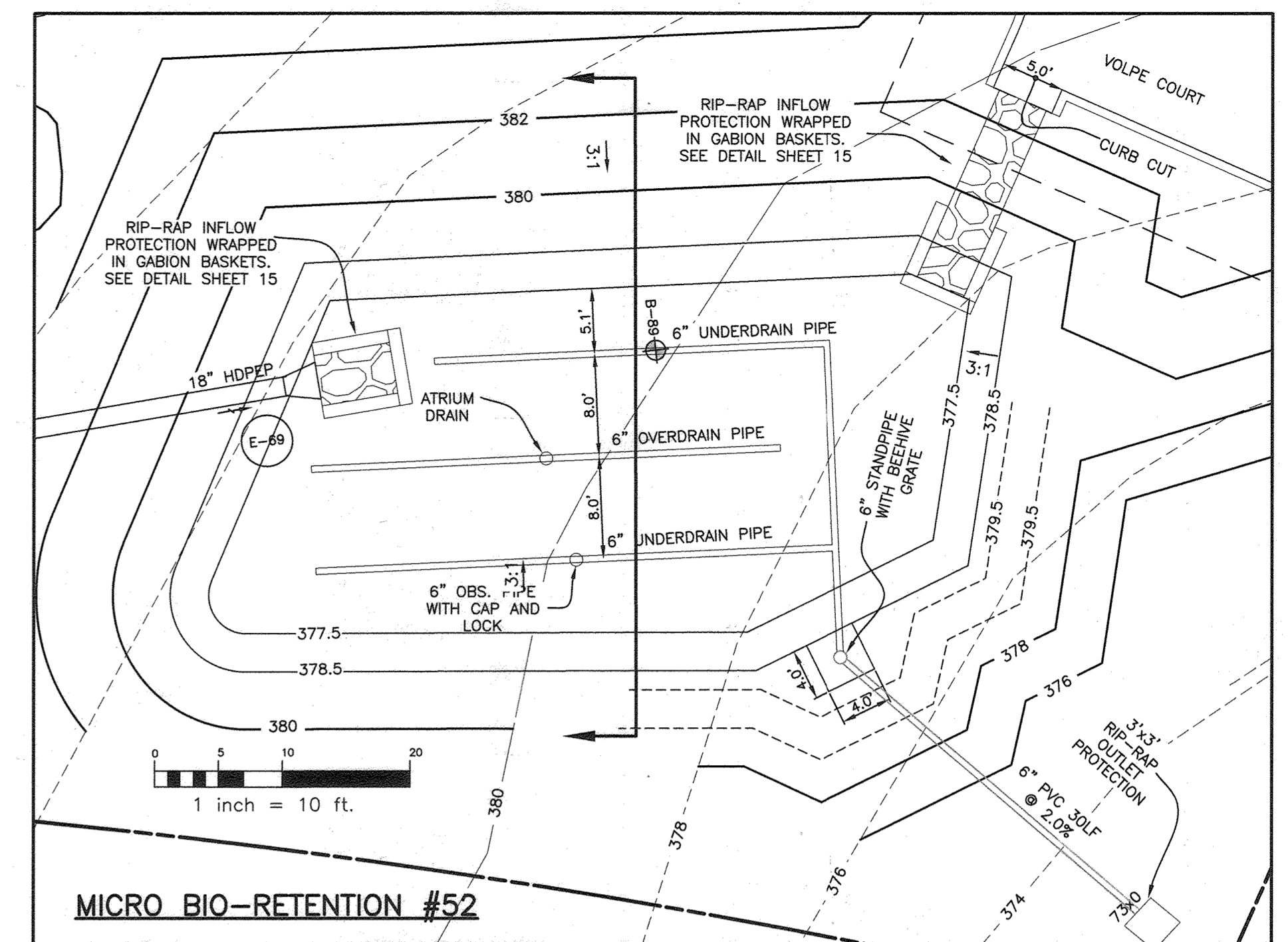
**MICRO BIO-RETENTION #50**

1 inch = 10 ft.



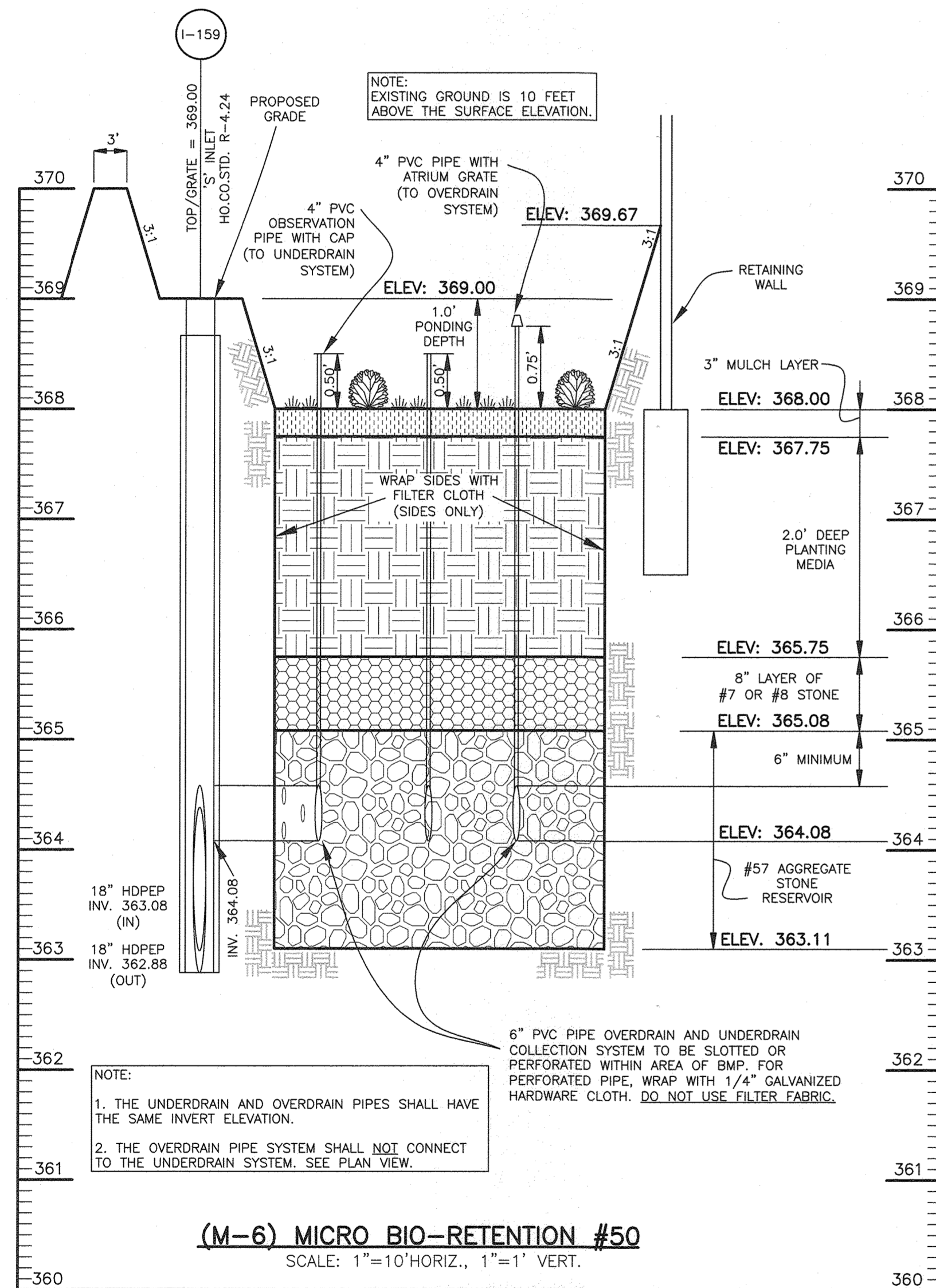
**MICRO BIO-RETENTION #51**

1 inch = 10 ft.



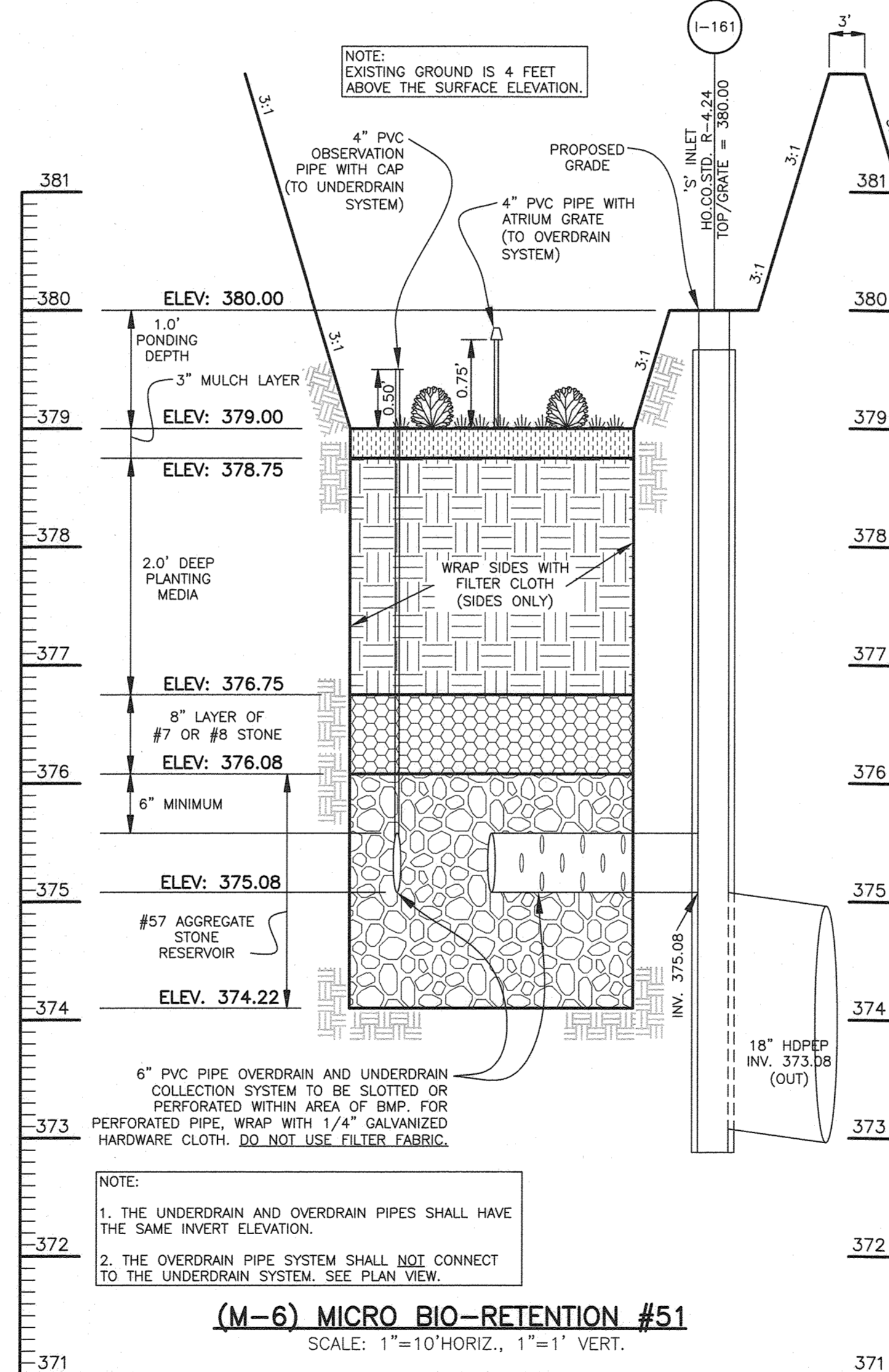
**MICRO BIO-RETENTION #52**

1 inch = 10 ft.



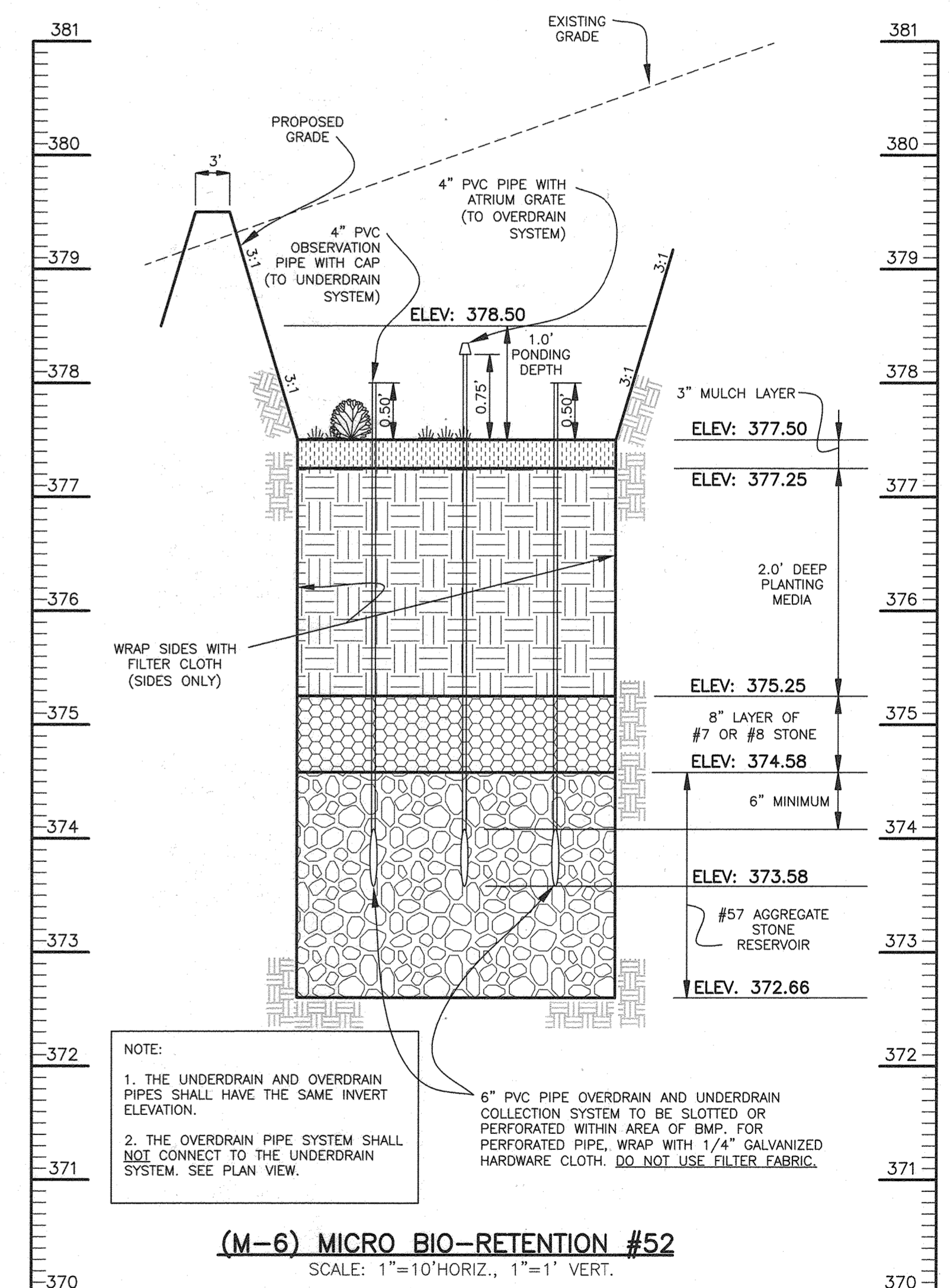
**(M-6) MICRO BIO-RETENTION #50**

SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #51**

SCALE: 1"=10'HORIZ., 1"=1' VERT.



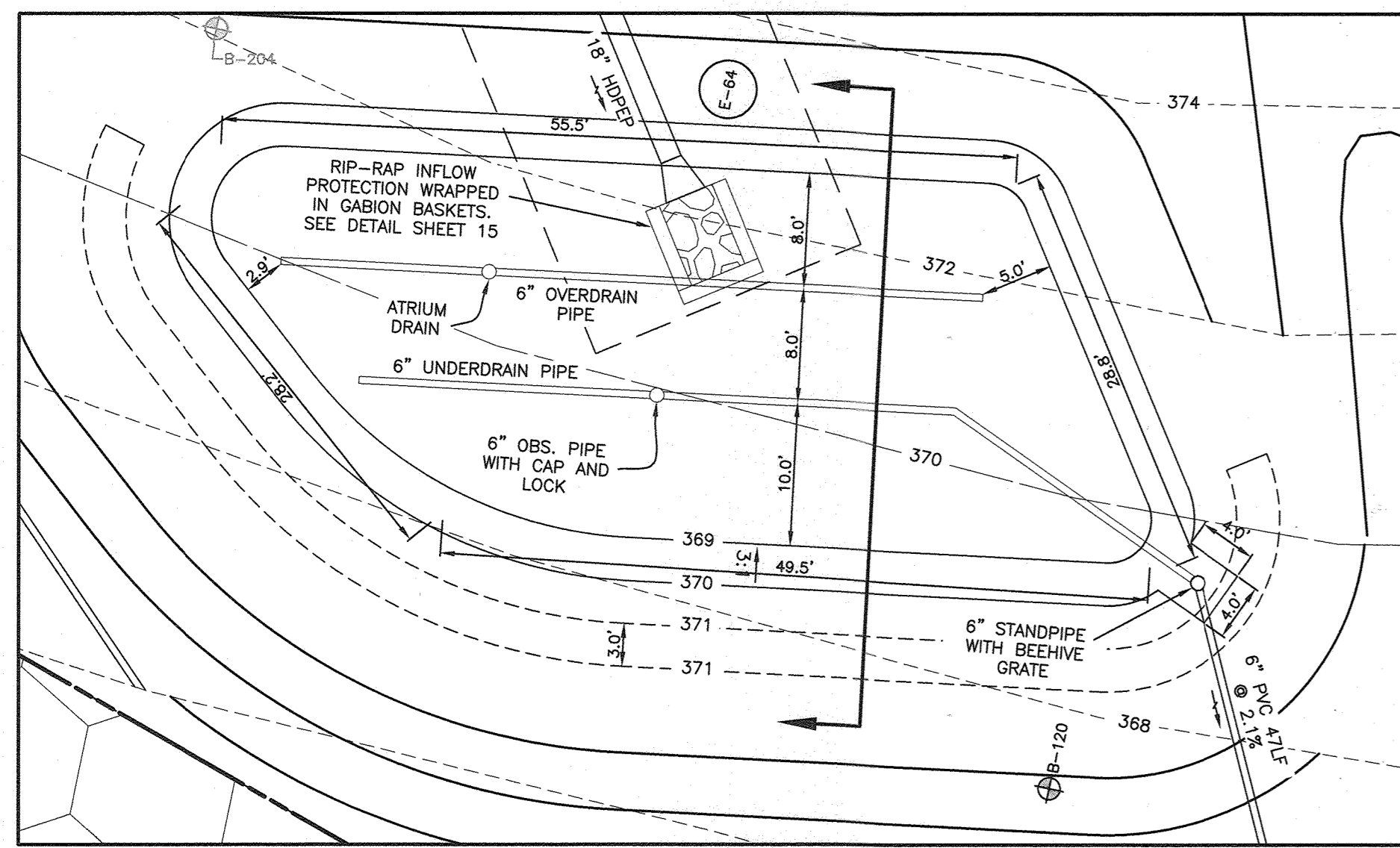
**(M-6) MICRO BIO-RETENTION #52**

SCALE: 1"=10'HORIZ., 1"=1' VERT.

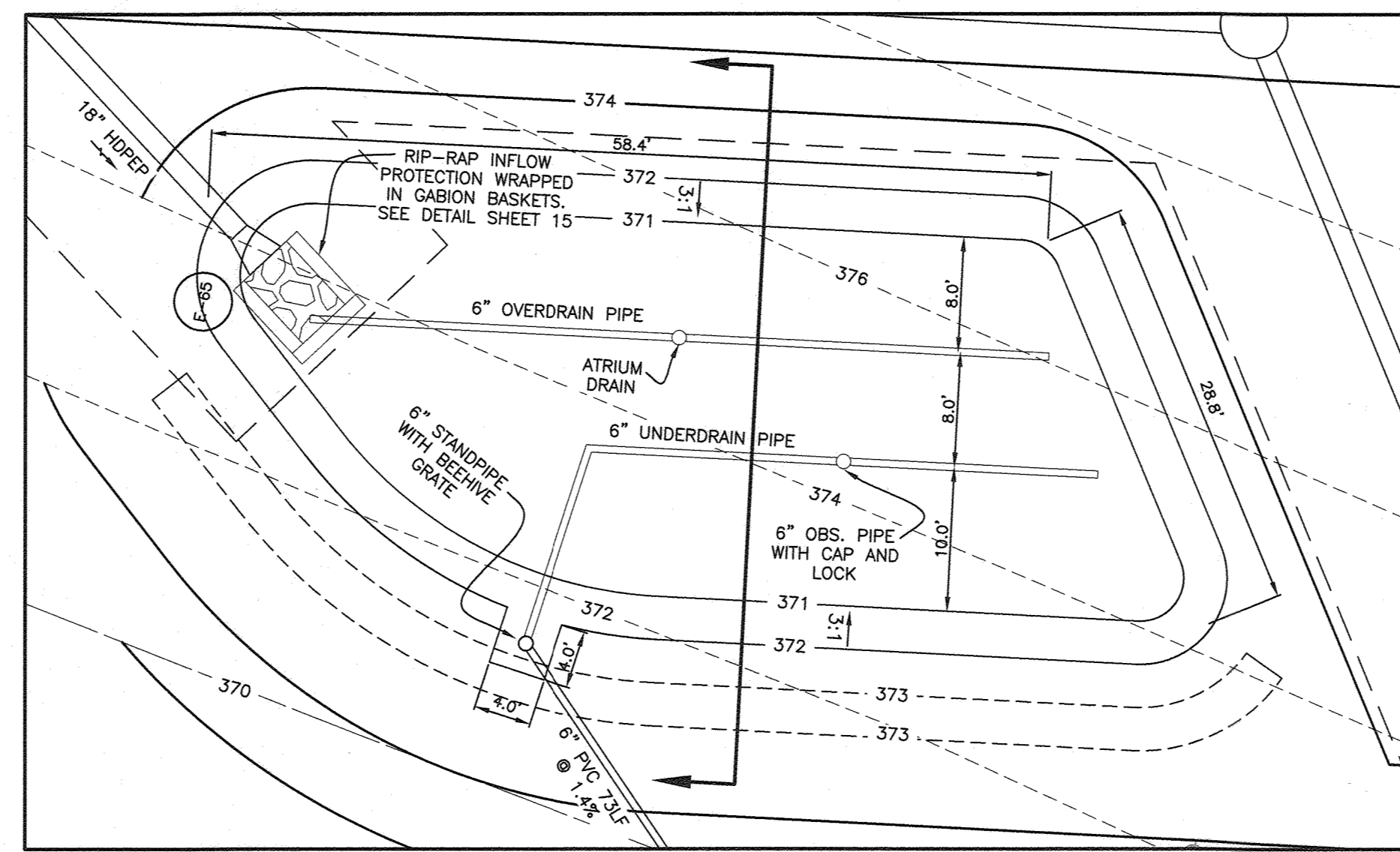
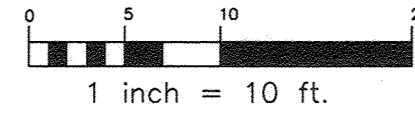
APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/15/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*[Signature]* 11/3/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

REVISIONS  
 1 8.1.2023 REVISE TOTAL NUMBER OF SHEETS  
 NO. DATE REVISION  
 BENCHMARK  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 ENGINEERING, INC.  
 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-8105 (F) 410-465-8644  
 WWW.BE-ENGINEERING.COM  
 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. 23390, Expiration Date: 6-30-2023.

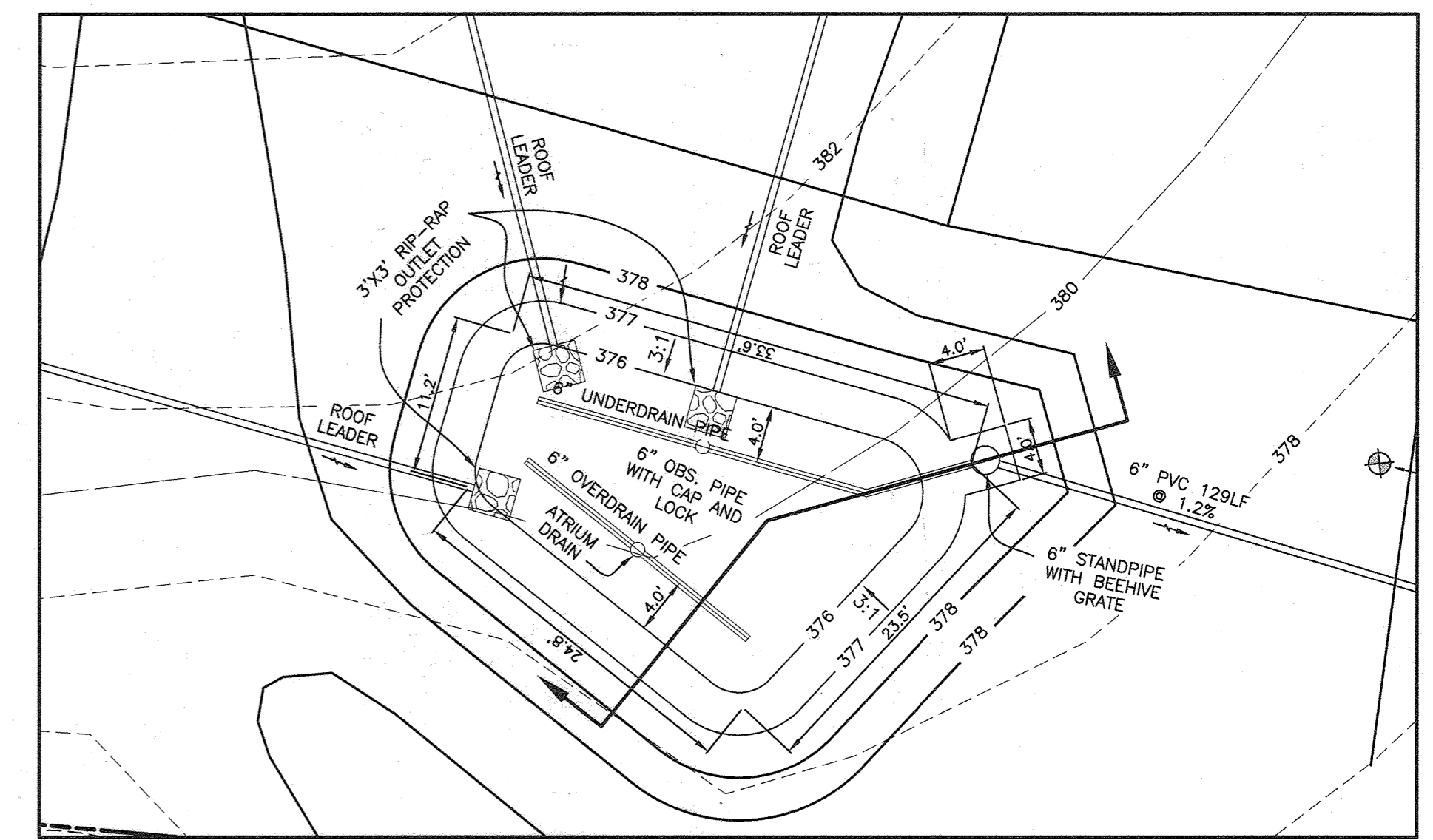
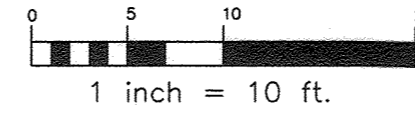
WELLINGTON FARMS  
 Phase 2  
 Lots 276 thru 419; Open Space Lots 420 thru 422;  
 (A Resubdivision of Non-Buildable Bulk Parcel 'E'  
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 TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONED: R-20-MXD-3 / R-SC-MXD-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND  
 STORMWATER MANAGEMENT DETAILS  
 DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
 SCALE: AS SHOWN SHEET 28 OF 44  
 DESIGN: DBT DRAFT: DBT



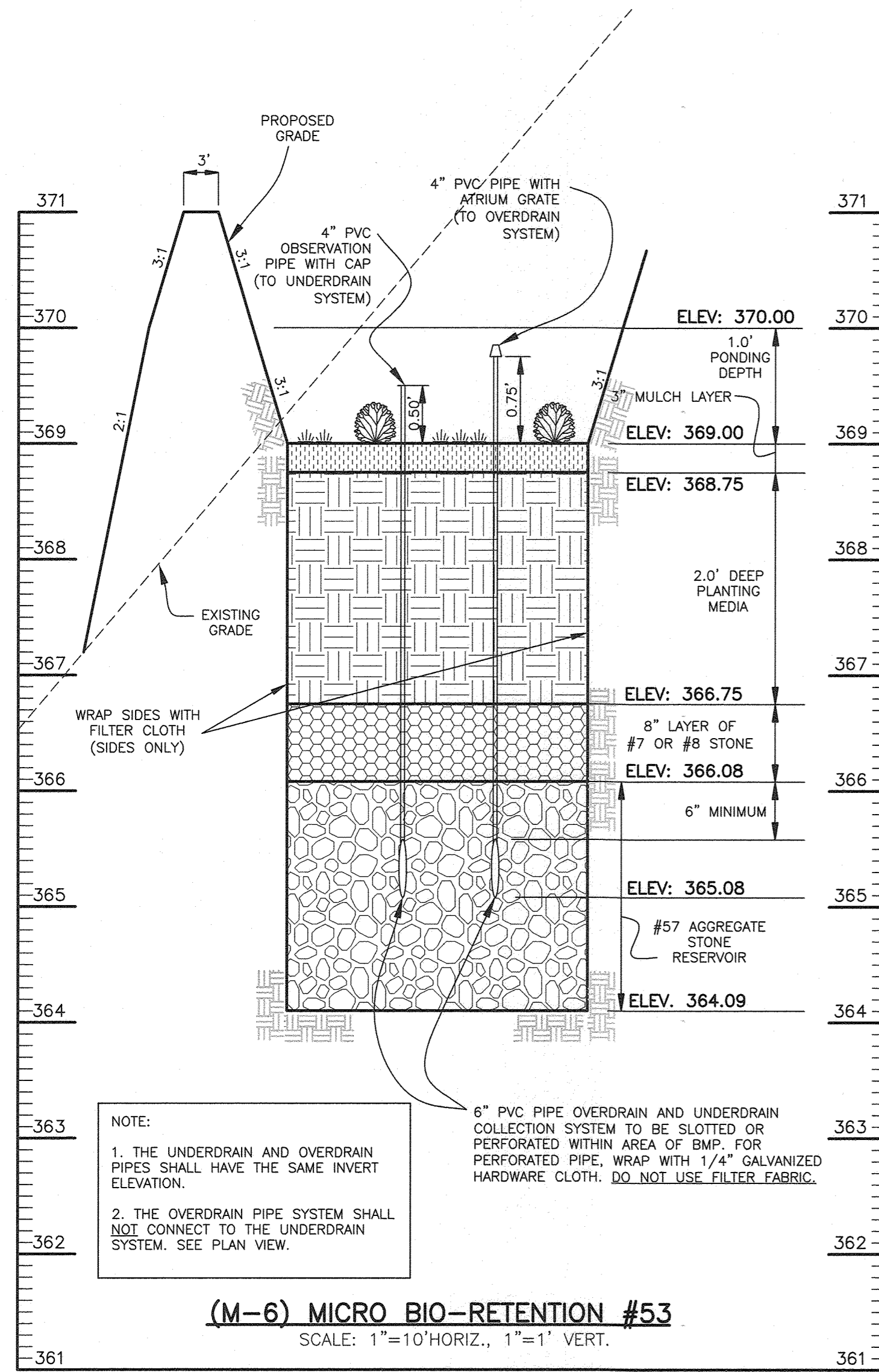
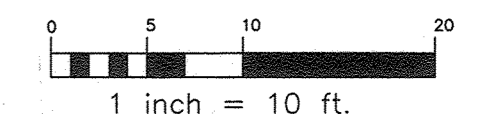
**MICRO BIO-RETENTION #53**



**MICRO BIO-RETENTION #54**

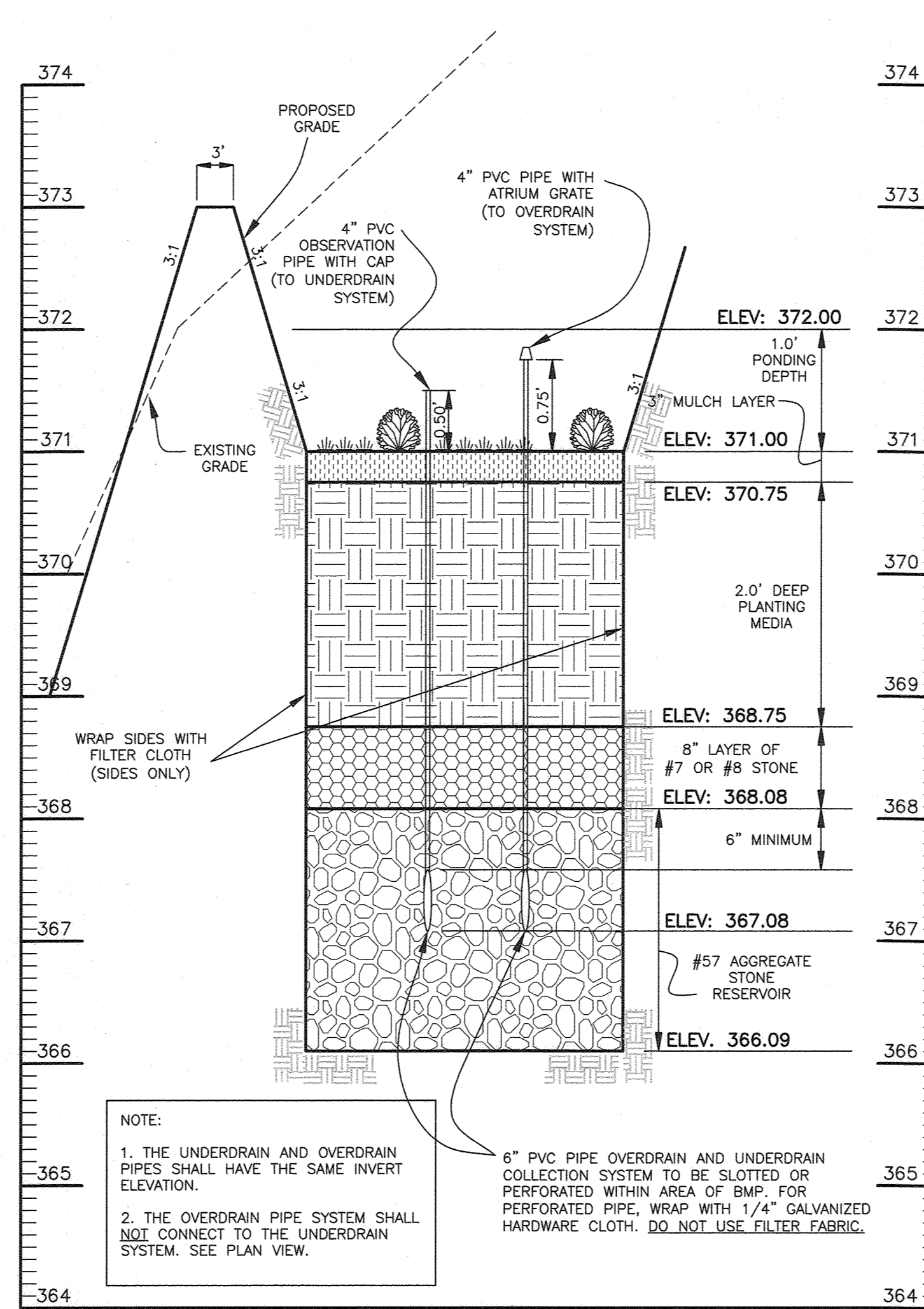


**MICRO BIO-RETENTION #55**



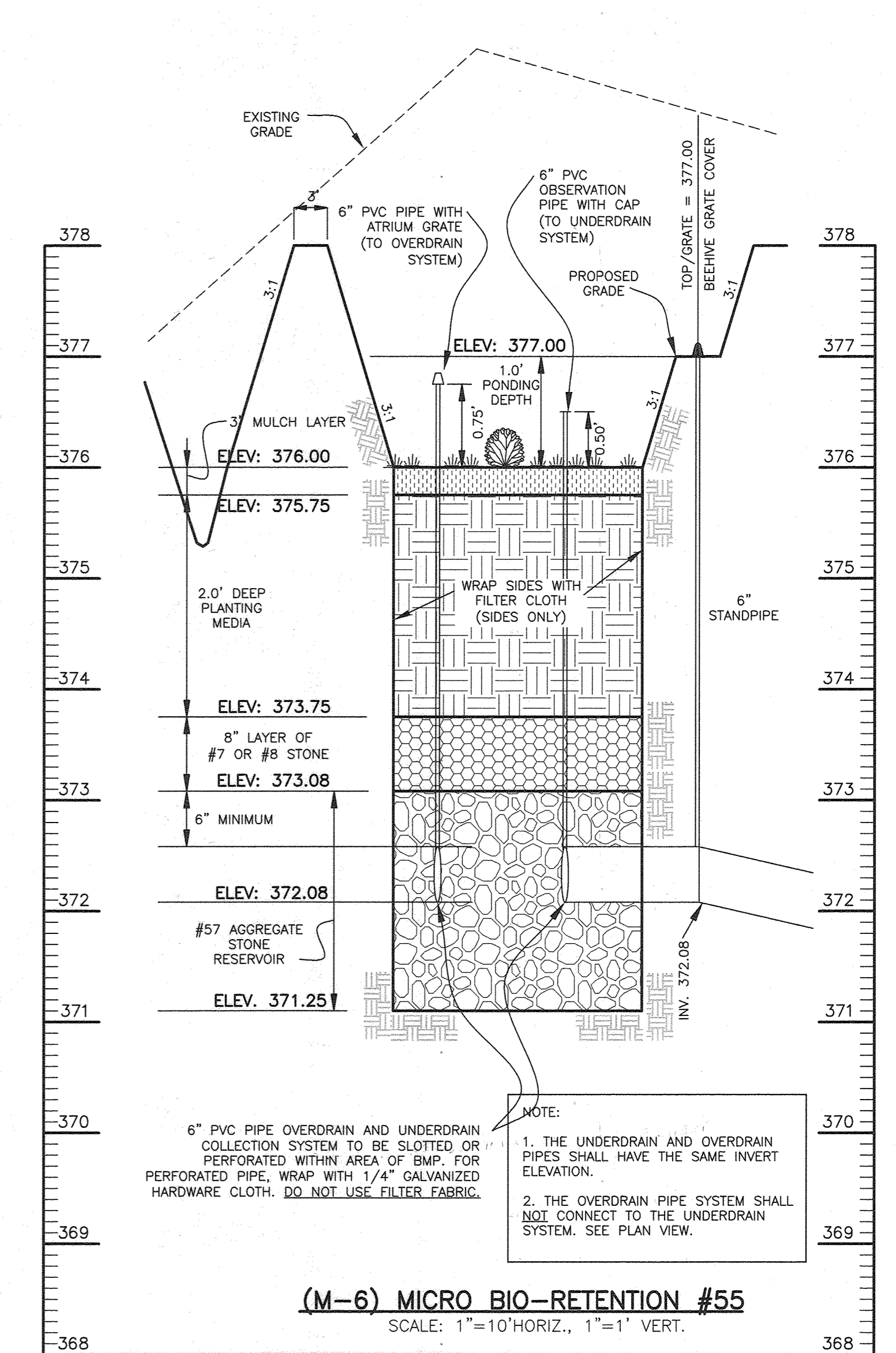
**(M-6) MICRO BIO-RETENTION #53**

SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #54**

SCALE: 1"=10'HORIZ., 1"=1' VERT.



**(M-6) MICRO BIO-RETENTION #55**

SCALE: 1"=10'HORIZ., 1"=1' VERT.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 10/20/2022  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
*[Signature]* 10/20/2022  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO.	DATE	REVISION
1	8.1.2023	REVISE TOTAL NUMBER OF SHEETS

**BENCHMARK**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
**ENGINEERING, INC.**  
 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-8108 (F) 410-465-8644  
 WWW.BE-CVLENGINEERING.COM

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. 22390, Expiration Date: 6-30-2023.

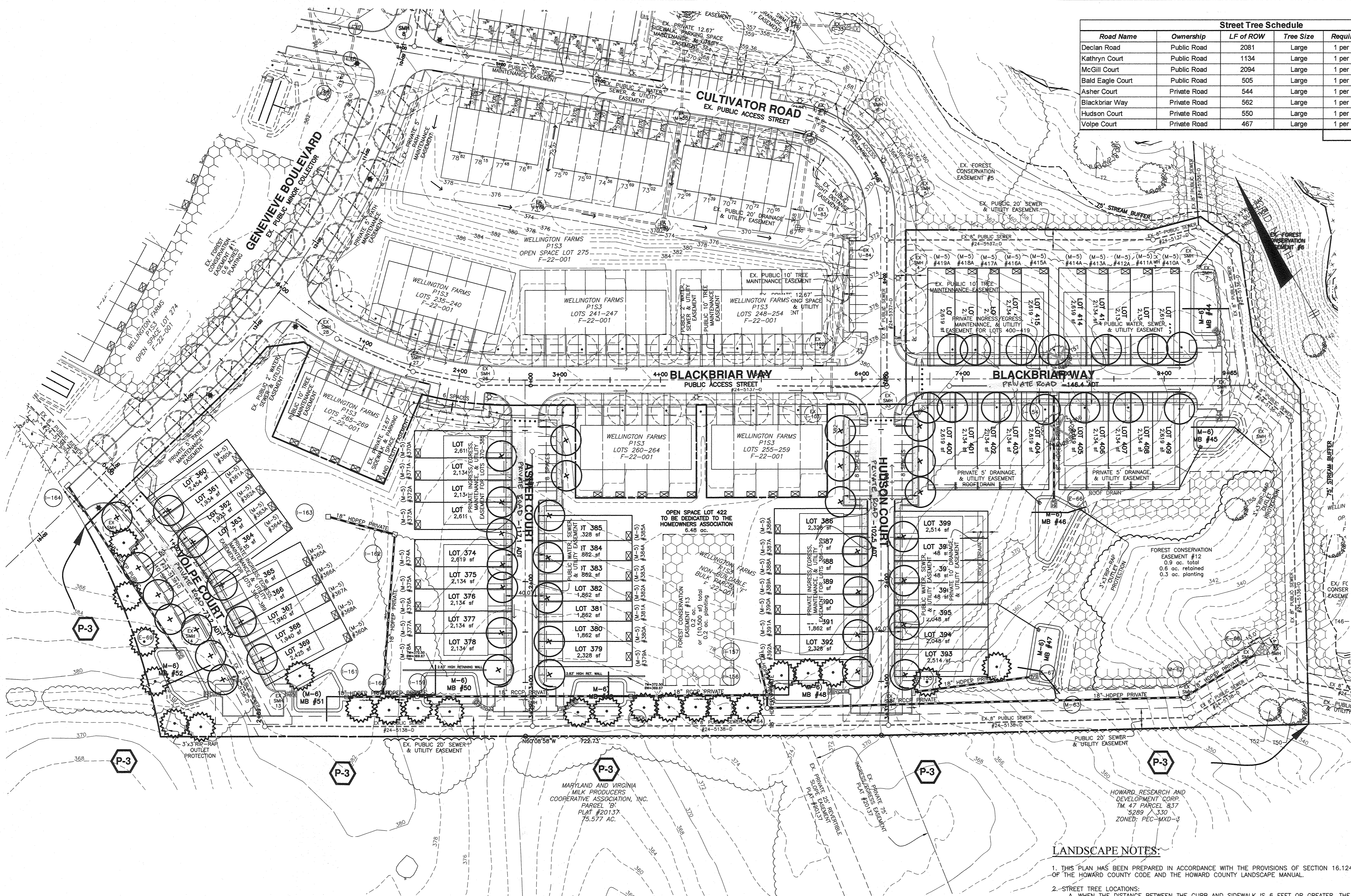
*[Signature]* 8-19-22

**WELLINGTON FARMS**  
 Phase 2  
 Lots 276 thru 419; Open Space Lots 420 thru 422;  
 (A Resubdivision of Non-Buildable Bulk Parcel 'E'  
 previously recorded under F-21-044 and  
 Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONE: R-20-MMD-3 / R-SC-MMD-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

**STORMWATER MANAGEMENT DETAILS**

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
 SCALE: AS SHOWN SHEET 29 OF 44



Street Tree Schedule					
Road Name	Ownership	LF of ROW	Tree Size	Requirement	Trees Required
Declan Road	Public Road	2081	Large	1 per 40 LF	52
Kathryn Court	Public Road	1134	Large	1 per 40 LF	28
McGill Court	Public Road	2094	Large	1 per 40 LF	52
Bald Eagle Court	Public Road	505	Large	1 per 40 LF	13
Asher Court	Private Road	544	Large	1 per 40 LF	14
Blackbriar Way	Private Road	562	Large	1 per 40 LF	14
Hudson Court	Private Road	550	Large	1 per 40 LF	14
Volpe Court	Private Road	467	Large	1 per 40 LF	12
Total					198

Schedule A				
Perimeter Landscape Edge				
Category	P-1	P-2	P-3	Totals
Linear Feet of Road Frontage or Perimeter	1,212	1,321	1,363	
Credit for Existing Vegetation (Yes, No, Linear Feet) (Describe below if needed)	0	0	0	
Credit for Wall, Fence, or Berm (Yes, No, Linear Feet) (Describe below if needed)	0	0	0	
Linear Feet of Planting	1,212	1,321	1,363	
Number of Plants Required				
Shade Trees	20	22	23	65
Evergreen Trees	0	0	0	0
Other Trees (2:1 substitute)	0	0	0	0
Shrubs	0	0	0	0
Number of Plants Provided				
Shade Trees	20	22	23	65
Evergreen Trees	0	0	0	0
Other Trees (2:1 substitute)	0	0	0	0
Shrubs	0	0	0	0

Notes:  
 1. Perimeter trees for sideyards to roadway for Lots 299, 317, 318, 338, 347, 356, 360, 370, 400, and 419 shall be provided by the Builder under future Site Development Plan.

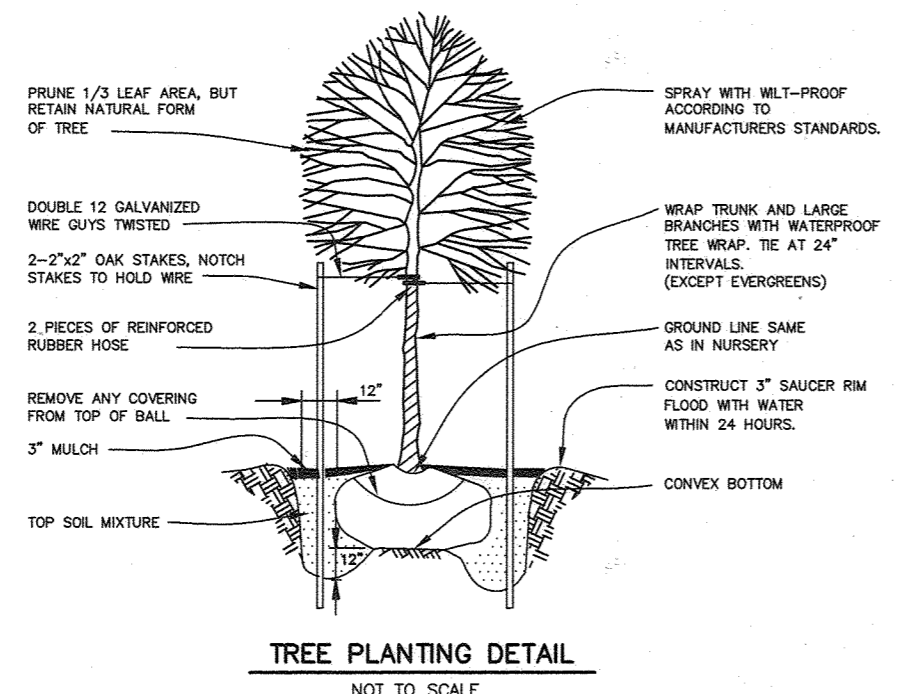
Schedule C		
Residential Development Internal Landscaping		
Category	SFA	APT
Number of Dwelling Unit	60	0
Number of Trees Required (1.0U SFA; 1.3 DU Apts)	60	0
Number of Trees Provided		
Shade Trees	deferred	0
Other Trees (2:1 substitution)		

Chart is shown for informational purposes. The actual planting obligation of these trees shall be deferred until the SDP stage so the plantings do not interfere with house and drywell construction.

LANDSCAPE PLANTING LIST				
SYMBOL	QUANTITY	NAME	REMARKS	DESCRIPTION
○	78	TILIA CORDATA (Greenspire Littleleaf Linden)	2.5" - 3" cal.	STREET TREES TO BE PROVIDED BY THE DEVELOPER
+	120	ACER RUBRUM (Red Sunset Red Maple)	2.5" - 3" cal.	
⊙	65	CLADRASTIS KENTUCKEA LUTEA (Yellowwood)	2.5" - 3" cal.	SHADE TREES ALONG PERIMETER EDGES TO BE PROVIDED BY THE DEVELOPER
⊕				EXISTING STREET TREES PLANTED UNDER F-21-044 AND F-22-001
⊗				EXISTING SPECIMEN TREES TO BE REMOVED AS APPROVED UNDER WP-20-039.

**LANDSCAPE NOTES:**

- THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 16.124 OF THE HOWARD COUNTY CODE AND THE HOWARD COUNTY LANDSCAPE MANUAL.
- STREET TREE LOCATIONS:
  - WHEN THE DISTANCE BETWEEN THE CURB AND SIDEWALK IS 6 FEET OR GREATER, THE TREES SHALL BE LOCATED WITHIN THE RIGHT-OF-WAY AND SHALL BE CENTERED BETWEEN THE CURB AND SIDEWALK.
  - WHEN THE DISTANCE BETWEEN THE CURB AND SIDEWALK IS LESS THAN 6 FEET, TREES MAY BE PLANTED 3 FEET FROM THE SIDEWALK IN THE DIRECTION AWAY FROM THE ROAD. A 10-FOOT WIDE TREE MAINTENANCE EASEMENT SHALL BE REQUIRED IF THE RIGHT-OF-WAY IS LIMITED.
  - TREES SHALL BE PLANTED 6 FEET BEHIND CURB WHEN THERE ARE NO SIDEWALKS.
  - TREES TO BE PLANTED MINIMUM 30 FEET FROM SIGNS AND INTERSECTIONS WHEN PLANTED BETWEEN SIDEWALK AND CURB. TREES MAY NOT BE PLANTED WITHIN 5 FEET OF A STORM DRAIN INLET, OPEN SPACE ACCESS STRIP, OR 10 FEET OF A DRIVEWAY.
  - STREET TREES SHALL BE PLANTED TO AVOID WATER AND SEWER HOUSE CONNECTIONS.
- AT THE TIME OF INSTALLMENT, ALL SHRUBS AND OTHER PLANTINGS HEREWITH LISTED AND APPROVED FOR THIS SITE, SHALL BE OF THE PROPER HEIGHT REQUIREMENTS IN ACCORDANCE WITH THE HOWARD COUNTY LANDSCAPE MANUAL. IN ADDITION, NO SUBSTITUTIONS OR RELOCATION OF REQUIRED PLANTINGS MAY BE MADE WITHOUT PRIOR REVIEW AND APPROVAL FROM THE DEPARTMENT OF PLANNING AND ZONING. ANY DEVIATION FROM THIS APPROVED LANDSCAPE PLAN MAY RESULT IN DENIAL OR DELAY IN RELEASE OF LANDSCAPE SURETY UNTIL SUCH TIME AS ALL REQUIRED MATERIALS ARE PLANTED AND/OR REVISIONS ARE MADE TO APPLICABLE PLANS AND CERTIFICATIONS.
- THE OWNER, TENANTS AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING INCLUDING BOTH PLANT MATERIALS AND BERMS, FENCES AND WALLS. ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- BCE ZONES: TREE HEIGHTS AT MATURITY SHALL BE LIMITED TO 25 FEET MAXIMUM WITHIN THE "GREEN ZONE", TREE HEIGHTS AT MATURITY SHALL BE LIMITED TO 40 FEET MAXIMUM WITHIN THE "YELLOW ZONE". IF TREES ARE TO BE PLANTED ON BERMS THE TREE HEIGHTS SHALL BE REDUCED BY THE HEIGHT OF THE BERM AS MEASURED ABOVE THE MEAN GROUND ELEVATION OF THE UTILITY POLE LINE.
- FINANCIAL SURETY IN THE AMOUNT OF \$78,900.00 FOR THE REQUIRED 198 STREET TREES AND 65 PERIMETER TREES SHALL BE POSTED AS PART OF THE DPW DEVELOPER'S AGREEMENT.



**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 SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF 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.

*J. V. Kirk* 9-20-22 DATE  
 JASON KIRK  
 ESC WELLINGTON, L.C.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022 DATE  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/3/22 DATE  
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/3/22 DATE  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

NO.	DATE	REVISION
2	8.1.2023	REVISE TOTAL NUMBER OF SHEETS
1	1/24/2023	BASE VOLPE, ASHER, HUDSON COURTS AND BLACKBRIAR WAY TO BE "PRIVATE ROAD"

**BENCHMARK ENGINEERING, INC.**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 3300 N. RIDGE ROAD SUITE 140A ELLICOTT CITY, MARYLAND 21043  
 (P) 410-465-8105 (F) 410-465-8644  
 WWW.BEI-CIVILENGINEERING.COM

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. 22396, Expiration Date: 6-30-2023.

**WELLINGTON FARMS**  
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 5074 DORSEY HALL DRIVE, SUITE 205  
 ELLICOTT CITY, MARYLAND 21042  
 410-720-3021

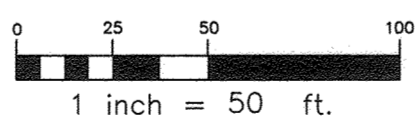
DEVELOPER:  
 ESC WELLINGTON, L.C.  
 5074 DORSEY HALL DRIVE, SUITE 205  
 ELLICOTT CITY, MARYLAND 21042  
 410-720-3021

**LANDSCAPE PLAN**

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
 SCALE: AS SHOWN SHEET 30 OF 44



MATCH LINE SEE SHEET 32



**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 SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF 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.

*J. V. Kirk* 9-20-22  
 JASON VAN KIRK DATE  
 ESC WELLINGTON, L.C.

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*Shelley* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/7/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 11.7.22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

NO.	DATE	REVISION
1	8.11.2022	REVISE OFFSITE PATH ALIGNMENTS, REVISE TOTAL NUMBER OF SHEETS.

**BENCHMARK ENGINEERING, INC.**  
 ENGINEERS & LAND SURVEYORS & PLANNERS  
 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
 (P) 410-485-8105 (F) 410-485-8844  
 WWW.BEI-CVLENGINEERING.COM

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. 22390. Expiration Date: 6-30-2023.

**WELLINGTON FARMS**  
 Phase 2  
 Lots 276 thru 419; Open Space Lots 420 thru 422;  
 (A Resubdivision of Non-Buildable Bulk Parcel 'E'  
 previously recorded under F-21-044 and  
 Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

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

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

TAX MAP: 46 - GRID: 6 - PARCEL: 163  
 ZONED: R-20-MKD-3 / R-SC-MKD-3  
 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

**LANDSCAPE PLAN**

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
 DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 31 OF 44



**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 SUBDIVISION AND LAND DEVELOPMENT REGULATIONS AND LANDSCAPE MANUAL. I/WE FURTHER CERTIFY THAT UPON COMPLETION OF 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.

*J. Van Kirk* 9-30-22  
 JASON VAN KIRK DATE  
 ESC WELLINGTON, L.C.

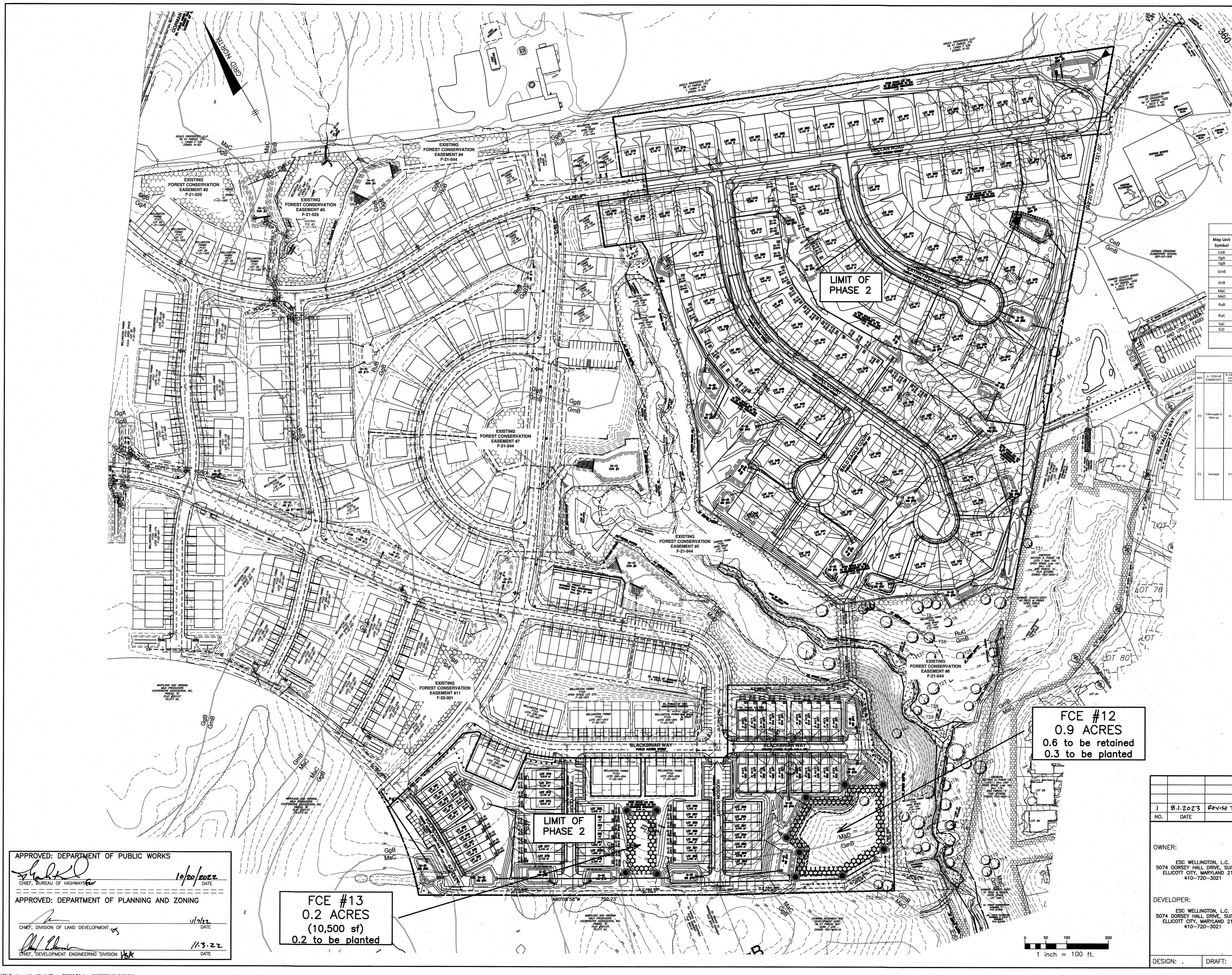
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS DATE

*[Signature]* 11/3/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT DATE

*[Signature]* 11.3.22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION DATE

<p>REVISION</p> <table border="1"> <tr> <td>NO.</td> <td>DATE</td> <td>REVISION</td> </tr> <tr> <td>1</td> <td>8.1.2023</td> <td>REMOVE OPPOSITE PATH. REVISE TOTAL NUMBER OF SHEETS</td> </tr> </table>		NO.	DATE	REVISION	1	8.1.2023	REMOVE OPPOSITE PATH. REVISE TOTAL NUMBER OF SHEETS	<p><b>BENCHMARK</b>  <b>ENGINEERING, INC.</b>  <small>ENGINEERS &amp; LAND SURVEYORS &amp; PLANNERS</small>        3300 N. RIDGE ROAD &amp; SUITE 140 • ELLICOTT CITY, MARYLAND 21043        (P) 410-485-8105 (F) 410-485-8844        WWW.BEI-CIVILENGINEERING.COM</p> <p>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. 22390. Expiration Date: 6-30-2023.</p>
NO.	DATE	REVISION						
1	8.1.2023	REMOVE OPPOSITE PATH. REVISE TOTAL NUMBER OF SHEETS						
<p><b>WELLINGTON FARMS</b>        Phase 2        Lots 276 thru 419; Open Space Lots 420 thru 422;        (A Resubdivision of Non-Buildable Bulk Parcel 'E'        previously recorded under F-21-044 and        Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)</p> <p>TAX MAP: 46 - GRID: 6 - PARCEL: 163        ZONED: R-20-MKD-3 / R-50-MKD-3        ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND</p> <p><b>LANDSCAPE PLAN</b></p>								
<p>OWNER:</p> <p>ESC WELLINGTON, L.C.        5074 DORSEY HALL DRIVE, SUITE 205        ELLICOTT CITY, MARYLAND 21042        410-720-3021</p>	<p>DEVELOPER:</p> <p>ESC WELLINGTON, L.C.        5074 DORSEY HALL DRIVE, SUITE 205        ELLICOTT CITY, MARYLAND 21042        410-720-3021</p>	<p>DATE: AUGUST 15, 2022</p> <p>SCALE: AS SHOWN</p>	<p>BEI PROJECT NO. 2879</p> <p>SHEET 32 OF 44</p>					





**Soils Table**

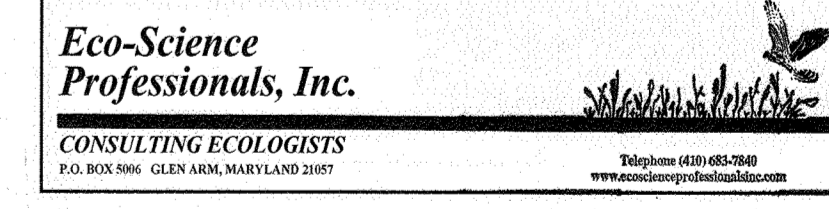
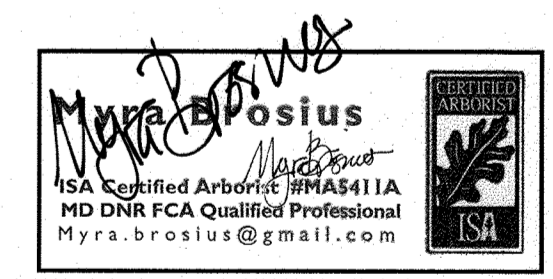
Map Unit Symbol	Map Unit Name	% Hydric Components	Drainage Class	K-Factor* (Whole soil)
GgB	Chilham loam, 3 to 5% slopes	0	Well drained	0.24
GgB	Glenly loam, 0 to 3% slopes	0	Well drained	0.24
GgB	Glenly loam, 3 to 8% slopes	0	Well drained	0.24
GmB	Glenville silt loam, 3 to 8% slopes	10	Moderately well drained	0.37
GhB	Glenville-Belle silt loam, 0 to 8% slopes	35	Moderately well drained	0.43
Mac	Manor loam, 8 to 15% slopes	0	Well drained	0.28
MaD	Manor loam, 15 to 25% slopes	0	Well drained	0.28
RuB	Russett and Beltsville soils, 2 to 5% slopes	0	Moderately well drained	0.28
RuC	Russett and Beltsville soils, 5 to 10% slopes	0	Moderately well drained	0.28
SaC	Sassafras loam 5 to 10% slopes	0	Well drained	0.28
SrP	Sassafras and Crown soils, 10 to 15% slopes	0	Well drained	0.30

Source: <https://websoilsurvey.sc.egov.usda.gov> (January 2018)  
\*Soils are considered highly erodible if the K-factor exceeds 0.35

**FOREST STAND ANALYSIS TABLE**

STAND NO.	A. TYPE OR COMMUNITY	B. AREA (Acres)	C. SOIL DESCRIPTION	D. DIVERSITY	E. DENSITY	F. HEIGHT	G. DBH	H. SPECIES COMPOSITION	I. FOREST AREA IN GENERAL ENVIRONMENT (Acres)
1	White oak	14.4	GgB, Mac, GmB	High	High	20-30'	10-12"	White oak (70%), Red oak (20%), Black oak (10%)	13.8
2	Red oak	9.7	GgB, Mac	High	High	20-30'	10-12"	Red oak (70%), White oak (20%), Black oak (10%)	9.3

- Legend**
- Development Section Boundary / Limit of Disturbance
  - Limit of FCE
  - Specimen tree to be removed
  - Permanent Protective Signage
  - Temporary Protective Fencing
  - 2" Tree planting location



**FCE #12**  
0.9 ACRES  
0.6 to be retained  
0.3 to be planted

**FCE #13**  
0.2 ACRES  
(10,500 sf)  
0.2 to be planted

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS  
 DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/2/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DATE

*[Signature]* 11/3/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 DATE

NO.	DATE	REVISION
1	8.1.2023	REVISE TOTAL NUMBER OF SHEETS

**WELLINGTON FARMS**  
Phase 2  
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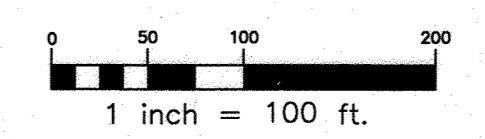
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TAX MAP: 46 - GRID: 6 - PARCEL: 163  
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ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

**FOREST CONSERVATION PLAN**

DATE: MAY 30, 2022 BEI PROJECT NO. 2879  
 SCALE: AS SHOWN SHEET 33 OF 44



No.	Common Name	Scientific Name	DBH (inches)	Condition Rating	Comments
1	Yellow poplar	<i>Liriodendron tulipifera</i>	32	Fair	Broken branches, narrow crown
2	White oak	<i>Quercus alba</i>	61	Good	Double leader
3	Yellow poplar	<i>Liriodendron tulipifera</i>	31	Fair	Narrow crown, vine cover ( <i>Toxicodendron radicans</i> )
4	Southern red oak	<i>Quercus falcata</i>	34	Poor	Broken leader, small dead wood
5	Yellow poplar	<i>Liriodendron tulipifera</i>	39	Good	Broken branches, small dead wood
6	Yellow poplar	<i>Liriodendron tulipifera</i>	38	Good	Large dead wood
7	Yellow poplar	<i>Liriodendron tulipifera</i>	30	Good	Small dead wood, broken branches
8	Yellow poplar	<i>Liriodendron tulipifera</i>	35	Poor	Heavy vine cover ( <i>Toxicodendron radicans</i> ), root cavity, poor form, 1-sided crown, small deadwood, broken branches, hollow trunk
9	Yellow poplar	<i>Liriodendron tulipifera</i>	41	Poor	Included bark, large root cavity
10	Yellow poplar	<i>Liriodendron tulipifera</i>	33	Good	
11	Yellow poplar	<i>Liriodendron tulipifera</i>	31	Fair	Broken leader, 1-sided crown, poor form
12	Yellow poplar	<i>Liriodendron tulipifera</i>	32	Good	
13	Northern red oak	<i>Quercus rubra</i>	33	Fair	Narrow crown, broken branches
14	Yellow poplar	<i>Liriodendron tulipifera</i>	36	Good	Vine cover ( <i>Toxicodendron radicans</i> )
15	Yellow poplar	<i>Liriodendron tulipifera</i>	33	Good	
16	Yellow poplar	<i>Liriodendron tulipifera</i>	31	Fair	Vine cover ( <i>Toxicodendron radicans</i> ), 1-sided crown, large dead wood
17	Yellow poplar	<i>Liriodendron tulipifera</i>	31	Good	Vine cover ( <i>Toxicodendron radicans</i> ), small dead wood
18	Yellow poplar	<i>Liriodendron tulipifera</i>	39	Good	Small dead wood
19	Yellow poplar	<i>Liriodendron tulipifera</i>	36	Good	1-sided crown
20	White oak	<i>Quercus alba</i>	30	Fair	Large dead wood, 1-sided crown
21	Yellow poplar	<i>Liriodendron tulipifera</i>	36	Good	Large dead wood
22	Yellow poplar	<i>Liriodendron tulipifera</i>	44	Fair	Large dead wood, cavity at base
23	Yellow poplar	<i>Liriodendron tulipifera</i>	56	Good	
24	Yellow poplar	<i>Liriodendron tulipifera</i>	31	Good	
25	Yellow poplar	<i>Liriodendron tulipifera</i>	34	Good	Large dead wood
26	Yellow poplar	<i>Liriodendron tulipifera</i>	35	Poor	Large dead wood, dead leader
27	Yellow poplar	<i>Liriodendron tulipifera</i>	39	Poor	Lean, large dead wood, small dead wood, 1-sided crown
28	White oak	<i>Quercus alba</i>	34	Good	Large dead wood
29	Yellow poplar	<i>Liriodendron tulipifera</i>	30	Good	
30	Yellow poplar	<i>Liriodendron tulipifera</i>	58	Poor	Dead leader, large dead wood
31	Northern red oak	<i>Quercus rubra</i>	30	Poor	Crown mostly dead, vine cover ( <i>Toxicodendron radicans</i> )
32	Northern red oak	<i>Quercus rubra</i>	30	Fair	Heavy vine cover ( <i>Toxicodendron radicans</i> ), large dead wood
33	Mockernut hickory	<i>Carya tomentosa</i>	31	Poor	Small dead wood, double leader, included bark
34	Yellow poplar	<i>Liriodendron tulipifera</i>	34	Good	Large dead wood, heavy vine cover ( <i>Toxicodendron radicans</i> )
35	Northern red oak	<i>Quercus rubra</i>	35	Fair	Heavy vine cover ( <i>T. radicans</i> , <i>S. rotundifolia</i> , <i>H. helix</i> )
36	Yellow poplar	<i>Liriodendron tulipifera</i>	30	Good	Small dead wood
37	Yellow poplar	<i>Liriodendron tulipifera</i>	32	Good	
38	Yellow poplar	<i>Liriodendron tulipifera</i>	31	Good	Small dead wood
39	Yellow poplar	<i>Liriodendron tulipifera</i>	31	Good	1-sided crown, large dead wood
40	Yellow poplar	<i>Liriodendron tulipifera</i>	32	Good	Large dead wood
41	Yellow poplar	<i>Liriodendron tulipifera</i>	34	Good	Small dead wood
42	Yellow poplar	<i>Liriodendron tulipifera</i>	32	Good	
43	Yellow poplar	<i>Liriodendron tulipifera</i>	41	Good	
44	Yellow poplar	<i>Liriodendron tulipifera</i>	46	Good	
45	Yellow poplar	<i>Liriodendron tulipifera</i>	33	Good	Minor vine cover ( <i>Toxicodendron radicans</i> )
46	Yellow poplar	<i>Liriodendron tulipifera</i>	30	Poor	Cavity at base, butt rot
47	Yellow poplar	<i>Liriodendron tulipifera</i>	33	Good	
48	Yellow poplar	<i>Liriodendron tulipifera</i>	31	Fair	Vine cover ( <i>Toxicodendron radicans</i> ), narrow crown, stem damaged
49	Northern red oak	<i>Quercus rubra</i>	32	Fair	Small cavity at base, minor stem damage, narrow crown
50	Yellow poplar	<i>Liriodendron tulipifera</i>	37	Good	
51	Yellow poplar	<i>Liriodendron tulipifera</i>	32	Good	
52	Yellow poplar	<i>Liriodendron tulipifera</i>	30	Good	
53	Yellow poplar	<i>Liriodendron tulipifera</i>	32	Fair	Dual leader, included bark, vine cover ( <i>Toxicodendron radicans</i> )
54	Yellow poplar	<i>Liriodendron tulipifera</i>	36	Good	
55	Yellow poplar	<i>Liriodendron tulipifera</i>	31	Good	
56	White oak	<i>Quercus alba</i>	44	Good	
57	White oak	<i>Quercus alba</i>	32	Good	Minor vine cover ( <i>Toxicodendron radicans</i> )
58	Yellow poplar	<i>Liriodendron tulipifera</i>	40	Very Poor	Lightning and storm damage, crown dieback
59	Yellow poplar	<i>Liriodendron tulipifera</i>	36	Very Poor	Lightning strike, very large cavity at base, butt rot
60	White oak	<i>Quercus alba</i>	31	Fair	Some beaver damage at base, included barbed wire fence in trunk
61	White oak	<i>Quercus alba</i>	30	Very Poor	Cavity at base, dead crown, trunk rot
62	Yellow poplar	<i>Liriodendron tulipifera</i>	32	Good	
63	Yellow poplar	<i>Liriodendron tulipifera</i>	32	Good	
64	Yellow poplar	<i>Liriodendron tulipifera</i>	35	Fair	Included bark, large dead wood
65	Yellow poplar	<i>Liriodendron tulipifera</i>	30	Poor	Very heavy vine cover ( <i>T. radicans</i> , <i>Vitis sp.</i> , <i>R. multiflora</i> ), large dead wood
66	Red maple	<i>Acer rubrum</i>	34	Fair	Double leader, included bark, large dead wood
67	Yellow poplar	<i>Liriodendron tulipifera</i>	46	Good	Small dead wood
68	Red maple	<i>Acer rubrum</i>	46	Poor	Double leader, included bark, butt rot, large cavity at base, leaning
69	Yellow poplar	<i>Liriodendron tulipifera</i>	45	Good	
70	Yellow poplar	<i>Liriodendron tulipifera</i>	31	Very Poor	Leaning, large cavity down trunk (10'), large dead wood
71	Red maple	<i>Acer rubrum</i>	30	Very Poor	Double leader, included bark, very large trunk cavity, butt rot
72	Yellow poplar	<i>Liriodendron tulipifera</i>	34	Good	Included bark, double leader at 20'
73	Yellow poplar	<i>Liriodendron tulipifera</i>	36	Fair	Large dead wood, included bark
74	Yellow poplar	<i>Liriodendron tulipifera</i>	40	Very Poor	Butt rot, vine cover ( <i>S. rotundifolia</i> , <i>C. orbiculatus</i> ), double leader, included bark
75	Yellow poplar	<i>Liriodendron tulipifera</i>	38	Fair	Double leader, included bark
76	Yellow poplar	<i>Liriodendron tulipifera</i>	44	Fair	Double leader, included bark
77	Yellow poplar	<i>Liriodendron tulipifera</i>	30	Fair	Beaver damage at base, small dead wood
78	Yellow poplar	<i>Liriodendron tulipifera</i>	34	Fair	Large dead wood, heavy vine cover ( <i>Toxicodendron radicans</i> )
79	White oak	<i>Quercus alba</i>	30	Fair	Double leader, included bark, small dead wood
80	Yellow poplar	<i>Liriodendron tulipifera</i>	30	Good	Large dead wood
81	Red maple	<i>Acer rubrum</i>	30	Good	
82	Yellow poplar	<i>Liriodendron tulipifera</i>	35	Fair	Double leader, included bark
83	Yellow poplar	<i>Liriodendron tulipifera</i>	33	Fair	Large dead wood, vine cover ( <i>T. radicans</i> , <i>Vitis sp.</i> )
84	Red maple	<i>Acer rubrum</i>	32	Fair	Double leader, included bark, small dead wood
85	Yellow poplar	<i>Liriodendron tulipifera</i>	45	Poor	Double leader, included bark, small dead wood
86	Yellow poplar	<i>Liriodendron tulipifera</i>	36	Fair	Double leader, included bark
87	Yellow poplar	<i>Liriodendron tulipifera</i>	58	Good	
88	Yellow poplar	<i>Liriodendron tulipifera</i>	34	Fair	Heavy vine cover, girdled roots, trunk decay (woodpecker holes), large dead wood
89	Yellow poplar	<i>Liriodendron tulipifera</i>	39	Good	Large dead wood, small dead wood
90	Yellow poplar	<i>Liriodendron tulipifera</i>	37	Poor	Narrow crown, large lean, large dead wood
91	Northern red oak	<i>Quercus rubra</i>	37	Good	Girdled roots, heavy vine cover - poison ivy ( <i>Toxicodendron radicans</i> ) and oriental bittersweet ( <i>Celastrus orbiculatus</i> )

APPROVED: DEPARTMENT OF PUBLIC WORKS  
 [Signature] 10/20/2022  
 CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
 [Signature] 11/5/22  
 CHIEF, DIVISION OF LAND DEVELOPMENT

APPROVED: DEPARTMENT OF ENGINEERING DIVISION  
 [Signature] 11/5/22  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION

## PLANTING SCHEDULE

FCP Planting Area # 12 - 0.3 acres  
 Planting units required: 210  
 Planting units proposed: 210

Qty	Species	Size	Spacing	Total Units
10	Acer rubrum - Red maple	1" caliper	15' o.c.	
5	Cornus florida - Flowering dogwood	1" caliper	15' o.c.*	
15	Liriodendron tulipifera - Tulip poplar	1" caliper	15' o.c.*	
10	Platanus occidentalis - Sycamore	1" caliper	15' o.c.*	
10	Prunus serotina - Black cherry	1" caliper	15' o.c.*	
5	Quercus palustris - Pin oak	1" caliper	15' o.c.	
5	Sassafras albidum - Sassafras	1" caliper	15' o.c.*	
60	Total plantings (3.5 planting units per tree)	FCA unit credit		210
Total Unit Credit				210

FCP Planting Area # 13 - 0.2 acres  
 Planting units required: 140  
 Planting units proposed: 140

Qty	Species	Size	Spacing	Total Units
4	Quercus alba - White oak	2" caliper	as shown	28
10	Cercis canadensis - Red bud	1" caliper	15' o.c.	
8	Cornus florida - Flowering dogwood	1" caliper	15' o.c.	
5	Prunus serotina - Black cherry	1" caliper	15' o.c.	
4	Quercus alba - White oak	1" caliper	15' o.c.	
5	Sassafras albidum - Sassafras	1" caliper	15' o.c.	
32	Total plantings (3.5 planting units per tree)	FCA unit credit		112
Total Unit Credit				140

### Planting Notes:

- Planting density based on 700 planting units per acre. 2" caliper trees = 7 planting units, 1" caliper trees = 3.5 planting units, whips with shelter = 2 planting units.
- \* - These species should not be planted within the wetland limits.
- Planting shall be made in a curvilinear fashion along contour. The planting should avoid a grid appearance but should be spaced to facilitate maintenance
- Existing native trees 1' and taller may be counted toward final plant density obligation for the purpose of calculating planting success and security release.
- Invasive Species Control Note - Woody invasive species occurring within the proposed planting areas shall be removed prior to planting. This includes, but is not limited to Bradford pear, multiflora rose, autumn/Russian olive, Oriental bittersweet, tree-of-heaven, and Japanese honeysuckle. These trees, shrubs and vines shall be cut/bush-hogged and all stumps should be treated with an appropriate herbicide treatment. Regrowth of the any woody invasive species should be controlled with herbicide and/or mowing on a monthly schedule, in the growing season, during the maintenance and monitoring period.

## FOREST CONSERVATION WORKSHEET FOR TOTAL PROJECT

Net Tract Area		A = 122.30
A. Total (Gross) Tract Area	B. Area within 100-year Floodplain	C = 0.90
C. Other Deductions (Identify: )	D. Net Tract Area	C = 0.00
		D = 121.40
Land Use Category		
Insert the number "1" under the appropriate land use (limit to only one ent)		
Resid.	Resid.	Resid.
Rural LD	Rural MD	Suburban
0	0	1
0	0	0
0	0	0
0	0	0
E. Afforestation Threshold (Net Tract Area x 15%)	F. Reforestation Threshold (Net Tract Area x 20%)	E = 18.20
		F = 24.30
Existing Forest Cover		
G. Existing Forest Cover within the Net Tract Area	H. Area of Forest above Afforestation Threshold	G = 14.40
I. Area of Forest above Reforestation Threshold	J. Break Even Point	H = 0.00
	K. Forest Clearing Permitted without Mitigation	I = 0.00
		J = 0.00
		K = 0.00
Proposed Forest Clearing		
L. Total Area of Forest to be Cleared	M. Total Area of Forest to be Retained	L = 4.30
		M = 10.10
Planting Requirements Inside Watershed		
N. Reforestation for Clearing above the Reforestation Threshold	P. Reforestation for Clearing below the Reforestation Threshold	N = 0.00
Q. Credit for Retention above the Reforestation Threshold	R. Total Reforestation Required	P = 8.60
S. Total Afforestation Required	T. Total Reforestation and Afforestation Requirement	Q = 0.00
U. 75% of Total Obligation (Retention + Planting)	V. Planting Required Onsite to meet 75% Obligation	R = 8.60
		S = 3.80
		T = 12.40
		U = 16.90
		V = 6.80
Planting Requirements Outside Watershed		
W. Total Planting within Development Site Watershed	X. Total Afforestation Required	W = 11.80
Y. Remaining Planting within Watershed for Reforestation Credit	Z. Reforestation for Clearing above the Reforestation Threshold	X = 0.00
AA. Reforestation for Clearing below the Reforestation Threshold	BB. Credit for Retention above the Reforestation Threshold	Y = 8.00
CC. Total Reforestation Required	DD. Total Afforestation and Reforestation Requirement	Z = 0.00
		AA = 0.90
		BB = 0.00
		CC = 0.00
		DD = 0.90

### FCP NOTES:

- 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.
- Forested areas retained outside of the FCE shall not be considered part of the FCE and shall not be subject to protective land covenants
- Limits of disturbance shall be restricted to areas outside the limit of temporary fencing of the FCE boundary, whichever is greater.
- There shall be no clearing, grading, construction, or disturbance of vegetation in the Forest Conservation Easement, except as permitted by Howard County DPZ
- No stockpiles, parking areas, equipment cleaning areas, etc. shall occur within areas designated as Forest Conservation Easements.
- Temporary fencing shall be used to protect forest resources during construction. Fencing shall be installed along limits of disturbance occurring within 50 feet of the proposed FCE limits. Permanent signage will be posted at 50-100 foot intervals along all FCE limits.
- The forest conservation requirements per section 16.1200 of the Howard County Code and Forest Conservation Manual for this project (Phase 2, F-22-030) will be met through the retention of 0.6 acres of onsite forest, 0.5 acres of onsite planting, and 0.9 acre in lieu payment in the amount of \$49,005.00 for the remaining 0.9 acre planting obligation. Financial surety in the amount of \$10,890.00 for the 0.5 acres of planting shall be posted as part of the DPW Developer's Agreement under F-22-030. Financial surety for the off-site planting was previously paid for under F-18-086.
- WP-20-039, an alternative compliance to Section 16.1205(a)(3) to allow for the removal of six specimen trees was approved on May 1, 2020. See General Note 23 on sheet 1. Specimen Trees #56 and #57 are proposed to be removed under this plan. Mitigation for these trees has been previously provided under F-21-025 and F-22-001.
- Woody invasive species occurring within the proposed planting areas shall be removed prior to planting. This includes, but is not limited to Bradford Pear, multiflora rose, autumn/Russian olive, Oriental bittersweet, tree-of-heaven, and Japanese honeysuckle. These trees, shrubs and vines shall be cut/bush-hogged and all stumps should be treated with an appropriate herbicide treatment. Regrowth of any of the invasive species should be controlled with herbicide and/or mowing on a monthly schedule, in the growing season, during the maintenance and monitoring period.
- Native trees that are 1' and taller that are present within the planting areas may be counted toward the overall planting density and planting success are required for the release of the planting security.
- Per Section 16.1205A Subtitle 12 of the County Code the following natural resources must be left undisturbed during land development: trees and other vegetation identified on the lists of rare, threatened and endangered species of the US Fish and Wildlife Service of MD DNR; trees that are part of a historic site or associated with a historic structure and state champion trees, trees 75% of the diameter of state champion trees and trees 30" in diameter or larger. None of these resources, with the exception of the identified trees 30" in diameter or larger, defined as specimen trees, are known to occur on the site.
- This project will provide larger stock (two rows of one inch caliper trees) planted along the edge of the Forest Conservation Easement in lieu of the 35 foot setback from the rear and side lot lines per section 16.1209(b)(4) of the County Code.
- The Forest Conservation Plan calculations have been based on existing conditions information provided in the approved Milk Producers Property - Supplemental Forest Stand Delineation as prepare by Wetland Studies and Solutions, October 25, 2019.

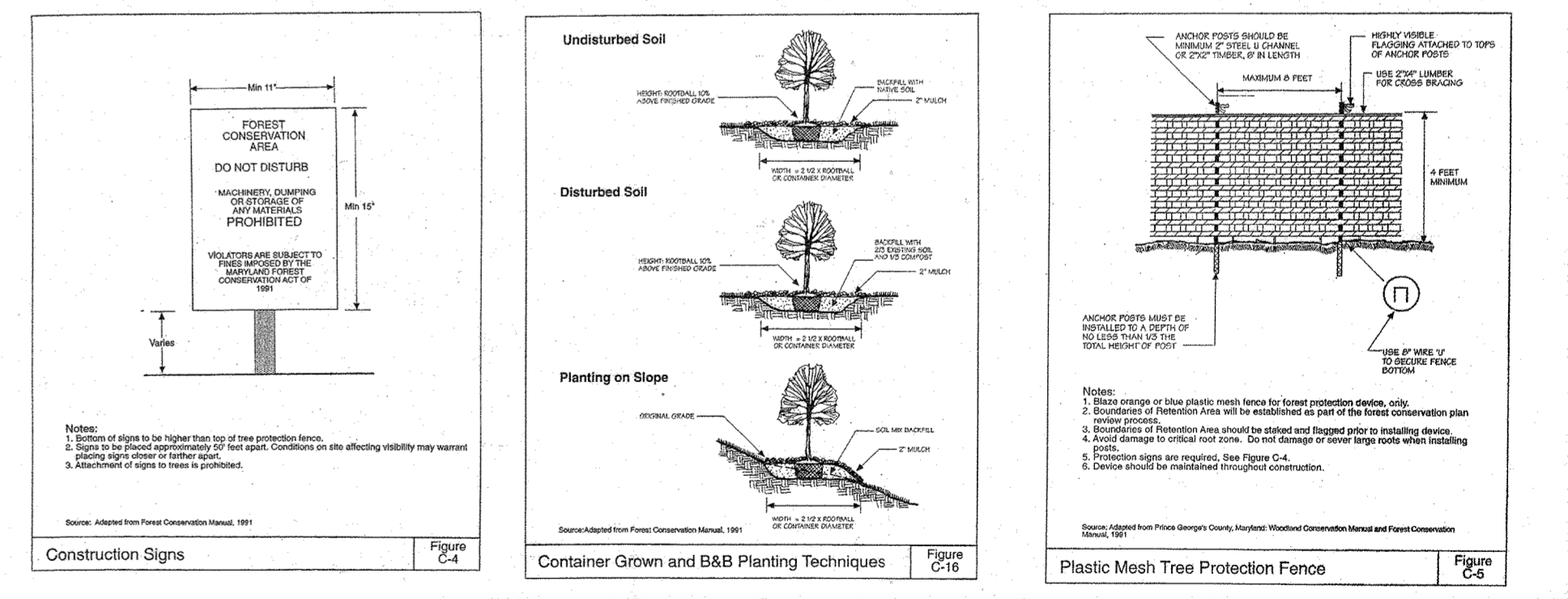
Date: \_\_\_\_\_

### NOTES:

- The gross acreage includes 0.83 acres of the Susquehanna Transmission Company property since that area will be impacted by road and utility connections and associated disturbances.
- An additional 0.1 acre of planting is being provided to comply with the conditions of approval of WP-20-117. This extra planting shall occur in FCE #1
- 0.2 acres of permanent loss of forest will occur in adjacent Emerson OS Lot 169. This must be mitigated within Wellington Farms with retention at a 2:1 ratio. The worksheet has been revised to account for the 0.4 acres of on-site retention required by indicating retention of 10.1 ac-on-site although the actual retention is 10.5 ac

Phase 1 Section 1 (F-21-025)		Phase 1 Section 2 (F-21-044)		Phase 1 Section 3 (F-22-001)		Phase 2 (F-22-030)		Total	
Required	Provided	Required	Provided	Required	Provided	Required	Provided	Required	Provided
2.8 acres	4.3 acres	4.0 acres	4.8 acres	3.6 acres	2.2 acres	5.6 acres*	0.5 acres	12.4 acres	11.8 acres**

\* Based on total site obligation of 12.4 acres minus what was required under F-21-025, F-21-044, and F-22-001.  
 \*\* Since the remaining obligation is less than 1 acre, the Developer shall pay a fee-in-lieu of the remaining obligation. This is implemented based on the outside watershed obligation which is 0.9 acres for an amount of \$49,005.00 (0.9 x 43560 x \$1.25)



### REFORESTATION PLAN

**A. Planting Plan and Methods**  
 Plant species selection was based on our knowledge regarding plant communities in Maryland's Piedmont Plateau and information provided in the soil survey on typical vegetation for the soil type on the planting site. Species selection was also based on our knowledge of plant availability in the nursery industry.  
 Reforestation will be accomplished through a mixed planting of whips and branched transplants. Container grown stock is recommended but bare-root stock may be used to help control afforestation costs. If bare-root stock is used the root systems of all plants will be dipped in an anti-desiccant gel prior to planting to improve moisture retention in the root systems.  
 Prior to planting the proposed Forest Conservation Easements all multiflora rose in the planting area shall be removed. Removal of the rose may be performed with mowing and herbicide treatments. Physical removal of all top growth following 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 2 month intervals during the first growing season and once each in the spring and fall for subsequent years. Herbicide used shall be made specifically to address woody plant material and shall be applied as per manufacturer specifications. Care should be taken not to spray planted trees or naturally occurring native tree/shrub seedlings. It is recommended that initiation of rose removal begin at least six months prior to planting.

**B. Planting and Soil Specifications**  
 Plant material will be installed in accordance with the Planting Detail and Planting Specifications shown on the Forest Conservation Plan.  
 Amendments to existing soil will be in accordance with the Planting Specifications shown on the Forest Conservation Plan. Soil disturbance will be limited to individual planting locations.

**C. Maintenance of Plantings**  
 For information regarding maintenance of the reforestation plantings, see Post Construction Management Plans.

**D. Guarantee Requirements**  
 A 90 percent survival rate of the reforestation plantings will be required after one growing season. All plant material below the 90 percent survival threshold will be replaced at the beginning of the second growing season. At the end of the third growing season, a 75 percent survival rate will be required. All plant material below the 75 percent survival threshold will be replaced by the beginning of the next growing season.

**E. Security for Reforestation**  
 Section 16-1209 of the Howard County Forest Conservation Act requires that a developer shall post a security (bond, letter of credit, etc.) with the County to insure that all work is done in accordance with the FCP.

### Below find a proposed sequence of construction.

- Install all signage and sediment control devices.
  - Hold pre-construction meeting between developer, contractor and County inspectors.
  - Build access roads, install well and septic systems, and construct houses. Stabilize all disturbed areas accordingly.
  - Begin multiflora rose removal. Install permanent protective signage for easements and initiate plantings in accordance with Forest Conservation Plan. Plantings will be completed within two (2) years of subdivision approval.
  - Remove sediment control.
  - Hold post-construction meeting with County inspectors to assure compliance with FCP. Submit Certification of Installation.
  - Monitor and maintain plantings for 3 years.
- E. Construction Monitoring**  
 Eco-Science Professionals, or another qualified professional designated by the developer, will monitor construction of the project to ensure that all activities are in compliance with the Forest Conservation Plan.
- F. Post-Construction Meeting**  
 Upon completion of construction, Eco-Science Professionals, or another qualified professional designated by the developer, will notify the County that construction has been completed and arrange for a post-construction meeting to review the project site. The meeting will allow the County inspector to verify that plantings have been installed.

### POST-CONSTRUCTION MANAGEMENT PLAN

Howard County requires a 3 year post-construction management plan be prepared as part of the forest conservation plan. The plan goes into effect upon acceptance of the construction certification by the County. Eco-Science Professionals, or another qualified professional designated by the developer, will be responsible for implementation of the post-construction management plan.

The following items will be incorporated into the plan:

**A. Fencing and Signage**  
 Permanent signage indicating the limits of the retention/reforestation area shall be maintained.

**B. General Site Inspections/Maintenance of Plantings**  
 Site inspections will be performed a minimum of three times during the growing season. The purpose of the inspections will be to assess the health of the afforestation plantings. Appropriate measures will be taken to rectify any problems which may arise.

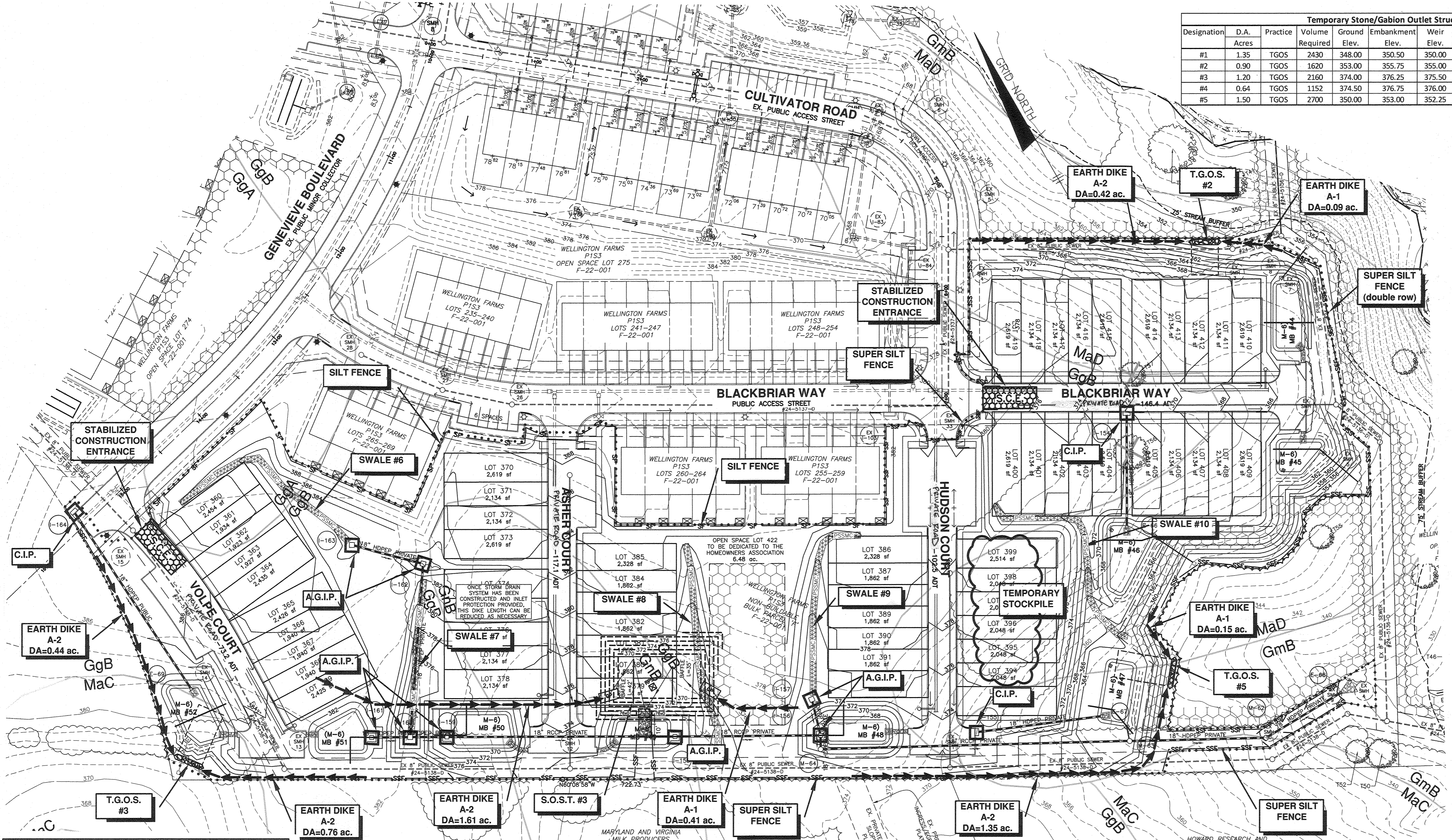
In addition, maintenance of the plantings will involve the following steps:

- Watering - All plant material shall be watered twice a month during the 1st growing season, more or less frequently depending on weather conditions. During the second growing season, once a month during May-September, if needed.
- Removal of invasive exotics and noxious weeds. Old field successional

Temporary Stone/Gabion Outlet Structure										
Designation	D.A.	Practice	Volume Required	Ground Elev.	Embankment Elev.	Weir Elev.	Weir Length	Uphill Length	Volume Provided	Adequate?
#1	1.35	TGOS	2430	348.00	350.50	350.00	30	42	2520	Yes
#2	0.90	TGOS	1620	353.00	355.75	355.00	30	28	1680	Yes
#3	1.20	TGOS	2160	374.00	376.25	375.50	30	50	2250	Yes
#4	0.64	TGOS	1152	374.50	376.75	376.00	20	39	1170	Yes
#5	1.50	TGOS	2700	350.00	353.00	352.25	25	50	2813	Yes

### SEDIMENT CONTROL LEGEND

- ..... LIMIT OF DISTURBANCE
- SF SILT FENCE
- SSSF SUPER SILT FENCE
- X-X-X- TREE PROTECTION FENCE
- EARTH DIKE
- INLET PROTECTION
- STABILIZED CONSTRUCTION ENT.
- GP GABION INFLOW PROTECTION
- GgB SOILS LINE
- SOILS TYPE
- SEDIMENT TRAP/BASIN CONTOURS
- PERMANENT SOIL STABILIZATION MATTING CHANNEL APPLICATION
- SPECIMEN TREE TO BE REMOVED
- STORAGE AREA
- TSOS OR TGOS



**ENGINEER'S CERTIFICATE**

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

*Cl. Malaga* 9-19-22 DATE

---

**DEVELOPER'S CERTIFICATE**

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

*S. V. W.* 9-20-22 DATE

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

*Alexander Butcher* 10/05/22 DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS

*Shah K.* 10/20/2022 DATE

CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING

*R.* 11/2/22 DATE

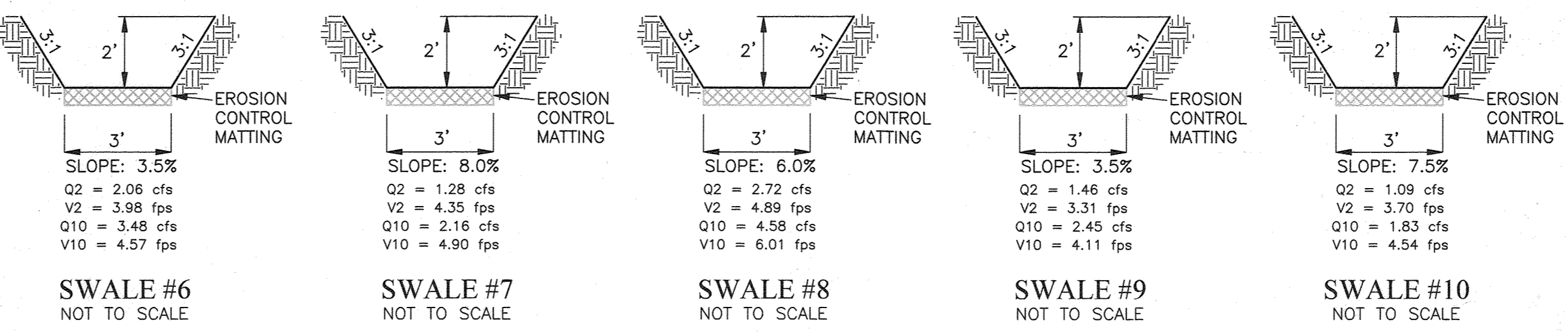
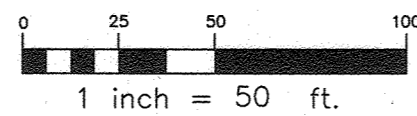
CHIEF, DIVISION OF LAND DEVELOPMENT

*Cl. Malaga* 11/3/22 DATE

CHIEF, PHASE ENGINEERING DIVISION

**SOST #3**

STONE/RIPRAP OUTLET SEDIMENT TRAP ST-III, TRAP NO. 3	ACRES
DRAINAGE AREA - INITIAL	2.6
DRAINAGE AREA - INTERM	2.6
DRAINAGE AREA - FINAL	2.6
TOTAL STORAGE REQUIRED	20,812 CF
TOTAL STORAGE PROVIDED	22,410 CF
WET STORAGE REQUIRED	4,680 CF
WET STORAGE PROVIDED	4,680 CF
DRY STORAGE REQUIRED	16,132 CF
DRY STORAGE PROVIDED	17,730 CF
EXISTING GROUND ELEVATION AT OUTLET	373.32 FT
TRAP BOTTOM ELEVATION	370.00 FT
TRAP BOTTOM DIMENSIONS	76.8 x 41.2 FT x FT
WEIR LENGTH	10.4 FT
WEIR CREST (DRY STORAGE) ELEVATION	375.00 FT
CLEANOUT ELEVATION	370.64 FT
TOP OF EMBANKMENT ELEVATION	376.00 FT
SIDE SLOPE	2 H:V
EMBANKMENT TOP WIDTH	4 FT
OUTLET PROTECTION - LENGTH	10 FT
OUTLET PROTECTION - DEPTH	19" IN



**THIS PLAN IS FOR SEDIMENT AND EROSION CONTROL ONLY.**

2	8-1-2023	REVISE TOTAL NUMBER OF SHEETS
1	12/1/2023	REVISE VOLPE, ASHER, HUDSON COURTS AND BLACKBRIAR WAY TO BE PRIVATE ROAD
NO.	DATE	REVISION

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**BENCHMARK ENGINEERING, INC.**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
3300 N. RIDGE ROAD SUITE 140A ELLICOTT CITY, MARYLAND 21043  
(P) 410-465-6105 (F) 410-465-6644  
WWW.BEI-CIVLENGINEERING.COM

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. 22596. Expiration Date: 6-30-2023.

**WELLINGTON FARMS**  
Phase 2  
Lots 276 thru 419; Open Space Lots 420 thru 422;  
(A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

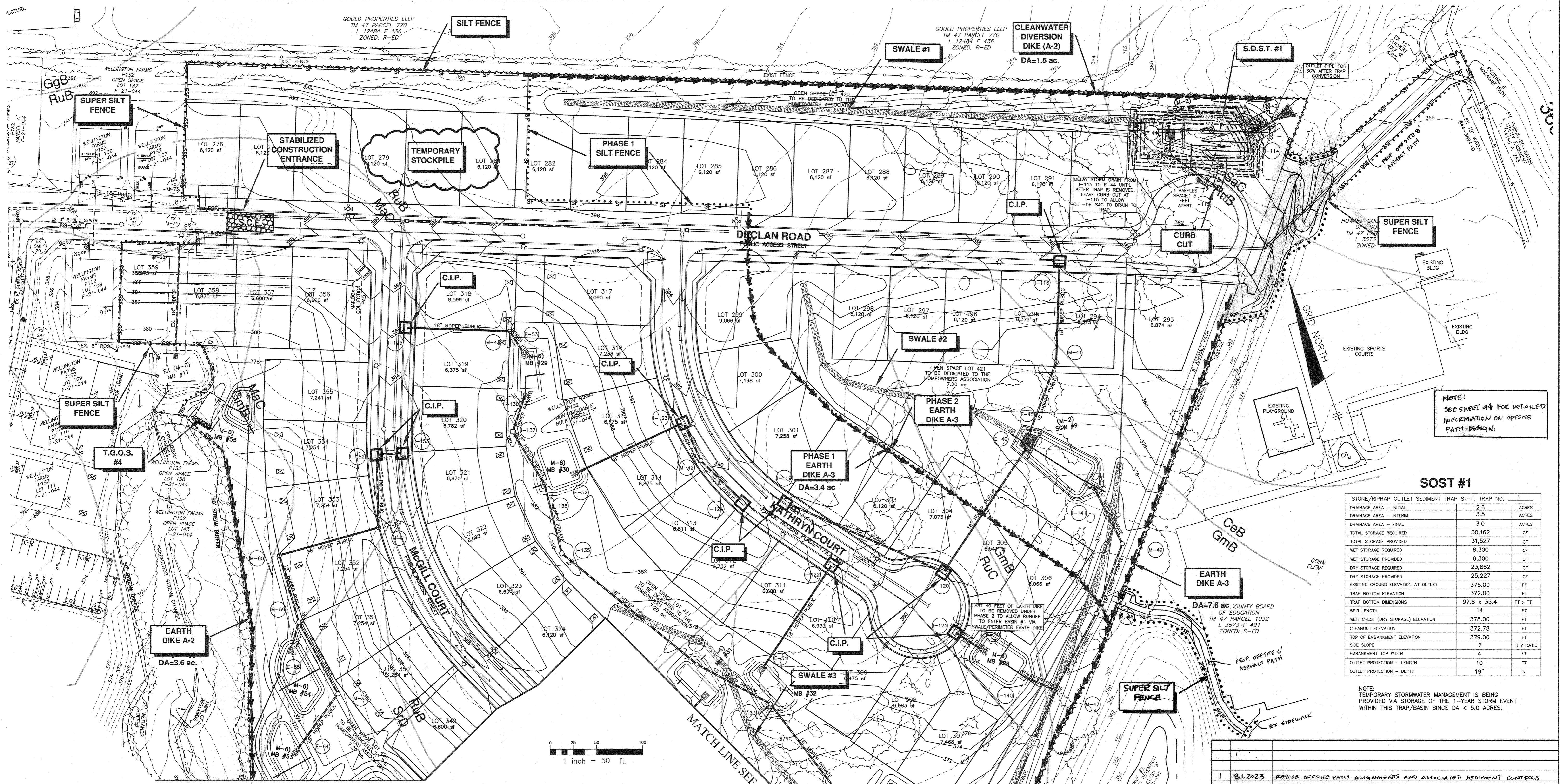
TAX MAP: 46 - GRID: 6 - PARCEL: 163  
ZONED: R-20-MXD-3 / R-SC-MXD-3  
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

**SEDIMENT AND EROSION CONTROL PLAN**

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

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

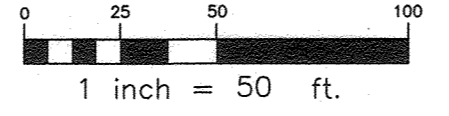
DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
SCALE: AS SHOWN SHEET 35 OF 44



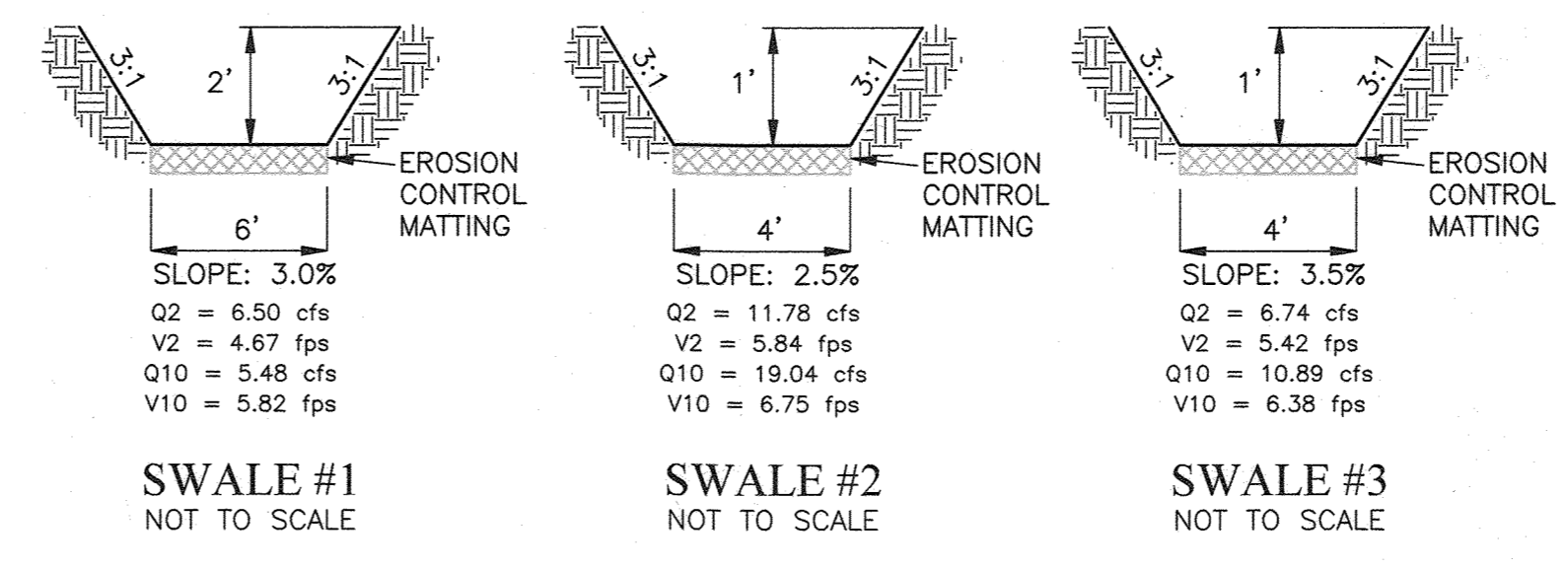
**SOST #1**

STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II, TRAP NO. 1	ACRES
DRAINAGE AREA - INITIAL	2.6
DRAINAGE AREA - INTERIM	3.5
DRAINAGE AREA - FINAL	3.0
TOTAL STORAGE REQUIRED	30,162 CF
TOTAL STORAGE PROVIDED	31,527 CF
WET STORAGE REQUIRED	6,300 CF
WET STORAGE PROVIDED	6,300 CF
DRY STORAGE REQUIRED	23,862 CF
DRY STORAGE PROVIDED	25,227 CF
EXISTING GROUND ELEVATION AT OUTLET	375.00 FT
TRAP BOTTOM ELEVATION	372.00 FT
TRAP BOTTOM DIMENSIONS	97.8 x 35.4 FT x FT
WEIR LENGTH	14 FT
WEIR CREST (DRY STORAGE) ELEVATION	378.00 FT
CLEANOUT ELEVATION	372.78 FT
TOP OF EMBANKMENT ELEVATION	379.00 FT
SIDE SLOPE	2 H:V RATIO
EMBANKMENT TOP WIDTH	4 FT
OUTLET PROTECTION - LENGTH	10 FT
OUTLET PROTECTION - DEPTH	19" IN

NOTE: TEMPORARY STORMWATER MANAGEMENT IS BEING PROVIDED VIA STORAGE OF THE 1-YEAR STORM EVENT WITHIN THIS TRAP/BASIN SINCE DA < 5.0 ACRES.



- SEDIMENT CONTROL LEGEND**
- ..... LIMIT OF DISTURBANCE
  - SF SILT FENCE
  - SSF SUPER SILT FENCE
  - x-x-x- TREE PROTECTION FENCE
  - EARTH DIKE
  - INLET PROTECTION
  - SCSCE STABILIZED CONSTRUCTION ENT.
  - GABION INFLOW PROTECTION
  - SOILS LINE
  - GgB SOILS TYPE
  - SEDIMENT TRAP/BASIN CONTOURS
  - PPSSM PERMANENT SOIL STABILIZATION MATTING CHANNEL APPLICATION



**THIS PLAN IS FOR SEDIMENT AND EROSION CONTROL ONLY.**

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

*Alexander Britsch* 10/05/22 DATE  
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022 DATE  
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 4/7/22 DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 1/3/22 DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION

**ENGINEER'S CERTIFICATE**

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

*Clay Malaga* 7-19-22 DATE  
ENGINEER

**DEVELOPER'S CERTIFICATE**

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

*[Signature]* 9-20-22 DATE  
DEVELOPER

NO.	DATE	REVISION
1	8.1.2023	REVISE OFFSITE PATH ALIGNMENTS AND ASSOCIATED SEDIMENT CONTROLS REVISE TOTAL NUMBER OF SHEETS

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043  
(P) 410-485-8105 (F) 410-485-8844  
WWW.BEI-ENGINEERING.COM

**WELLINGTON FARMS**  
Phase 2  
Lots 276 thru 419; Open Space Lots 420 thru 422;  
(A Resubdivision of Non-Buildable Bulk Parcel 'E'  
previously recorded under F-21-044 and  
Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

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

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

**SEDIMENT AND EROSION CONTROL PLAN**

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
DESIGN: DBT DRAFT: DBT SCALE: AS SHOWN SHEET 36 OF 44

- SEDIMENT BASIN CONSTRUCTION SPECIFICATIONS**
- Install sediment control practices necessary to construct basin. Clear and grub to remove trees, vegetation, roots or other objectionable material from the areas where the embankment is to be placed. Do not clear the pool area until completion of the embankment, unless the pool area is to be used for borrow. Salvage topsoil for later use.
  - Excavate cut-off trench along centerline of proposed embankment a minimum depth of 4 feet and a bottom (min 4 feet) wide enough to permit operation of excavation and compaction equipment. Construct side slopes 1:1 or flatter. Cut-off trench must be continuous and extend the entire length of embankment. Compaction requirements are the same as those for the embankment. Dewater the trench during the backfilling/compaction operations, using an approved practice.
  - Construct embankment of clean soil free of roots, woody vegetation, oversized stones, rocks, or other objectionable material. Fill material for impervious core and cut-off trench must conform to Unified Soil Classification GC, SC, CH, or CL and must have at least 30 percent passing the #200 sieve. Use fill material containing sufficient moisture so that the soil can be formed by hand into a ball without crumbling. If water can be squeezed out of the ball, it is too wet for proper compaction. Place fill material in six-inch to eight-inch-thick continuous lifts over the entire length of the fill. Obtain compaction by passing construction equipment or compactor over the fill, so that the entire surface of each layer of fill is traversed at least four times. Construct the embankment to an elevation a minimum of 10 percent higher than the design height to allow for settlement.
  - Install principal spillway prior to, or concurrently with, fill placement. Do not excavate embankment for placement of spillway. All pipe connections, including anti-seep collars must be completely watertight. Install filter diaphragm when specified on plan. Barrel connection to riser must be welded all around when the pipe and riser are metal. Attach barrel stub to riser at the same percent (slope) of grade as the barrel. For concrete riser/barrel assembly, pour riser with barrel in place or set pre-cast riser and install projection collar for watertight connection. Place fill material around the pipe spillway in four (4) inch lifts and hand compact around the pipe to a depth of 1.5 times the pipe diameter (minimum). Securely install anti-vortex device and trash rack as shown on plan.
  - Install the emergency spillway in undisturbed natural ground. Construct spillway within a tolerance of +/- 0.2 feet.
  - Stabilize embankment and associated disturbed areas within three (3) days of completion with seed and mulch. Monitor embankment and maintain erosion free during the life of the basin.
  - Install fencing and signage in accordance with the approved plan.
  - Remove sediment when accumulated material has reached 25 percent of the total storage depth. Restore basin to original design volume. Place removed sediments in a controlled area and stabilize. Do not deposit sediment downstream of the embankment, adjacent to a stream or floodplain.
  - When the contributing drainage area is stable, the basin can be removed in accordance with the approved sediment control plan.
  - A sediment basin designed, built, and certified as a stormwater management structure, may be converted when the contributory damage area is stable. Properly dewater basin, modify outlet structure, perform additional grading, and provide required storage volume in accordance with approved stormwater management plans.

**SOST #2**

STONE/RIPRAP OUTLET SEDIMENT TRAP ST-II, TRAP NO. 2		
DRAINAGE AREA - INITIAL	0.8	ACRES
DRAINAGE AREA - INTERM	3.7	ACRES
DRAINAGE AREA - FINAL	3.7	ACRES
TOTAL STORAGE REQUIRED	30,522	CF
TOTAL STORAGE PROVIDED	32,228	CF
WET STORAGE REQUIRED	6,660	CF
WET STORAGE PROVIDED	6,660	CF
DRY STORAGE REQUIRED	23,862	CF
DRY STORAGE PROVIDED	25,568	CF
EXISTING GROUND ELEVATION AT OUTLET	357.00	FT
TRAP BOTTOM ELEVATION	353.00	FT
TRAP BOTTOM DIMENSIONS	SEE PLAN VIEW	FT x FT
WEIR LENGTH	14.8	FT
WEIR CREST (DRY STORAGE) ELEVATION	360.00	FT
CLEANOUT ELEVATION	354.08	FT
TOP OF EMBANKMENT ELEVATION	361.00	FT
SIDE SLOPE	2	H:V RATIO
EMBANKMENT TOP WIDTH	4	FT
OUTLET PROTECTION - LENGTH	10'	FT
OUTLET PROTECTION - DEPTH	19"	IN

NOTE: TEMPORARY STORMWATER MANAGEMENT IS BEING PROVIDED VIA STORAGE OF THE 1-YEAR STORM EVENT WITHIN THIS TRAP/BASIN SINCE DA < 5.0 ACRES.

**ENGINEER'S CERTIFICATE**

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

*Cl. Malaga* 9-19-22 DATE

**DEVELOPER'S CERTIFICATE**

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

*G. V. Alie* 9-20-22 DATE

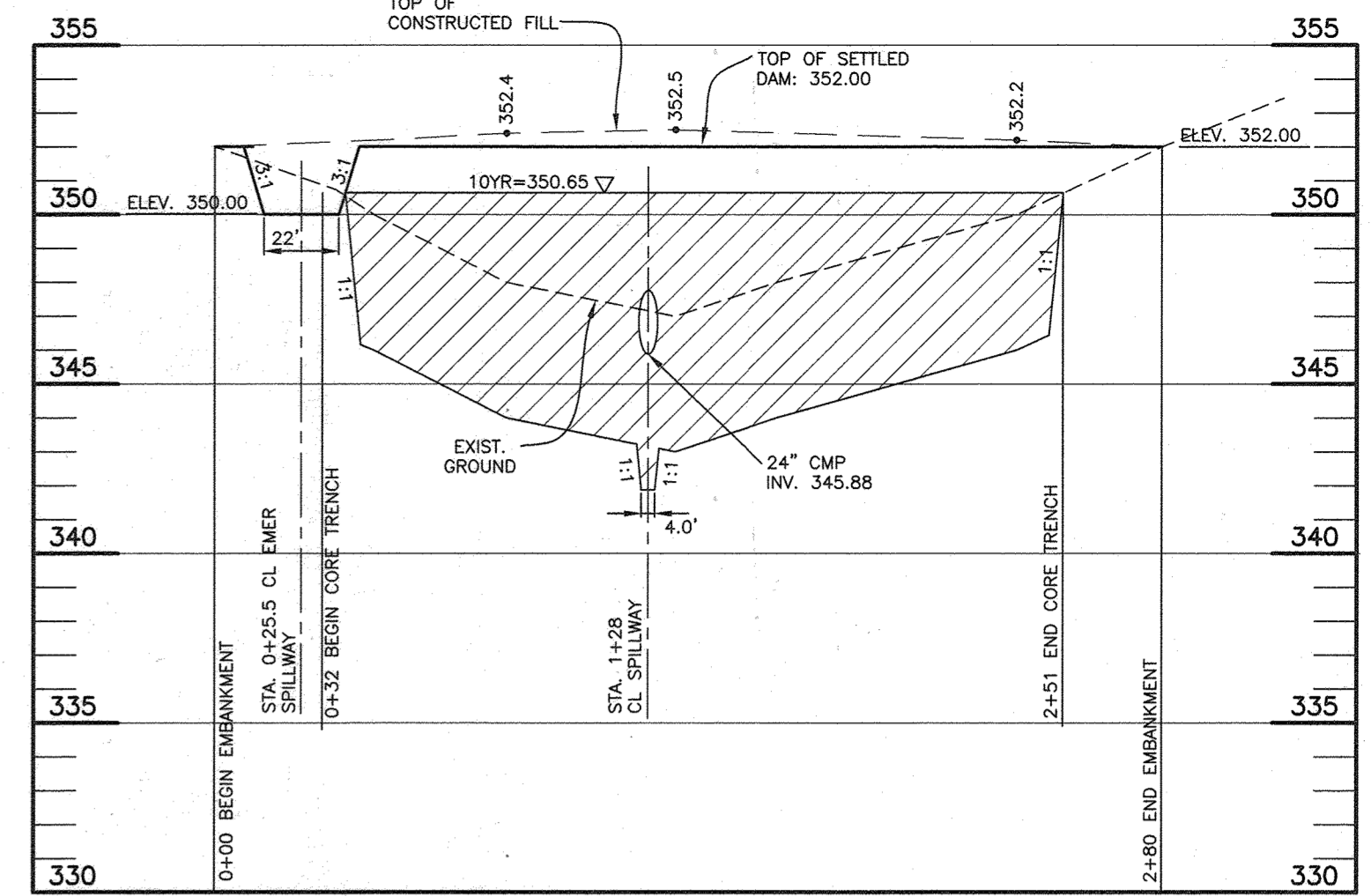
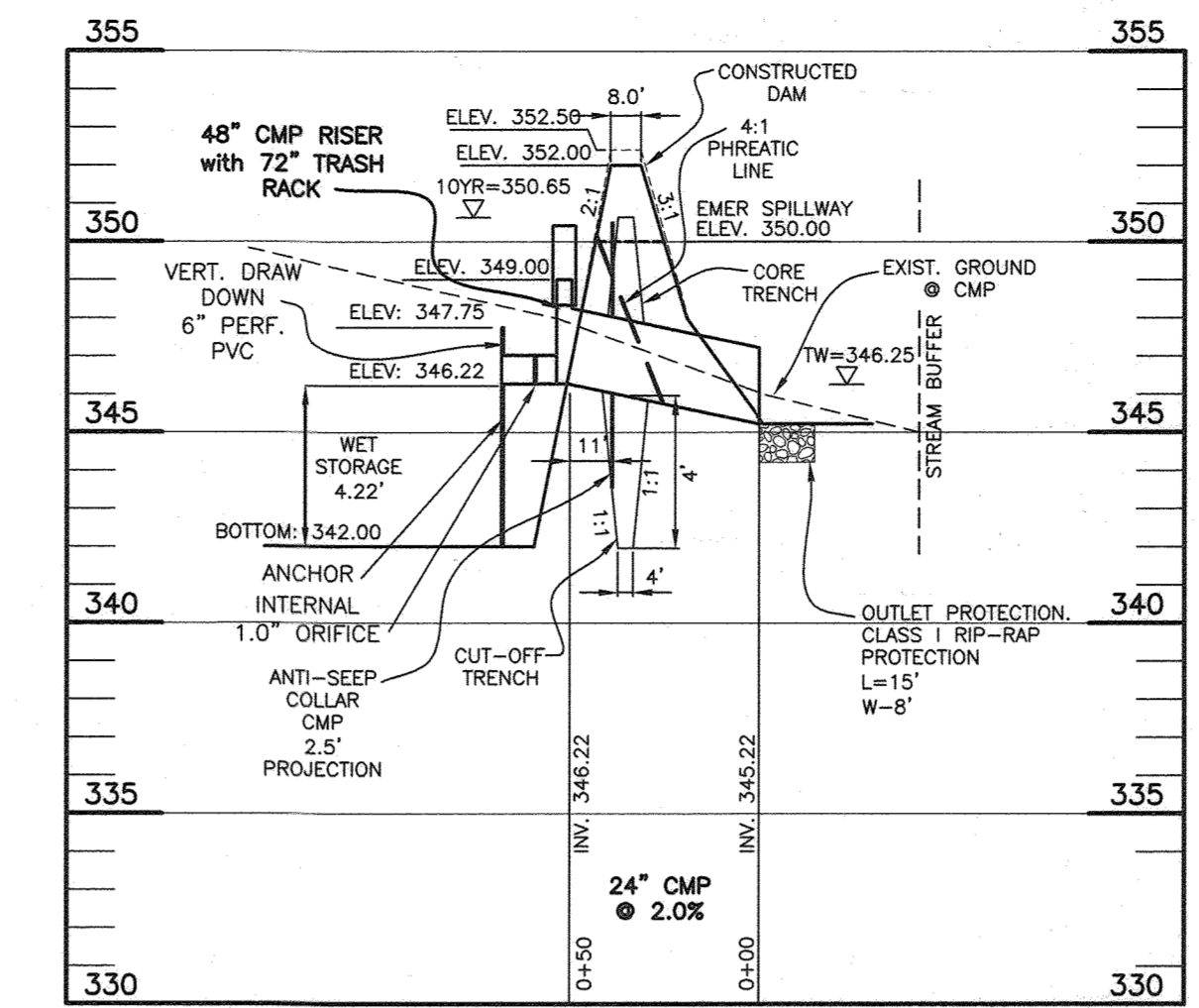
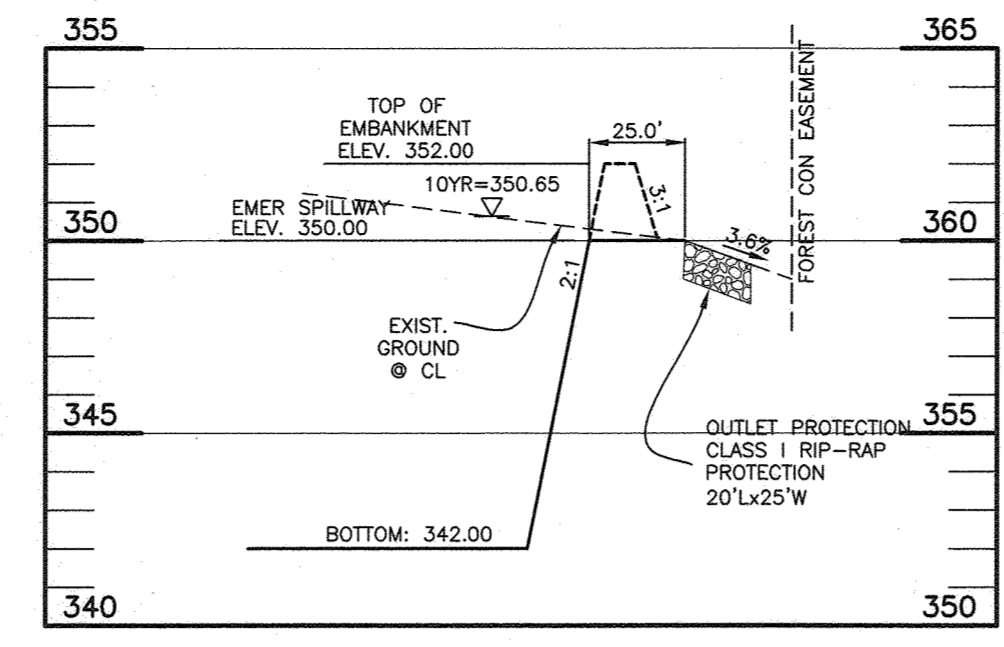
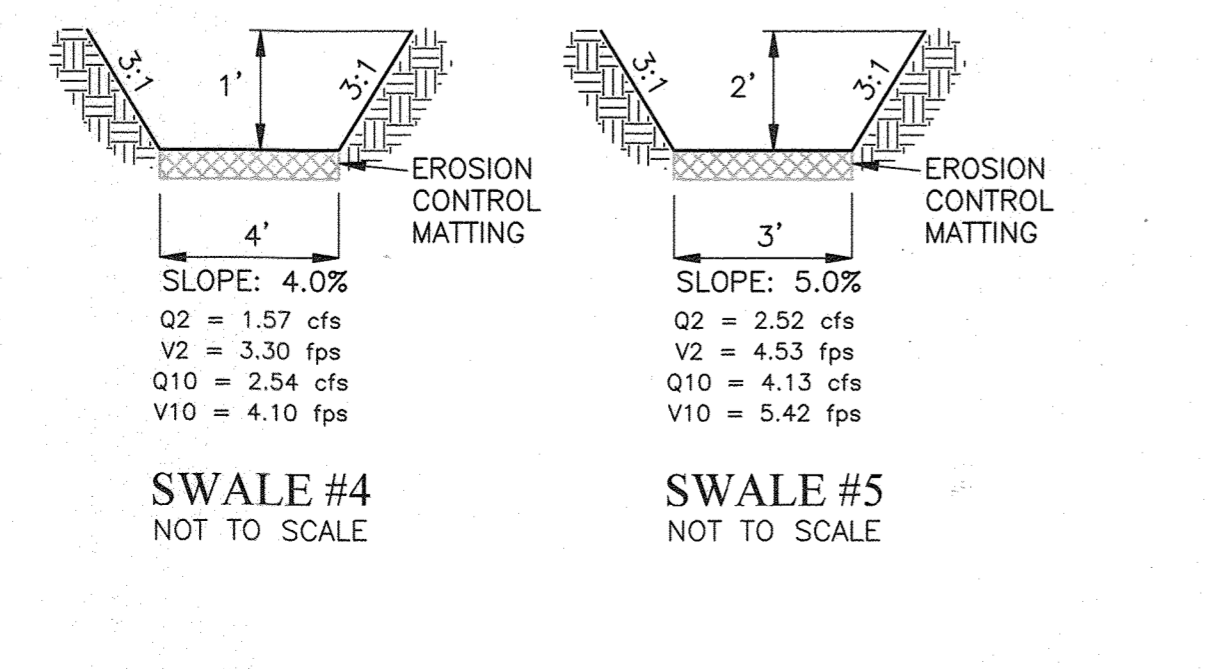
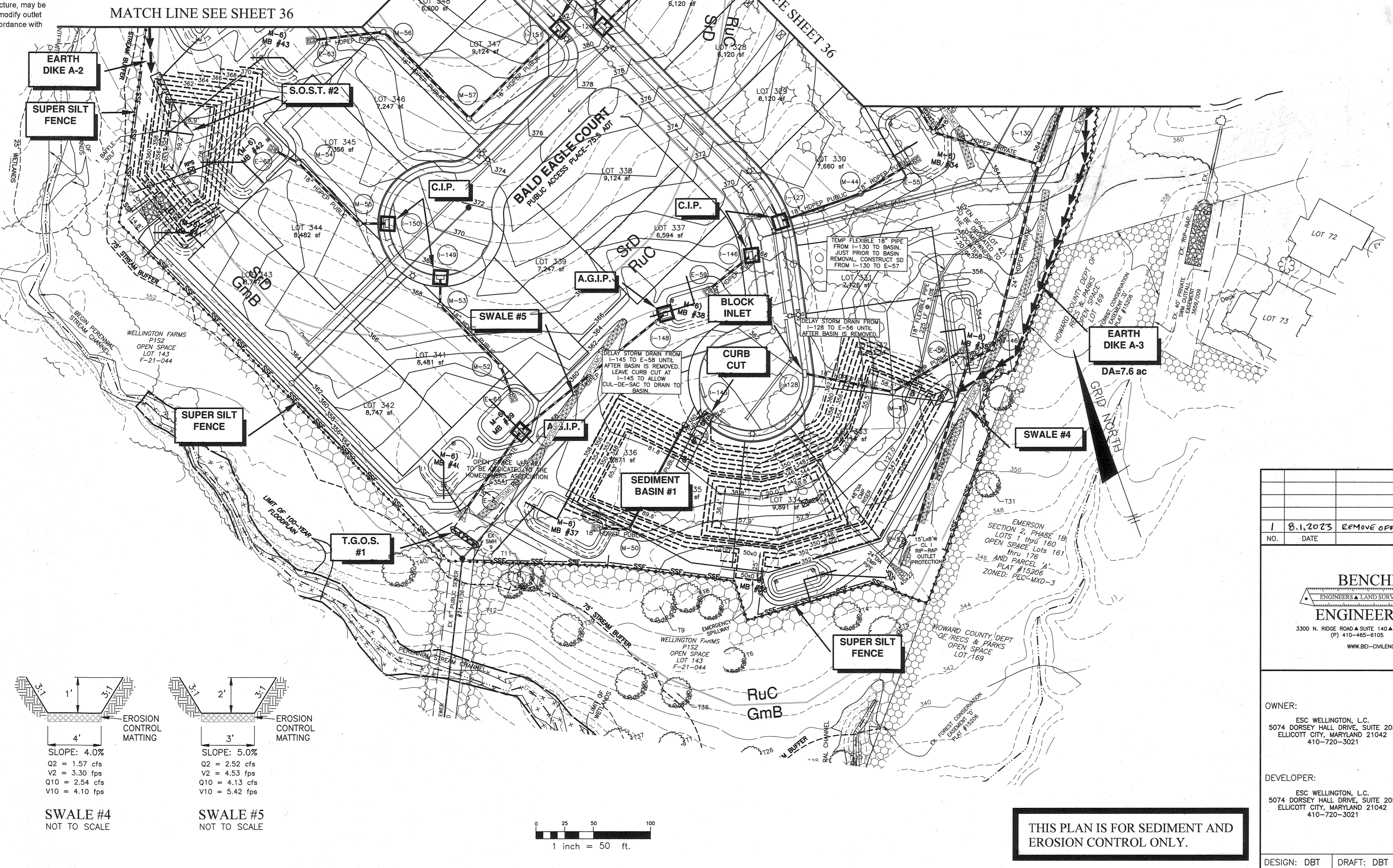
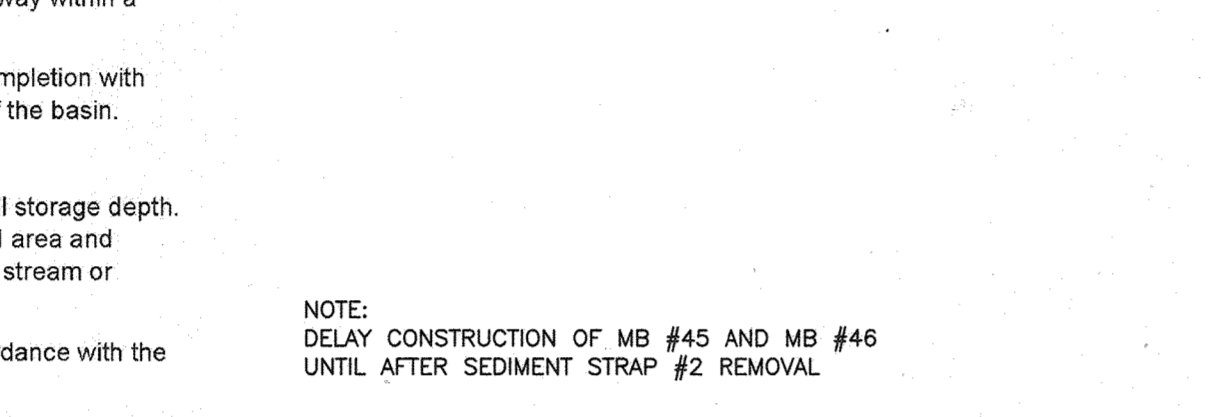
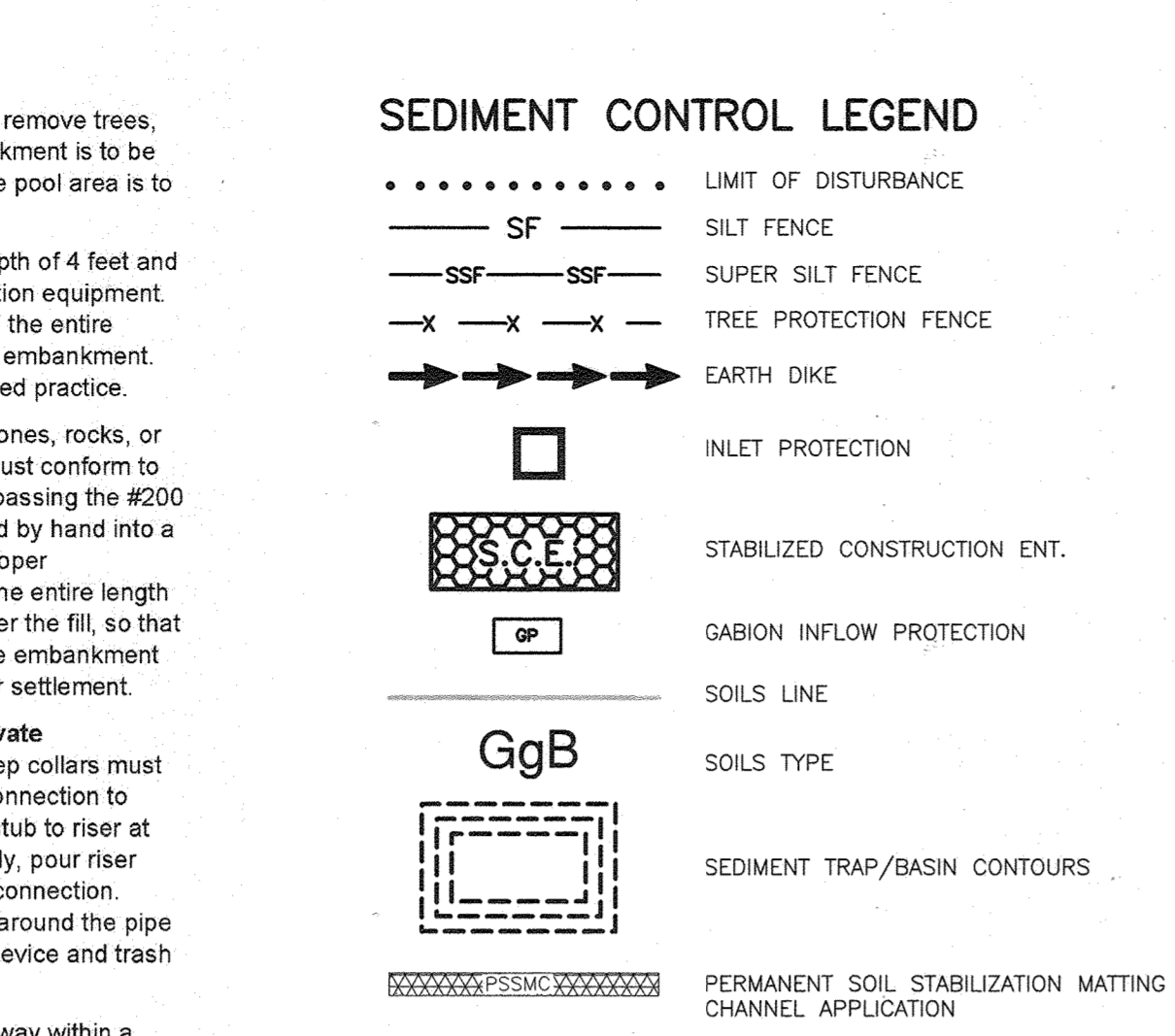
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.

*Alexander Butcher* 10/05/22 DATE  
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*[Signature]* 10/20/2022 DATE  
CHIEF, BUREAU OF HIGHWAYS

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*[Signature]* 11/3/22 DATE  
CHIEF, DIVISION OF LAND DEVELOPMENT

*[Signature]* 11/3/22 DATE  
CHIEF, DEVELOPMENT ENGINEERING DIVISION



**BASIN #1**

DRAINAGE AREA - INITIAL	6.9	ACRES
DRAINAGE AREA - INTERM	12.8	ACRES
DRAINAGE AREA - FINAL	12.8	ACRES
NET STORAGE REQUIRED	23,040	CF
NET STORAGE PROVIDED	23,040	CF
DRY STORAGE PROVIDED	23,040	CF
NET STORAGE PROVIDED	73,712	CF
NET STORAGE ELEVATION	346.22	CF
TRAP BOTTOM ELEVATION	342.00	FT
TRAP BOTTOM DIMENSIONS	SEE PLAN VIEW	FT x FT
WEIR LENGTH	25	FT
WEIR CREST (DRY STORAGE) ELEVATION	350.00	FT
CLEANOUT ELEVATION	344.40	FT
TOP OF EMBANKMENT ELEVATION	352.00	FT
SIDE SLOPE	2	H:V RATIO
EMBANKMENT TOP WIDTH	8	FT
OUTLET PROTECTION - LENGTH	15'	FT
OUTLET PROTECTION - DEPTH	19"	IN
Q1 PRE-DEVELOPMENT	8.0	CFS
Q1 NEWLY GRADED/POST-DEVELOPMENT	7.5	CFS

1 8.1.2023 REMOVE OPPOSITE PATH, REVISE TOTAL NUMBER OF SHEETS

**BENCHMARK ENGINEERING, INC.**  
3300 N. RIDGE ROAD SUITE 140A ELLICOTT CITY, MARYLAND 21043  
(P) 410-485-6105 (F) 410-485-8844  
WWW.BEI-CIVILENGINEERING.COM

**WELLINGTON FARMS**  
Phase 2  
Lots 276 thru 419; Open Space Lots 420 thru 422;  
(A Resubdivision of Non-Buildable Bulk Parcel 'E'  
previously recorded under F-21-044 and  
Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

TAX MAP: 46 - GRID: 6 - PARCEL: 163  
ZONED: R-20-MXD-3 / R-30-MXD-3  
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

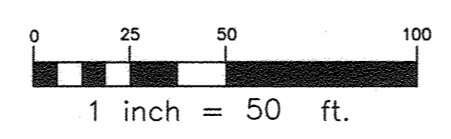
**SEDIMENT AND EROSION CONTROL PLAN**

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

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

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
SCALE: AS SHOWN SHEET 37 OF 44

THIS PLAN IS FOR SEDIMENT AND EROSION CONTROL ONLY.



SEQUENCE OF CONSTRUCTION

NOTIFY SEDIMENT CONTROL DIVISION 48 HOURS PRIOR TO START OF WORK

1. Obtain grading. Notify C.I.D. at 410-313-1880 at least 24 hours before starting any work. (day 1)

2. Hold on-site pre-construction meeting. (day 2)

Phase 1

3. Upon approval from the Howard County Sediment Control Inspector, Clear and grub as specified in order to install Phase 1 perimeter controls and install those controls (i.e. fencing, dikes, TGOS #1 and #4, SOST #2, Basin #1, etc.) (day 3-10)

4. Upon approval from the Howard County Sediment Control Inspector, proceed with site excavation. Bring road beds to subgrade, install water, sewer and storm drain systems. Do not install storm drain from I-145 to E-58, I-128 to E-56, or storm drain south of I-130 to E-57 at this time. Utilize inlet protection as shown. Construct micro bio-retention facilities that are not being utilized or affected by traps or basins. Cover surface media with filter fabric. Do not install mulch or plantings at this time. (day 11-101)

5. Pour curb and gutter. Leave curb cut in locations of I-145 to allow flow to basin. (day 102-112)

6. Base pave roads. (day 113-120)

7. Construct sidewalks and paths. Once the relative drainage area to each micro bio-retention is stabilized, the filter fabric can be removed and mulch and plantings can be installed. (day 121-128)

8. Upon approval from the Howard County Sediment Control Inspector, SOST #2 can be removed and SWMFs in area can be constructed. Basin #1 is to remain. Flush the storm drain systems that designed to trap. Remove all remaining sediment control devices. Stabilize any remaining disturbed areas in accordance with the permanent seeded notes. (day 129-143)

Phase 2

9. Once 50% or more of Phase 1 LOD is stabilized and with the permission of the Howard County Sediment Control Inspector, proceed to clear and grub as necessary to install Phase 2 perimeter controls and install those controls (i.e. SOST #1 and #3, TGOS #2, #3, and #5, dikes, fencing, etc.) (day 144-151)

10. Proceed with Phase 2 site excavation. Bring road beds to subgrade, install water, sewer and storm drain systems. Do not install storm drain from I-115 to E-44 at this time. Utilize inlet protection as shown. Construct micro bio-retention facilities that are not being utilized or affected by traps or basins. Cover surface media with filter fabric. Do not install mulch or plantings at this time. (day 152-182)

11. Pour curb and gutter. Leave curb cut in locations of I-114 to allow flow to trap. (day 183-190)

12. Base pave roads. (day 191-198)

13. Construct sidewalks and paths. Once the relative drainage area to each micro bio-retention is stabilized, the filter fabric can be removed and mulch and plantings can be installed. (day 199-200)

14. Upon approval from the Howard County Sediment Control Inspector, SOST #1, SOST #3, and Basin #1 can be removed and SWMFs in these areas can be constructed. Storm drain delayed under #4 and #10 above can now be installed. Flush the storm drain systems that are discharged to traps/basins. Remove all remaining sediment control devices. Stabilize any remaining disturbed areas in accordance with the permanent seeded notes. (day 201-210)

15. Install street trees and forest conservation plantings. (day 211-220)

Note: A maximum acreage of 20 acres to be disturbed at any one time. Additional disturbance not to occur until at least 50% of the current disturbed area has been stabilized and approved by CID.

Note: A maximum acreage of 10 acres to be disturbed at any one time. Additional disturbance not to occur until at least 50% of the current disturbed area has been stabilized and approved by CID.

Note: Following initial soil disturbance or any re-disturbances, permanent or temporary stabilization shall be completed within:
A. 3 calendar days for all perimeter sediment control structures, dikes, swales and all slopes greater than 3:1.
B. 7 calendar days for all other disturbed areas.
During grading and after each rainfall, contractor will inspect and provide necessary maintenance to the sediment control measures of this plan.

B-4 STANDARDS AND SPECIFICATIONS FOR VEGETATIVE STABILIZATION. Definition: Using vegetation as cover to protect exposed soil from erosion. Purpose: To promote the establishment of vegetation on exposed soil. Conditions Where Practice Applies: On all disturbed areas not stabilized by other methods. This specification is divided into sections on incremental stabilization, soil preparation, soil amendments and topsoiling; seeding and mulching; temporary stabilization; and permanent stabilization.

B-4-2 STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS. Definition: The process of preparing the soils to sustain adequate vegetative stabilization. Purpose: To provide a suitable soil medium for vegetative growth. Conditions Where Practice Applies: Where vegetative stabilization is to be established. Criteria: A. Soil Preparation 1. Temporary Stabilization a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment...

B-4-3 STANDARDS AND SPECIFICATIONS FOR SEEDING AND MULCHING. Definition: The application of seed and mulch to establish vegetative cover. Purpose: To stabilize disturbed soils with permanent vegetation. Conditions Where Practice Applies: To stabilize disturbed soils from erosion during and at the end of construction. To the surface of all perimeter controls, slopes, and any disturbed area not under active grading. A. Seeding 1. Specifications a. All seed must meet the requirements of the Maryland State Seed Law. All seed must be subject to re-testing by a recognized seed laboratory...

B-4-5 STANDARDS AND SPECIFICATIONS FOR PERMANENT STABILIZATION. Definition: To stabilize disturbed soils with permanent vegetation. Purpose: To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils. Exposed soils where ground cover is needed for 6 months or more. Criteria: 1. General Use a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone from Figure B.3 and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary...

B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION. Definition: 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. Criteria: 1. Excavate and stabilize cut slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all cut slopes as the work progresses. 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...

B-4-2 STANDARDS AND SPECIFICATIONS FOR TOPSOILING. Definition: Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Conditions Where Practice Applies: Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS. Criteria: 1. Topsoiling is limited to areas having 2:1 or flatter slopes where: a. The texture of the exposed subsoil/permanent material is not adequate to produce vegetative growth...

B-4-3 STANDARDS AND SPECIFICATIONS FOR MULCHING. Definition: Mulch materials are used to protect soil from erosion and to provide a suitable soil medium for vegetative growth. Purpose: To stabilize disturbed soils with vegetation for up to 6 months. Conditions Where Practice Applies: To use fast growing vegetation that provides cover on disturbed soils. Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required. Criteria: 1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone from Figure B.3, and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.

B-4-4 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA. Definition: A 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: 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. Benching must be provided in accordance with Section B-3 Land Grading. 3. Runoff from the stockpile area must drain to a suitable sediment control practice. 4. Access the stockpile area from the upgrade 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. Provisions must be made for discharging concentrated flow in a non-erosive manner.

B-4-1 STANDARDS AND SPECIFICATIONS FOR INCREMENTAL STABILIZATION. Definition: 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. Criteria: 1. Excavate and stabilize cut slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all cut slopes as the work progresses. 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...

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ENGINEER'S CERTIFICATE. I CERTIFY THAT THIS PLAN FOR SEDIMENT AND EROSION CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE CONDITIONS AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT. ENGINEER: CLM/algan, 9-19-22

DEVELOPER'S CERTIFICATE. I/WE CERTIFY THAT ALL DEVELOPMENT AND CONSTRUCTION WILL BE DONE ACCORDING TO THIS PLAN FOR SEDIMENT AND EROSION CONTROL, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I ALSO AUTHORIZE PERIODIC ON-SITE INSPECTION BY THE HOWARD SOIL CONSERVATION DISTRICT. DEVELOPER: J. V. Nk, 9-20-22

H-5 STANDARDS AND SPECIFICATIONS FOR DUST CONTROL. Definition: Controlling the suspension of dust particles from construction activities. Purpose: To prevent blowing and movement of dust from exposed soil surfaces to reduce on and off-site damage including health and traffic hazards. Conditions Where Practice Applies: Areas subject to dust blowing and movement where on and off-site damage is likely without treatment. Criteria: 1. Mulches: See Section B-4-2 Soil Preparation, Topsoiling, and Soil Amendments. Section B-4-3 Seeding and Mulching, and Section B-4-4 Temporary Stabilization. Mulch must be anchored to prevent blowing. 2. Vegetative Cover: See Section B-4-4 Temporary Stabilization. 3. Tillage: Till to roughen surface and bring clods to the surface. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment that may produce the desired effect. 4. Irrigation: Sprinkle site with water until the surface is moist. Repeat as needed. The site must not be irrigated to the point that runoff occurs. 5. Barriers: Solid board fences, silt fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing. 6. Chemical Treatment: Use of chemical treatment requires approval by the appropriate plan review authority.

Table B.1: Temporary Seeding for Site Stabilization. Table with columns for Plant Species, Seeding Rate 1/ (lb/acre), Seeding Rate 2/ (lb/acre), Recommended Seeding Dates by Plant Hardiness Zone 3/ (Start and End Dates), and 7a and 7b.

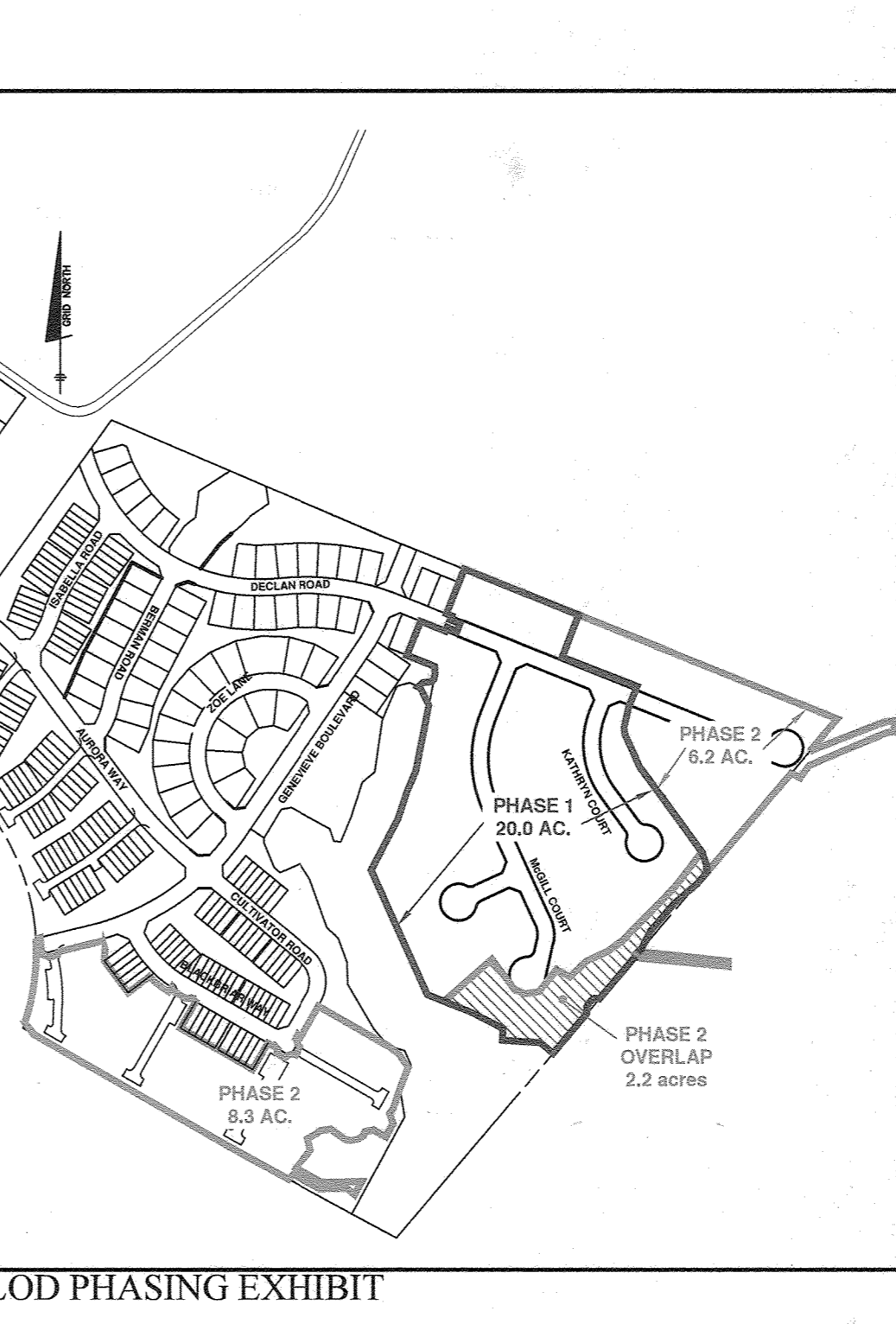
Table B.3: Permanent Seeding Summary. Table with columns for No., Species, Application Rate (lb/acre), Seeding Date, Seeding Depth (inches), Fertilizer Rate (lb-20-20), Lime Rate, and Line Rate.

APPROVED: DEPARTMENT OF PUBLIC WORKS. APPROVED: DEPARTMENT OF PLANNING AND ZONING. Includes signatures and dates for approval.

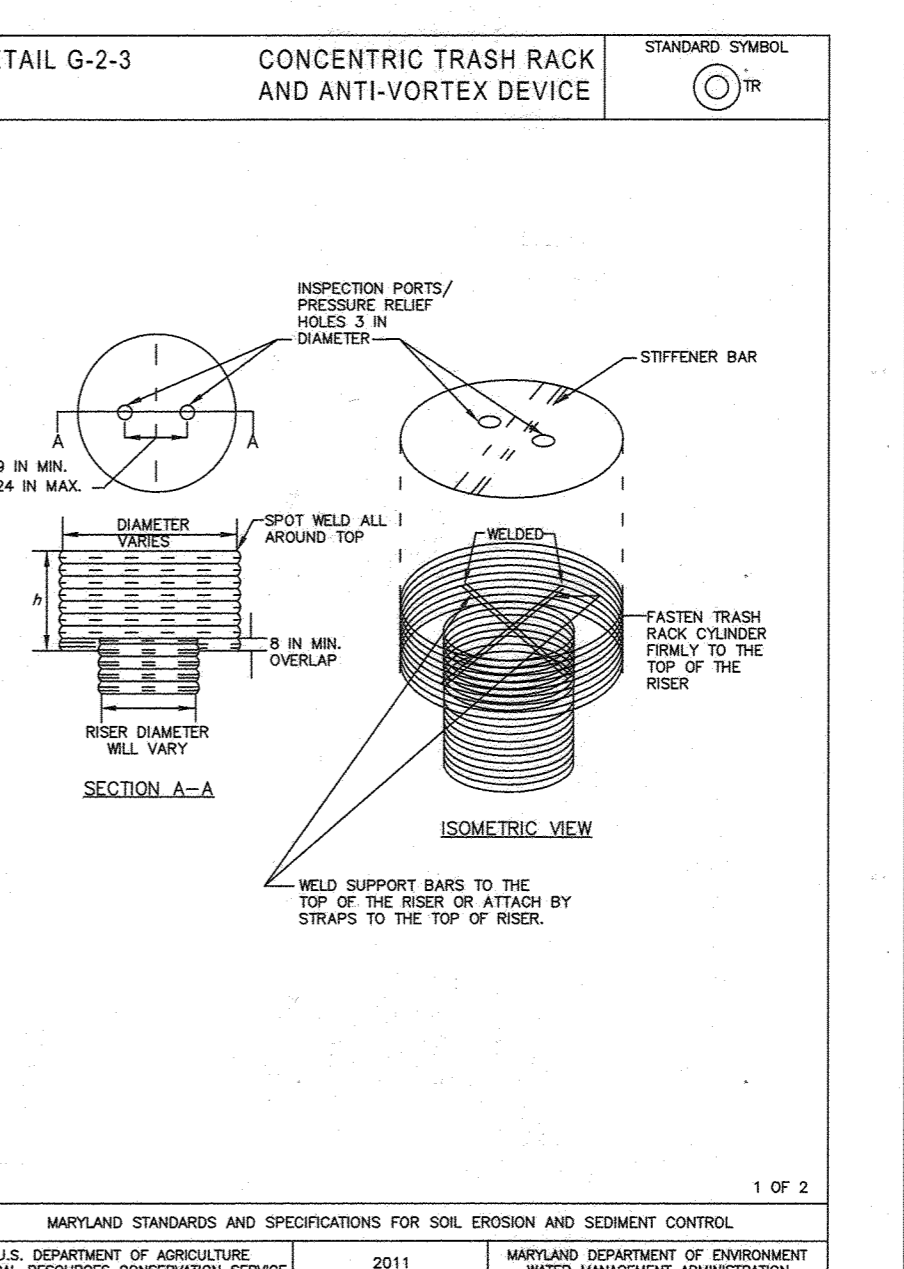
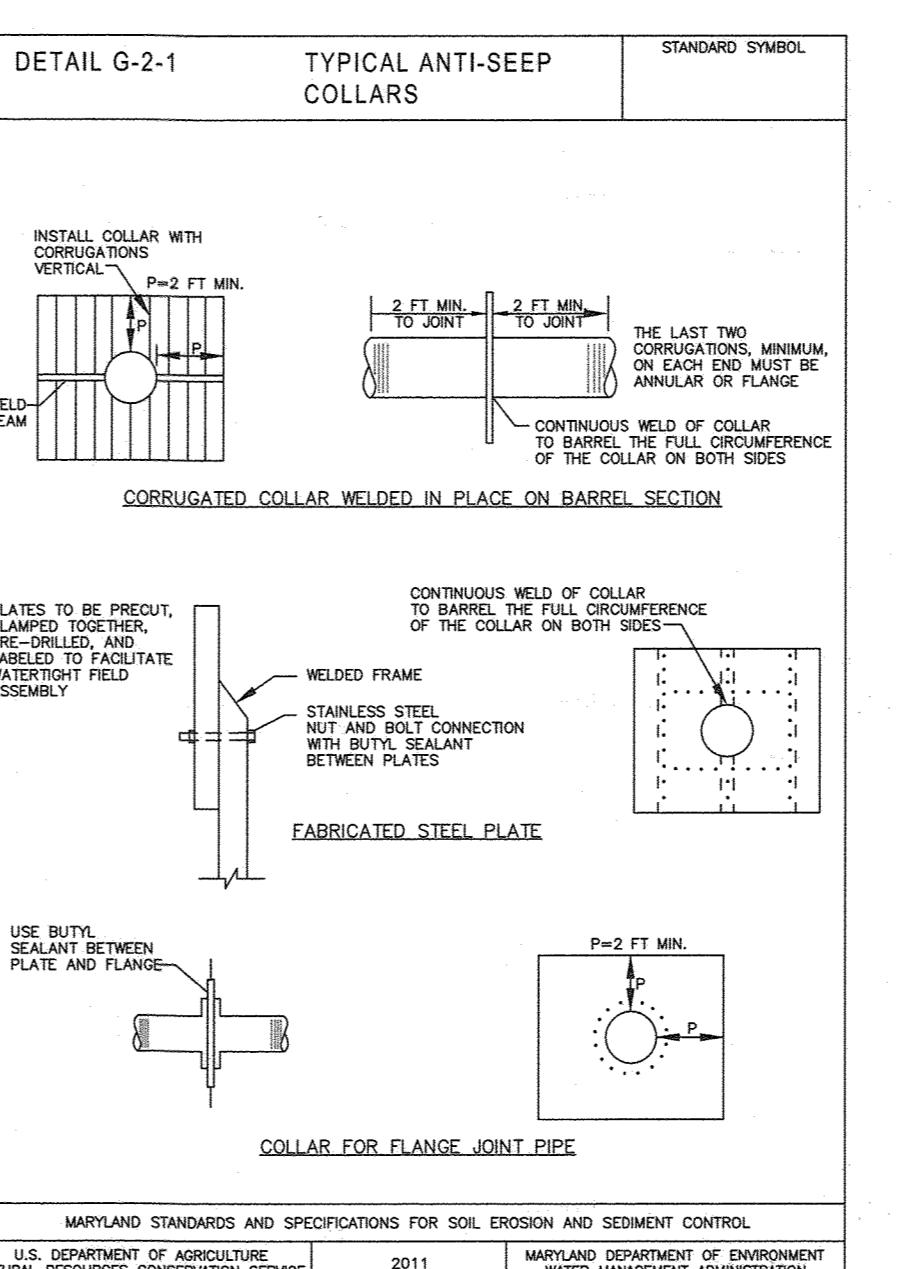
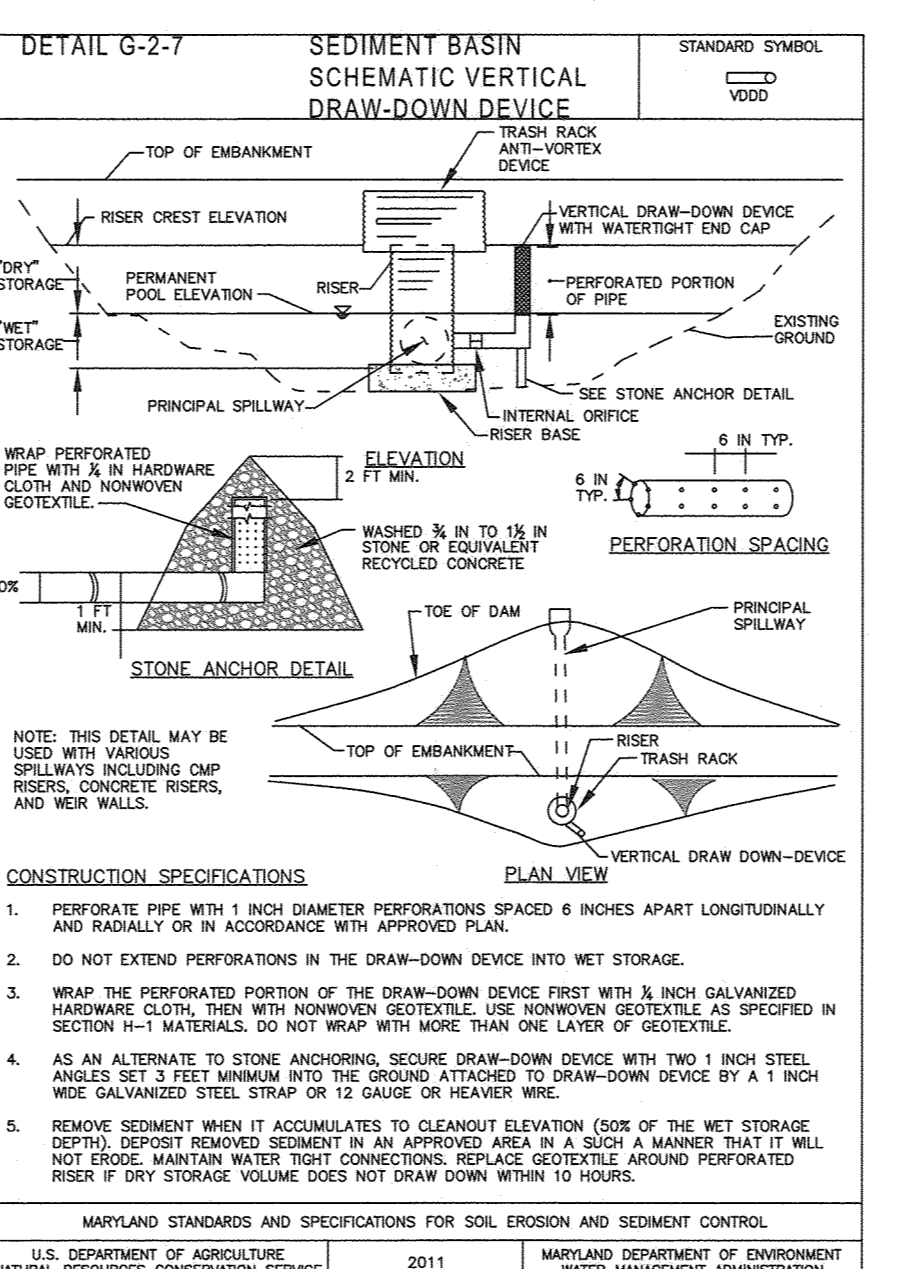
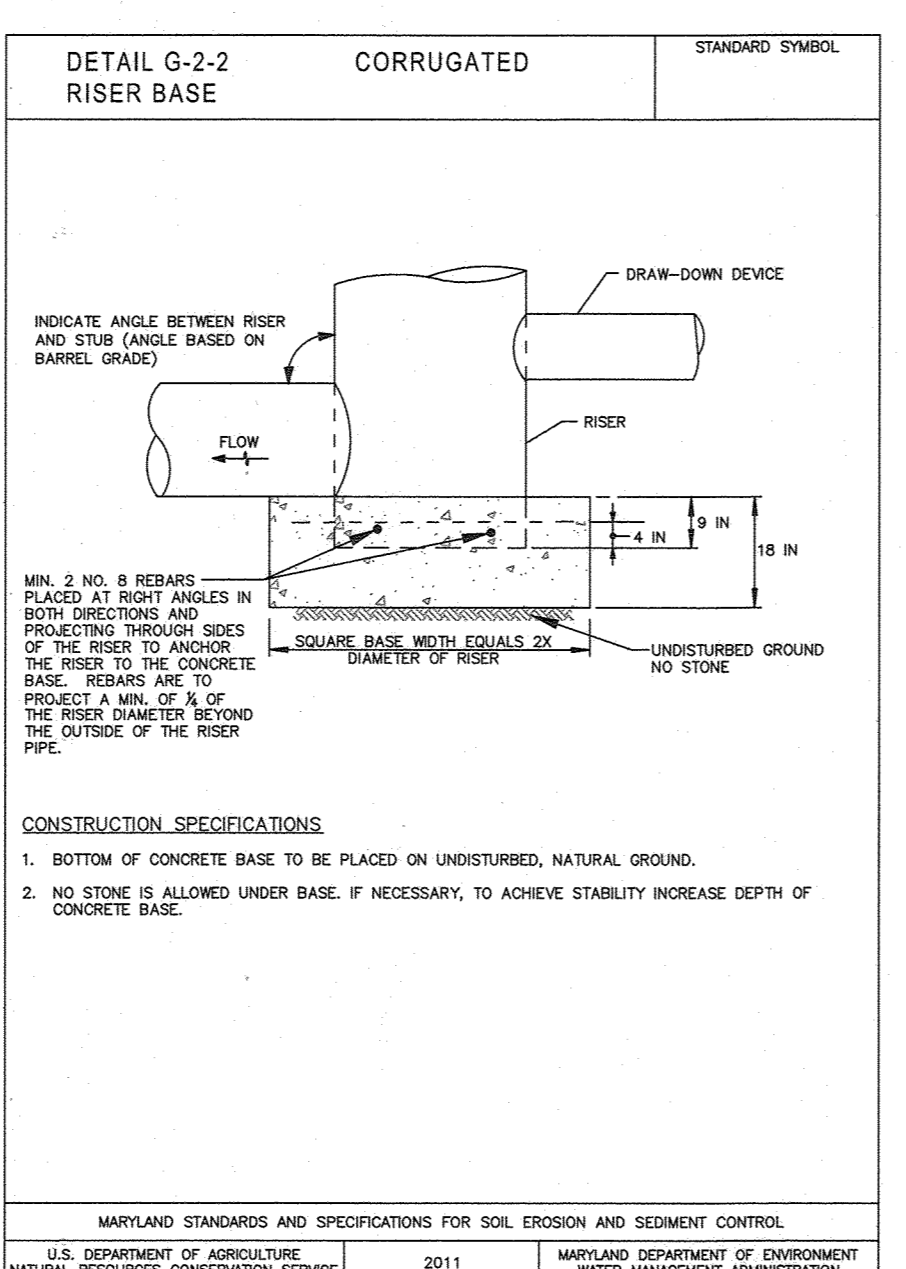
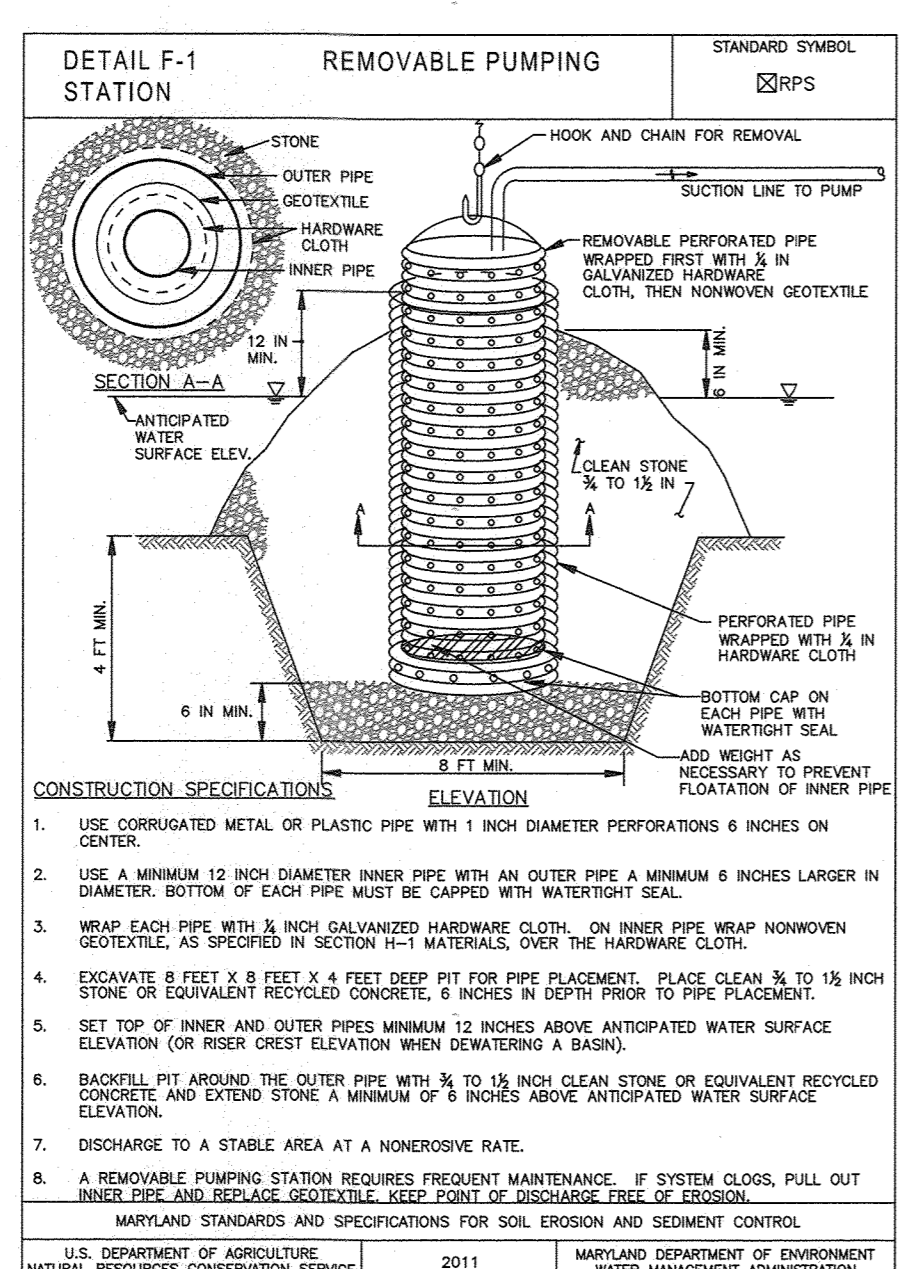
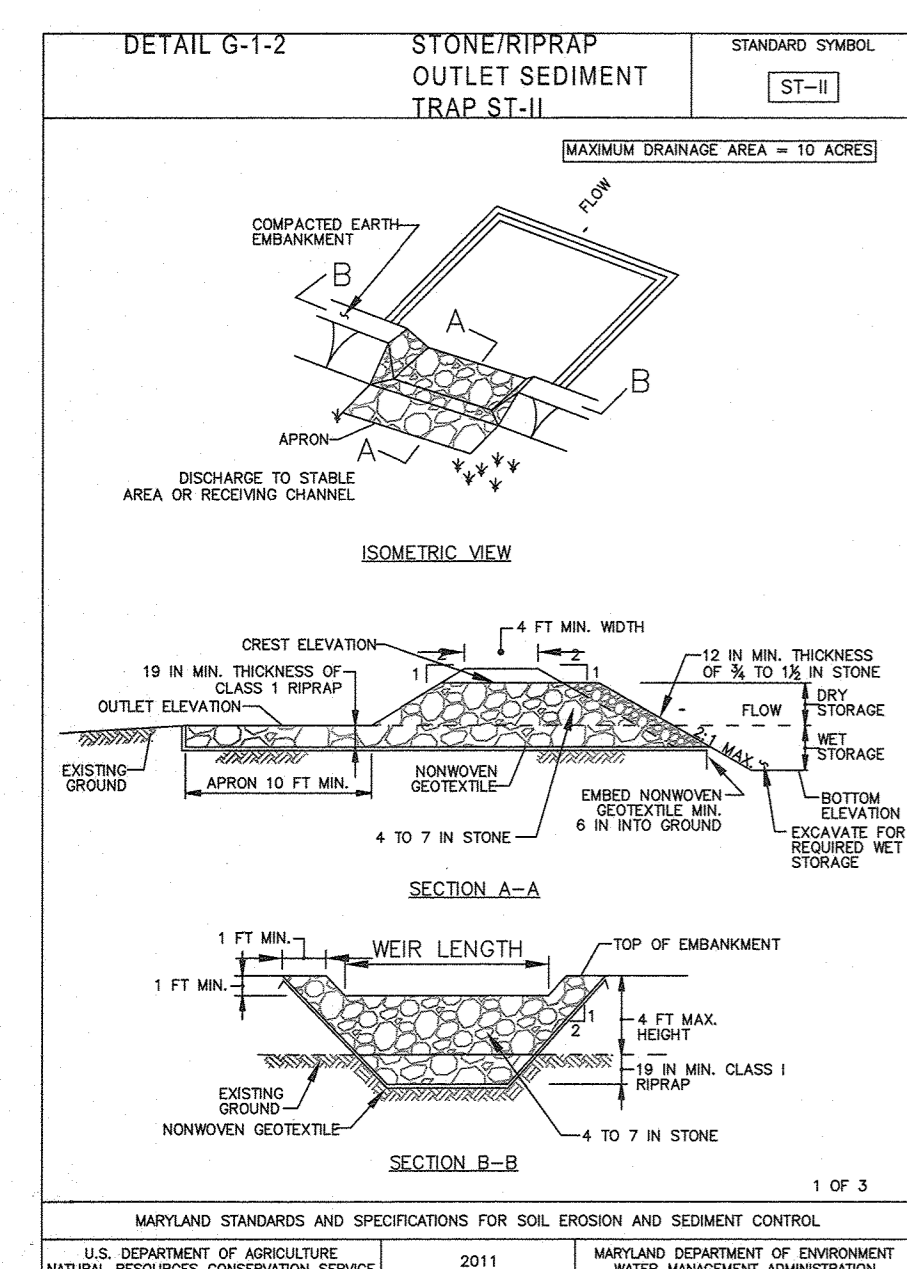
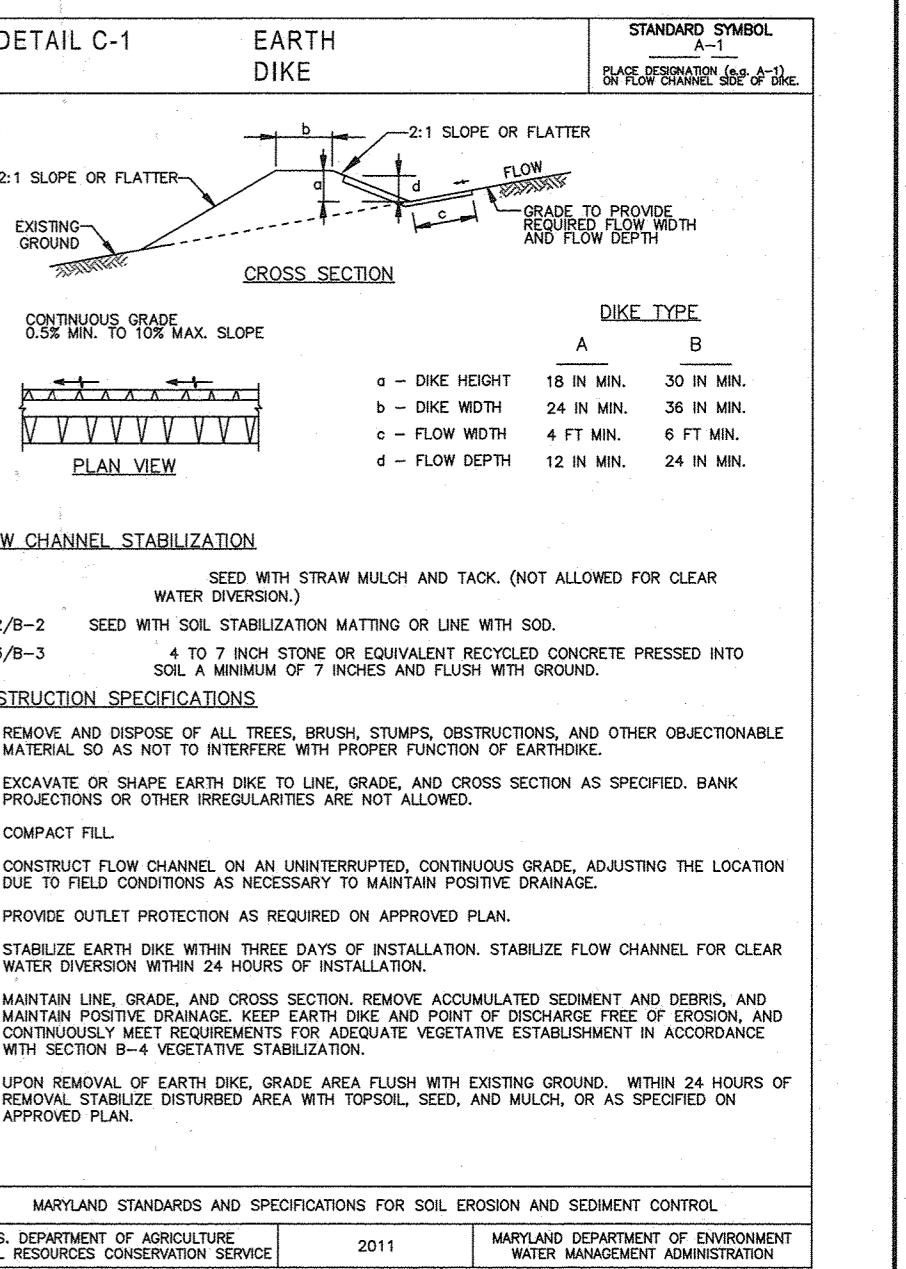
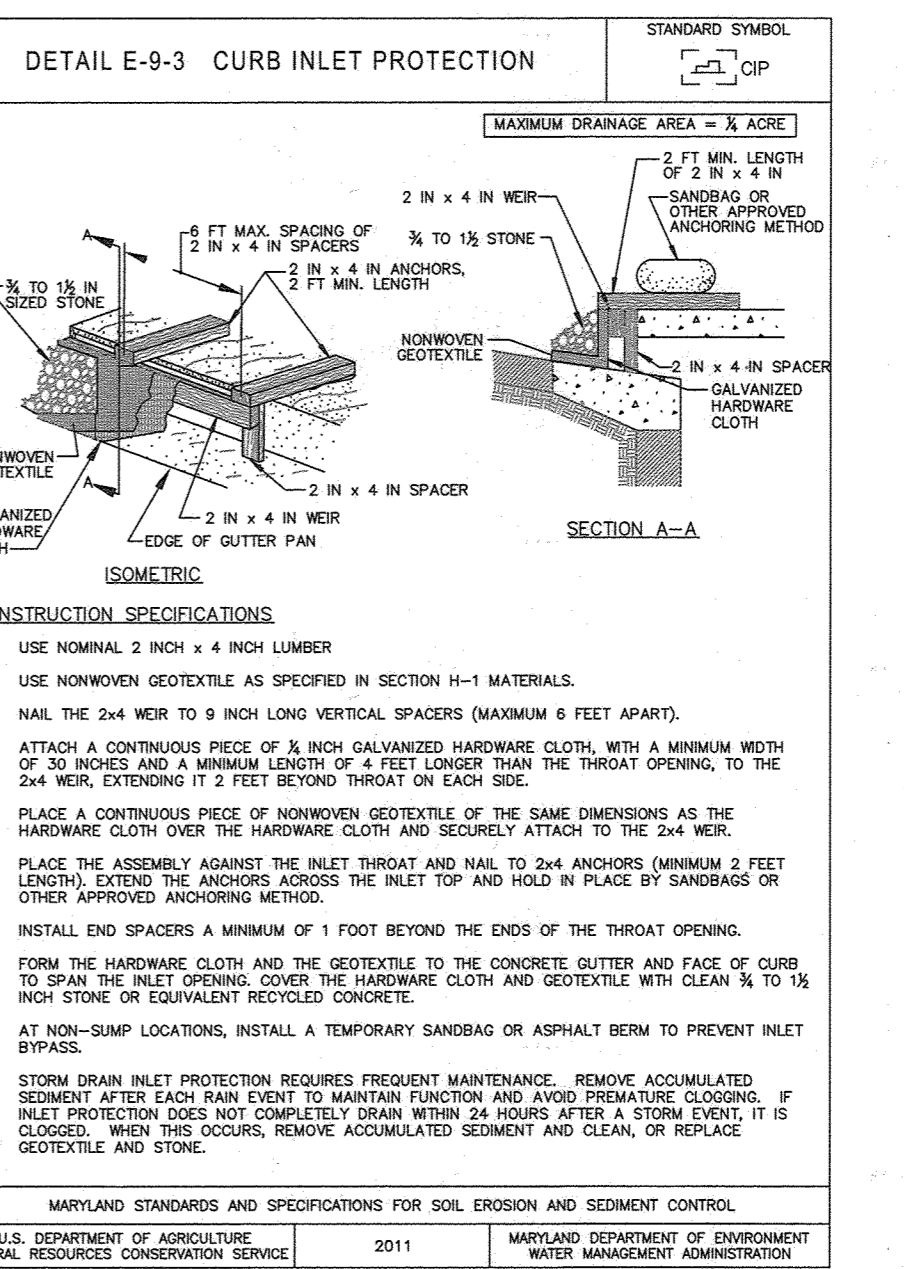
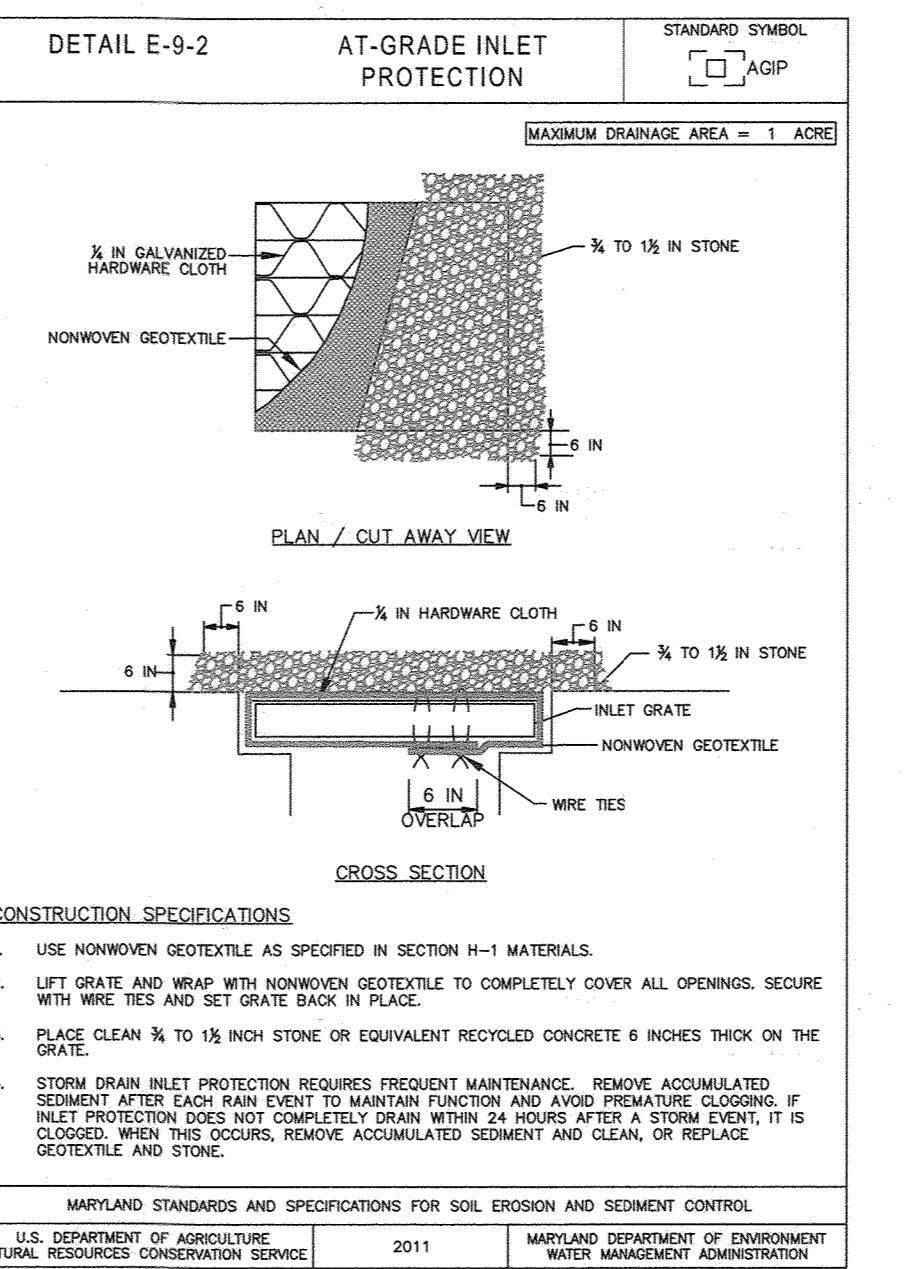
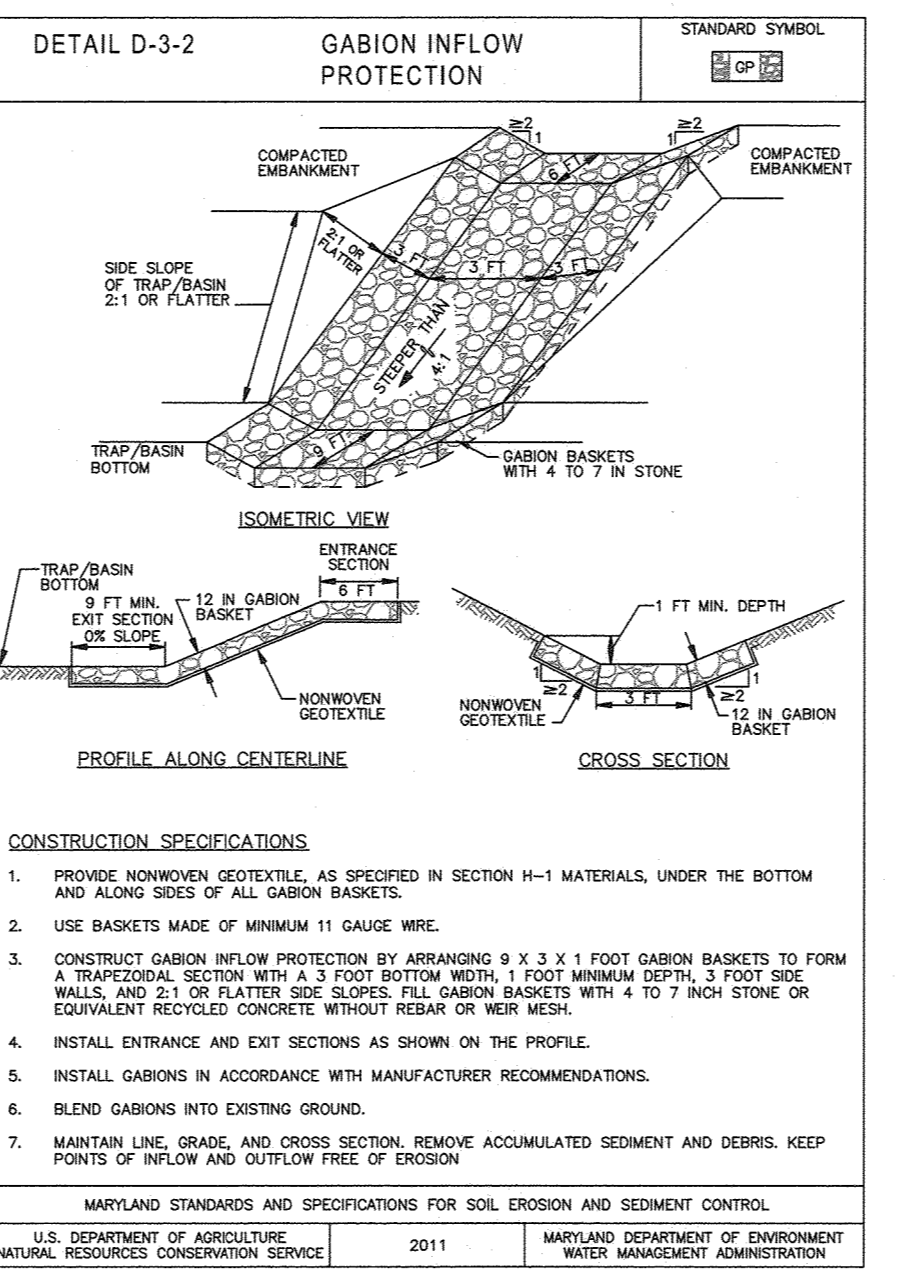
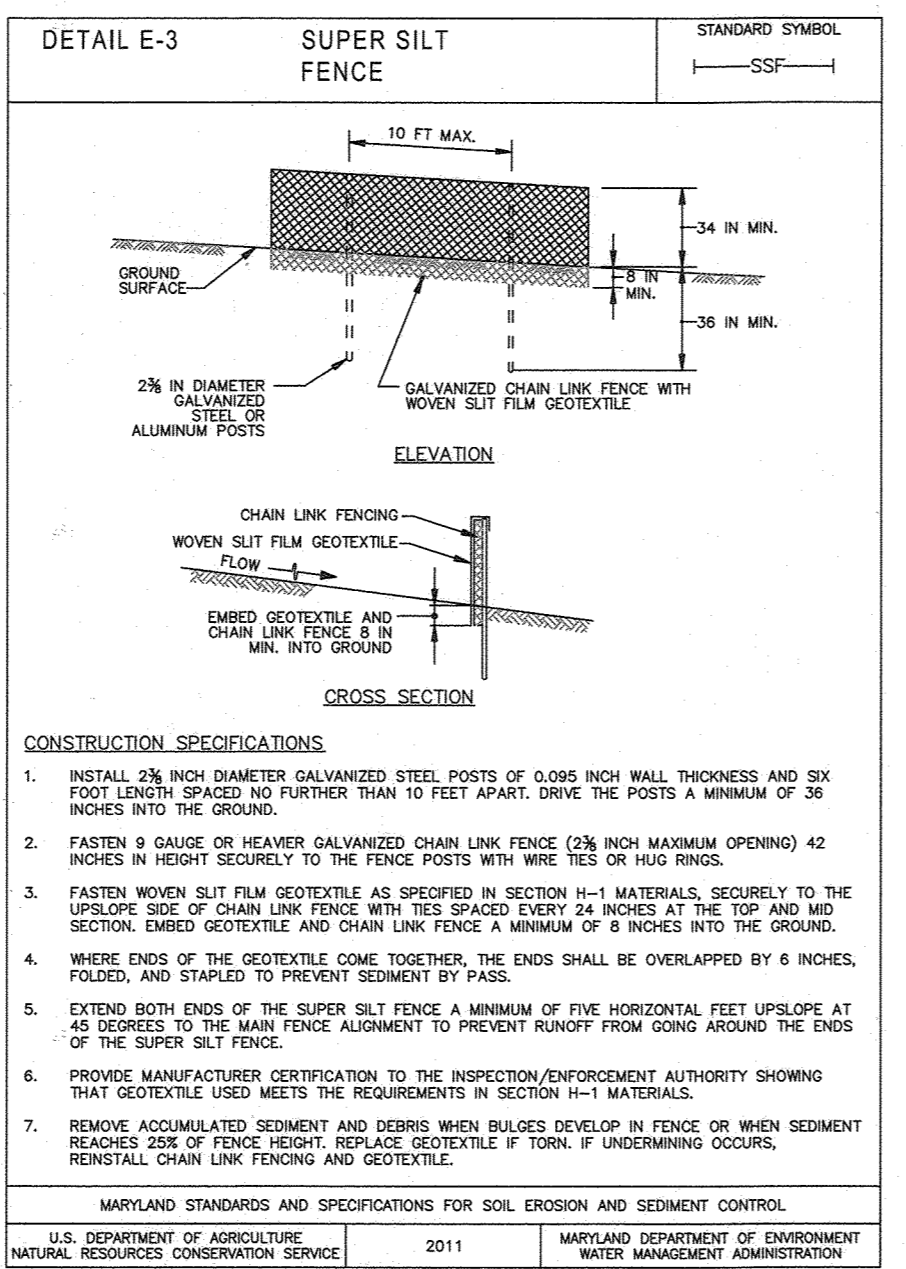
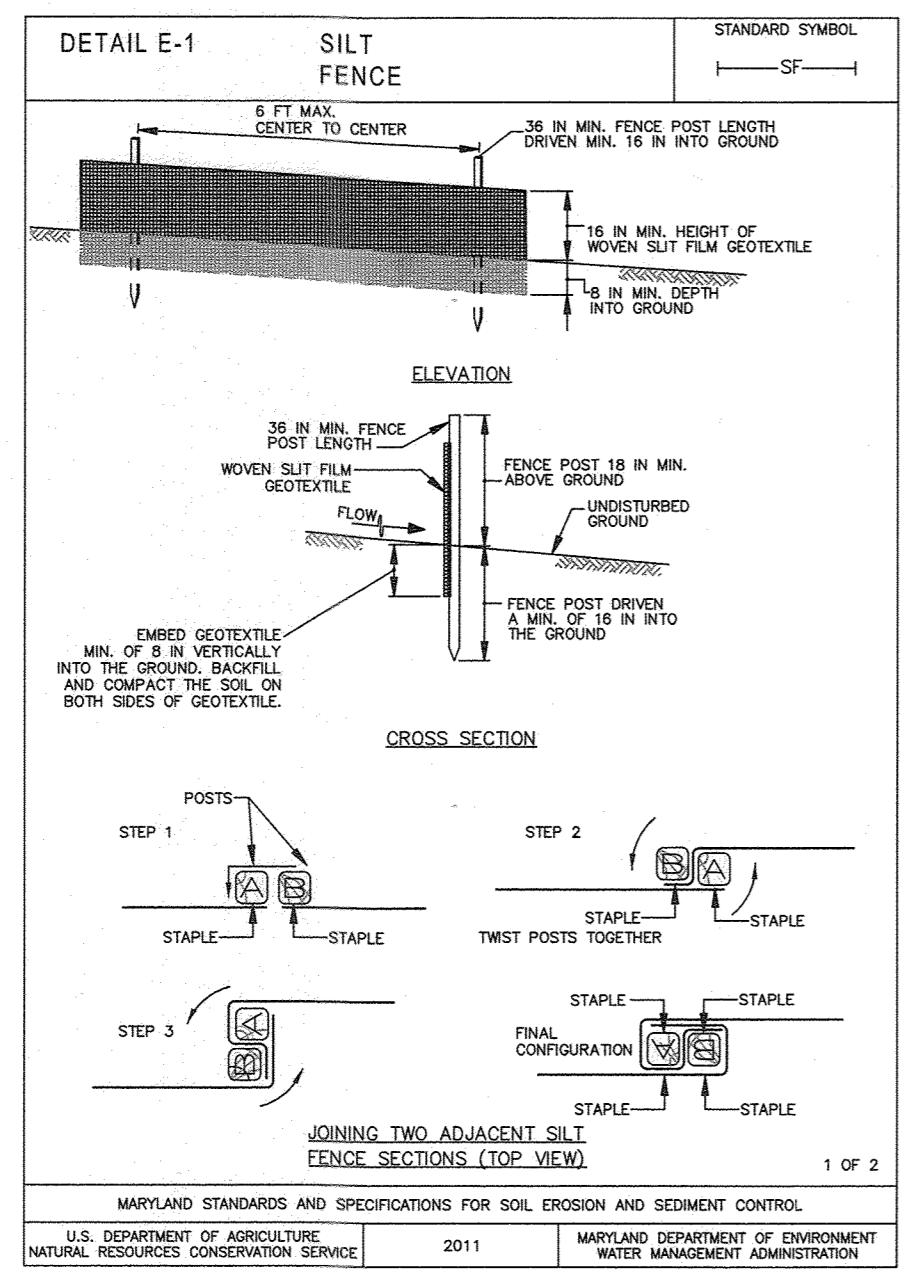
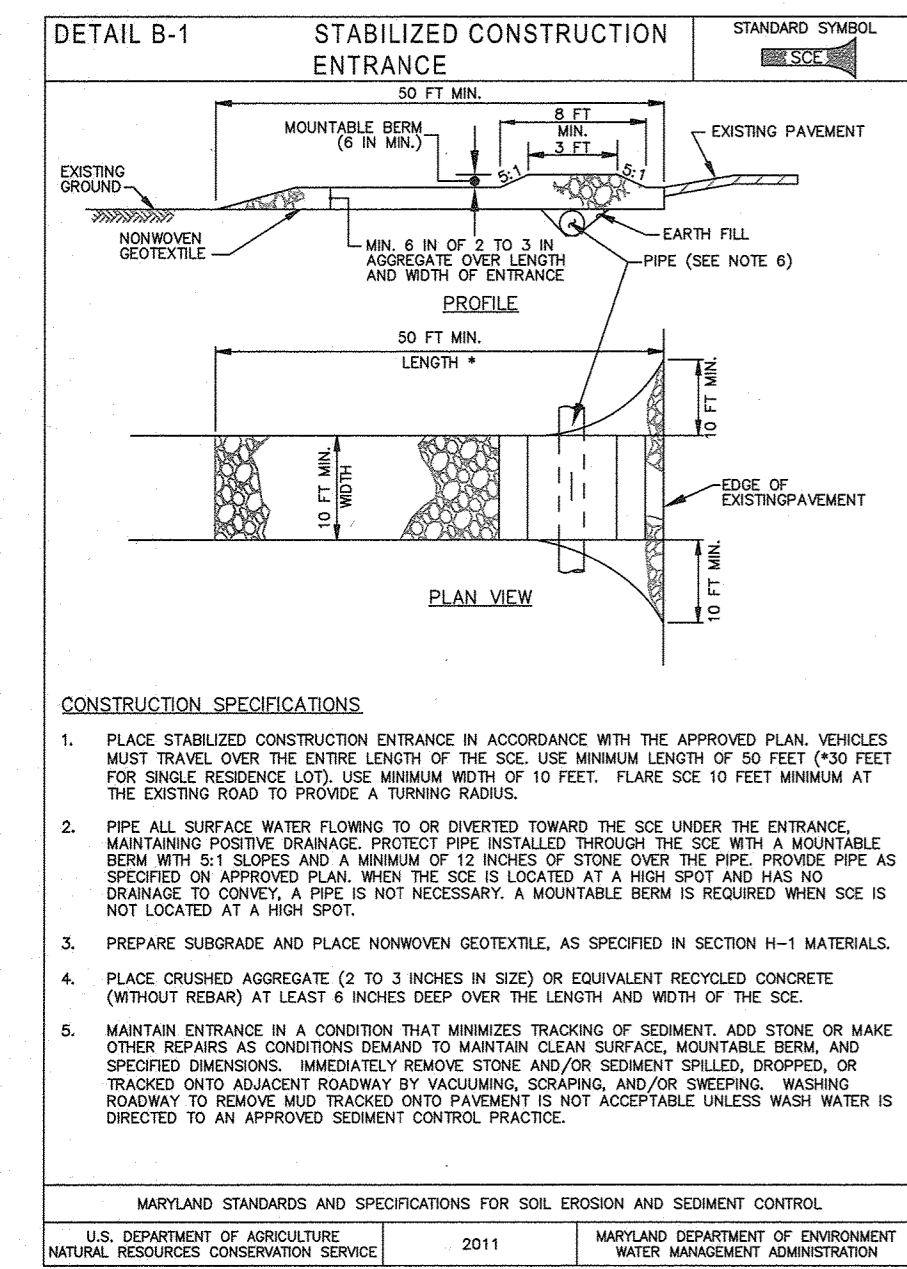
APPROVED: DEPARTMENT OF PUBLIC WORKS. APPROVED: DEPARTMENT OF PLANNING AND ZONING. Includes signatures and dates for approval.

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APPROVED: DEPARTMENT OF PUBLIC WORKS. APPROVED: DEPARTMENT OF PLANNING AND ZONING. Includes signatures and dates for approval.



WELLINGTON FARMS Phase 2. Includes owner information (ESC WELLINGTON, L.C.), developer information (BENCHMARK ENGINEERING, INC.), and sediment and erosion control notes. Notes include: DATE: AUGUST 15, 2022; BEI PROJECT NO. 2879; DESIGN: DBT; DRAFT: DBT; SCALE: AS SHOWN; SHEET 38 OF 44.



**DETAIL G-2-3 CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE**

RISER DIAM. (IN.)	RISER DIAM. THICKNESS (IN.)	MINIMUM SIZE SUPPORT BAR	MINIMUM THICKNESS (GAUGE)	STIFFENER		
12	18	16	14	#8 REBAR	16	N/A
15	21	18	15	#8 REBAR	16	N/A
18	27	16	16	#8 REBAR	16	N/A
21	30	16	19	#8 REBAR	16	N/A
24	36	16	21	#8 REBAR	14	N/A
27	42	16	21	#8 REBAR	14	N/A
36	54	14	25	#8 REBAR	12	N/A
42	60	14	27	#8 REBAR	12	N/A
48	72	12	29	1 1/2 IN PIPE OR 1 1/2 X 1 1/2 X 8 ANGLE	10	N/A
54	78	12	33	1 1/2 IN PIPE OR 1 1/2 X 1 1/2 X 8 ANGLE	10	N/A
60	90	12	37	1 1/2 IN PIPE OR 1 1/2 X 1 1/2 X 8 ANGLE	8	N/A
66	96	10	41	2 IN PIPE OR 2 X 2 X 3/4 ANGLE	8	2 X 2 X 3/4 ANGLE
72	102	10	44	2 IN PIPE OR 2 X 2 X 3/4 ANGLE	8	2 1/2 X 2 1/2 X ANGLE
78	114	10	47	2 1/2 IN PIPE OR 2 X 2 X 3/4 ANGLE	8	2 1/2 X 2 1/2 X ANGLE
84	120	10	50	2 1/2 IN PIPE OR 2 1/2 X 2 1/2 X ANGLE	8	2 1/2 X 2 1/2 X ANGLE

NOTE: THE ABOVE TRASH RACK AND ANTI-VORTEX DEVICE INFORMATION IS FOR CORRUGATED METAL PIPE ONLY. CONCRETE RISERS MUST MEET THE REQUIREMENTS OF MD 578.

**ENGINEER'S CERTIFICATE**

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

*A. Malagan* 9-19-22  
ENGINEER DATE

**DEVELOPER'S CERTIFICATE**

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

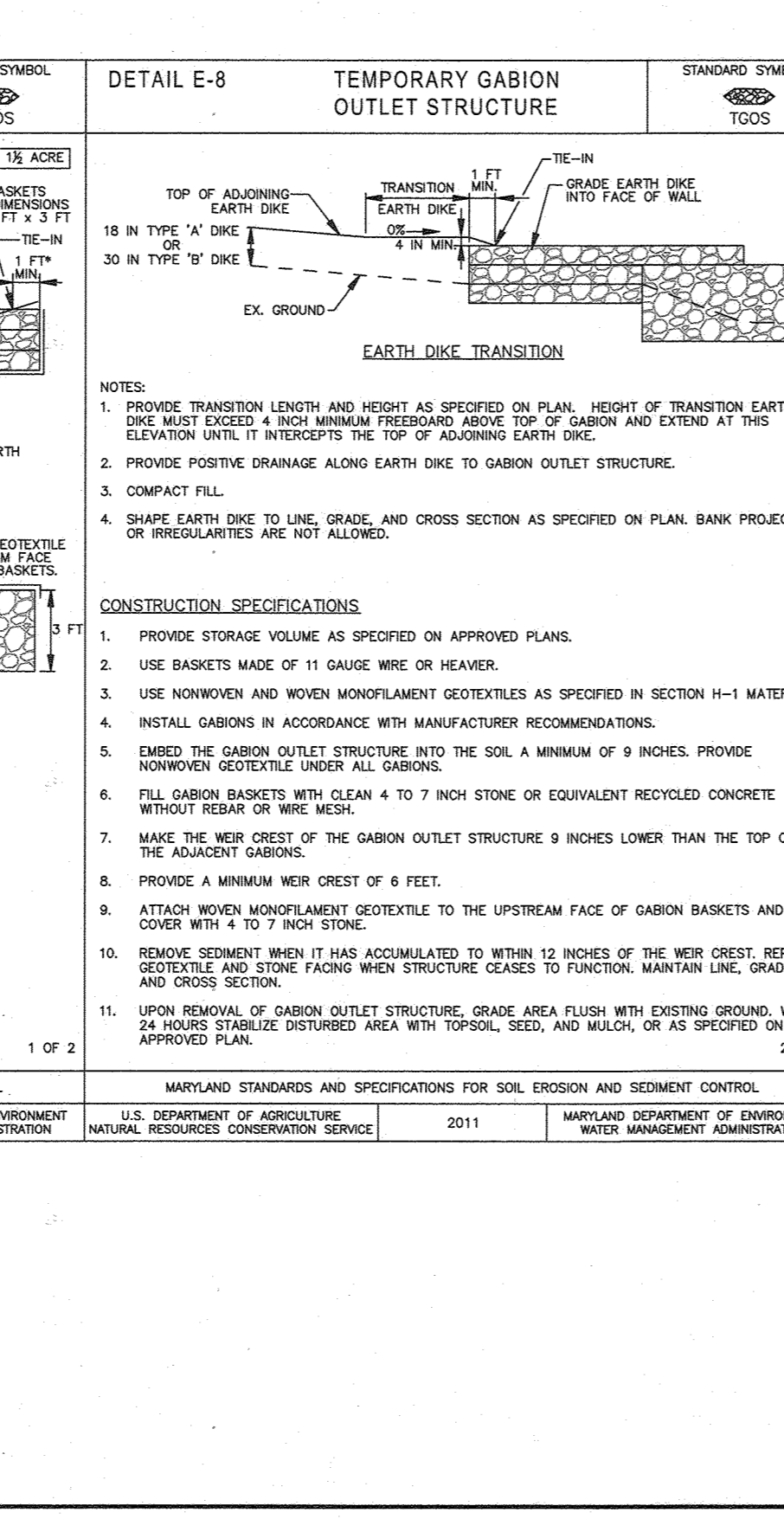
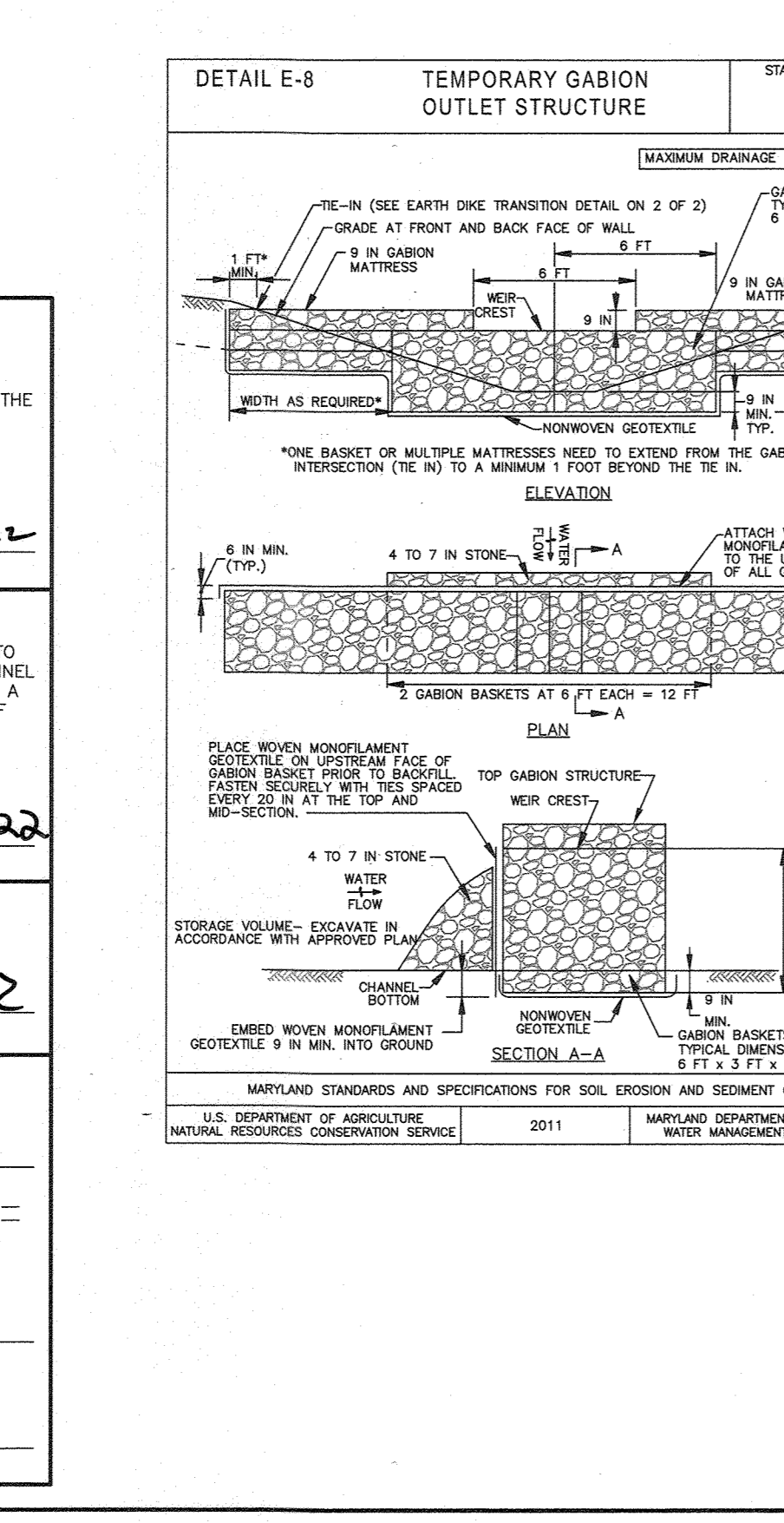
*J. V. Mz* 9-20-22  
DEVELOPER DATE

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

*Alexandra Butcher* 10/05/22  
HOWARD SOIL CONSERVATION DISTRICT DATE

APPROVED: DEPARTMENT OF PUBLIC WORKS  
*Shelley* 10/20/2022  
CHIEF, BUREAU OF HIGHWAYS DATE

APPROVED: DEPARTMENT OF PLANNING AND ZONING  
*W. J. J.* 11/3/22  
CHIEF, DIVISION OF LAND DEVELOPMENT DATE



**SWALE SHEAR STRESS**

SWALE #1	0.52 lb/ft <sup>2</sup>
SWALE #2	0.80 lb/ft <sup>2</sup>
SWALE #3	0.74 lb/ft <sup>2</sup>
SWALE #4	0.35 lb/ft <sup>2</sup>
SWALE #5	0.66 lb/ft <sup>2</sup>
SWALE #6	0.46 lb/ft <sup>2</sup>
SWALE #7	0.65 lb/ft <sup>2</sup>
SWALE #8	0.79 lb/ft <sup>2</sup>
SWALE #9	0.37 lb/ft <sup>2</sup>
SWALE #10	0.56 lb/ft <sup>2</sup>

**NO. DATE REVISION**

1	8.1.2023	REVISE TOTAL NUMBER OF SHEETS
---	----------	-------------------------------

**BENCHMARK ENGINEERING, INC.**  
ENGINEERS & LAND SURVEYORS & PLANNERS  
3300 N. RIDGE ROAD SUITE 140 A ELLICOTT CITY, MARYLAND 21043  
(P) 410-485-6105 (F) 410-485-8844  
WWW.BEI-CIVILENGINEERING.COM

**WELLINGTON FARMS**  
Phase 2  
Lots 276 thru 419; Open Space Lots 420 thru 422;  
(A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)

TAX MAP: 46 - GRID: 6 - PARCEL: 163  
ZONED: R-20-MXD-3 / F-SC-MXD-3  
ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND

**SEDIMENT AND EROSION CONTROL DETAILS**

DATE: AUGUST 15, 2022 BEI PROJECT NO. 2879  
SCALE: AS SHOWN SHEET 39 OF 44  
DESIGN: DBT DRAFT: DBT

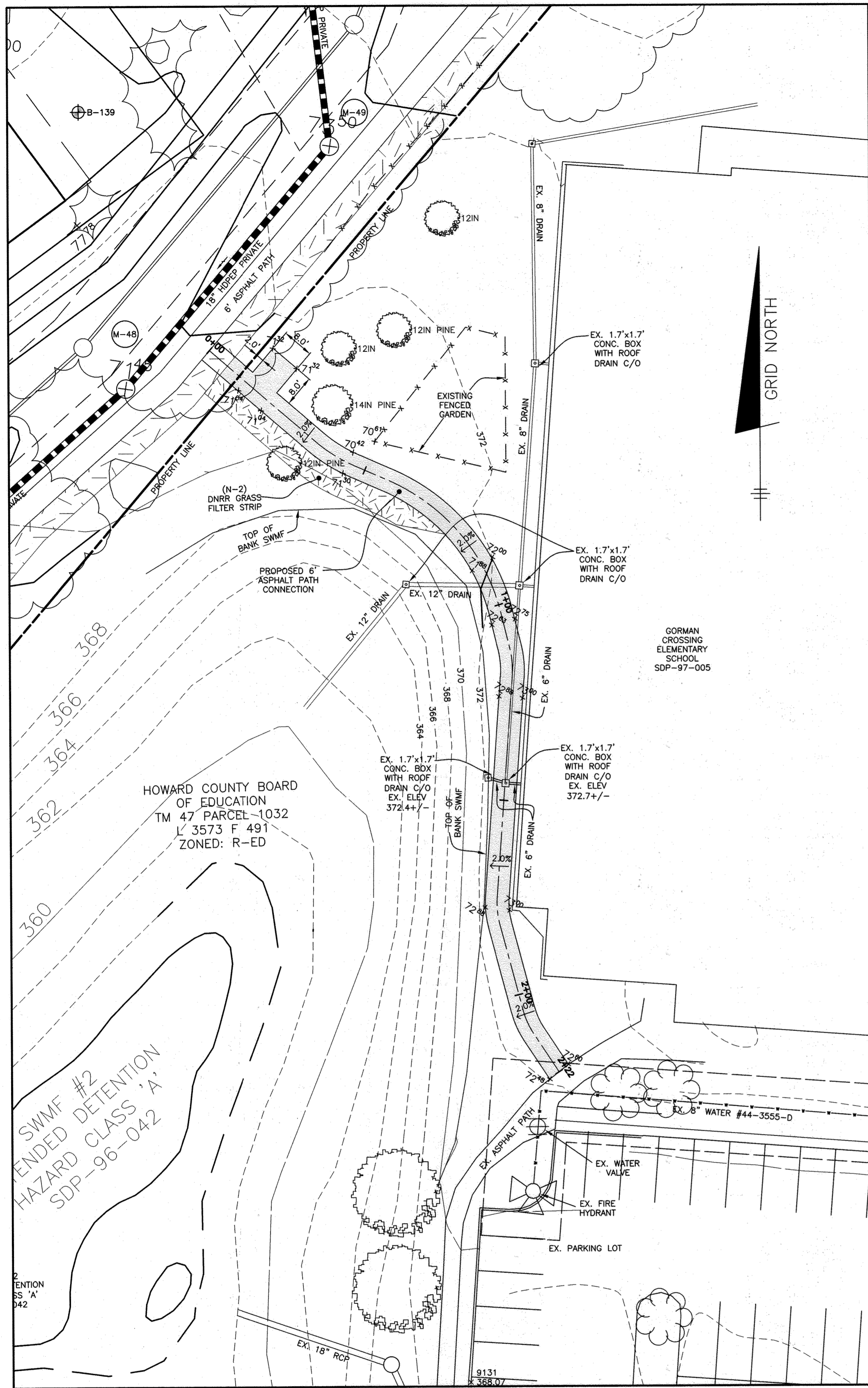




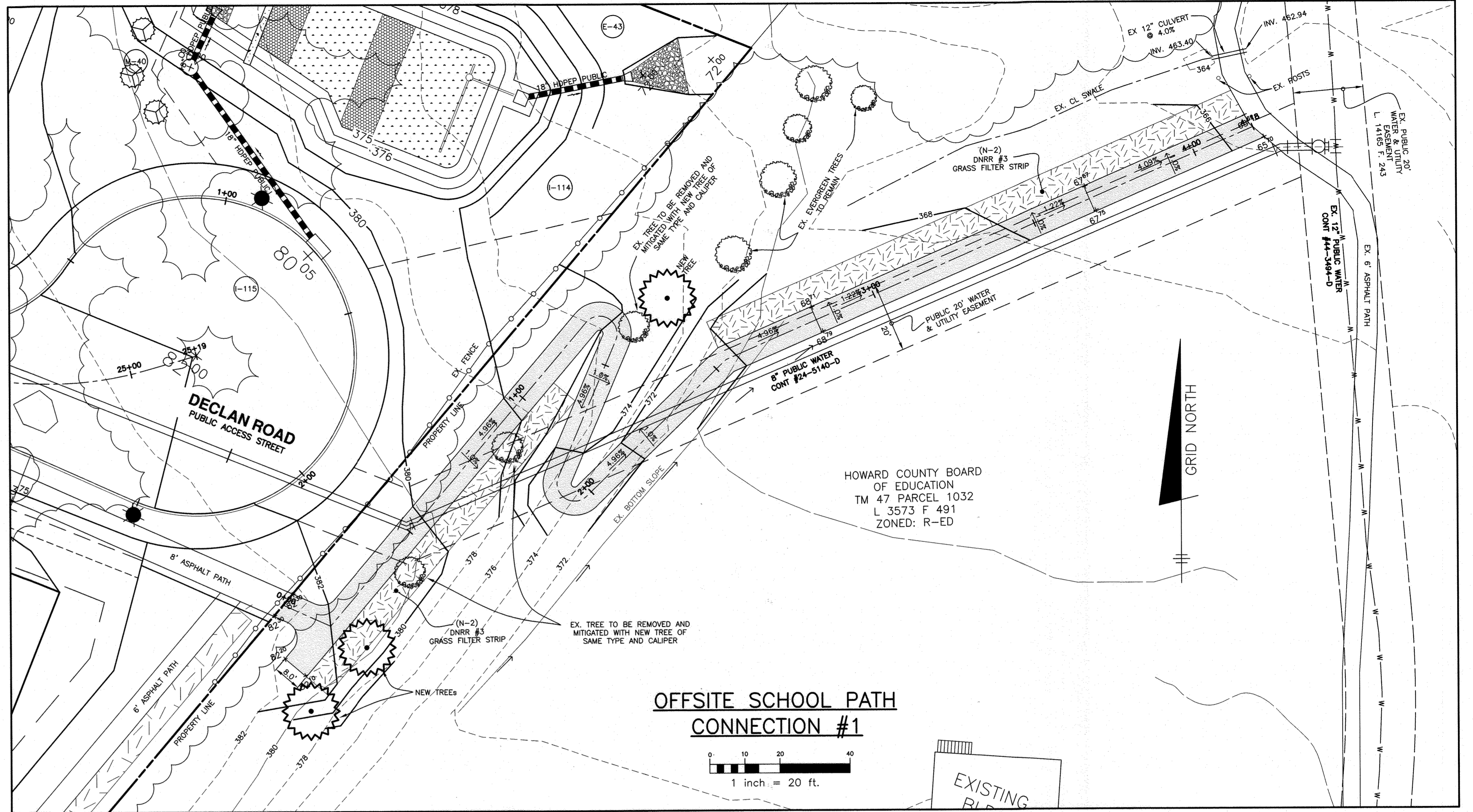
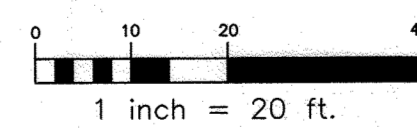




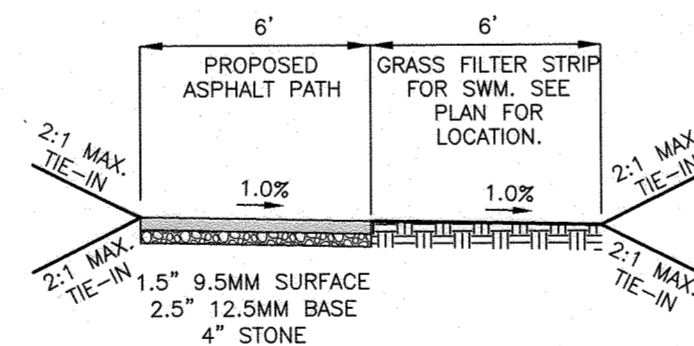
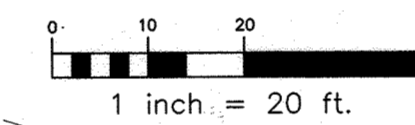




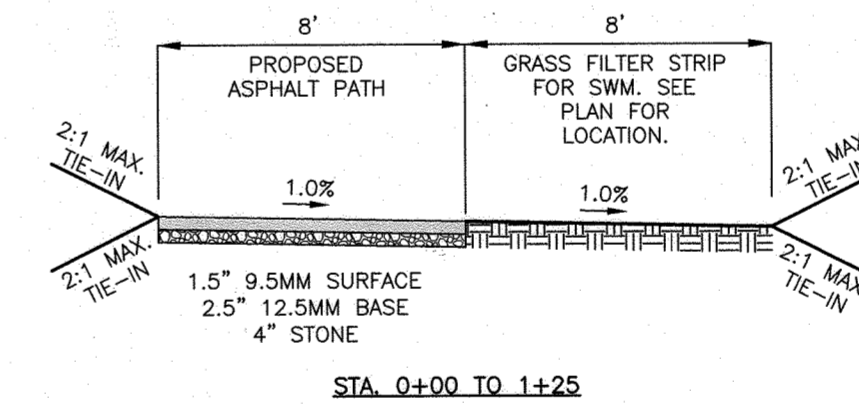
**OFFSITE SCHOOL PATH CONNECTION #2**



**OFFSITE SCHOOL PATH CONNECTION #1**



**TYPICAL SECTION OFF-SITE ASPHALT PATH #2**  
SCALE: 1" = 5'



**TYPICAL SECTION OFF-SITE ASPHALT PATH #1**  
SCALE: 1" = 5'

APPROVED: DEPARTMENT OF PUBLIC WORKS	
<i>[Signature]</i> CHIEF, BUREAU OF HIGHWAYS	08/17/2023 DATE
APPROVED: DEPARTMENT OF PLANNING AND ZONING	
<i>[Signature]</i> CHIEF, DIVISION OF LAND DEVELOPMENT	9/13/23 DATE
<i>[Signature]</i> CHIEF, DEVELOPMENT ENGINEERING DIVISION	9.6.23 DATE

NO. DATE REVISION	
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. 22390, F-11/11/11, 6-30-2025.	
<b>BENCHMARK ENGINEERING, INC.</b> ENGINEERS & LAND SURVEYORS & PLANNERS 3300 N. RIDGE ROAD & SUITE 140 • ELLICOTT CITY, MARYLAND 21043 (P) 410-462-6105 (F) 410-462-6644 WWW.BEI-CIVILENGINEERING.COM	
<b>WELLINGTON FARMS</b> Phase 2 Lots 276 thru 419; Open Space Lots 420 thru 422; (A Resubdivision of Non-Buildable Bulk Parcel 'E' previously recorded under F-21-044 and Non-Buildable Bulk Parcel 'F' previously recorded under F-22-001)	
OWNER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021	
DEVELOPER: ESC WELLINGTON, L.C. 5074 DORSEY HALL DRIVE, SUITE 205 ELLICOTT CITY, MARYLAND 21042 410-720-3021	
TAX MAP: 46 - GRID: 6 - PARCEL: 163 ZONED: R-20-MXD-3 / R-SC-MXD-3 ELECTION DISTRICT NO. 6 - HOWARD COUNTY, MARYLAND	
<b>OFFSITE PATH CONNECTION PLAN</b>	
DATE: JULY 14, 2023	BEI PROJECT NO. 2879
DESIGN: DBT	DRAFT: DBT
SCALE: AS SHOWN	SHEET 44 OF 44