







**LOT 1 SEWER NOTE:**  
 REFER TO DMV2-23-016, ON FEBRUARY 24, 2023, THE CHIEF OF THE BUREAU OF ENGINEERING - UTILITY DESIGN DIVISION APPROVED THE REQUEST TO USE AN EJECTOR PUMP TO SERVE LOT 1 OF THE SCHNEIDER SUBDIVISION.

ALICE L. TOLIVER  
 TM: 17 PARCEL: 132  
 L. 12950 / F. 545  
 2.00 AC  
 USE: RESIDENTIAL  
 ZONED: R-20

DEEPAK J. PATEL  
 BHAVIKA D. PATEL  
 TM: 17 PARCEL: 132  
 GERMAN PROPERTY  
 L. 17062 / F. 92  
 PLAT: 5479  
 LOT: 1  
 20,224 SF  
 USE: RESIDENTIAL  
 ZONED: R-20

TM: 17 PARCEL: 132  
 BETHANY RIDGE  
 LOT: 3  
 20,051 SF  
 USE: RESIDENTIAL  
 ZONED: R-20

TAN KEAN-TUAN  
 NG PAU-GEAN  
 TM: 17 PARCEL: 132  
 GERMAN PROPERTY  
 L. 15185 / F. 120  
 PLAT: 5479  
 LOT: 3  
 27,109 SF  
 USE: RESIDENTIAL  
 ZONED: R-20

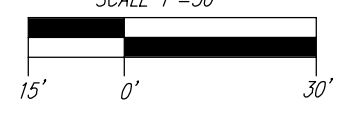
CHANG WIN-LONG  
 CHEN CHUNG-CHU  
 TM: 17 PARCEL: 512  
 L. 7850 / F. 225  
 25,047 SF  
 USE: RESIDENTIAL  
 ZONED: R-20

DALE L. LINTHICUM & WF  
 TM: 17 PARCEL: 638  
 L. 789 / F. 651  
 20,124 SF  
 USE: RESIDENTIAL  
 ZONED: R-20

BAHRAM SAHAND  
 SHAHIN SAHAND  
 TM: 17 PARCEL: 220  
 JOS H RAY SUBDY  
 L. 5918 / F. 531  
 LOT: 1  
 24,045 SF  
 USE: RESIDENTIAL  
 ZONED: R-20

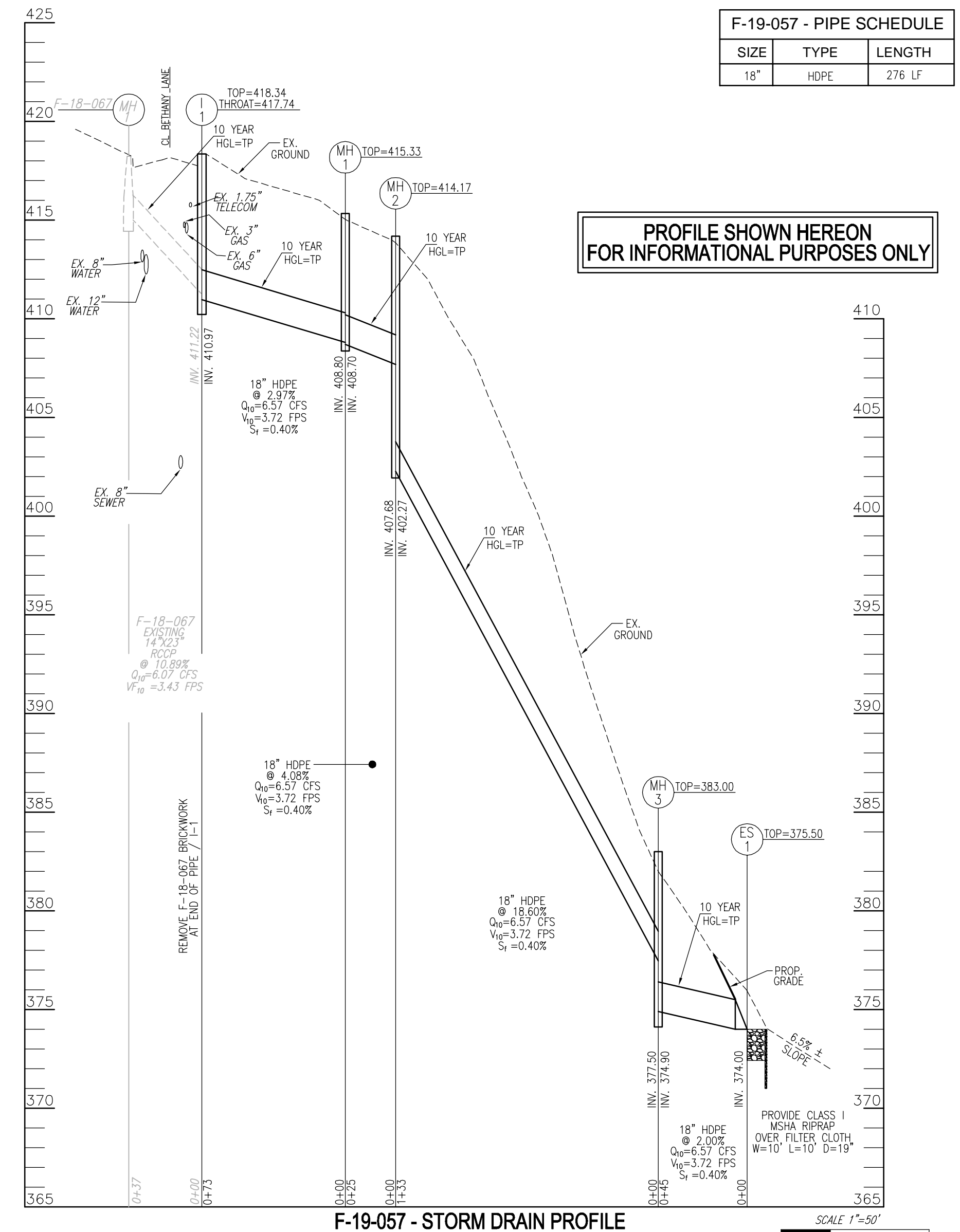
SUSANNE M. ANACKER  
 TM: 17 PARCEL: 411  
 J RAY SUBDY  
 L. 18887 / F. 431  
 LOT: 2  
 22,651 SF  
 USE: RESIDENTIAL  
 ZONED: R-20

**LAYOUT PLAN**  
 SCALE: 1"=30'



**NOTES:**  
 1. ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAIL W-3.28 OUTSIDE METER SETTINGS.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DIRECTOR

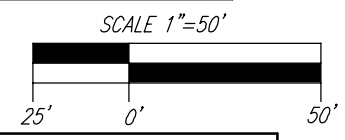


**F-19-057 - PIPE SCHEDULE**

SIZE	TYPE	LENGTH
18"	HDPE	276 LF

PROFILE SHOWN HEREON FOR INFORMATIONAL PURPOSES ONLY

**F-19-057 - STORM DRAIN PROFILE**  
 SCALE: 1"=5' VERT.  
 1"=50' HORIZ.



**LEGEND:**

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING EDGE OF PAVING
- EXISTING TREELINE
- STREAM BUFFER
- STREAM
- EXISTING WETLANDS  
PLATS 25610-25612
- WETLAND BUFFER
- EXISTING FOREST CONSERVATION EASEMENT  
PLAT 19810-19812
- EXISTING 20' SEWER RIGHT-OF-WAY FOR SANITARY SEWER  
L. 651 / F. 692
- EXISTING PUBLIC FOREST CONSERVATION EASEMENT  
PLATS 25610-25612
- EXISTING 20' PUBLIC DRAINAGE & UTILITY EASEMENT  
PLATS 25610-25612
- EXISTING VARIABLE WIDTH PUBLIC WATER & UTILITY EASEMENT  
PLATS 25610-25612
- EXISTING 24' PRIVATE USE-IN-COMMON ACCESS EASEMENT FOR LOTS 1-4 AND OPEN SPACE LOTS 5 & 6  
PLATS 25610-25612
- EXISTING 24' PRIVATE WATER & UTILITY EASEMENT FOR LOTS 2 & 3  
PLATS 25610-25612
- EXISTING 20' PRIVATE SEWER & UTILITY EASEMENT  
PLATS 25610-25612
- EXISTING 20' PUBLIC DRAINAGE & UTILITY EASEMENT  
PLAT 26460

**F-19-057 - STRUCTURE SCHEDULE**

NO.	TYPE	LOCATION	TOP EL.	INV. IN.	INV. OUT.	COMMENTS
I-1	TYPE "A-5" INLET	N 590054.74 E 1352580.08	418.34	411.22	410.97	HO. CO. STD. D-4.01
MH-1	4' STANDARD PRECAST MANHOLE	N 590041.21 E 1352651.42	415.33	408.80	408.70	HO. CO. STD. G-5.12
MH-2	4' STANDARD PRECAST MANHOLE	N 590055.55 E 1352672.48	414.17	407.68	402.27	HO. CO. STD. G-5.12
MH-3	4' STANDARD PRECAST MANHOLE	N 590030.72 E 1353831.18	383.00	377.50	374.90	HO. CO. STD. G-5.12
ES-1	18" HDPE END SECTION	N 590023.36 E 1352841.42	375.50	-	374.00	-

\* REFER TO F-19-067

**OWNER/DEVELOPER**  
 PATAPSCO BUILDERS, LLC  
 612 THIRD STREET, SUITE 4C  
 ANNAPOLIS, MD 21403  
 (240) 375-1052

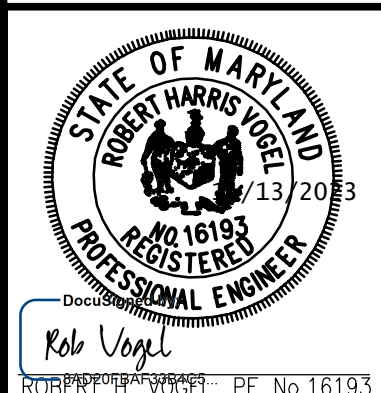
NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN**  
**SITE LAYOUT PLAN**  
**SCHNEIDER SUBDIVISION**  
 LOTS 1-4

PARCEL: 136  
 TAX MAP: 17 GRID: 20  
 2ND ELECTION DISTRICT

ZONED: R-20  
 L. 18861 / F. 73  
 HOWARD COUNTY, MARYLAND

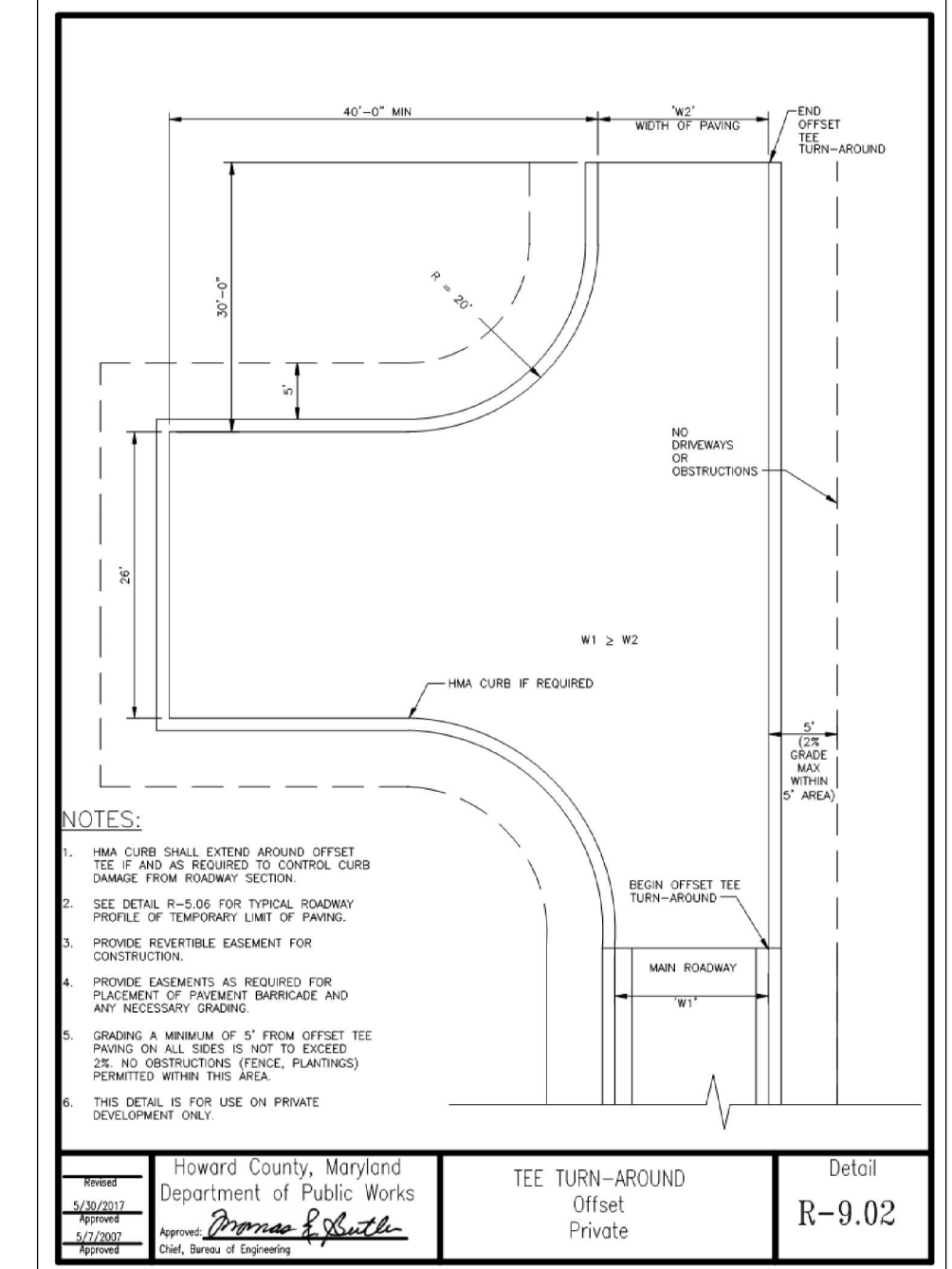
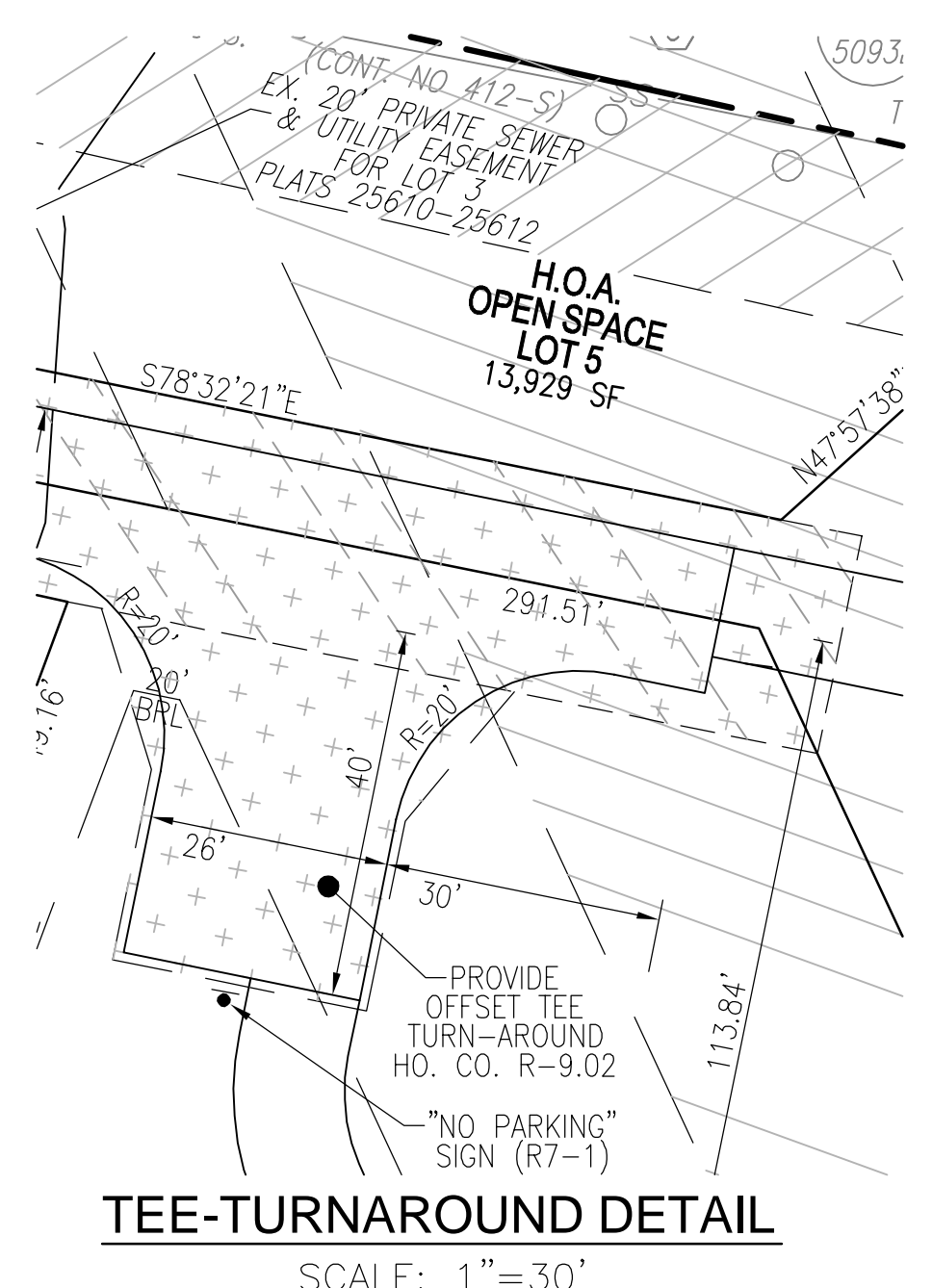
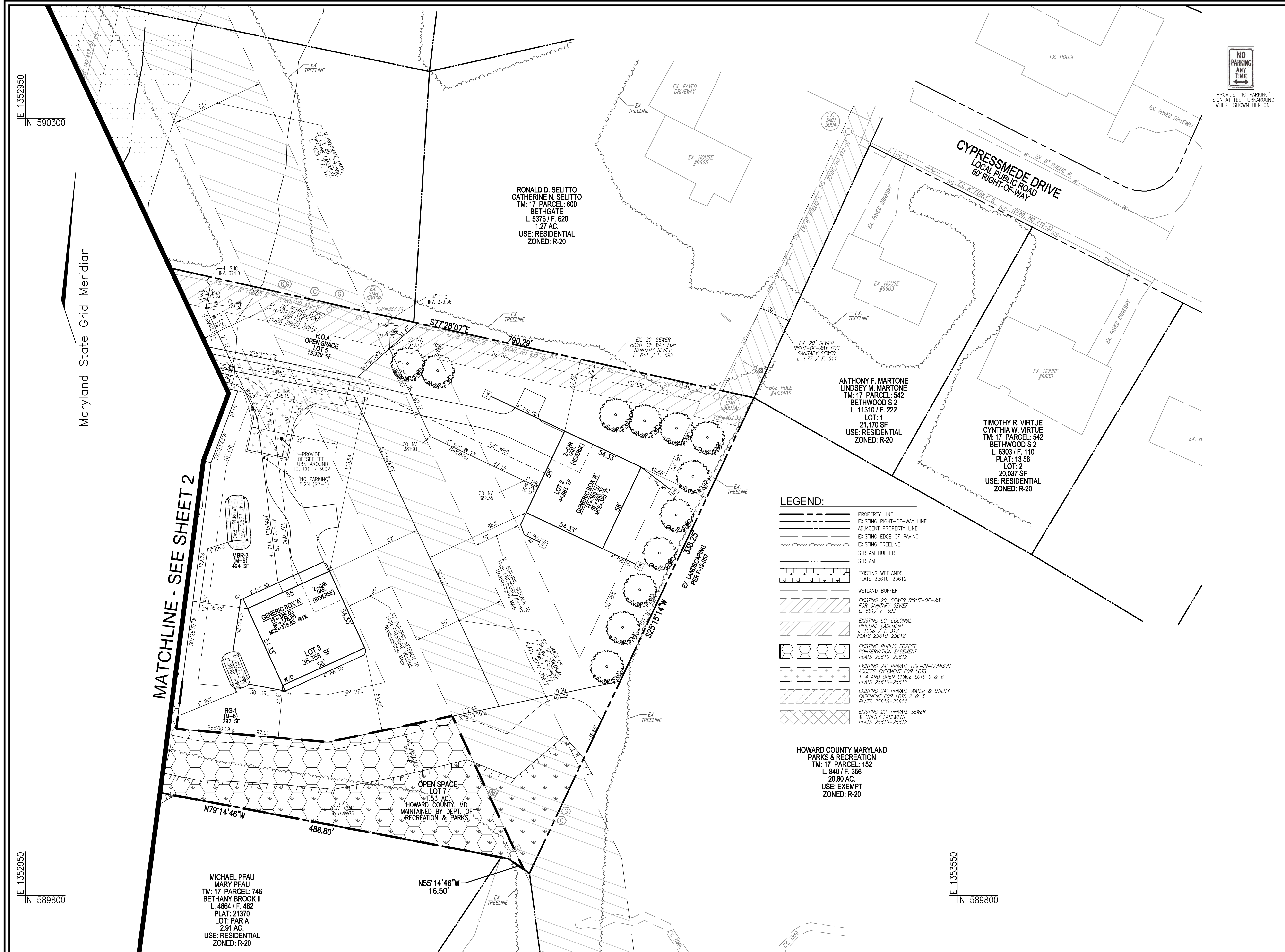
**VOGEL ENGINEERING**  
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
 P: 410.461.7666 F: 410.461.8961 www.timmons.com



DESIGN BY: RHW/EJS  
 DRAWN BY: JMR  
 CHECKED BY: RHW  
 DATE: NOVEMBER 2023  
 SCALE: AS SHOWN  
 W.O. NO.: 41899

PROFESSIONAL CERTIFICATE  
 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. 16193  
 EXPIRATION DATE: 09-27-2024





**OWNER/DEVELOPER**  
PATAPSCO BUILDERS, LLC  
612 THIRD STREET, SUITE 4C  
ANNAPOLIS, MD 21403  
(240) 375-1052

- LEGEND:**
- PROPERTY LINE
  - EXISTING RIGHT-OF-WAY LINE
  - ADJACENT PROPERTY LINE
  - EXISTING EDGE OF PAVING
  - EXISTING TREELINE
  - STREAM BUFFER
  - STREAM
  - EXISTING WETLANDS  
PLATS 25610-25612
  - WETLAND BUFFER
  - EXISTING 20" SEWER RIGHT-OF-WAY FOR SANITARY SEWER  
L. 651 / F. 692
  - EXISTING 60" COLONIAL PIPELINE EASEMENT  
L. 1008 / F. 1317  
PLATS 25610-25612
  - EXISTING PUBLIC FOREST CONSERVATION EASEMENT  
PLATS 25610-25612
  - EXISTING 24" PRIVATE USE-IN-COMMON ACCESS EASEMENT FOR LOTS 1-4 AND OPEN SPACE LOTS 5 & 6  
PLATS 25610-25612
  - EXISTING 24" PRIVATE WATER & UTILITY EASEMENT FOR LOTS 2 & 3  
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PLATS 25610-25612

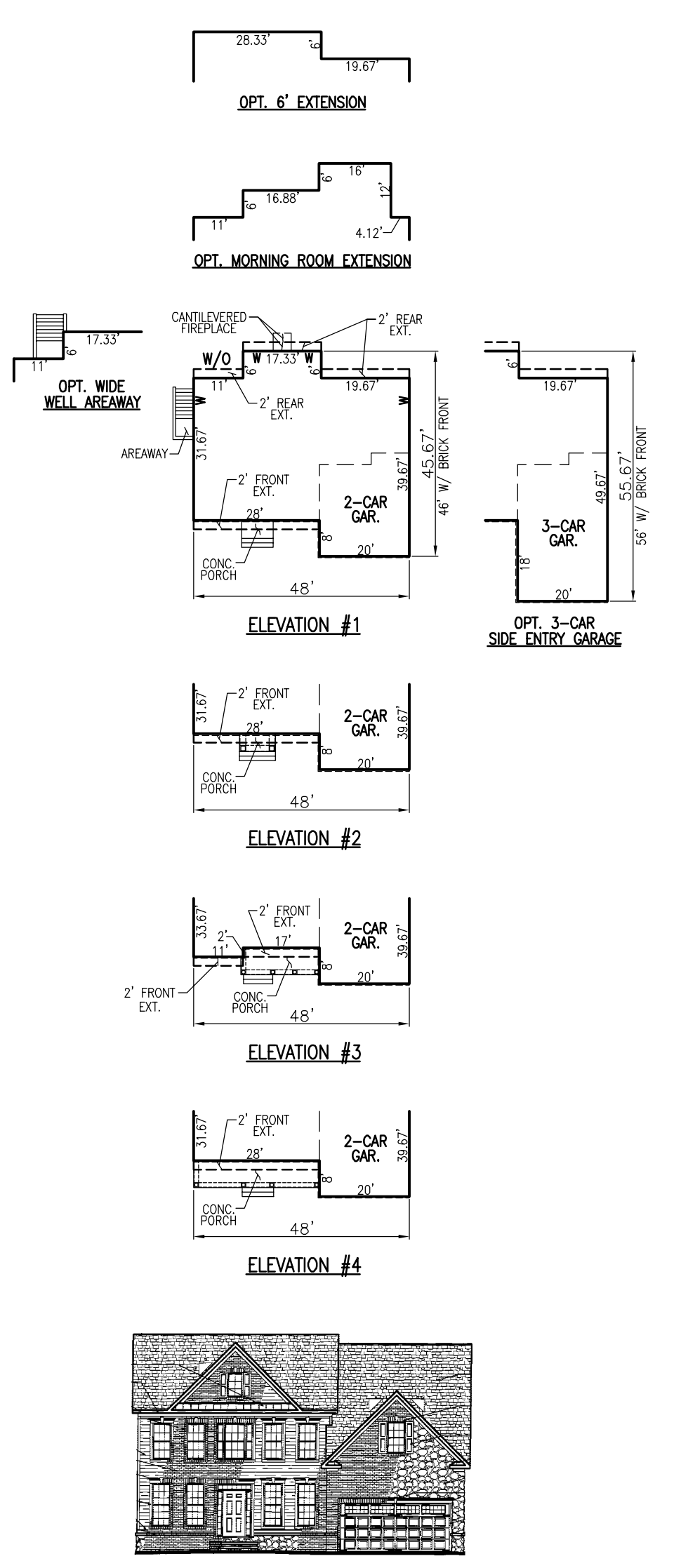
**LAYOUT PLAN**  
SCALE: 1" = 30'  
SCALE: 1" = 30'

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

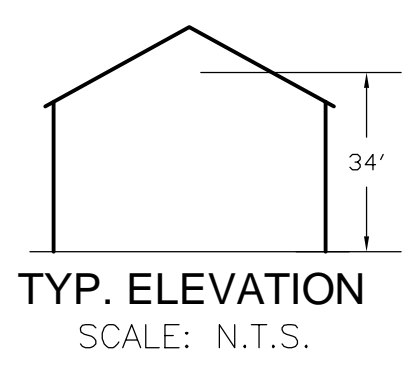
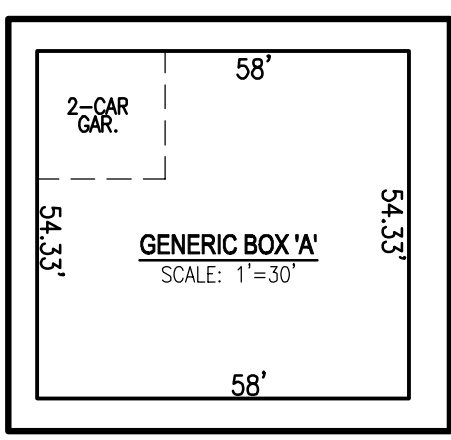
<i>Chad Edmondson</i>	12/15/2023
CHIEF, DEVELOPMENT ENGINEERING DIVISION	DATE
<i>Lynda Eisenberg</i>	12/18/2023
CHIEF, DIVISION OF LAND DEVELOPMENT	DATE
DIRECTOR	DATE

NO.	REVISION	DATE
SITE DEVELOPMENT PLAN SITE LAYOUT PLAN <b>SCHNEIDER SUBDIVISION</b> LOTS 1-4		
PARCEL: 136 TAX MAP: 17 GRID: 20 2ND ELECTION DISTRICT	ZONED: R-20 L. 18861 / F. 73 HOWARD COUNTY, MARYLAND	
<b>VOGEL ENGINEERING</b> TIMMONS GROUP		
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043 P: 410.461.7666 F: 410.461.8961 www.timmons.com		
	DESIGN BY: RHW/EDS.	I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DAILY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193, EXPIRATION DATE: 09-27-2024
	DRAWN BY: JMR.	
	CHECKED BY: RHW.	
	DATE: NOVEMBER 2023.	
SCALE: AS SHOWN.		
W.O. NO.: 41899.		
3 SHEET OF 13		





SENECA I  
SCALE: 1"=30'



TYP. ELEVATION  
SCALE: N.T.S.

- SCALE: 1"=30'
- SENECA I (48.00' X 46.00' BASE)  
- FITS ALL ELEVATIONS  
- DOES NOT FIT 3-CAR GARAGE OPTION  
- FITS ALL OTHER OPTIONS
- SENECA II (48.00' X 48.00')  
- FITS ALL ELEVATIONS  
- DOES NOT FIT 3-CAR GARAGE OPTION  
- DOES NOT FIT MORNING ROOM EXTENSION WITH 2 FOOT REAR EXTENSION  
- FITS ALL OTHER OPTIONS
- SEVERN (46.00' X 36.00' BASE)  
- FITS ALL ELEVATIONS  
- FITS ALL OPTIONS
- POTOMAC (58.00' X 48.33' BASE)  
- FITS ALL ELEVATIONS  
- DOES NOT FIT 3-CAR GARAGE OPTION  
- FITS ALL OTHER OPTIONS

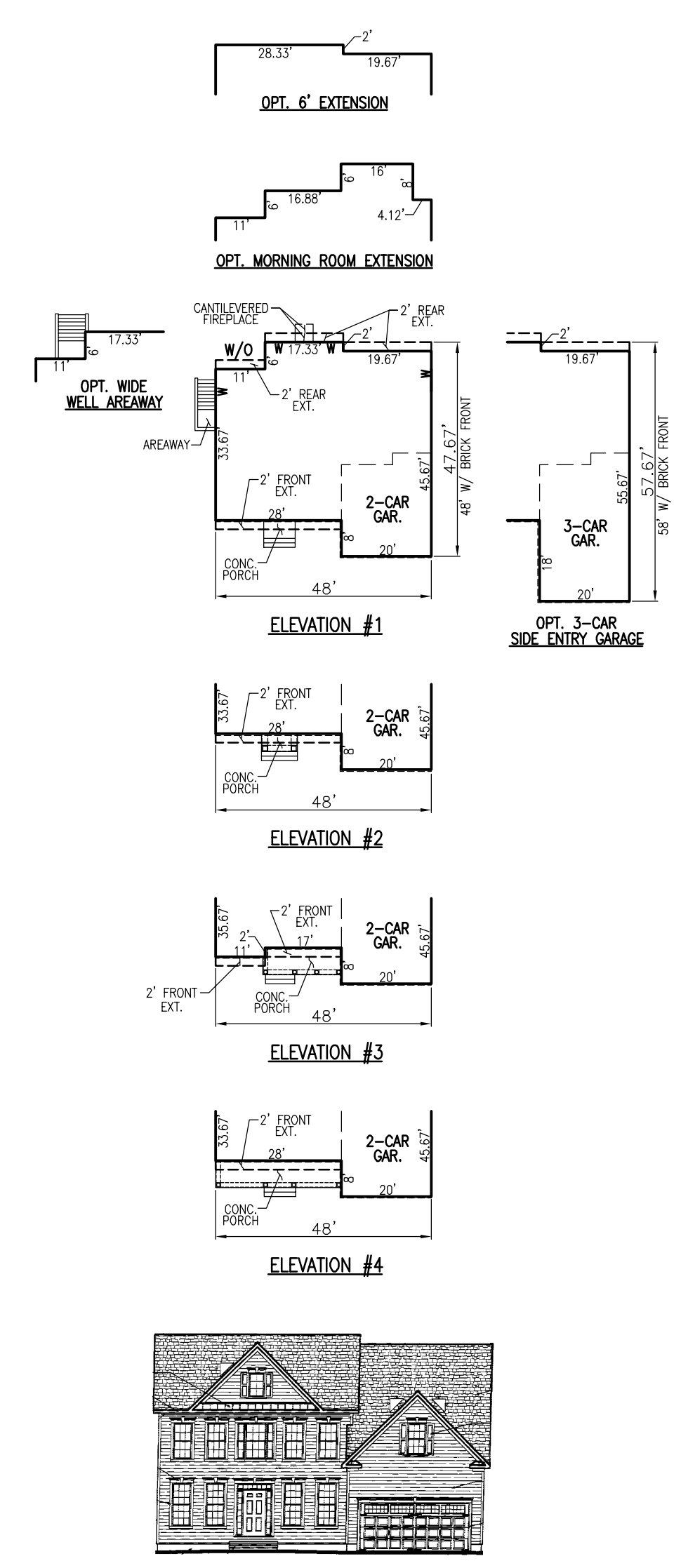
**NOTES:**

- ADDITIONAL HOUSE TYPES AND OPTIONS MAY FIT ON ANY GIVEN LOT.
- THE STAKING OF FOUNDATIONS PRIOR TO CONSTRUCTION TO ENSURE COMPLIANCE WITH REGULATORY BUILDING RESTRICTION LINES IS RECOMMENDED.
- A MINIMUM OF 10 FEET SHALL BE PROVIDED BETWEEN THE CHOSEN HOME MODEL AND AN ON-LOT DRYWELL.
- MODEL ELEVATION SHALL NOT EXCEED 34' MAX HEIGHT AS ALLOWED BY R-20 ZONE.
- IN ACCORDANCE WITH SECTION 128.0.A OF THE HOWARD COUNTY ZONING REGULATIONS:
  - MAX ENCROACHMENT INTO SETBACK FOR CORNICES, EAVES AND CANTILEVERED BUILDING FEATURES WHICH DO NOT CONTAIN ANY FLOOR AREA OR EXTENSION OF INTERIOR LIVING SPACE IS: 3 FEET INTO ANY SETBACK.
  - MAX ENCROACHMENT INTO SETBACK FOR BAY WINDOWS, WINDOW WELLS, ORIELS, VESTIBULES, BALCONIES AND CHIMNEYS IS: 4 FEET INTO ANY SETBACK OR A REQUIRED DISTANCE BETWEEN BUILDINGS; PROVIDED THE FEATURE HAS A MAXIMUM WIDTH OF 16 FEET AS MEASURED HORIZONTALLY ALONG THE WALL FROM WHICH THE FEATURE EXTENDS.
  - MAX ENCROACHMENT INTO SETBACK FOR EXTERIOR STAIRWAYS OR RAMPS, ABOVE OR BELOW GROUND LEVEL EXCLUDING THOSE ATTACHED TO A PORCH OR DECK (SEE E) IS: 10 FEET INTO A FRONT SETBACK OR A SETBACK FROM A PROJECT BOUNDARY OR DIFFERENT ZONING DISTRICT; 16 FEET INTO A REAR SETBACK; 4 FEET INTO A SIDE SETBACK OR A REQUIRED DISTANCE BETWEEN BUILDINGS.
  - MAX ENCROACHMENT INTO SETBACK FOR OPEN OR ENCLOSED PORCHES AND DECKS, AND THE STAIRWAYS OR RAMPS ATTACHED THERETO IS: 10 FEET INTO A FRONT OR REAR SETBACK, A SETBACK FROM A PROJECT BOUNDARY, A SETBACK FROM A DIFFERENT ZONING DISTRICT, OR A REQUIRED DISTANCE BETWEEN BUILDINGS.

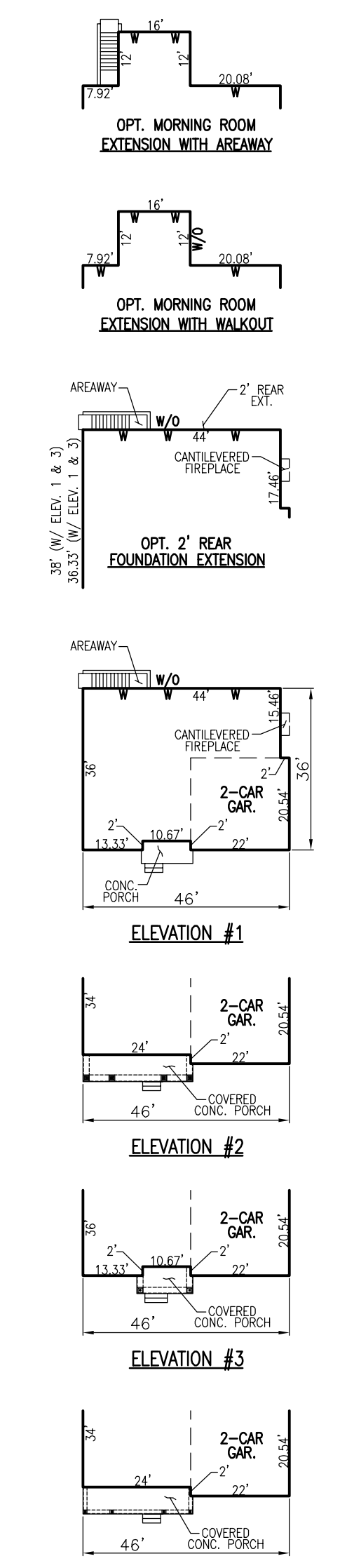
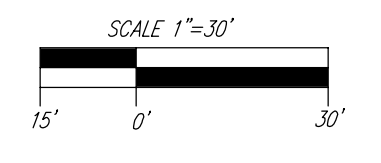
GENERIC HOUSE BOX OPTIONS:  
THE GENERIC HOUSE BOX DOES NOT NEED TO SHOW AVAILABLE OPTIONS (CHIMNEYS, BAY WINDOWS, EAVES, DECKS, PORCHES, ETC.) THAT ARE PERMITTED TO ENCRACH INTO THE SIDE OR REAR YEAR BRL'S PROVIDED THE SETBACK ENCROACHMENTS COMPLY WITH THE REQUIREMENTS OF SECTION 128.0 OF THE ZONING REGULATIONS.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DIRECTOR

12/15/2023  
 DATE  
 12/15/2023  
 DATE  
 12/18/2023  
 DATE

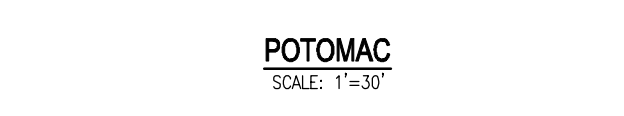
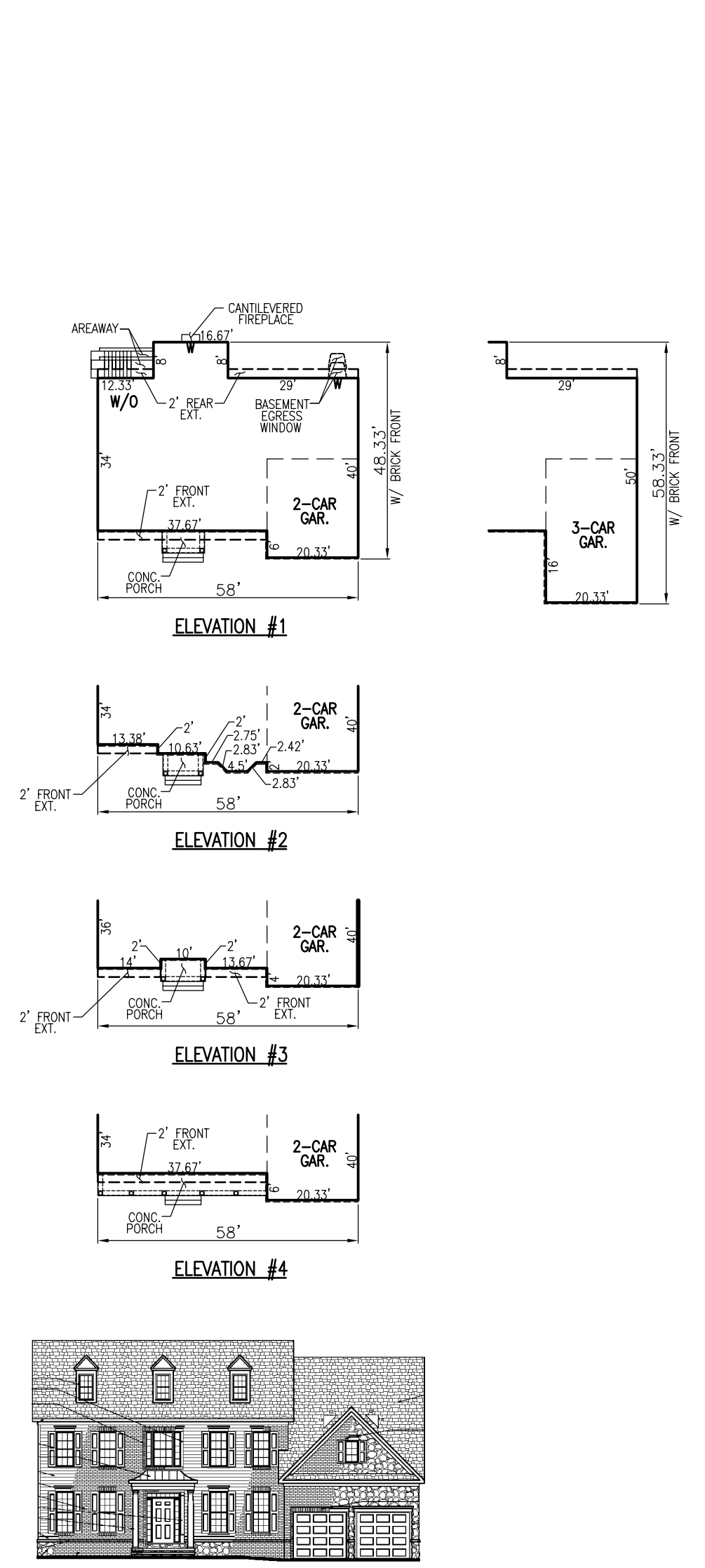
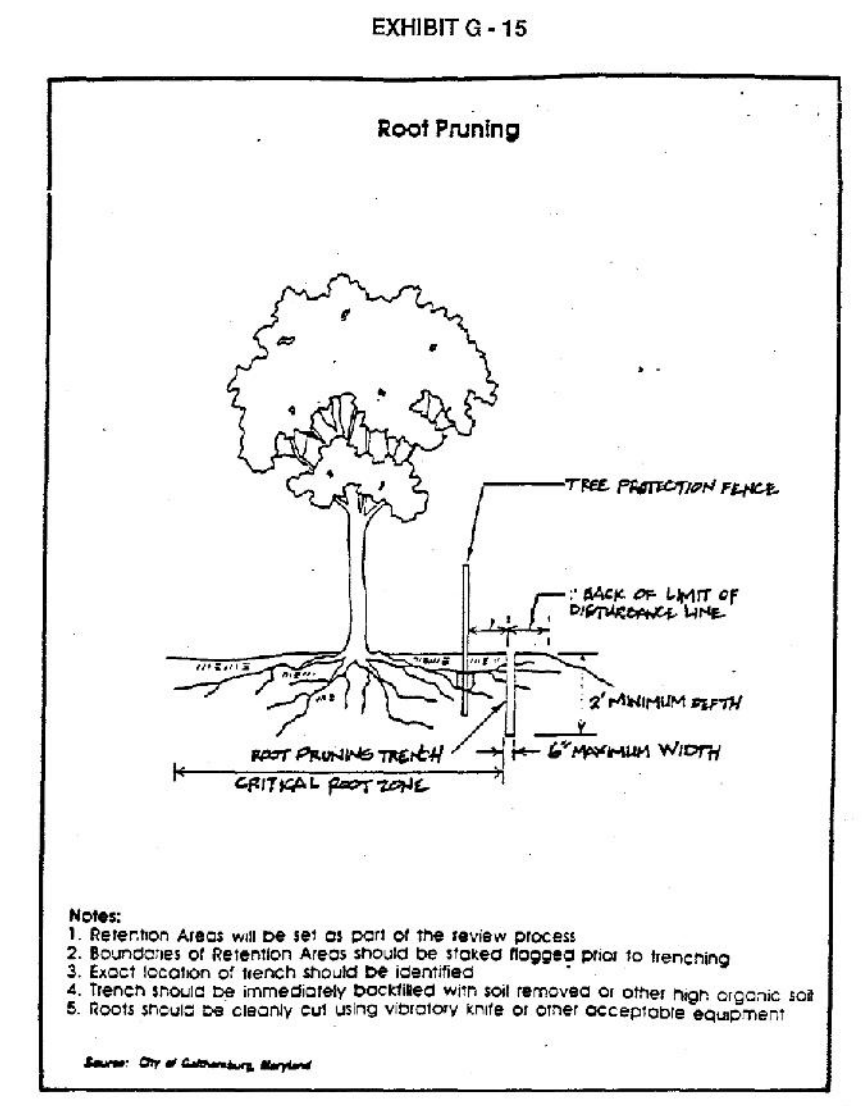


SENECA II  
SCALE: 1"=30'

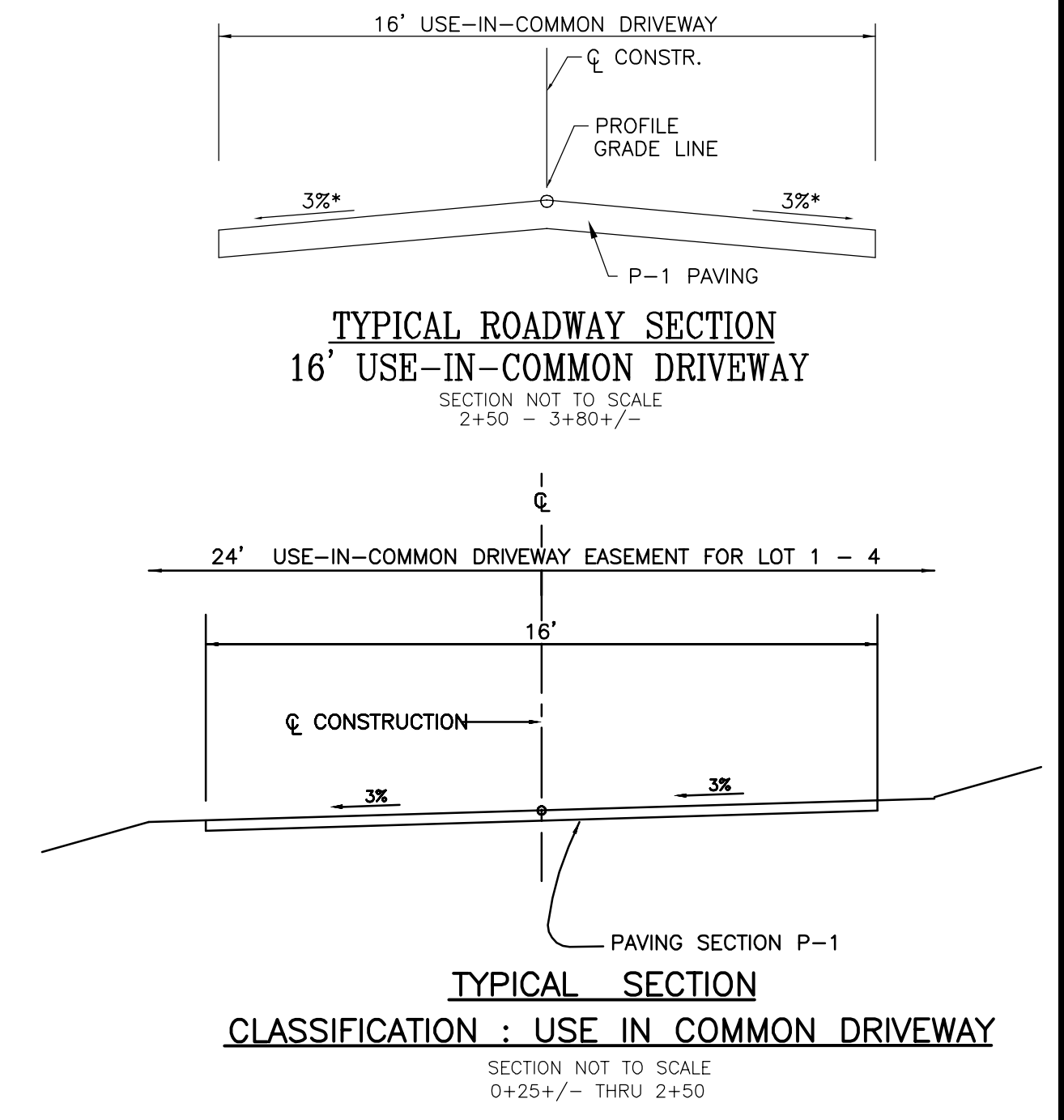


SEVERN  
SCALE: 1"=30'

**TREE PROTECTION DETAIL:**



POTOMAC  
SCALE: 1"=30'

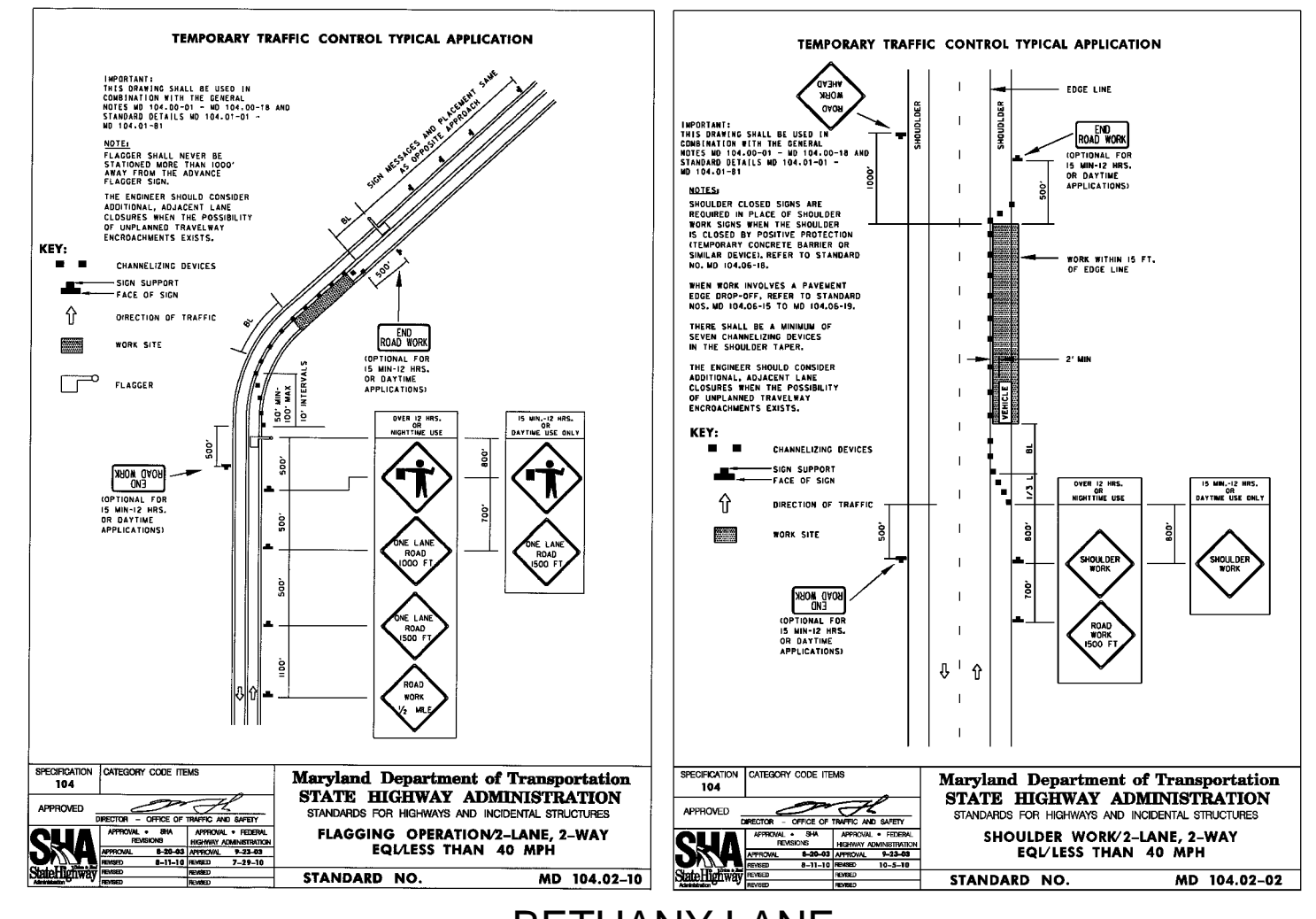


SECTION NUMBER	ROAD AND STREET CLASSIFICATION / TYPE	CALIFORNIA BEARING RATIO (CBR)	PAVEMENT MATERIAL (INCHES)	MIN. SUPERPAVE ASPHALT MIX WITH CONSTANT GAB	3 TO <5	5 TO <7	7	3 TO <5	5 TO <7	7
P-1	NEW STREET TYPE	RETROFIT PROJECTS ONLY	PARKING DRIVE	SUPERPAVE ASPHALT MIX FINAL SURFACE	1.5	1.5	1.5	1.5	1.5	1.5
			RESIDENTIAL AND NON-RESIDENTIAL	SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE	NA	NA	NA	NA	NA	NA
			PARKING DRIVE ACCESS	SUPERPAVE ASPHALT MIX BASE	2.0	2.0	2.0	2.0	2.0	2.0
P-2	ALLEY	NEIGHBORHOOD YIELD STREET SINGLE FAMILY DETACHED	PARKING DRIVE ACCESS	SUPERPAVE ASPHALT MIX FINAL SURFACE	1.5	1.5	1.5	1.5	1.5	
			RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE	1.0	1.0	1.0	1.0	1.0	
			LOCAL ROADS	SUPERPAVE ASPHALT MIX BASE	2.0	2.0	2.0	2.0	2.0	
P-3	RURAL DEVELOPMENT STREET	NEIGHBORHOOD YIELD STREET SINGLE FAMILY DETACHED	PARKING DRIVE ACCESS	SUPERPAVE ASPHALT MIX FINAL SURFACE	1.5	1.5	1.5	1.5	1.5	
			RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE	1.0	1.0	1.0	1.0	1.0	
			LOCAL ROADS	SUPERPAVE ASPHALT MIX BASE	3.0	3.0	3.0	3.0	3.0	
P-4	NEIGHBORHOOD STREET 1	MINOR COLLECTORS	PARKING DRIVE ACCESS	SUPERPAVE ASPHALT MIX FINAL SURFACE	2.0	2.0	2.0	2.0	2.0	
			RESIDENTIAL AND NON-RESIDENTIAL WITH NO MORE THAN 10 HEAVY TRUCKS PER DAY	SUPERPAVE ASPHALT MIX INTERMEDIATE SURFACE	2.0	2.0	2.0	2.0	2.0	
			LOCAL ROADS	SUPERPAVE ASPHALT MIX BASE	4.0	4.0	4.0	4.0	4.0	

NOTES:  
 1. HEAVY TRUCKS ARE DEFINED AS THOSE WITH SIX (6) WHEELS OR MORE INCLUDING GARBAGE TRUCKS.  
 2. SUPERPAVE ASPHALT MIX LAYERS SHALL BE PLACED IN APPROPRIATE COMPACTED LIFT THICKNESS: 18.0 MM BASE (0.67 MIN TO 4.07 MAX), 12.5 MM SURFACE (1.57 MIN TO 3.07 MAX), AND 9.5 MM SURFACE (0.37 MIN TO 2.07 MAX).  
 3. GRADED AGGREGATE BASE (GAB) TO BE PLACED AND COMPACTED IN 6" MAX. COMPACTED THICKNESS LAYERS.  
 4. THE INTERMEDIATE SURFACE COURSE MUST BE PLACED WITH 3 NEEDS OF PLACEMENT OF BASE COURSE, AND IS REQUIRED PRIOR TO SUBSTANTIAL COMPLETION INSPECTION AND BOND REDUCTION.  
 5. IN LIEU OF PLACING THE INTERMEDIATE SURFACE COURSE WITHIN FOR COMMERCIAL/INDUSTRIAL ENTRANCE APPROX WITHIN THE COUNTY RIGHT-OF-WAY WHERE AUXILIARY LANES ARE NOT REQUIRED, THE THICKNESS OF THE INTERMEDIATE PAVEMENT LAYER CAN BE ADDED TO THE REQUIRED THICKNESS OF THE BASE ASPHALT LAYER.  
 6. THE CONSTRUCTION DRAWINGS SHALL SHOW THE PAVING SECTION, ROAD CLASSIFICATION AND CBR VALUE FOR EACH ROADWAY.

3/1/2023  
 4/30/2017  
 Howard County, Maryland  
 Department of Public Works  
 PAVING SECTIONS  
 P-1 to P-4  
 Detail  
 R-2.01

OWNER/DEVELOPER  
 PATAPSCO BUILDERS, LLC  
 612 THIRD STREET, SUITE 4C  
 ANNAPOLIS, MD 21403  
 (240) 375-1052



BETHANY LANE  
 TYPICAL WORK ZONE  
 TRAFFIC CONTROL DETAILS

ALL WORK WITHIN THE BETHANY LANE PUBLIC RIGHT-OF-WAY SHALL BE IN ACCORDANCE WITH THE STANDARD MARYLAND STATE HIGHWAY ADMINISTRATION DETAILS: MD 104.02-02 & MD 104.02-10 OR AS DIRECTED BY THE HOWARD COUNTY - TRAFFIC ENGINEERING DIVISION.

SITE DEVELOPMENT PLAN  
 SITE DETAILS AND HOUSE TYPES  
**SCHNEIDER SUBDIVISION**  
 LOTS 1-4

PARCEL: 136  
 TAX MAP: 17 GRID: 20  
 2ND ELECTION DISTRICT

ZONED: R-20  
 L 18861 / F. 73  
 HOWARD COUNTY, MARYLAND

**VOGEL ENGINEERING**  
 TIMMONS GROUP

3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE  
 DESIGN BY: RHW/EDS  
 DRAWN BY: JMR  
 CHECKED BY: RHW  
 DATE: NOVEMBER 2023  
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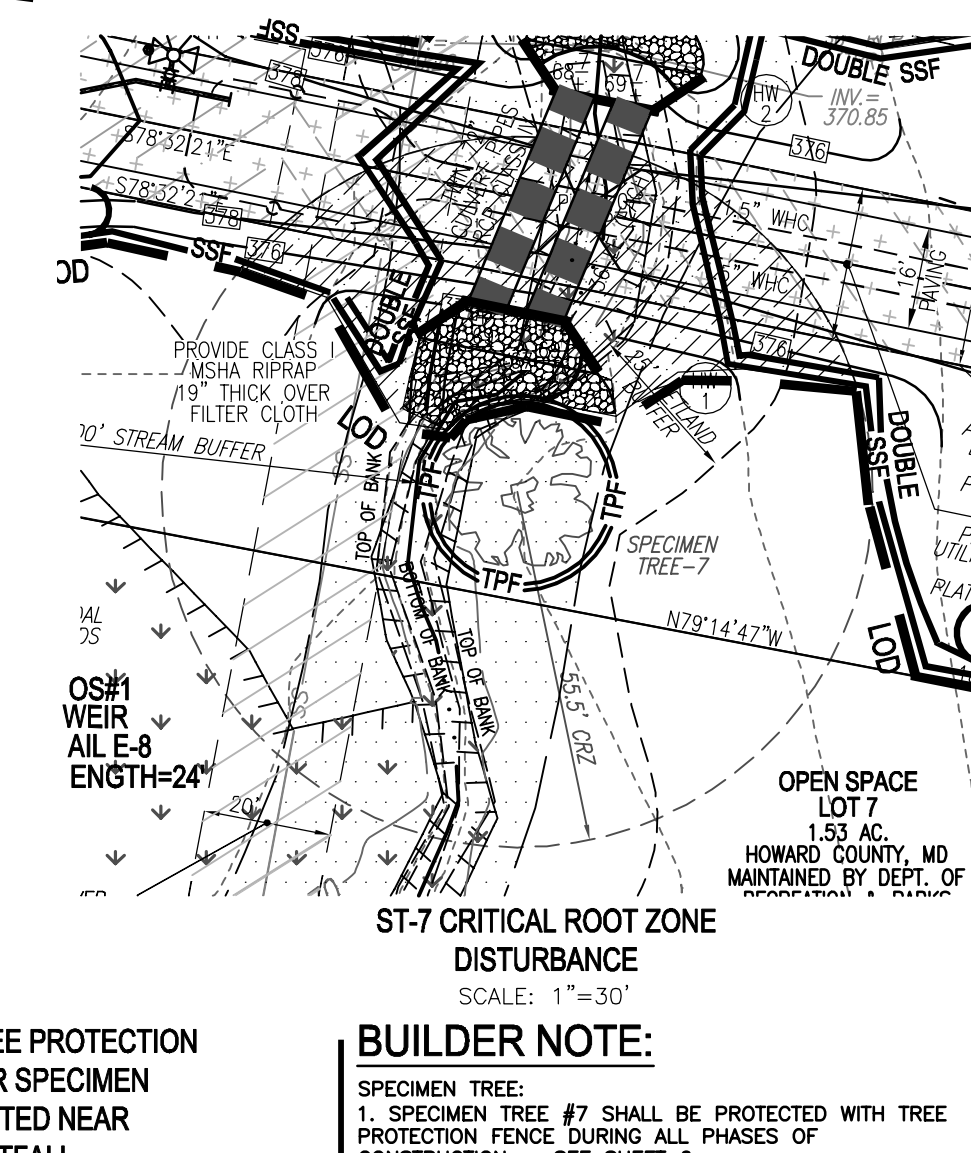
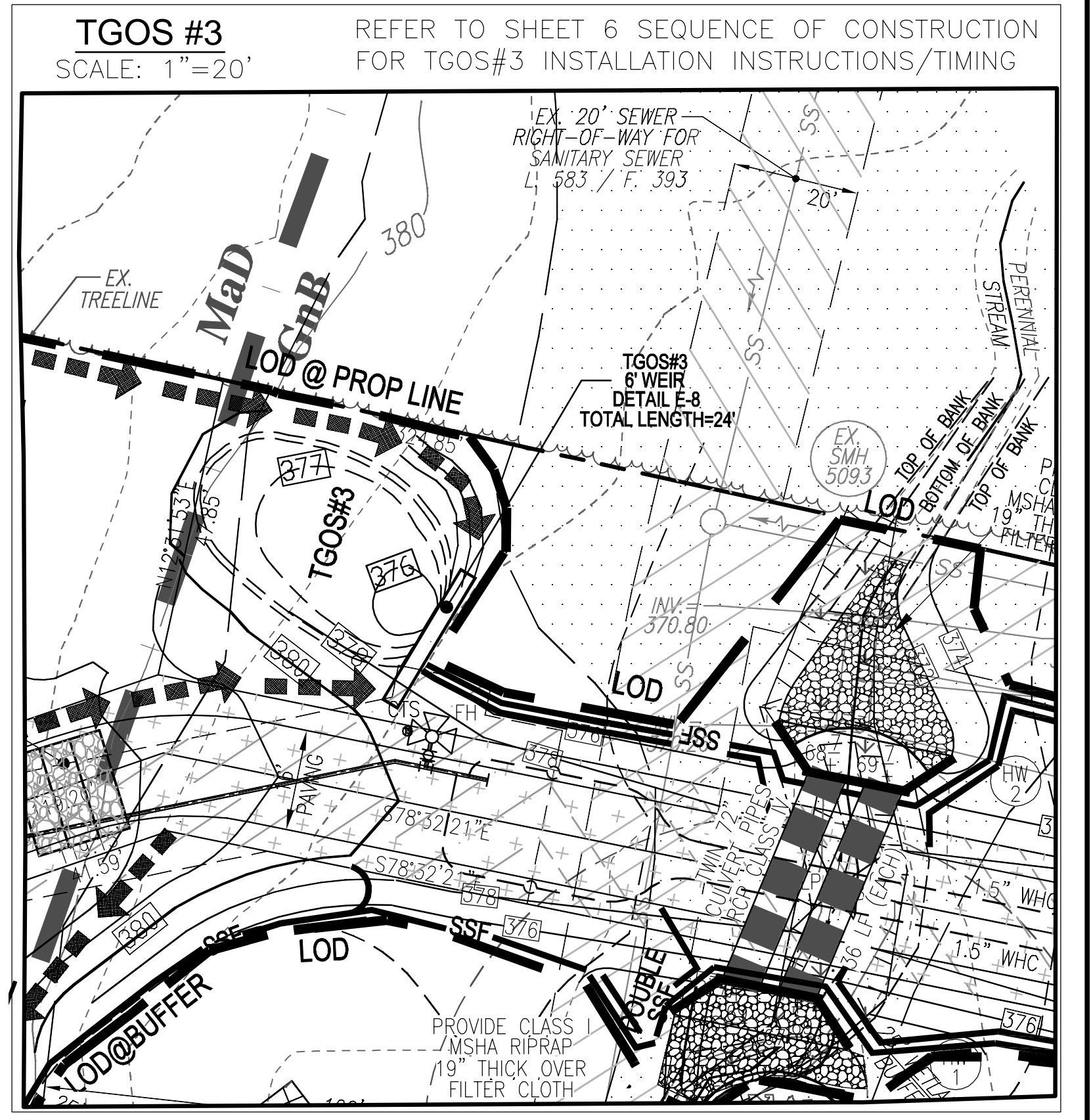
4 SHEET OF 13





**LEGEND:**

[Symbol]	PROPERTY LINE	[Symbol]	EXISTING 2' CONTOUR
[Symbol]	EXISTING RIGHT-OF-WAY LINE	[Symbol]	EXISTING 10' CONTOUR
[Symbol]	ADJACENT PROPERTY LINE	[Symbol]	EXISTING STEEP SLOPES (25% SLOPES OR GREATER)
[Symbol]	EXISTING EDGE OF PAVING	[Symbol]	EXISTING MODERATE SLOPES (15% TO 24.99% SLOPES)
[Symbol]	EXISTING TREELINE	[Symbol]	PROPOSED 10' CONTOUR
[Symbol]	STREAM BUFFER	[Symbol]	PROPOSED 2' CONTOUR
[Symbol]	STREAM	[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	EXISTING WETLANDS PLATS 25610-25612	[Symbol]	STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	WETLAND BUFFER	[Symbol]	SUPER SILT FENCE
[Symbol]	EXISTING FOREST CONSERVATION EASEMENT PLAT 19810-19812	[Symbol]	SILT FENCE
[Symbol]	EXISTING 20' SEWER RIGHT-OF-WAY FOR SANITARY SEWER L. 8517 / F. 692	[Symbol]	EARTH DIKE
[Symbol]	EXISTING PUBLIC FOREST CONSERVATION EASEMENT PLATS 25610-25612	[Symbol]	TOOS
[Symbol]	EXISTING 20' PUBLIC DRAINAGE & UTILITY EASEMENT PLATS 25610-25612	[Symbol]	
[Symbol]	EXISTING VARIABLE WIDTH PUBLIC WATER & UTILITY EASEMENT PLATS 25610-25612	[Symbol]	
[Symbol]	EXISTING 20' PUBLIC DRAINAGE & UTILITY EASEMENT PLAT 26460	[Symbol]	



**OWNER/DEVELOPER**  
PATAPSCO BUILDERS, LLC  
612 THIRD STREET, SUITE 4C  
ANNAPOLIS, MD 21403  
(240) 375-1052

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 12/15/2023

CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 12/18/2023

DIRECTOR

**OWNER/DEVELOPER CERTIFICATION:**  
I HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.

OWNER/DEVELOPER SIGNATURE  
Timothy C. Burkard  
DATE: 11/8/2023

**DESIGNER CERTIFICATION:**  
I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

DESIGNER'S SIGNATURE  
Robert H. Vogel  
DATE: 11/13/2023

**GRADING PLAN**  
SCALE: 1"=30'

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

DATE: 12/18/2023

**MAPPED SOILS TYPES - HOWARD COUNTY, MARYLAND (MD027)**

SYMBOL NAME / DESCRIPTION	GROUP	HYDRIC	Kw RANCE	PERCENT FROM 0.075 TO 0.425	PERCENT FROM 0.425 TO 2.0	<15% SLOPE EROSION POTENTIAL
SMB (SLENMILLE-WALKER Silt Loams, 0 to 8 Percent Slopes)	S	NO	0.37-0.82	NO	NO	NO
Md (Mancos loam, 8 to 15 Percent Slopes)	B	NO	0.24	YES*	NO	NO
Md (Mancos loam, 15 to 25 Percent Slopes)	B	NO	0.24	NO	YES*	NO

NOTE: HIGHLY ERODIBLE SOILS ARE 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 PERCENT.

**VOGEL ENGINEERING**  
**TIMMONS GROUP**

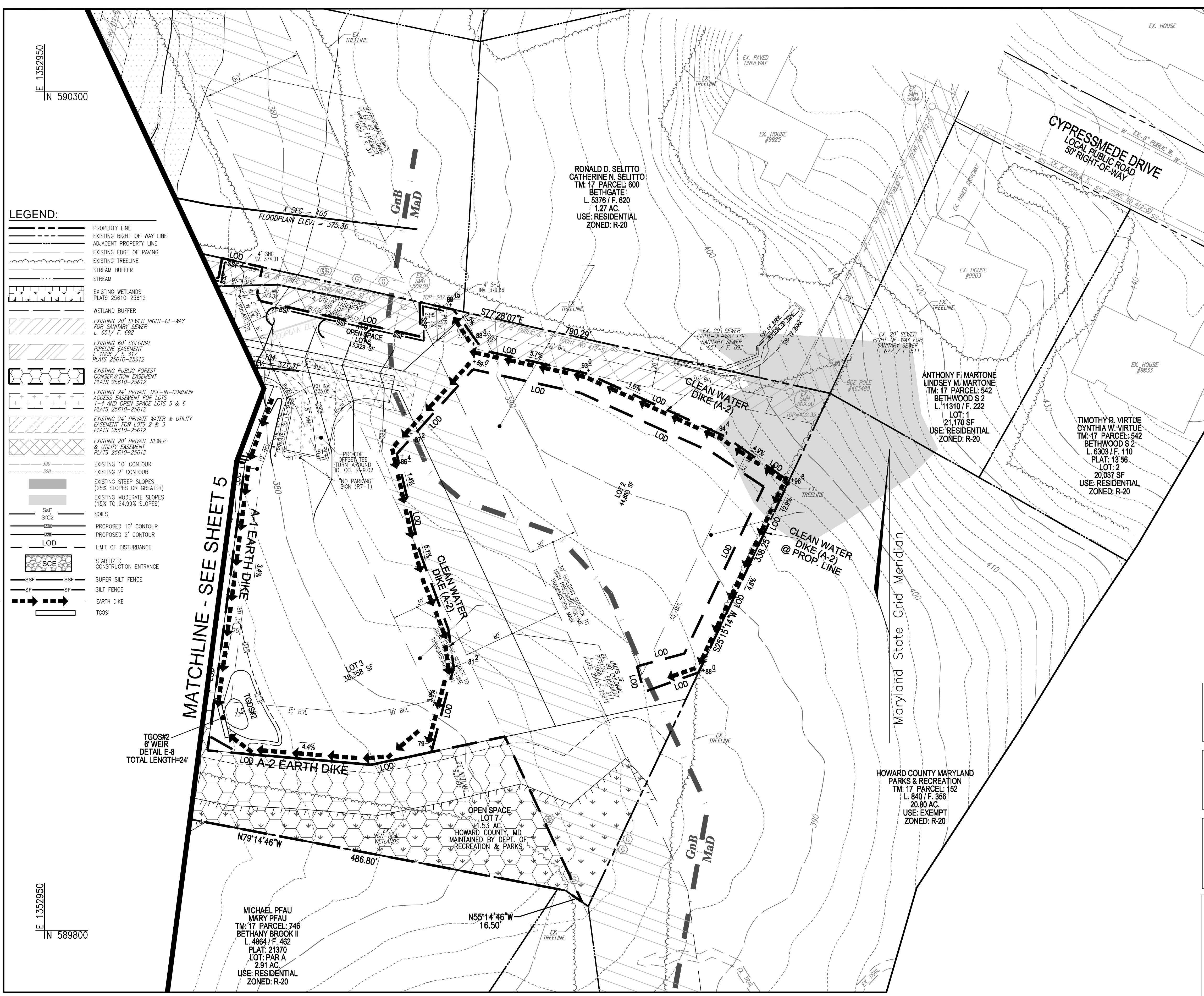
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHW/EDS  
DRAWN BY: JMR  
CHECKED BY: RHW  
DATE: NOVEMBER 2023  
SCALE: AS SHOWN  
W.O. NO.: 41899

5 SHEET OF 13





LEGEND: PROPERTY LINE, EXISTING RIGHT-OF-WAY LINE, ADJACENT PROPERTY LINE, EXISTING EDGE OF PAVING, EXISTING TREETRACE, STREAM BUFFER, STREAM, EXISTING WETLANDS PLATS, WETLAND BUFFER, EXISTING 20" SEWER RIGHT-OF-WAY FOR SANITARY SEWER, EXISTING 60" COLONIAL PIPELINE EASEMENT, EXISTING PUBLIC FOREST CONSERVATION EASEMENT, EXISTING 24" PRIVATE USE-IN-COMMON ACCESS EASEMENT, EXISTING 24" PRIVATE WATER & UTILITY EASEMENT, EXISTING 20" PRIVATE SEWER & UTILITY EASEMENT, EXISTING 10' CONTOUR, EXISTING 2' CONTOUR, EXISTING STEEP SLOPES, EXISTING MODERATE SLOPES, SOILS, PROPOSED 10' CONTOUR, PROPOSED 2' CONTOUR, LIMIT OF DISTURBANCE, STABILIZED CONSTRUCTION ENTRANCE, SUPER SILT FENCE, SILT FENCE, EARTH DIKE, TIGOS.

SEQUENCE OF CONSTRUCTION

- 1. OBTAIN GRADING PERMIT. (1 WEEK)
2. REQUEST A PRE-CONSTRUCTION MEETING WITH THE HOWARD COUNTY DPW, CONSTRUCTION INSPECTION DIVISION (410) 313-5712 PRIOR TO BEGINNING CONSTRUCTION. (1 DAY)
3. NOTIFY HOWARD COUNTY BUREAU OF INSPECTIONS AND PERMITS (410-313-1880) AT LEAST 24 HOURS BEFORE STARTING ANY WORK. (1 DAY)
PHASE 1
4. STAKE OUT LIMITS OF DISTURBANCE. (2 DAYS)
5. INSTALL STABILIZED CONSTRUCTION ENTRANCE AT THE INTERSECTION OF THE BETHANY LANE AND THE PROPOSED USE-IN-COMMON DRIVEWAY. (1 DAY)
6. PERFORM CLEARING AND GRUBBING AS NECESSARY FOR THE INSTALLATION OF PHASE 1 PERMETER CONTROLS REQUIRED FOR THE INSTALLATION OF THE 6" PUBLIC WATER EXTENSION, THE STORM DRAIN SYSTEM FROM ES-1 TO 1-1 AND THE STREAM CROSSING CONSTRUCTION ONLY. EARTH DIKES FEEDING TIGOS 1 & 3 ALONG THE NORTHERN BOUNDARY AND AT THE REAR OF LOT 4 SHOULD NOT BE INSTALLED AT THIS TIME. (2 DAYS)
7. WITH PERMISSION FROM SEDIMENT CONTROL INSPECTOR, COMPLETE THE INSTALLATION OF THE 6" PUBLIC WATER EXTENSION FROM BETHANY LANE TO INCLUDE LOT 1 WHICH THE STORM DRAIN SYSTEM FROM ES-1 TO 1-1, AND WITH CULVERT MATERIALS ON-SITE, INSTALL PUMP-AROUND PRACTICES FOR THE STREAM (SHEET 10), INSTALL CULVERT PIPES AND CONSTRUCT STREAM CROSSING FOR THE USE-IN-COMMON DRIVEWAY EXTENSION. (2 WEEKS)
8. UPON COMPLETION OF THE ABOVE TASKS, STABILIZE DISTURBANCES FROM ITEM 7 WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH OR EQUAL STABILIZATION. SHIFT PLACEMENT OF SILT FENCING OVER CULVERT PIPES IN ACCORDANCE WITH D-5.5.3. (1 DAY)
9. WITH STREAM CROSSING IN PLACE AND ITEM 8 STABILIZATION COMPLETE, INSTALL TIGOS#1 AND #3, EARTH DIKE, AMENDED SILT FENCING, STABILIZE DISTURBANCES WITH TEMPORARY SEEDING MIXTURE AND STRAW MULCH OR EQUAL STABILIZATION. SEE INSET SHEET 5 (4 DAYS)
10. WITH ACCESS AVAILABLE TO LOTS 2 & 3, INSTALL PERMETER SILT FENCING, CLEANWATER DIVERSION DIKES, TIGOS #2 AND EARTH DIKES AS SHOWN HEREON. INSTALL THE WATER HOUSE CONNECTIONS AND SEWER HOUSE CONNECTIONS FOR LOTS 2 & 3. STABILIZE DISTURBANCES WITH TEMPORARY SEEDING MIXTURE AND STRAW MULCH (1 WEEK)
11. WITH PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, PLACE USE-IN-COMMON DRIVEWAY TO STONE SUBBASE. HOME CONSTRUCTION MAY BEGIN ON LOT 1. REFER TO PHASE 2 FOR ON-LOT CONTROLS (3 DAYS)
12. THE FIRST FLOOR ELEVATIONS CANNOT BE MORE THAN 1' HIGHER OR 0.2' LOWER THAN THE ELEVATIONS SHOWN ON THIS PLAN. (6 MONTHS)
13. STOCKPILING SHALL BE LIMITED TO ONLOT OR AS SHOWN HEREON. STOCKPILES SHALL BE STABILIZED AS DETAILED HEREON. (1 DAY)
14. WITH PERMISSION FROM SEDIMENT CONTROL INSPECTOR, COMPLETE THE GRADING REQUIRED FOR THE CONSTRUCTION OF THE TEE-TURNAROUND, COMPLETE PLACEMENT OF THE USE-IN-COMMON DRIVEWAY STONE BASE AND INSTALL BASE PAVEMENT. (2 WEEKS)
PHASE 2
15. INSTALL SCE FOR LOT 2 & 3 AND BEGIN ROUGH GRADING REQUIRED FOR LOT 2 & 3 HOUSE CONSTRUCTION. (2 WEEKS)
16. CONSTRUCT HOUSES. SEE ITEM 11 - 13 ABOVE. (6 MONTHS/PER LOT)
17. FINE GRADE LOT, ADD TOPSOIL PER THE SPECIFICATIONS SHOWN HEREON AND STABILIZE DISTURBED AREAS PER SEDIMENT CONTROL PLAN. (1 WEEK/PER LOT)
18. AFTER OBTAINING PERMISSION FROM THE SEDIMENT CONTROL INSPECTOR, REMOVE / BACKFILL TIGOS FACILITIES TO EXISTING GRADES AND INSTALL STORMWATER MANAGEMENT FEATURES TO INCLUDE DROWELLS AND MICRO-BIORETENTION FACILITIES. PROTECT STORMWATER FEATURES FROM RECEIVING SEDIMENT LAIDEN RUNOFF. STABILIZE THESE DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. (1 WEEK)
19. INSTALL LEVEL SPREADERS. (1 DAY)
20. WITH ALL DISTURBANCES COMPLETED, STABILIZE WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH OR EQUAL STABILIZATION. (1 DAY/PER LOT)
21. UPON STABILIZATION OF ALL DISTURBED AREAS AND WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROLS AND STABILIZE THESE DISTURBED AREAS WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. (1 WEEK)
ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.

SEQUENCE OF CONSTRUCTION NOTES:

- 1. THE SEDIMENT SHALL BE REMOVED FROM THE TIGOS FACILITIES PER DETAIL E-8 - DAILY
2. THE CONTRACTOR SHALL INSPECT AND PROVIDE NECESSARY MAINTENANCE ON THE SEDIMENT AND EROSION CONTROLS SHOWN HEREON AFTER EACH RAINFALL AND ON A DAILY BASIS. - DAILY
3. THE ACCUMULATED SEDIMENT SHALL BE PLACED UP GRADE FROM THE STRUCTURE IN SUCH A MANNER AS NOT TO INTERFERE WITH CONSTRUCTION OPERATIONS OR CAUSE EROSION DOWN GRADE FROM THE STRUCTURE. - DAILY
4. AS ULTIMATE GRADES BETWEEN CONTROLS AND THE LOD ARE ESTABLISHED, THESE DISTURBANCES SHALL BE IMMEDIATELY STABILIZED WITH PERMANENT SEEDING MIXTURE AND STRAW MULCH. CONSTRUCTION IN TIGOS AREAS SHALL BE DELAYED UNTIL ALL CONTRIBUTING AREAS ARE STABILIZED OR PERMISSION HAS BEEN GIVEN BY THE SEDIMENT CONTROL INSPECTOR. - DAILY

NOTE: DIVERSION FENCE SHALL BE INSTALLED AS SHOWN HEREON OR AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR

NOTE: LOCATE STOCKPILE AS SHOWN HEREON OR AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR. STOCKPILES EXCEEDING 15 FEET IN HEIGHT SHALL BE BENCHED.

NOTE: STABILIZATION IS TO BE DONE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR AT THE INTERVALS REQUIRED BY THE 2011 STDS. & SPECS. WHICHEVER IS MORE RESTRICTIVE.

NOTE: - SILT FENCE IS TO BE REPLACED WITH SUPER SILT FENCE AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR. - SILT FENCE SHALL BE CURLED UP HILL. NO MORE THAN 35 FEET APART - DOUBLE ROWS OF SUPER SILT FENCE SHALL BE INSTALLED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR.

OWNER/DEVELOPER

PATAPSCO BUILDERS, LLC
612 THIRD STREET, SUITE 4C
ANNAPOLIS, MD 21403
(240) 375-1052

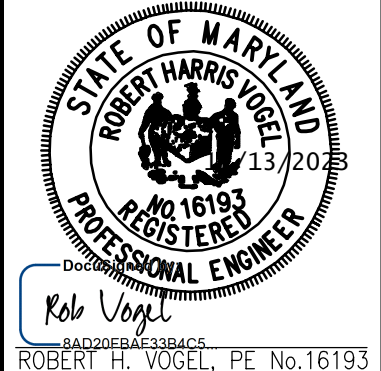
SITE DEVELOPMENT PLAN
PHASE 1 - SOILS MAP, GRADING, SOIL EROSION AND SEDIMENT CONTROL PLAN
SCHNEIDER SUBDIVISION
LOTS 1-4

PARCEL: 136 L. 136 AC. ZONED: R-20
TAX MAP: 17 GRID: 20 L. 18881 / F. 73
2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

VOGEL ENGINEERING

TIMMONS GROUP

3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043
P: 410.461.7666 F: 410.461.8961 www.timmons.com



DESIGN BY: RHW/EDS
DRAWN BY: JMR
CHECKED BY: RHW
DATE: NOVEMBER 2023
SCALE: AS SHOWN
W.O. NO.: 41899

PROFESSIONAL CERTIFICATE
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. 16193, EXPIRATION DATE: 09-27-2024

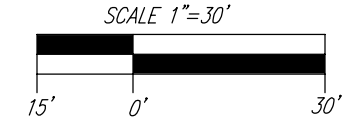
APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING
12/15/2023
CHIEF, DEVELOPMENT ENGINEERING DIVISION
12/15/2023
CHIEF, DIVISION OF LAND DEVELOPMENT
12/18/2023
DIRECTOR

OWNER/DEVELOPER CERTIFICATION:
I/WE CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN INCLUDING RESPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL OF EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.
11/8/2023
Timothy C. Burkard
OWNER/DEVELOPER SIGNATURE
Timothy C. Burkard
PRINTED NAME & TITLE

DESIGN CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.
11/13/2023
Robert H. Vogel
DESIGNER'S SIGNATURE
ROBERT H. VOGEL
PRINTED NAME
MD REGISTRATION NO. 16193
R.H.S., OR R.L.A. (circle one)
DATE
12/18/2023
Alexander Bratichie
HOWARD S.C.D.

GRADING PLAN
SCALE: 1" = 30'
THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT.
12/18/2023

MAPPED SOILS TYPES - HOWARD COUNTY, MARYLAND (MD027)
Table with columns: SYMBOL NAME / DESCRIPTION, GROUP, HYDRIC, Kw RANGE, PRAIRIE W/ EROSION POTENTIAL, <15% SLOPE. Rows include GmB (Glenville-Bable silt loams, 0 to 8 percent slopes), MSc (Manor loam, 8 to 15 percent slopes), MSp (Manor loam, 15 to 25 percent slopes).







**LEGEND:**

[Symbol]	PROPERTY LINE
[Symbol]	EXISTING RIGHT-OF-WAY LINE
[Symbol]	ADJACENT PROPERTY LINE
[Symbol]	EXISTING EDGE OF PAVING
[Symbol]	EXISTING TREELINE
[Symbol]	STREAM BUFFER
[Symbol]	STREAM
[Symbol]	EXISTING WETLANDS PLATS 25610-25612
[Symbol]	WETLAND BUFFER
[Symbol]	EXISTING FOREST CONSERVATION EASEMENT PLAT 19810-19812
[Symbol]	EXISTING 20' SEWER RIGHT-OF-WAY FOR SANITARY SEWER L. 8517 / F. 692
[Symbol]	EXISTING PUBLIC FOREST CONSERVATION EASEMENT PLATS 25610-25612
[Symbol]	EXISTING 20' PUBLIC DRAINAGE & UTILITY EASEMENT PLATS 25610-25612
[Symbol]	EXISTING 20' PUBLIC DRAINAGE & UTILITY EASEMENT PLAT 26460
[Symbol]	EXISTING VARIABLE WIDTH PUBLIC WATER & UTILITY EASEMENT PLATS 25610-25612
[Symbol]	EXISTING 24' PRIVATE USE-IN-COMMON ACCESS EASEMENT FOR LOTS 1-4 AND OPEN SPACE LOTS 5 & 6 PLATS 25610-25612
[Symbol]	EXISTING 24' PRIVATE WATER & UTILITY EASEMENT FOR LOTS 2 & 3 PLATS 25610-25612
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[Symbol]	EXISTING 10' CONTOUR
[Symbol]	EXISTING 2' CONTOUR
[Symbol]	EXISTING STEEP SLOPES (25% SLOPES OR GREATER)
[Symbol]	EXISTING MODERATE SLOPES (15% TO 24.99% SLOPES)
[Symbol]	SOILS
[Symbol]	PROPOSED 10' CONTOUR
[Symbol]	PROPOSED 2' CONTOUR
[Symbol]	LIMIT OF DISTURBANCE
[Symbol]	STABILIZED CONSTRUCTION ENTRANCE
[Symbol]	SUPER SILT FENCE
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[Symbol]	EARTH DIKE
[Symbol]	TOOS

**NOTE:**  
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MATCHLINE - SEE SHEET 8

**NOTE:**  
STORM DRAIN INSTALLATION SHALL UTILIZE ROOT PRUNING TREE PROTECTION METHODS TO PRESERVE SPECIMEN TREE 4

**GRADING PLAN**

SCALE: 1"=30'

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

**MAPPED SOILS TYPES - HOWARD COUNTY, MARYLAND (MD027)**

SYMBOL NAME / DESCRIPTION	GROUP	HYDRIC	Kw RANCE	PERCENT FROM/TO	<1% SLOPE POTENTIAL
SMB (SLENNELL-WALKER S&T LOAMS, 0 TO 8 PERCENT SLOPES)	C	YES	0.37/0.52	NO	NO
M2 (MANOR LOAM, 8 TO 15 PERCENT SLOPES)	B	NO	0.24	YES*	NO
M3 (MANOR LOAM, 15 TO 25 PERCENT SLOPES)	B	NO	0.24	NO	YES*

\*MARYLAND OF STATEWIDE IMPORTANCE

**NOTE:**  
HIGHLY ERODIBLE SOILS ARE 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 PERCENT

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION  
DATE: 12/15/2023

CHIEF, DIVISION OF LAND DEVELOPMENT  
DATE: 12/18/2023

DIRECTOR

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Timothy C. Burkard  
OWNER/DEVELOPER SIGNATURE  
DATE: 11/8/2023  
PRINTED NAME & TITLE

**DESIGN CERTIFICATION:**  
I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

Robert H. Vogel  
DESIGNER'S SIGNATURE  
DATE: 11/13/2023  
PRINTED NAME  
MD REGISTRATION NO. 16193  
R.L.S. OR R.L.A. (circle one)

Alexander Bratchie  
DATE: 12/18/2023  
HOWARD S.C.D.

SITE DEVELOPMENT PLAN  
PHASE 2 - SOILS MAP, GRADING, SOIL EROSION AND SEDIMENT CONTROL PLAN  
**SCHNEIDER SUBDIVISION**  
LOTS 1-4

PARCEL: 136  
TAX MAP: 17 GRID: 20  
2ND ELECTION DISTRICT

ZONED: R-20  
L. 18861 / F. 73  
HOWARD COUNTY, MARYLAND

**VOGEL ENGINEERING**  
TIMMONS GROUP

3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHW/EDS  
DRAWN BY: JMR  
CHECKED BY: RHW  
DATE: NOVEMBER 2023  
SCALE: AS SHOWN  
W.O. NO.: 41899

7 SHEET OF 13

ROBERT H. VOGEL, PE, No. 16193

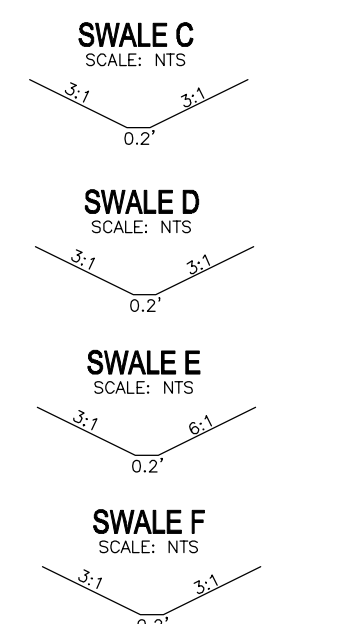




**LEGEND:**

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING EDGE OF PAVING
- EXISTING TREELINE
- STREAM BUFFER
- STREAM
- EXISTING WETLANDS
- PLATS 25610-25612
- WETLAND BUFFER
- EXISTING 20' SEWER RIGHT-OF-WAY FOR SANITARY SEWER L. 651 / F. 692
- EXISTING 60' COLONIAL PIPELINE EASEMENT L. 1059 / F. 1172 PLATS 25610-25612
- EXISTING PUBLIC FOREST CONSERVATION EASEMENT PLATS 25610-25612
- EXISTING 24' PRIVATE USE-IN-COMMON ACCESS EASEMENT FOR LOTS 1-4 AND OPEN SPACE LOTS 5 & 6 PLATS 25610-25612
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- EXISTING 20' PRIVATE SEWER & UTILITY EASEMENT PLATS 25610-25612
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING STEEP SLOPES (25% SLOPES OR GREATER)
- EXISTING MODERATE SLOPES (15% TO 24.99% SLOPES)
- SOILS
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR
- LOD
- LIMIT OF DISTURBANCE
- STABILIZED CONSTRUCTION ENTRANCE
- SSF
- SUPER SILT FENCE
- SILT FENCE
- EARTH DIKE
- TOGS

**OWNER/DEVELOPER**  
PATAPSCO BUILDERS, LLC  
612 THIRD STREET, SUITE 4C  
ANNAPOLIS, MD 21403  
(240) 375-1052



**HOWARD COUNTY MARYLAND PARKS & RECREATION**  
TM: 17 PARCEL: 152  
L. 840 / F. 356  
20.80 AC.  
USE: EXEMPT  
ZONED: R-20

NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN**  
**PHASE 2 - SOILS MAP, GRADING, SOIL EROSION AND SEDIMENT CONTROL PLAN**  
**SCHNEIDER SUBDIVISION**  
LOTS 1-4

PARCEL: 136  
TAX MAP: 17 GRID: 20  
2ND ELECTION DISTRICT

ZONED: R-20  
L. 18861 / F. 73  
HOWARD COUNTY, MARYLAND

**VOGEL ENGINEERING**  
**TIMMONS GROUP**  
3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
P: 410.461.7666 F: 410.461.8961 www.timmons.com

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

DocuSigned by:  
**CHAD Edmondson**  
12/15/2023

CHIEF, DEVELOPMENT ENGINEERING DIVISION

DATE: 12/15/2023

CHIEF, DIVISION OF LAND DEVELOPMENT

DATE: 12/18/2023

DIRECTOR

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DocuSigned by:  
**Timothy C. Burkard**  
11/8/2023

OWNER/DEVELOPER SIGNATURE  
DATE

PRINTED NAME & TITLE  
Timothy C. Burkard

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DocuSigned by:  
**Rob Vogel**  
11/13/2023

DESIGNER'S SIGNATURE  
DATE

PRINTED NAME  
ROBERT H. VOGEL

MD REGISTRATION NO. 16193  
(E), R.L.S., OR R.L.A. (circle one)

**GRADING PLAN**  
SCALE: 1" = 30'

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

DocuSigned by:  
**Alexander Bratchev**  
12/18/2023

DATE

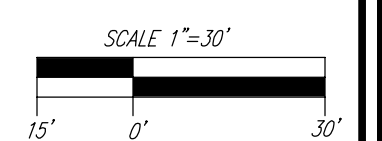
HOWARD S.C.D.

**MAPPED SOILS TYPES - HOWARD COUNTY, MARYLAND (MD027)**

SYMBOL NAME / DESCRIPTION	GROUP	HYDRC	Kw RANGE	PERMEABILITY	EROSION POTENTIAL
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MSC (MAYNOR LOAM, 8 TO 15 PERCENT SLOPES)	B	NO	0.24	YES*	NO
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\*FARMLAND OF STATEWIDE IMPORTANCE

NOTE: HIGHLY ERODIBLE SOILS ARE 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 PERCENT



**PROFESSIONAL CERTIFICATE**  
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A FULLY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 16193 EXPIRATION DATE: 03-27-2024

DESIGN BY: RHV/EDS  
DRAWN BY: JMR  
CHECKED BY: RHV  
DATE: NOVEMBER 2023  
SCALE: AS SHOWN  
W.O. NO.: 41899

8 SHEET OF 13



HOWARD SOIL CONSERVATION DISTRICT STANDARD SEDIMENT CONTROL NOTES

- 1. PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS, CONSTRUCTION INSPECTION DIVISION (CID), 410-313-1855 AFTER THE FUTURE LOT AND PROTECTED AREAS ARE MARKED CLEARLY IN THE FIELD...

- 2. ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL...

Site Analysis table with columns: Category, Value, Units. Includes Total Area of Site (5.53 Acres), Area to be Reopened or Paved (0.58 Acres), etc.

- (1) REFER TO ITEM 11 BELOW
5. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE...

- 6. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR 20 FEET DEEPER OVER 18 INCHES IN DIAMETER. THE RESULTING SEDIMENT MUST BE IN SUCH CONDITION THAT FUTURE MOVING OF GRASSES WILL NOT BE DIFFICULTY...

ITEM 11, REGARDING POOL RESTORATION IS NO LONGER A REQUIREMENT OF THE STATE OF MARYLAND, HOWEVER REMAINS A REQUIREMENT OF HOWARD COUNTY.

THIS PLAN IS APPROVED FOR SMALL POND CONSTRUCTION, AND SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY CONSERVATION DISTRICT.

OWNER/DEVELOPER CERTIFICATION form with fields for Name, Date, Signature, and Title. Includes a section for Designer's Signature and Date.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING. Includes fields for Chief, Division, and Director, along with Date and Signature.

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.

- 1. SEED MIXTURES: A. GENERAL USE: 1. SELECT ONE OR MORE OF THE SPECIES OR MIXTURES LISTED IN TABLE 8.3 FOR THE APPROPRIATE PLANT HARDNESS ZONE...

- 2. TURFING MIXTURES: A. AREAS WHERE TURFGRASS MAY BE DESIRED INCLUDE LAWNS, PARKS, PLAYGROUNDS, AND COMMERCIAL SITES WHICH WILL RECEIVE A MEDIUM TO HIGH LEVEL OF MAINTENANCE...

- 3. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURES FOR USE IN DROUGHT PRONE AREAS AND IN AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE...

- 4. TALL FESCUE/KENTUCKY BLUEGRASS: FULL SUN MIXTURES FOR USE IN DROUGHT PRONE AREAS AND IN AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE...

- 5. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR 20 FEET DEEPER OVER 18 INCHES IN DIAMETER. THE RESULTING SEDIMENT MUST BE IN SUCH CONDITION THAT FUTURE MOVING OF GRASSES WILL NOT BE DIFFICULTY...

- 6. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR 20 FEET DEEPER OVER 18 INCHES IN DIAMETER. THE RESULTING SEDIMENT MUST BE IN SUCH CONDITION THAT FUTURE MOVING OF GRASSES WILL NOT BE DIFFICULTY...

PERMANENT SEEDING SUMMARY table with columns: Species, Application Rate, Seeding Dates, Seeding Depth, Fertilizer Rate, Lime Rate.

FOR ALTERNATES, REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL - PAGES B.26 - B.32

R-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.

- 1. SOIL PREPARATION: A. SOIL TEST: 1. TEMPORARY STABILIZATION: A. SEEDING PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT...

- 2. PERMANENT STABILIZATION: A. SOIL TEST: 1. SOIL PH BEING 6.0 AND 7.0. II. SOIL CONTAINS LESS THAN 500 PARTS PER MILLION (PPM) OF ARSENIC...

- 3. TOPSOILING: I. TOPSOIL IS PLACED OVER PREPARED SUBSOIL PRIOR TO ESTABLISHMENT OF PERMANENT VEGETATION. THE PURPOSE IS TO PROVIDE A SUITABLE SOIL MEDIUM FOR VEGETATIVE GROWTH...

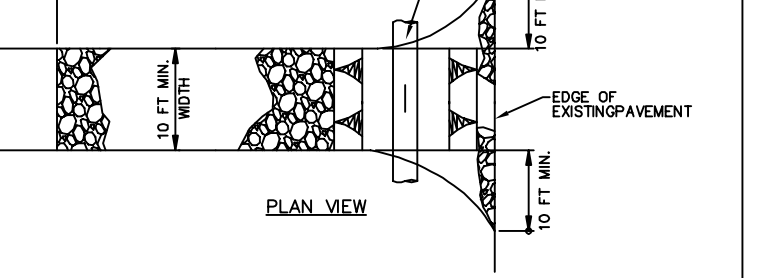
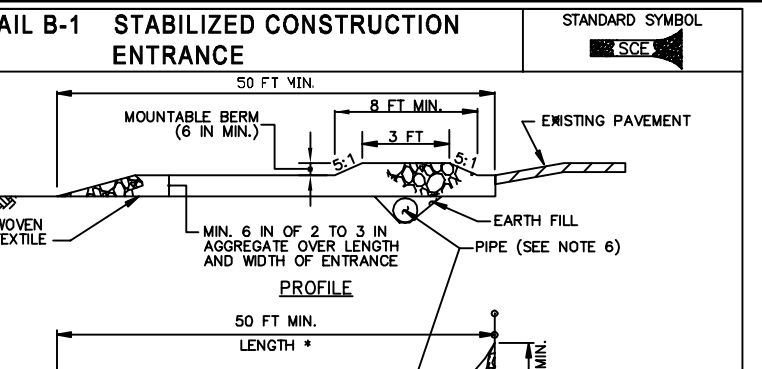
- 4. AREAS HAVING SOILS STEEPER THAN 1% SLOPE: A. SOIL TEST: 1. SOIL PH BEING 6.0 AND 7.0. II. SOIL CONTAINS LESS THAN 500 PARTS PER MILLION (PPM) OF ARSENIC...

- 5. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS): A. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATES AND APPLICATION RATES FOR BOTH NITROGEN AND PHOSPHORUS...

- 6. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS): A. SOIL TESTS MUST BE PERFORMED TO DETERMINE THE EXACT RATES AND APPLICATION RATES FOR BOTH NITROGEN AND PHOSPHORUS...

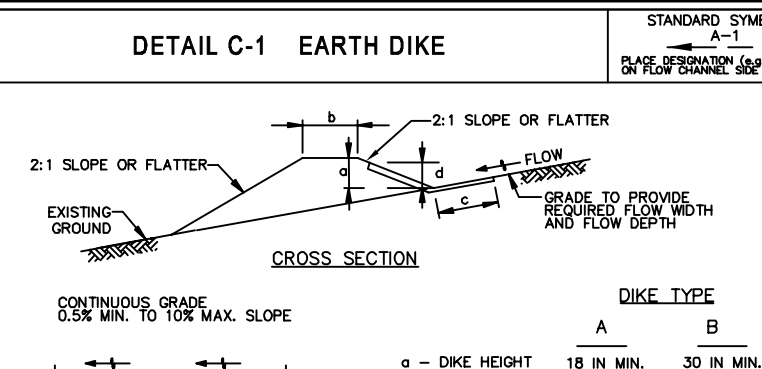
TEMPORARY SEEDING SUMMARY table with columns: Species, Application Rate, Seeding Dates, Seeding Depth, Fertilizer Rate, Lime Rate.

FOR ALTERNATES, REFER TO THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL - PAGES B.20, TABLE B.1.



CONSTRUCTION NOTES: 1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SIDE USE MINIMUM LENGTH OF 50 FEET (150 FEET FOR TRUCKS) TO PROVIDE A TURNING RADIUS.

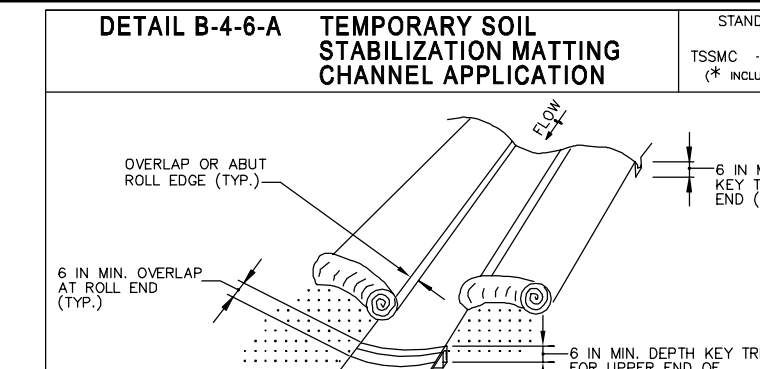
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. Table with columns: U.S. Department of Agriculture, Natural Resources Conservation Service, 2011; Maryland Department of Environment, Water Management Administration.



CONSTRUCTION SPECIFICATIONS: 1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.

CONSTRUCTION NOTES: 1. REMOVE AND DISPOSE OF ALL TREES, BRUSH, STAMPS, OBSTRUCTIONS, AND OTHER OBSTRUCTIONAL MATERIAL SO AS NOT TO INTERFERE WITH PROPER FUNCTION OF EARTHDIKE.

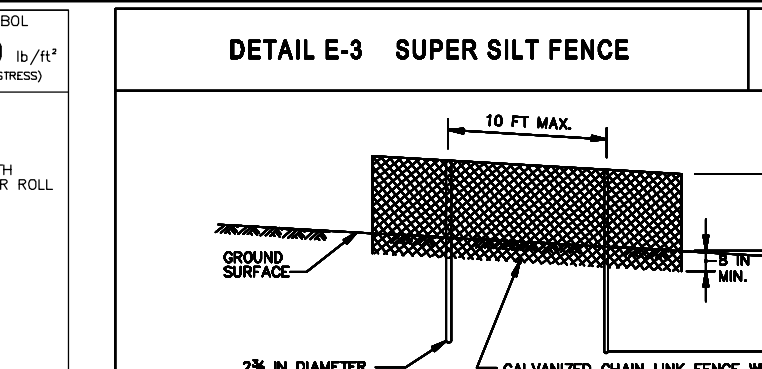
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. Table with columns: U.S. Department of Agriculture, Natural Resources Conservation Service, 2011; Maryland Department of Environment, Water Management Administration.



CONSTRUCTION NOTES: 1. INSTALL 2 1/2 INCH DIAMETER GALVANIZED STEEL POSTS OF 4005 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED 8 FEET OR FEWER GALVANIZED CHAIN LINK FENCE THE POSTS A MINIMUM OF 36 INCHES.

CONSTRUCTION SPECIFICATIONS: 1. PROVIDE STORAGE VALUE AS SPECIFIED ON APPROVED PLANS. 2. USE BASKETS MADE OF 1/2 INCH GAUGE WIRE OR HEAVIER.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. Table with columns: U.S. Department of Agriculture, Natural Resources Conservation Service, 2011; Maryland Department of Environment, Water Management Administration.



CONSTRUCTION SPECIFICATIONS: 1. PROVIDE STORAGE VALUE AS SPECIFIED ON APPROVED PLANS. 2. USE BASKETS MADE OF 1/2 INCH GAUGE WIRE OR HEAVIER.

CONSTRUCTION NOTES: 1. PROVIDE TRANSITION LENGTH AND HEIGHT AS SPECIFIED ON PLAN. HEIGHT OF TRANSITION EARTH DIKE UNITS IT INTERSECTS THE TOP OF ADJACENT EARTH DIKE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. Table with columns: U.S. Department of Agriculture, Natural Resources Conservation Service, 2011; Maryland Department of Environment, Water Management Administration.

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

DEFINITION: THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER. PURPOSE: TO PROTECT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION.

- 1. MULCH ANCHORING TOOL: IS A TRACTOR DRIVEN IMPLEMENT DESIGNED TO PUNCH AND ANCHOR MULCH INTO THE SOIL SURFACE A MINIMUM OF 3 INCHES. THIS PRACTICE IS MOST EFFECTIVE ON LARGER AREAS, BUT IS LIMITED TO FLATTER SLOPES WHERE EQUIPMENT CAN OPERATE SAFELY.

- 2. APPLICATION: A. DRY SEEDING: THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SEEDING. I. INCORPORATE SEED INTO THE SOIL AT THE RATE SPECIFIED ON TEMPORARY SEEDING TABLE 8.1, PERMANENT SEEDING TABLE 8.3, OR SITE-SPECIFIC SEEDING SUMMARIES.

- 3. MULCHING: A. MULCH MATERIALS (IN ORDER OF PREFERENCE): 1. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, LYS, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WOOD SPECIES AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOULDY, CAVED, DECAYED, OR EXCESSIVELY DUSTY.

- 4. MULCHING: A. MULCH MATERIALS (IN ORDER OF PREFERENCE): 1. STRAW CONSISTING OF THOROUGHLY THRESHED WHEAT, LYS, OAT, OR BARLEY AND REASONABLY BRIGHT IN COLOR. STRAW IS TO BE FREE OF NOXIOUS WOOD SPECIES AS SPECIFIED IN THE MARYLAND SEED LAW AND NOT MUSTY, MOULDY, CAVED, DECAYED, OR EXCESSIVELY DUSTY.



RECONFIGURATION AFTER STABILIZATION. Detail D-5.53. Includes fields for Name, Title, and Date.

B-4-8 STANDARDS AND SPECIFICATIONS FOR STOCKPILE AREA

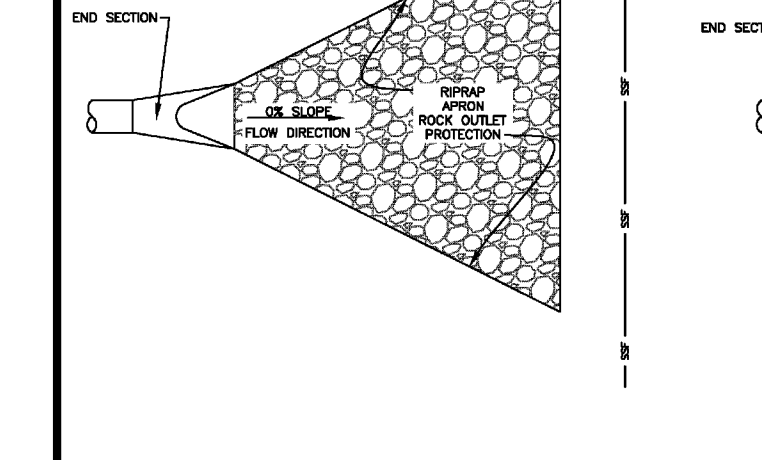
DEFINITION: A MOUND OR PILE OF SOIL PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL MEASURES. PURPOSE: TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS.

- 1. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN. THE FOOTPRINT OF THE STOCKPILE MUST BE SEED TO ACCOMMODATE THE ANTICIPATED WINDING OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1.

- 2. STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE. I. STOCKPILE AREAS MUST BE SEED TO ACCOMMODATE THE ANTICIPATED WINDING OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1.

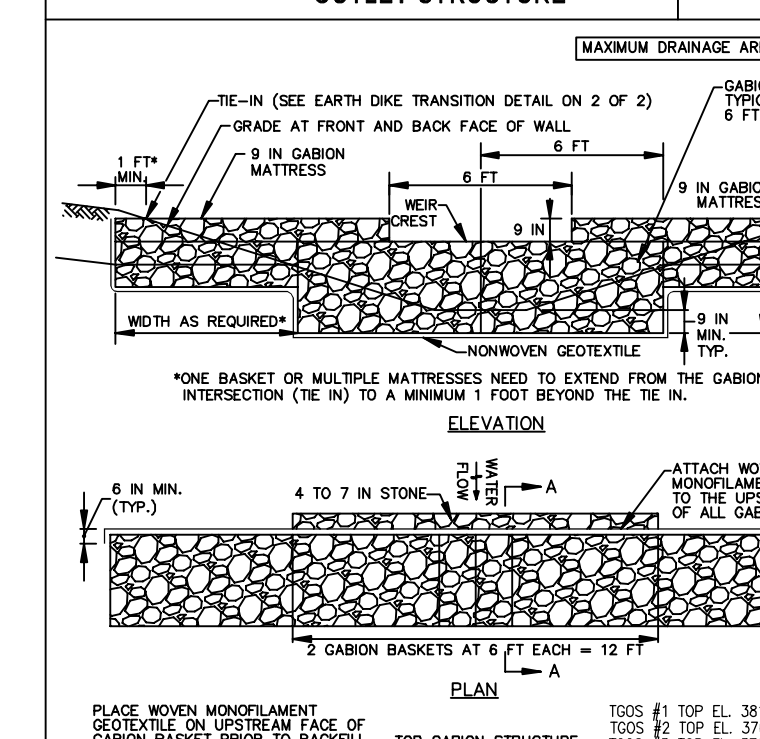
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- 4. STOCKPILE AREAS ARE UTILIZED WHEN IT IS NECESSARY TO SALVAGE AND STORE SOIL FOR LATER USE. I. STOCKPILE AREAS MUST BE SEED TO ACCOMMODATE THE ANTICIPATED WINDING OF MATERIAL AND BASED ON A SIDE SLOPE RATIO NO STEEPER THAN 2:1.



CONSTRUCTION SPECIFICATIONS: 1. PROVIDE STORAGE VALUE AS SPECIFIED ON APPROVED PLANS. 2. USE BASKETS MADE OF 1/2 INCH GAUGE WIRE OR HEAVIER.

DETAIL E-8 TEMPORARY GABION OUTLET STRUCTURE

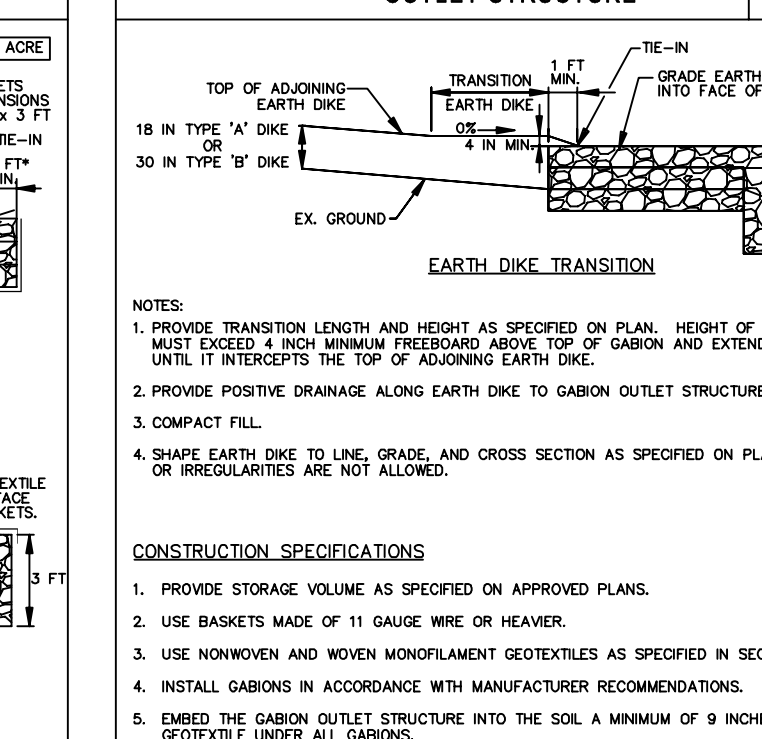


CONSTRUCTION SPECIFICATIONS: 1. PROVIDE STORAGE VALUE AS SPECIFIED ON APPROVED PLANS. 2. USE BASKETS MADE OF 1/2 INCH GAUGE WIRE OR HEAVIER.

CONSTRUCTION NOTES: 1. PROVIDE TRANSITION LENGTH AND HEIGHT AS SPECIFIED ON PLAN. HEIGHT OF TRANSITION EARTH DIKE UNITS IT INTERSECTS THE TOP OF ADJACENT EARTH DIKE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. Table with columns: U.S. Department of Agriculture, Natural Resources Conservation Service, 2011; Maryland Department of Environment, Water Management Administration.

DETAIL E-8 TEMPORARY GABION OUTLET STRUCTURE



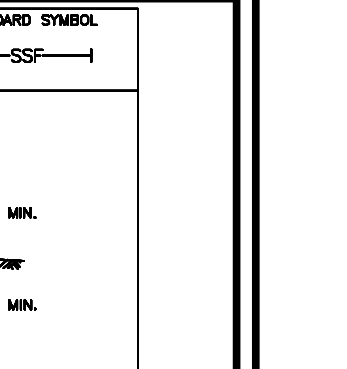
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MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. Table with columns: U.S. Department of Agriculture, Natural Resources Conservation Service, 2011; Maryland Department of Environment, Water Management Administration.

OWNER/DEVELOPER: PATAPSCO BUILDERS, LLC. 612 THIRD STREET, SUITE 4C ANNAPOLIS, MD 21403 (240) 375-1052

SITE DEVELOPMENT PLAN SOIL EROSION AND SEDIMENT CONTROL PLAN NOTES AND DETAILS SCHNEIDER SUBDIVISION LOTS 1-4



CONSTRUCTION SPECIFICATIONS: 1. PROVIDE STORAGE VALUE AS SPECIFIED ON APPROVED PLANS. 2. USE BASKETS MADE OF 1/2 INCH GAUGE WIRE OR HEAVIER.

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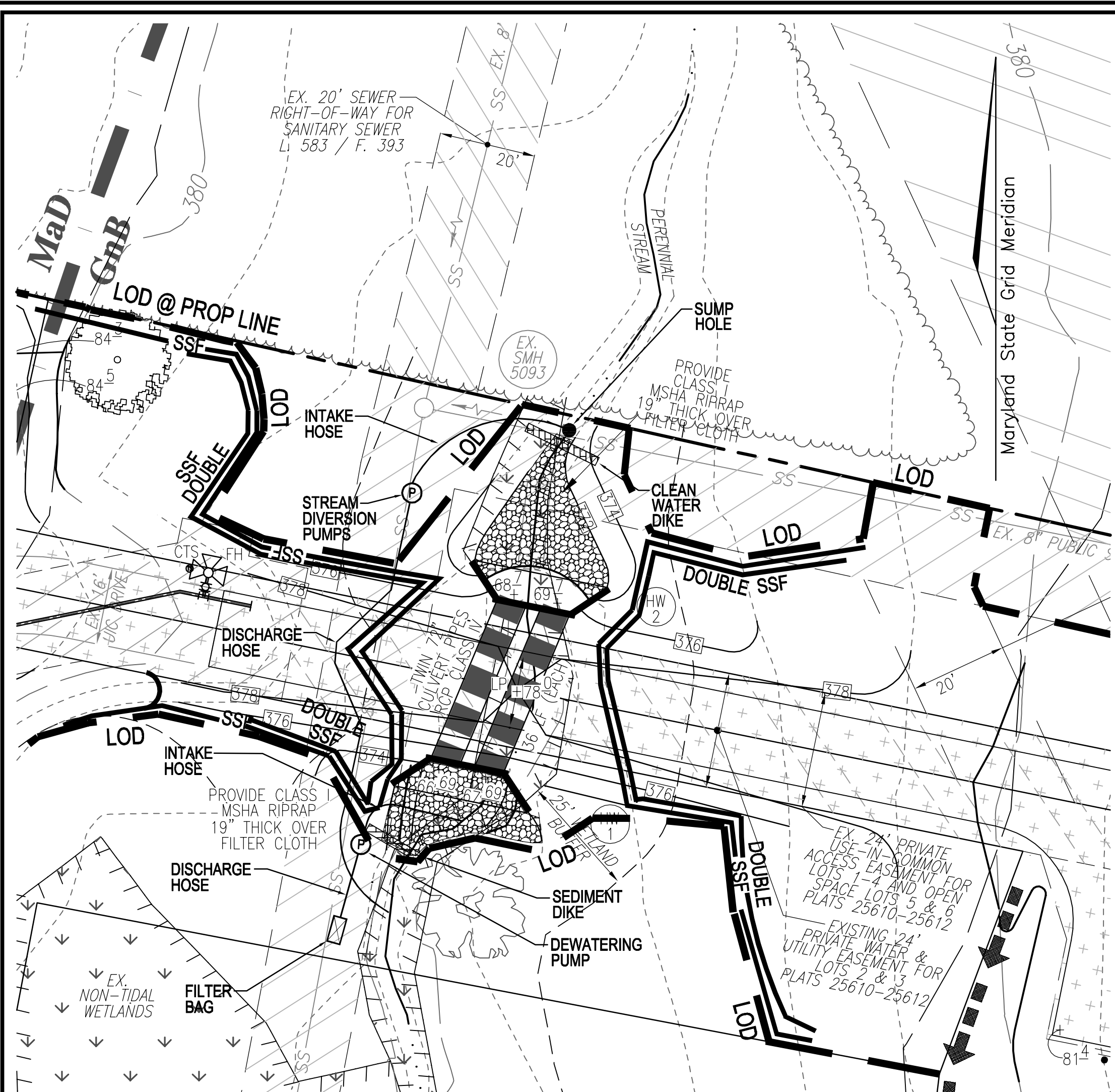
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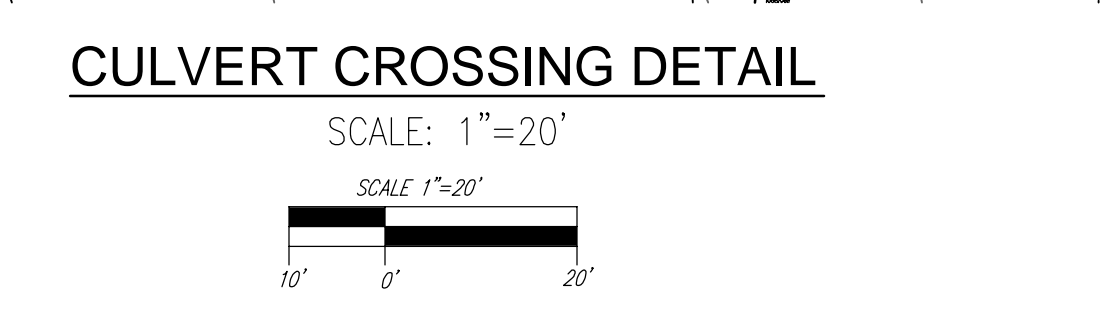
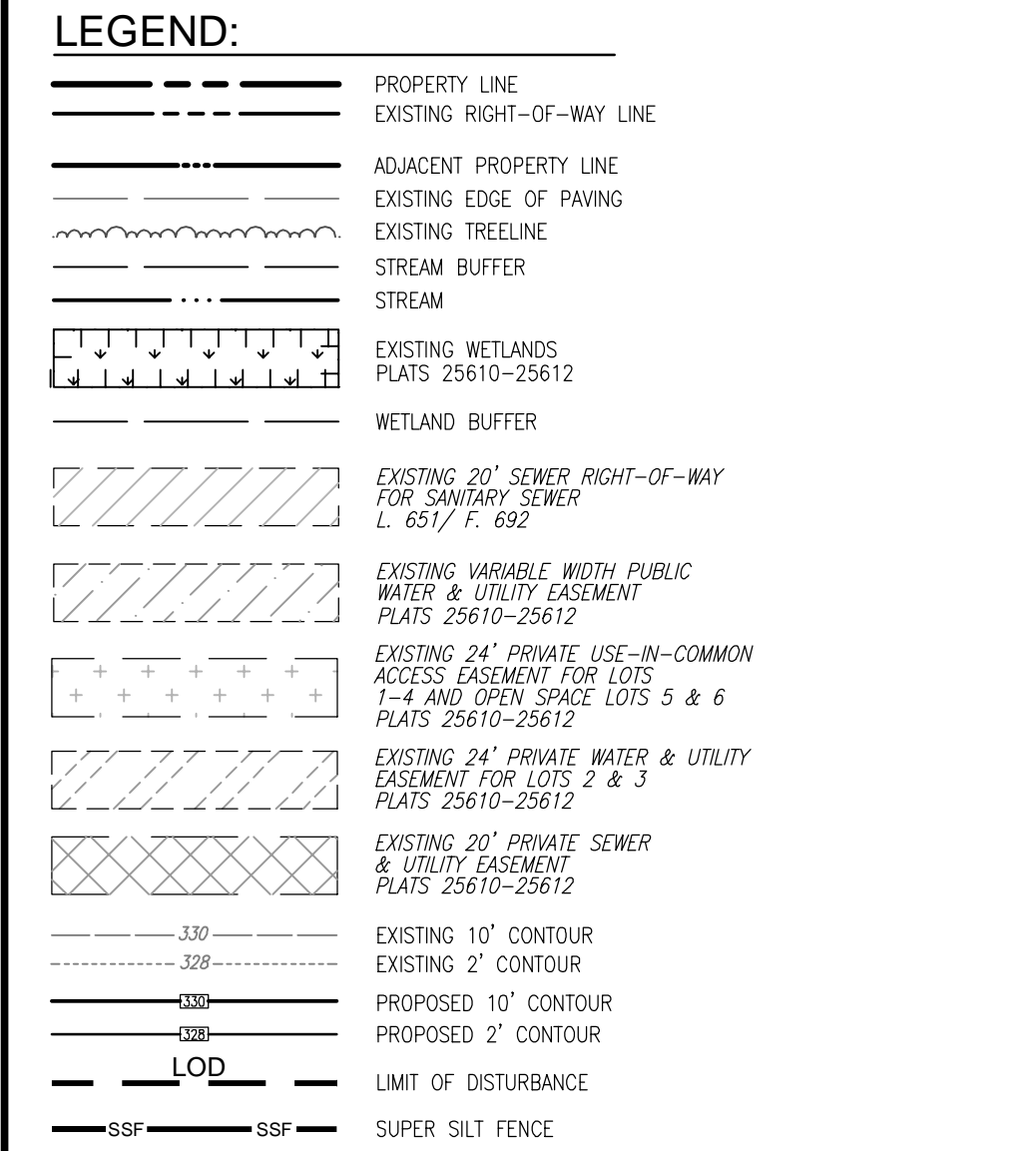
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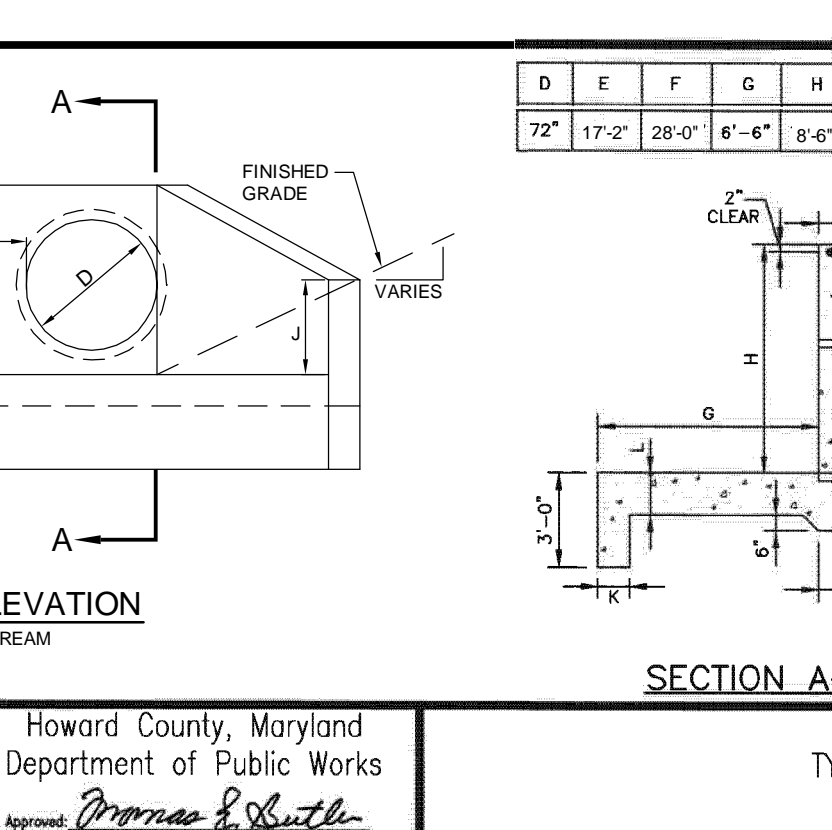
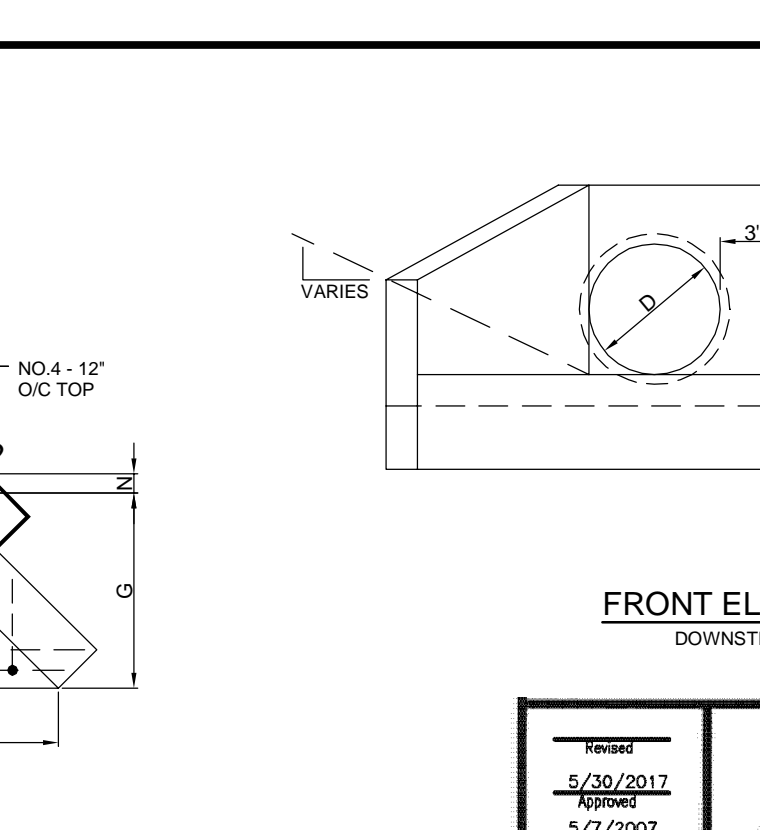
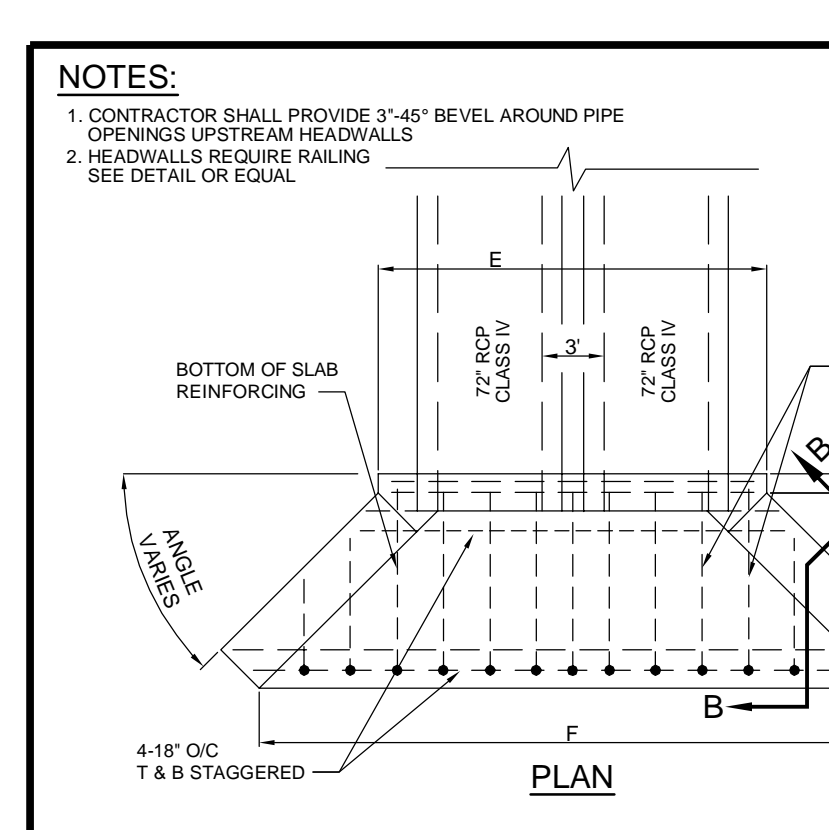
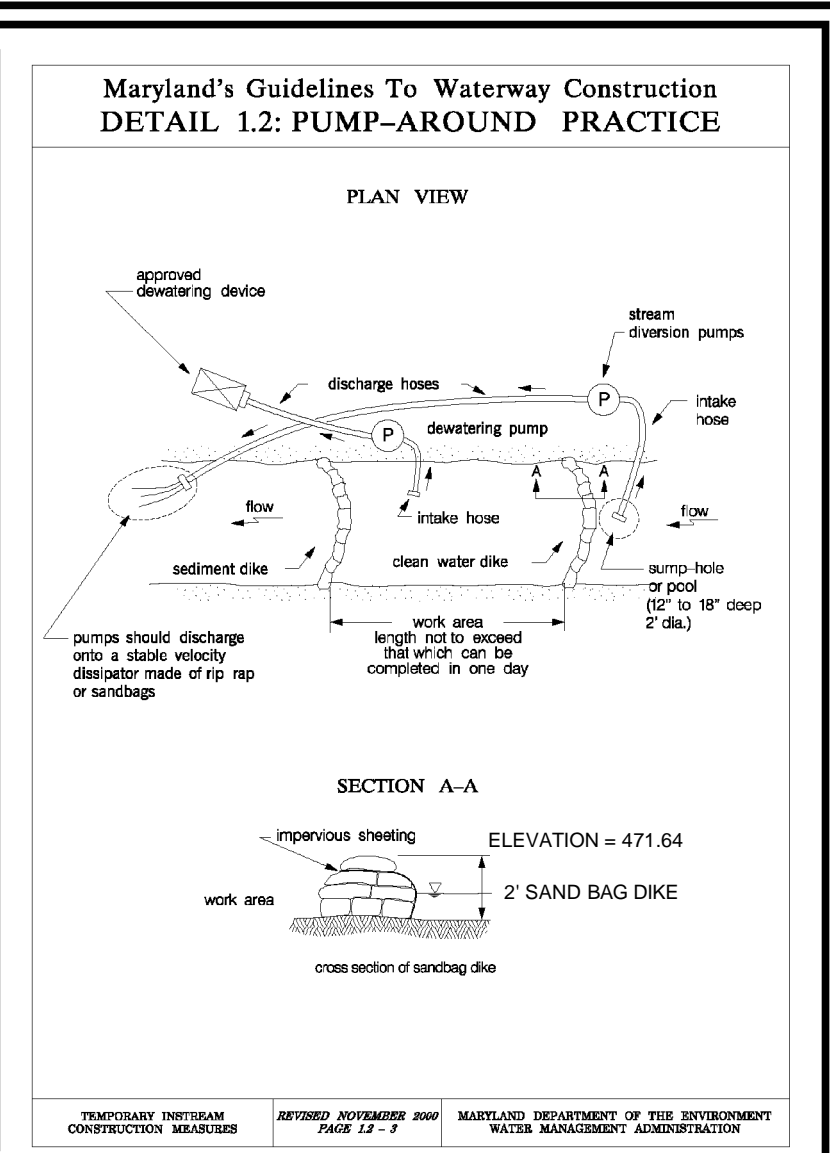
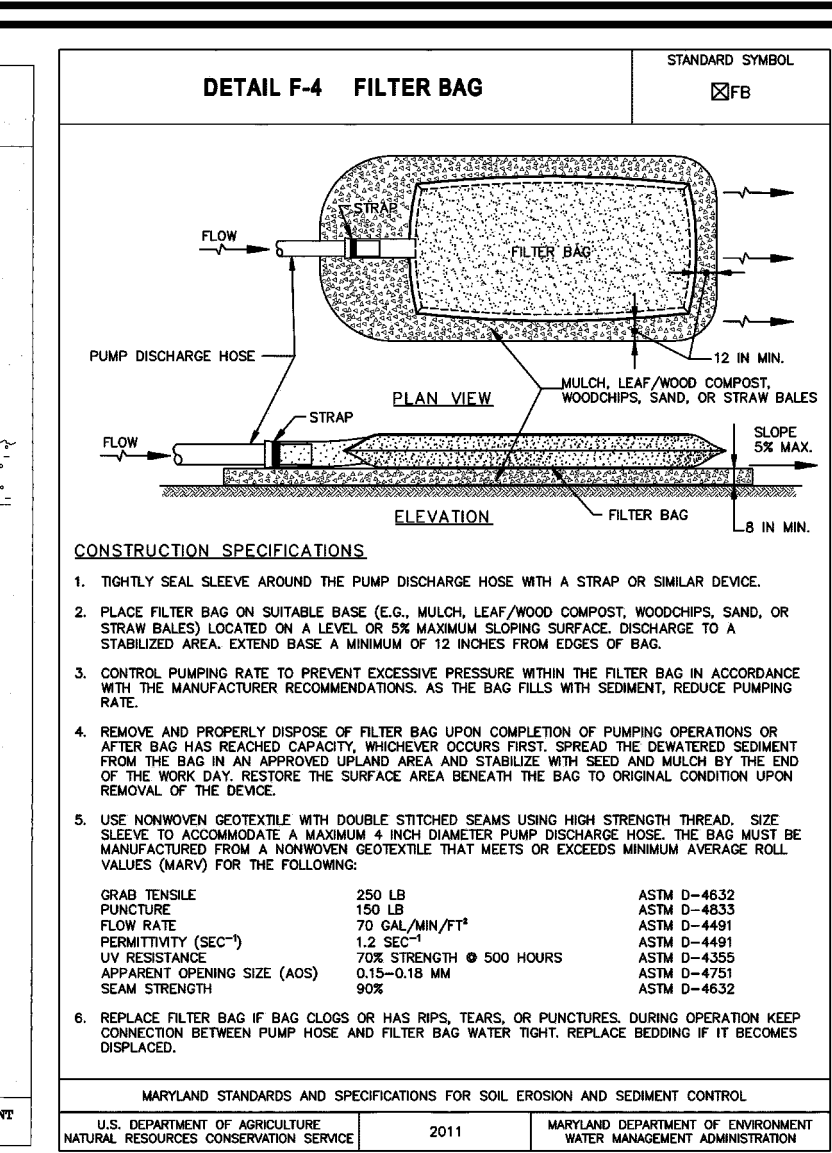
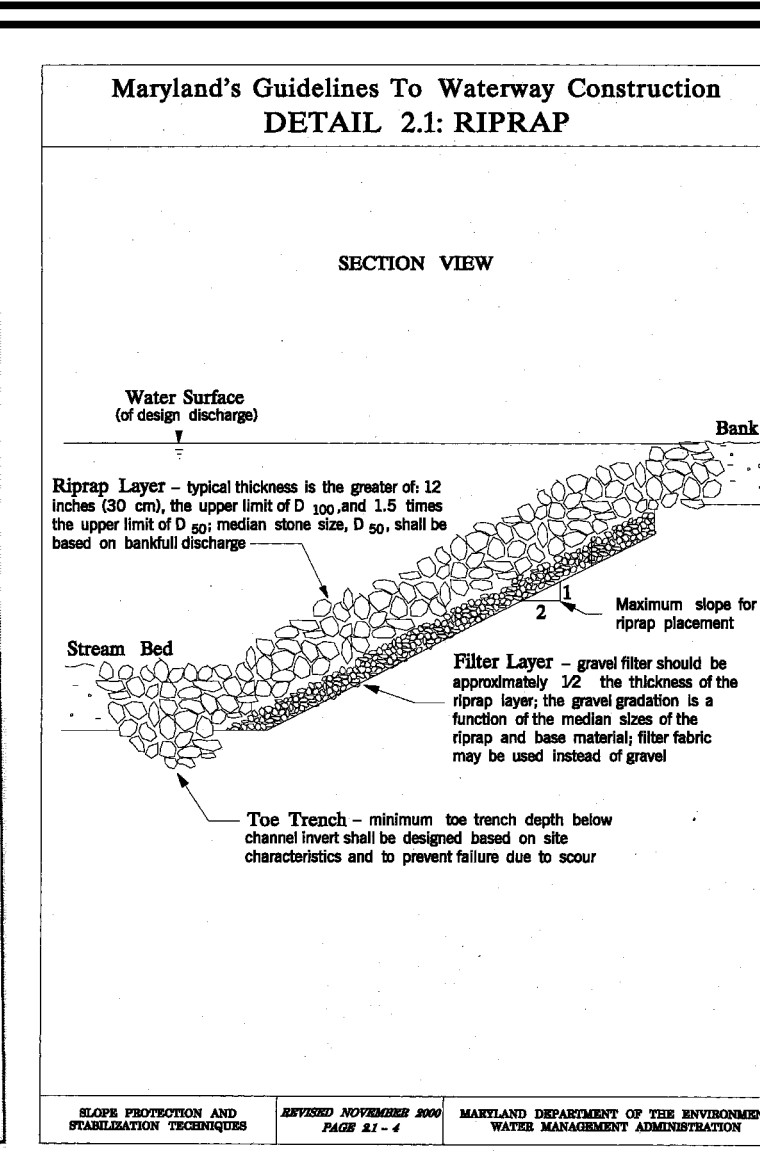
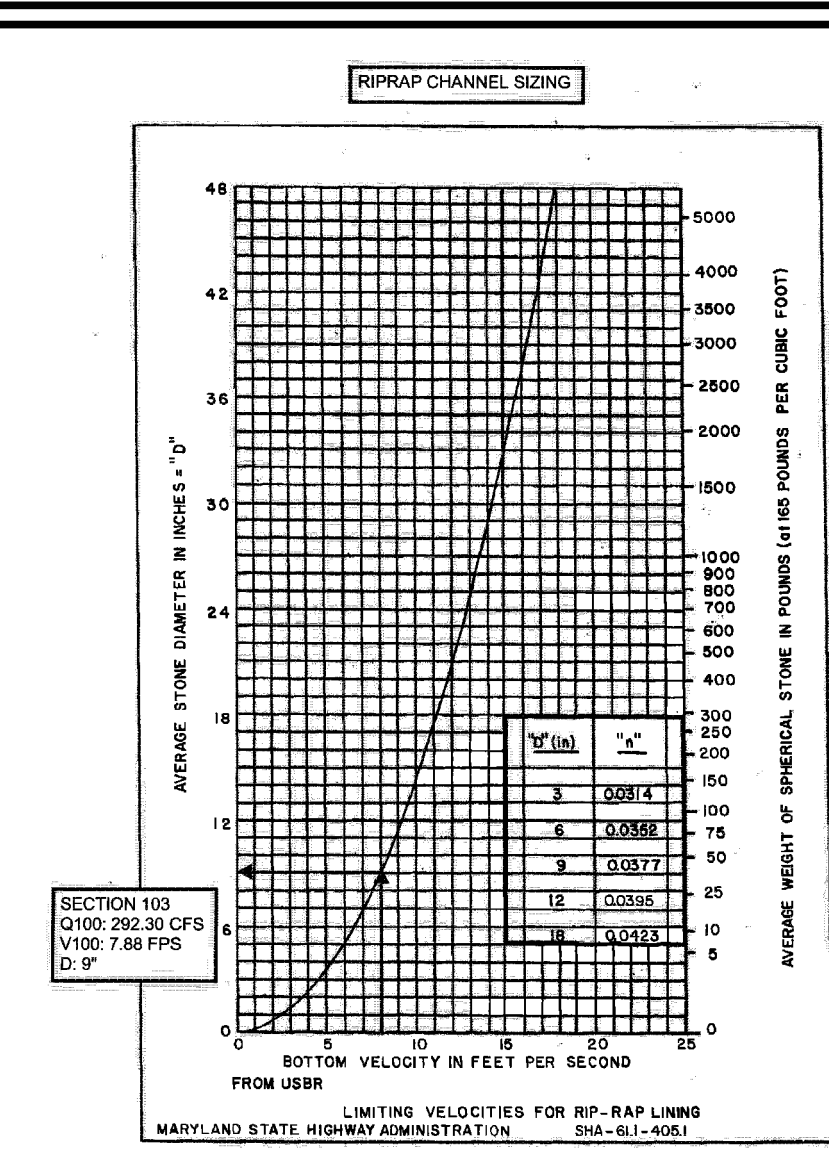




**NOTE**  
 THE DEVELOPER WILL OBTAIN ALL NECESSARY STATE PERMITS FOR THE PROPOSED ENVIRONMENTAL IMPACTS.  
 -MDE AUTHORIZATION NUMBER IS: 20-NI-3202/202061531  
 -DEPT. OF ARMY NO. 202061531  
 -CAT A -b(1) GENERAL MAINTENANCE (JAMES SCHNEIDER/CULVERT REPLACEMENT,  
 ALL WORK IN THE NONTIDAL WETLANDS, WETLAND BUFFERS SHALL BE COMPLETED PER THE BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS.



- BEST MANAGEMENT PRACTICES FOR WORKING IN NONTIDAL WETLANDS, WETLAND BUFFERS, WATERWAYS, AND 100-YEAR FLOODPLAINS**
- NO EXCESS FILL, CONSTRUCTION MATERIAL, OR DEBRIS SHALL BE STOCKPILED OR STORED IN NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
  - PLACE MATERIALS IN A LOCATION AND MANNER WHICH DOES NOT ADVERSELY IMPACT SURFACE OR SUBSURFACE WATER FLOW INTO OR OUT OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
  - DO NOT USE THE EXCAVATED MATERIAL AS BACKFILL IF IT CONTAINS WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE. IF ADDITIONAL BACKFILL IS REQUIRED, USE CLEAN MATERIAL FREE OF WASTE METAL PRODUCTS, UNSIGHTLY DEBRIS, TOXIC MATERIAL, OR ANY OTHER DELETERIOUS SUBSTANCE.
  - PLACE HEAVY EQUIPMENT ON MATS OR SUITABLY OPERATE THE EQUIPMENT TO PREVENT DAMAGE TO NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR THE 100-YEAR FLOODPLAIN.
  - REPAIR AND MAINTAIN ANY SERVICEABLE STRUCTURE OR FILL SO THERE IS NO PERMANENT LOSS OF NONTIDAL WETLANDS, NONTIDAL WETLAND BUFFERS, WATERWAYS, OR 100-YEAR FLOODPLAIN TEMPORARILY IMPACTED BY ANY CONSTRUCTION.
  - ALL STABILIZATION IN THE NONTIDAL WETLAND AND NONTIDAL WETLAND BUFFER SHALL CONSIST OF THE FOLLOWING SPECIES: ANNUAL RYEGRASS (LOLIUM MULTIFLORUM), MILLET (SETARIA ITALICA), BURLY (HORDEUM SP.), OATS (Avena SP.), AND/OR RYE (SECALE CEREALE). THESE SPECIES WILL ALLOW FOR THE STABILIZATION OF THE SITE WHILE ALSO ALLOWING FOR THE VOLUNTARY REVEGETATION OF NATURAL WETLAND SPECIES. OTHER NON-PERSISTENT VEGETATION MAY BE ACCEPTABLE, BUT MUST BE APPROVED BY THE NONTIDAL WETLANDS AND WATERWAYS DIVISION. KENTUCKY 31 FESCUE SHALL NOT BE UTILIZED IN WETLAND OR BUFFER AREAS. THE AREA SHOULD BE SEEDED AND MULCHED TO REDUCE EROSION AFTER CONSTRUCTION ACTIVITIES HAVE BEEN COMPLETED.
  - AFTER INSTALLATION HAS BEEN COMPLETED, MAKE POST-CONSTRUCTION GRADES AND ELEVATIONS THE SAME AS THE ORIGINAL GRADES AND ELEVATIONS IN TEMPORARILY IMPACTED AREAS.
  - TO PROTECT AQUATIC SPECIES, IN-STREAM WORK IS PROHIBITED AS DETERMINED BY THE CLASSIFICATION OF THE STREAM.
  - USE IN WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE, DURING ANY YEAR.
  - USE IN WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD OCTOBER 1 THROUGH APRIL 30, INCLUSIVE, DURING ANY YEAR.
  - USE IN WATERS: IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH MAY 31, INCLUSIVE, DURING ANY YEAR.
  - STORMWATER RUNOFF FROM IMPERVIOUS SURFACES SHALL BE CONTROLLED TO PREVENT THE WASHING OF DEBRIS INTO THE WATERWAY.
  - CULVERTS SHALL BE CONSTRUCTED AND ANY RIPRAP PLACED SO AS NOT TO OBSTRUCT THE MOVEMENT OF AQUATIC SPECIES, UNLESS THE PURPOSE OF THE ACTIVITY IS TO IMPOUND WATER.



**NOTE**  
 PUMP AROUND PRACTICE DETAIL SHOWN HEREON AND IN CULVERT CROSSING DETAIL. TOP UPSTREAM 3' SAND BAG DIKE MUST BE AT 2 YEAR WATER SURFACE ELEVATION = 471.64 MIN.

Revised: 5/30/2017	Howard County, Maryland Department of Public Works	MODIFIED TYPE 'A' Headwall Circular Pipe	Detail D-5.11
Approved: 5/7/2007	Approved: [Signature]	Chief, Bureau of Engineering	

**PIPE SCHEDULE**

NO.	TYPE	LENGTH
HW-1	MODIFIED TYPE 'A' HEADWALL	N 590140.97 E 1352978.80 375.19 - 367.69 366.69 (MODIFIED)
HW-2	MODIFIED TYPE 'A' HEADWALL	N 590175.11 E 1352985.72 377.20 369.70 368.70 (MODIFIED)

**STRUCTURE SCHEDULE**

NO.	TYPE	LOCATION	TOP EL.	INV. IN.	INV. OUT.	COMMENTS
HW-1	MODIFIED TYPE 'A' HEADWALL	N 590140.97 E 1352978.80	375.19	-	367.69	HW CO. STD D-5.11 (MODIFIED)
HW-2	MODIFIED TYPE 'A' HEADWALL	N 590175.11 E 1352985.72	377.20	369.70	368.70	HW CO. STD D-5.11 (MODIFIED)

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING

CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 [Signature] 12/15/2023

CHIEF, DIVISION OF LAND DEVELOPMENT  
 [Signature] 12/18/2023

DIRECTOR  
 [Signature]

**OWNER/DEVELOPER CERTIFICATION:**  
 I HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN, INCLUDING INSPECTING AND MAINTAINING CONTROLS, AND THAT ALL RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL ON EROSION AND SEDIMENT PRIOR TO BEGINNING THE PROJECT. I CERTIFY RIGHT-OF-ENTRY FOR PERIODIC ON-SITE EVALUATION BY HOWARD COUNTY, THE HOWARD SOIL CONSERVATION DISTRICT AND/OR MDE.

Timothy C. Burkard  
 OWNER/DEVELOPER SIGNATURE  
 Timothy C. Burkard  
 PRINTED NAME & TITLE

**DESIGN CERTIFICATION:**  
 I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS, AND STANDARDS, THAT IT REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT IT WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT.

DocuSigned by:  
 Rob Vogel  
 ROBERT H. VOGEL  
 PRINTED NAME

11/13/2023  
 DATE

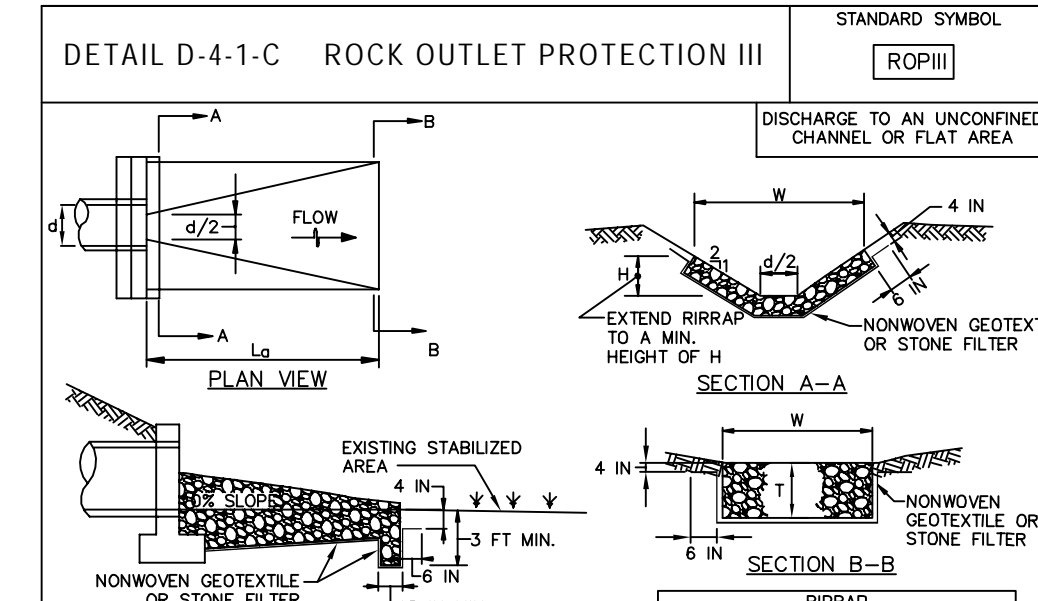
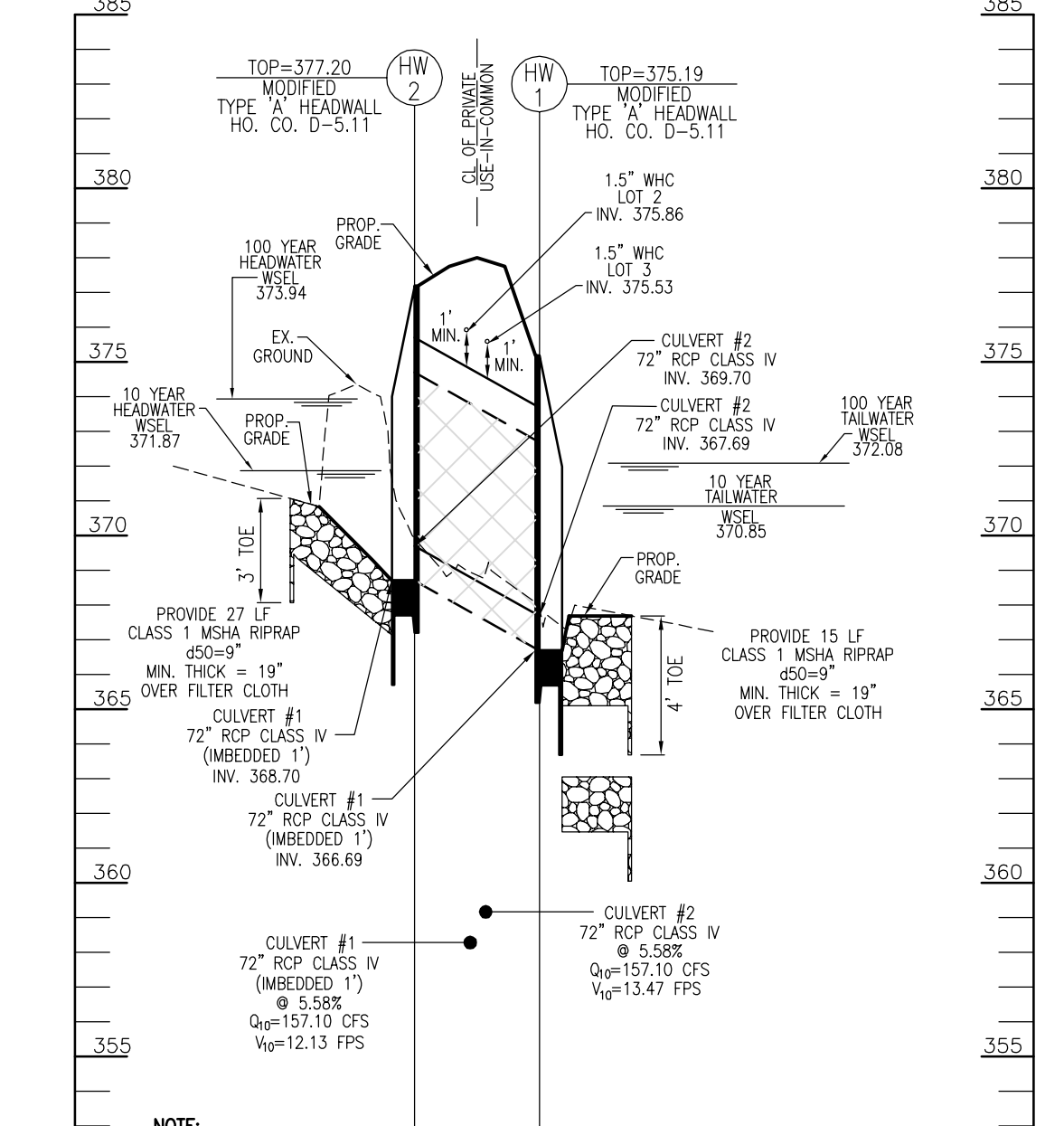
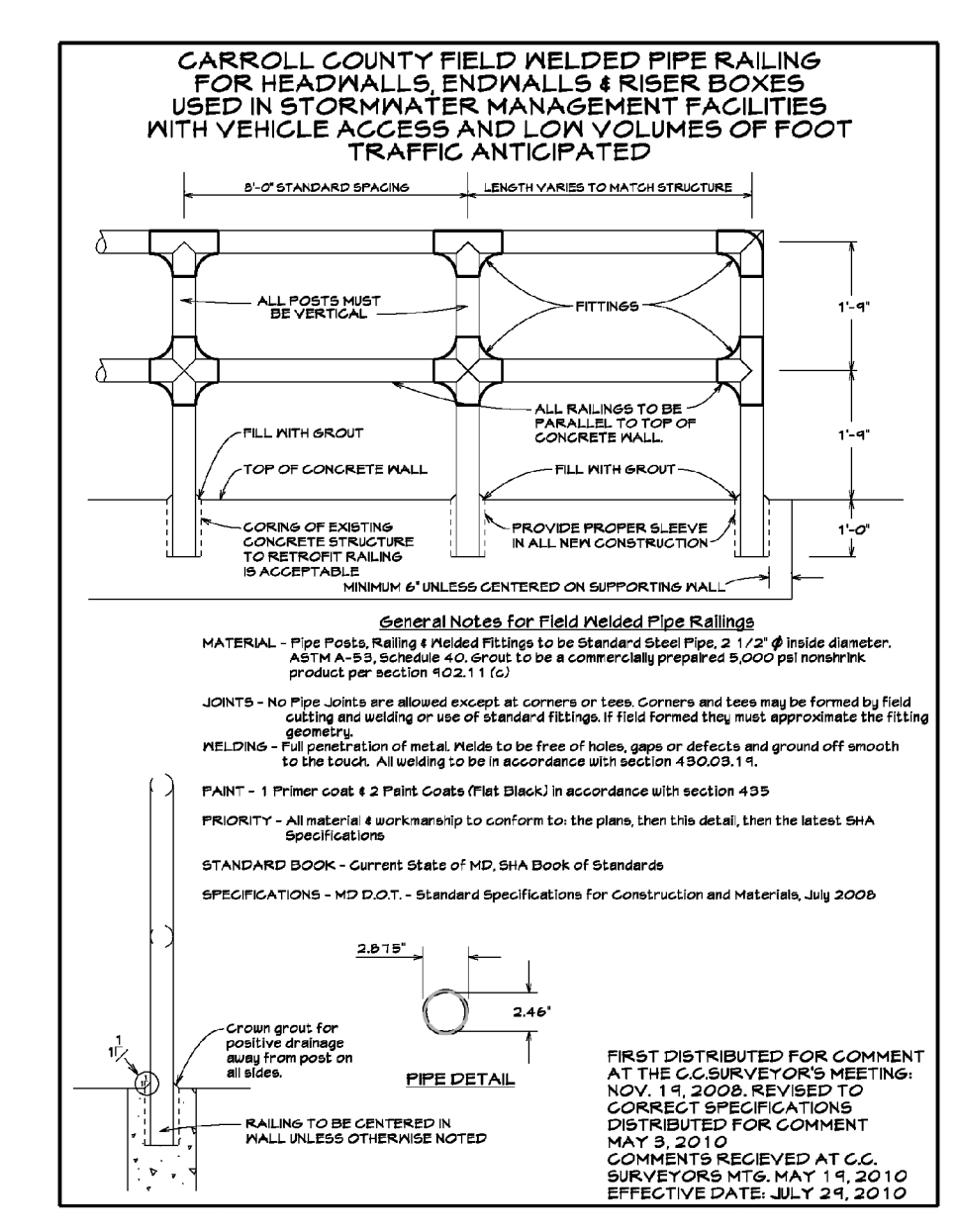
MD REGISTRATION NO. 16193  
 ES, RLS, OR RLA (circle one)

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

DocuSigned by:  
 Alexander Bratovich  
 ALEXANDER BRATOVICH  
 DATE

12/18/2023  
 DATE

HOWARD S.C.D. 664468468646



**CONSTRUCTION NOTES**

- RIPRAP AND STONE MUST CONFORM TO THE SPECIFIED CLASS.
- USE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, AND PROTECT FROM PUNCTURING, CUTTING, OR TEARING. REPAIR ANY DAMAGE OTHER THAN AN OCCASIONAL SMALL HOLE BY PLACING ANOTHER PIECE OF GEOTEXTILE OVER THE DAMAGED PART OR BY COMPLETELY REPLACING THE GEOTEXTILE. PROVIDE A MINIMUM OF ONE FOOT OVERLAP FOR ALL REPAIRS AND FOR JOINING TWO PIECES OF GEOTEXTILE TOGETHER.
- PREPARE THE SUBGRADE FOR GEOTEXTILE OR STONE FILTER (3% TO 1 1/2% MINIMUM SLOPE FOR 6 INCH MINIMUM DEPTH) AND RIPRAP TO THE REQUIRED LINES AND GRADES. COMPACT ANY FILL REQUIRED IN THE SUBGRADE TO A DENSITY OF APPROXIMATELY THAT OF THE SURROUNDING UNDISTURBED MATERIAL.
- EXTEND GEOTEXTILE AT LEAST 6 INCHES BEYOND EDGES OF RIPRAP AND EMBED AT LEAST 4 INCHES AT SIDES OF RIPRAP.
- CONSTRUCT RIPRAP OUTLET TO FULL COURSE THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO AVOID DISPLACEMENT OF UNDERLYING MATERIALS. PLACE STONE FOR RIPRAP OUTLET IN A MANNER THAT WILL ENSURE THAT IT IS REASONABLY HOMOGENEOUS WITH THE SMALLER STONES AND SPALLS FILLING THE VOID BETWEEN THE LARGER STONES. PLACE RIPRAP IN A MANNER TO PREVENT DAMAGE TO THE FILTER BLANKET OR GEOTEXTILE. HAND PLACE TO THE EXTENT NECESSARY.
- WHERE NO ENDWALL IS USED, CONSTRUCT THE UPSTREAM END OF THE APRON SO THAT THE WIDTH IS TWO TIMES THE DIAMETER OF THE OUTLET PIPE, AND EXTEND THE STONE UNDER THE OUTLET BY A MINIMUM OF 18 INCHES.
- CONSTRUCT APRON WITH ONE SLOPE ALONG ITS LENGTH AND WITHOUT OBSTRUCTIONS. PLACE STONE SO THAT IT BLENDS IN WITH EXISTING GROUND.
- MAINTAIN LINE, GRADE, AND CROSS SECTION. KEEP OUTLET FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. AFTER HIGH FLOW INSPECT FOR SOOAK AND RIPRAP DISLODGED RIPRAP. MAKE NECESSARY REPAIRS IMMEDIATELY.

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

**OWNER/DEVELOPER**  
 PATAPSCO BUILDERS, LLC  
 612 THIRD STREET, SUITE 4C  
 ANNAPOLIS, MD 21403  
 (240) 375-1052

NO.	REVISION	DATE

**SITE DEVELOPMENT PLAN**  
**CULVERT CONSTRUCTION DETAILS AND SOIL EROSION AND SEDIMENT CONTROL PLAN - NOTES AND DETAILS**

**SCHNEIDER SUBDIVISION**  
 LOTS 1-4

PARCEL: 136  
 TAX MAP: 17 GRID: 20  
 2ND ELECTION DISTRICT

ZONED: R-20  
 L 18861 / F. 73  
 HOWARD COUNTY, MARYLAND

**VOGEL ENGINEERING**  
 3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

**TIMMONS GROUP**

PROFESSIONAL CERTIFICATE

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. 16193, EXPIRATION DATE: 09-27-2024

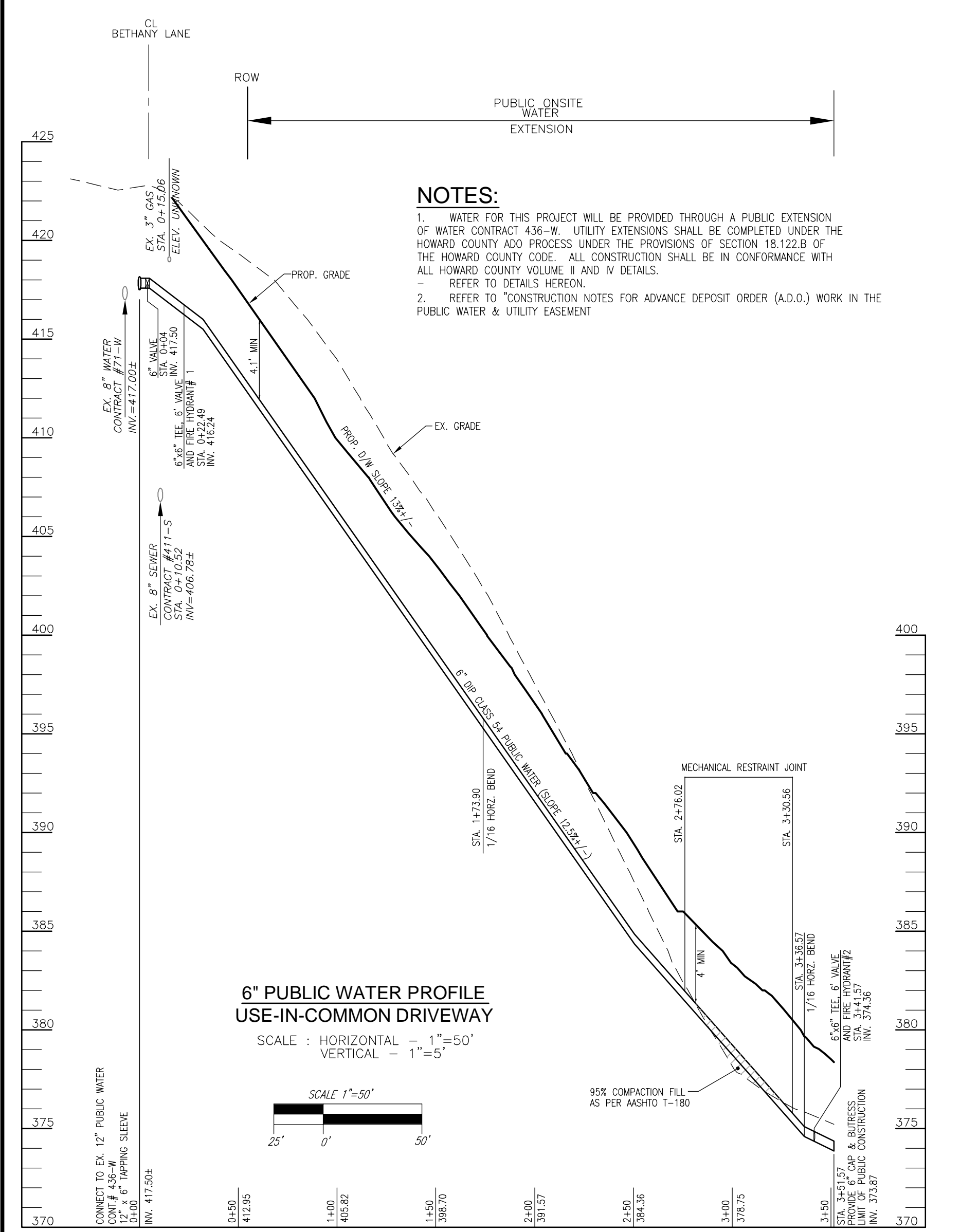
DESIGN BY: RHV/EDS.  
 DRAWN BY: JMR.  
 CHECKED BY: RHV.  
 DATE: NOVEMBER 2023.  
 SCALE: AS SHOWN.  
 W.O. NO.: 41899.

10 SHEET OF 13









CONSTRUCTION NOTES FOR ADVANCE DEPOSIT ORDER (A.D.O.)  
WORK IN THE PUBLIC WATER & UTILITY EASEMENT

**PART 1 GENERAL CONSTRUCTION NOTES**

- FOR DETAILS NOT SHOWN ON THE DRAWING, AND FOR MATERIALS AND CONSTRUCTION METHODS, USE HOWARD COUNTY DESIGN MANUAL, VOLUME IV, STANDARD SPECIFICATIONS AND DETAILS FOR CONSTRUCTION (LATEST EDITION). THE CONTRACTOR SHALL HAVE A COPY OF VOLUME IV ON THE JOB.
- THE A.D.O. CONSTRUCTION WORK MUST BE PERFORMED UNDER THE CONTINUOUS INSPECTION OF THE HOWARD COUNTY BUREAU OF UTILITIES. THE CONTRACTOR SHALL NOTIFY THE BUREAU OF UTILITIES (MR. ROY HOOD AT 410-313-4958) AT LEAST FIVE (5) DAYS PRIOR TO THE START OF ANY CONSTRUCTION FOR THIS A.D.O.
- CLEAR ALL UTILITIES BY A MINIMUM OF 12 INCHES. CLEAR ALL POLES BY 5'0" MINIMUM OR TUNNEL AS REQUIRED UNLESS OTHERWISE NOTED. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANIES TO SCHEDULE THE BRACING OF THE POLES.
- THE CONTRACTOR SHALL NOTIFY ALL UTILITIES AND AGENCIES AND MISS UTILITY AT LEAST TWO (2) WORKING DAYS BEFORE STARTING WORK SHOWN ON THE PLANS.
- EXISTING UTILITIES IN THE VICINITY OF THE PROPOSED WORK FOR WHICH TEST PITS HAVE NOT BEEN DUG SHALL BE LOCATED BY THE CONTRACTOR IN ADVANCE OF CONSTRUCTION OPERATIONS AT HIS OWN EXPENSE.
- THE CONTRACTOR SHALL NOTIFY THE HOWARD COUNTY BUREAU OF HIGHWAYS, 410-313-7450, AT LEAST FIVE WORKING DAYS BEFORE OPEN CUTTING OR BORING/JACKING OF ANY COUNTY ROAD FOR LAYING WATER OR SEWER MAINS OR SERVICE CONNECTIONS.
- WORK PERFORMED WITHIN MARYLAND STATE HIGHWAY ADMINISTRATION (MSHA) RIGHT-OF-WAY SHALL BE PERFORMED IN ACCORDANCE WITH THE MSHA PERMIT ISSUED FOR THE CONTRACT. THE CONTRACTOR SHALL NOTIFY THE MARYLAND STATE HIGHWAY ADMINISTRATION, 410-313-5533, AT LEAST FIVE (5) WORKING DAYS BEFORE EXCAVATING WITHIN THE MARYLAND STATE HIGHWAY RIGHT-OF-WAY FOR LAYING WATER OR SEWER MAINS OR SERVICE CONNECTIONS.
- EXCAVATIONS MUST BE SUPPORTED FOR THE PROTECTION OF WORKERS, THE CONSTRUCTION WORK AREA AND ADJACENT PROPERTY. REFER TO **TEMPORARY EXCAVATION SUPPORT SYSTEMS** UNDER SECTION 1000.03.03 OF THE STANDARD SPECIFICATIONS.
- EXCAVATIONS MUST BE KEPT WELL DRAINED AT ALL TIMES. DEWATERING, DRAINAGE AND PUMPING IS REQUIRED DURING CONSTRUCTION. REFER TO **DEWATERING, DRAINAGE AND PUMPING** UNDER SECTION 1000.03.03 OF THE STANDARD SPECIFICATIONS. PUMPS MUST BE THE PROPER TYPE AND CAPACITY TO MAINTAIN A DRY WORK AREA.
- THE USE OF STEEL PLATES TO PROTECT THE TRENCH AND ROADWAY SHALL BE AS SPECIFIED UNDER SECTION 1000.03.05, SECTION 104 AND STANDARD DETAIL PLATE G-4.02 OF THE STANDARD SPECIFICATIONS.
- TEMPORARY AND PERMANENT REPAIR OF ROADWAY OPENINGS SHALL BE AS SPECIFIED UNDER SECTION 1000.03.08 AND STANDARD DETAIL PLATE G-4.01 OF THE STANDARD SPECIFICATIONS UNLESS OTHERWISE SPECIFIED BY PERMIT FROM THE AUTHORITY HAVING JURISDICTION. TEMPORARY PAVING SHALL CONSIST OF NOT LESS THAN 12 (TWELVE) INCHES OF CRUSHED STONE AND 2 (TWO) INCHES OF BITUMINOUS COLD PATCH MATERIAL.

APPROVED: HOWARD COUNTY DEPARTMENT OF PLANNING AND ZONING  
 CHIEF, DEVELOPMENT ENGINEERING DIVISION  
 CHIEF, DIVISION OF LAND DEVELOPMENT  
 DIRECTOR

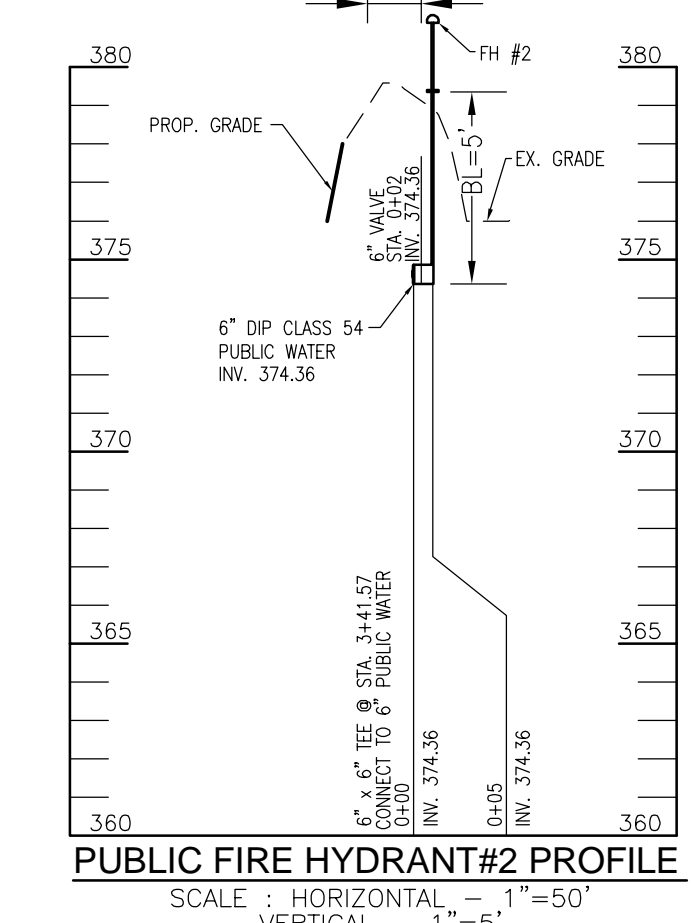
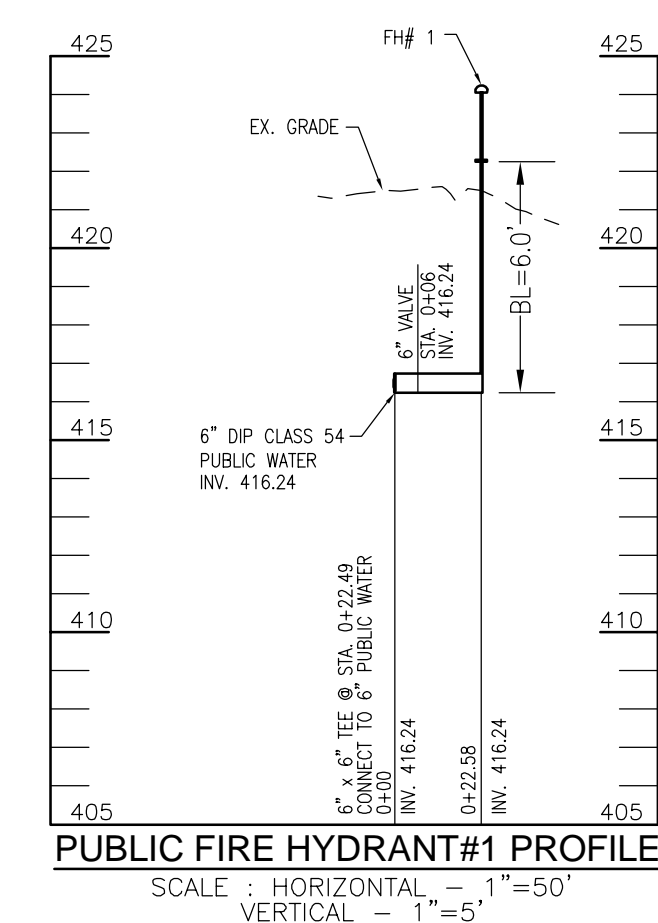
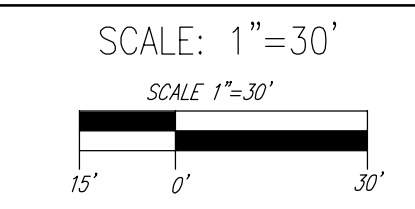
12/15/2023  
 12/15/2023  
 12/18/2023  
 DATE

**PART II WATER CONSTRUCTION NOTES**

- ALL WATER MAINS SHALL BE D.I.P., CLASS 54 MINIMUM, OR AWWA C900/C905 P.V.C. PIPE, CLASS DR18 MINIMUM.
- TOPS OF ALL WATER PIPES SHALL HAVE NOT LESS THAN 4" OF COVER UNLESS OTHERWISE NOTED.
- VALVES ADJACENT TO TEES SHALL BE STRAPPED TO TEES.
- FIRE HYDRANTS SHALL BE SET TO THE BURY LINE ELEVATIONS SHOWN ON THE PLANS. ALL FIRE HYDRANTS SHALL BE INSTALLED IN ACCORDANCE WITH STANDARD DETAILS. THE SOIL AROUND THE FIRE HYDRANT SHALL BE COMPACTED IN ACCORDANCE WITH SECTIONS 1000 AND 1005 OF THE STANDARD SPECIFICATIONS.
- ALL FITTINGS SHALL BE BUTTRESSED OR ANCHORED WITH CONCRETE IN ACCORDANCE WITH STANDARD DETAILS UNLESS OTHERWISE PROVIDED FOR ON THE DRAWINGS.
- THE CONTRACTOR SHALL NOTIFY THE BUREAU OF UTILITIES AT LEAST 48 HOURS IN ADVANCE OF SCHEDULED SHUTDOWNS OF THE EXISTING WATER MAIN. SHUTDOWNS OF THE EXISTING WATER MAIN FOR NEW CONNECTIONS AND REMOVAL OF EXISTING SERVICE CONNECTIONS SHALL BE AS SPECIFIED UNDER SECTION 1002.06 - CONNECTIONS OF THE STANDARD SPECIFICATIONS.
- THE CONTRACTOR SHALL NOT OPERATE ANY WATER MAIN VALVES ON THE EXISTING WATER SYSTEM.
- WATER SERVICE CONNECTIONS SHALL BE AS SPECIFIED UNDER SECTION 1004-WATER HOUSE SERVICE AND APPURTENANCES OF THE STANDARD SPECIFICATIONS AND STANDARD DETAIL PLATE. THE MINIMUM SIZE OF A SINGLE RESIDENTIAL WHC FOR NEW RESIDENTIAL CONSTRUCTION IS 1-1/2" INCH DIAMETER WITH 1-INCH METER. INSTALLATION OF THE WATER METER IS NOT PART OF THE A.D.O. CONSTRUCTION WORK. WATER SERVICE CONNECTIONS INCLUDE PRESSURE AND LEAK TESTING, DISINFECTION AND BACTERIOLOGICAL TESTING.
- [FOR COMMERCIAL METERS] THE NEW WATER METER ASSEMBLY SHALL BE THE (TYPE) PER HOWARD COUNTY DETAIL PLATE W-3.24. INSTALLATION OF THE WATER METER IS NOT PART OF THE A.D.O. CONSTRUCTION WORK.
- IF THE EXISTING WATER METER WILL BE MOVED TO THE NEW METER CONNECTION INSIDE THE BUILDING, THE CONTRACTOR SHALL CONTACT THE METER DIVISION OF THE BUREAU OF UTILITIES AT 410-313-4948 TO SCHEDULE RELOCATION OF THE METER SETTING.
- THE ABANDONMENT OF EXISTING WATER SERVICE CONNECTIONS SHALL BE AS SPECIFIED UNDER SECTION 1015.03 OF THE STANDARD SPECIFICATIONS. REMOVAL OF THE EXISTING CORPORATION STOP OR TAPPING SADDLE REQUIRES A SCHEDULED SHUTDOWN OF THE WATER MAIN. THE EXISTING CORPORATION STOP SHALL BE REMOVED FROM THE WATER MAIN AND THE JOINT REPAIRED WITH A COUNTY APPROVED STAINLESS STEEL FULL CIRCLE REPAIR CLAMP SUCH AS FORD METER FS2, MUELLER 550 OR ROMAC SS2 SERIES.
- TRACER WIRE AND CONTINUITY TEST STATIONS SHALL BE INSTALLED ON ALL WATER MAINS IN ACCORDANCE WITH DETAIL PLATE G-8.21 OF THE STANDARD SPECIFICATIONS.
- PROPER ASSEMBLY OF GASKETED PVC PIPE JOINTS. THE MANUFACTURER'S INSERTION LINE OF GASKETED PVC PIPE JOINTS INDICATES THE MAXIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL. AFTER ASSEMBLY OF THE JOINT, THE LINE SHALL REMAIN VISIBLE. DUAL INSERTION LINES ON GASKETED PVC PIPE INDICATE THE MAXIMUM AND MINIMUM DEPTH OF INSERTION OF THE SPIGOT INTO THE BELL.
- TEES, CROSSES, BENDS GREATER THAN 5 DEGREES, AND SIMILAR FITTINGS FOR USE WITH C-900 PVC WATER PIPE SHALL BE DUCTILE IRON CONFORMING TO AWWA C153.
- ALL CHANGES IN HORIZONTAL OR VERTICAL DIRECTION OF PVC WATER PIPE SHALL BE MADE WITH HIGH-DEFLECTION COUPLINGS, 5 DEGREE SWEEPS OR STANDARD BENDS. NO BENDING OF PIPE OR DEFLECTION OF PVC PIPE JOINTS IS PERMITTED.
- SEVENTEEN (17) POUND SACRIFICIAL ANODES SHALL BE INSTALLED ON ALL VALVES AND METALLIC FITTINGS USED WITH PVC WATER MAINS IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS AND DETAILS. MAGNESIUM ANODES SHALL BE INSTALLED ON ALL IRON VALVES AND DUCTILE IRON FITTINGS INCLUDING RESTRAINTS AND HARNESSSES. ZINC ANODES SHALL BE INSTALLED ON ALL STAINLESS STEEL FITTINGS AND SADDLES USED WITH PVC WATER MAINS.



**PUBLIC WATER EXTENSION PLAN**



**LEGEND:**

- PROPERTY LINE
- EXISTING RIGHT-OF-WAY LINE
- ADJACENT PROPERTY LINE
- EXISTING EDGE OF PAVING
- EXISTING TREE LINE
- STREAM BUFFER
- STREAM
- WETLANDS
- WETLAND BUFFER
- EXISTING FOREST CONSERVATION EASEMENT PLAT 19810-19812
- EXISTING 20" SEWER RIGHT-OF-WAY FOR SANITARY SEWER L. 851 / F. 692
- EXISTING PUBLIC FOREST CONSERVATION EASEMENT PLATS 25610-25612
- EXISTING 20" PUBLIC DRAINAGE & UTILITY EASEMENT PLAT 29460
- EXISTING 20" PUBLIC DRAINAGE & UTILITY EASEMENT PLAT 29460
- EXISTING VARIABLE WIDTH PUBLIC WATER & UTILITY EASEMENT PLATS 25610-25612
- EXISTING 24" PRIVATE USE-IN-COMMON ACCESS EASEMENT FOR LOTS 1-4 AND OPEN SPACE LOTS 5 & 6 PLATS 25610-25612
- EXISTING 24" PRIVATE WATER & UTILITY EASEMENT FOR LOTS 2 & 3 PLATS 25610-25612
- EXISTING 20" PRIVATE SEWER & UTILITY EASEMENT PLATS 25610-25612
- EXISTING 10' CONTOUR
- EXISTING 2' CONTOUR
- EXISTING STEEP SLOPES (25% SLOPES OR GREATER)
- EXISTING MODERATE SLOPES (15% TO 24.99% SLOPES)
- PROPOSED 10' CONTOUR
- PROPOSED 2' CONTOUR

**NOTES:**  
 1. ALL WATER CONNECTIONS SHALL BE 1-1/2" WITH 1" OUTSIDE METER SETTINGS, UNLESS OTHERWISE NOTED. REFER TO HOWARD COUNTY DETAIL W-3.28 OUTSIDE METER SETTINGS.

**OWNER/DEVELOPER**  
 PATAPSCO BUILDERS, LLC  
 612 THIRD STREET, SUITE 4C  
 ANNAPOLIS, MD 21403  
 (240) 375-1052

SITE DEVELOPMENT PLAN  
**PUBLIC WATER EXTENSION PLAN,  
 NOTES, DETAILS AND STORMDRAIN PROFILE**  
**SCHNEIDER SUBDIVISION**  
 LOTS 1-4

PARCEL: 136  
 TAX MAP: 17 GRID: 20  
 2ND ELECTION DISTRICT

ZONED: R-20  
 L. 18861 / F. 73  
 HOWARD COUNTY, MARYLAND

**VOGEL ENGINEERING**  
 TIMMONS GROUP

3300 NORTH RIDGE ROAD, SUITE 110, ELLICOTT CITY, MD 21043  
 P: 410.461.7666 F: 410.461.8961 www.timmons.com

PROFESSIONAL CERTIFICATE

DESIGN BY: RHY/EDS  
 DRAWN BY: JMR  
 CHECKED BY: RHY  
 DATE: NOVEMBER 2023  
 SCALE: AS SHOWN  
 W.O. NO.: 41899

12 SHEET OF 13



