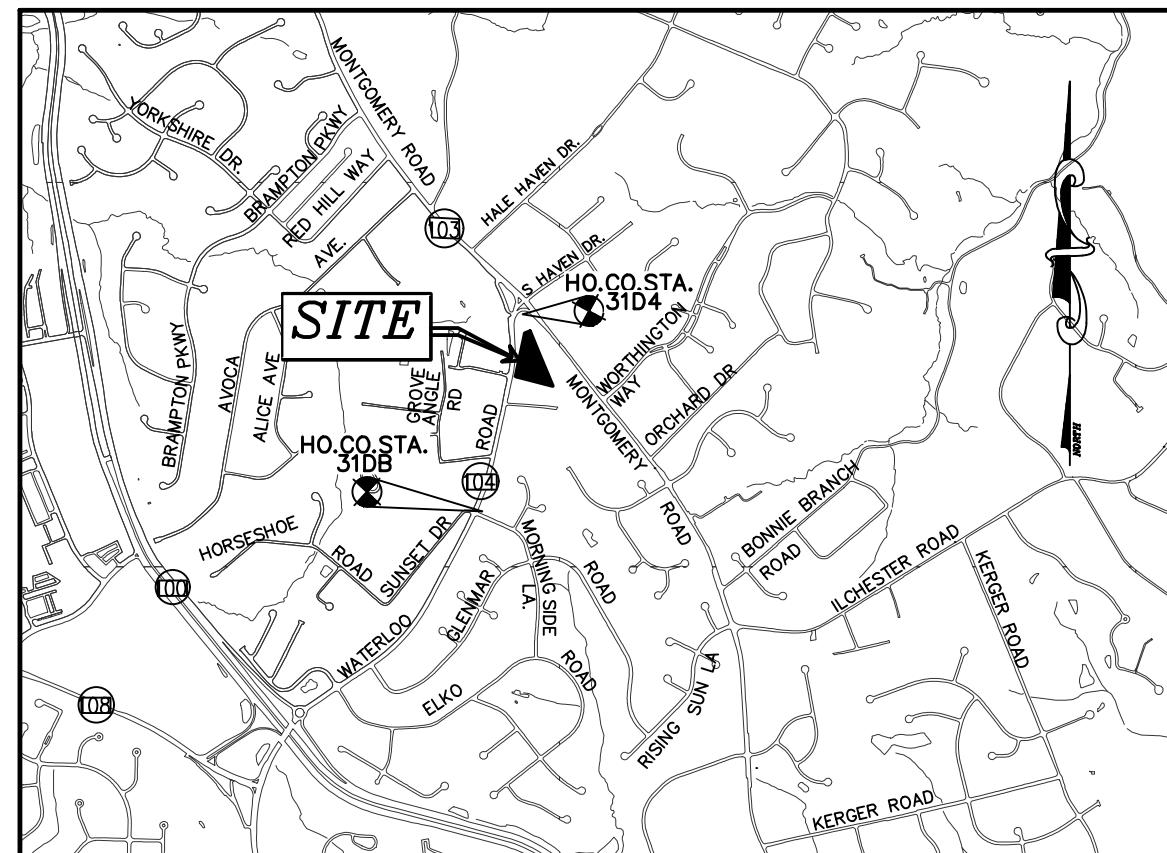


INDEX OF DRAWINGS

NO.	DESCRIPTION
1	COVER SHEET
2	EXISTING CONDITIONS
3	HORIZONTAL LAYOUT AND MARKING PLAN
4	GRADING AND SEDIMENT CONTROL PLAN
5	UTILITIES PROFILES AND DETAILS
6	EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
7	LANDSCAPE AND FOREST CONSERVATION PLAN
8	SWM DRAINAGE AREA MAP AND SWM DETAILS
9	ROAD IMPROVEMENTS

SITE DEVELOPMENT PLAN PRIMROSE SCHOOL FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND

32. A FIRE DEPARTMENT CONNECTION FOR FIRE PROTECTION SYSTEMS SHALL BE LOCATED:
(A.) TYPICALLY ON THE SIDE OF THE STRUCTURE DISPLAYING THE ADDRESS CLEARLY VISIBLE TO THE RESPONDING UNITS UNLESS OTHERWISE APPROVED BY THE OFFICE OF THE FIRE MARSHAL;
(B.) WITHIN 100 FT. OF A FIRE HYDRANT; (II) THE APPROPRIATE SIGN SHALL BE MOUNTED ON THE BUILDING'S WALL BETWEEN 8 AND 12 FEET ABOVE THE FIRE DEPARTMENT CONNECTION;
(C.) A FREE-STANDING FIRE DEPARTMENT CONNECTION SHALL HAVE THE SIGN MOUNTED ON POLE DIRECTLY BEHIND THE CONNECTION APPROXIMATELY 6 FEET HIGH;
(D.) SIGNS SHALL HAVE A WHITE REFLECTIVE BACKGROUND WITH A RED REFLECTIVE BORDER, RED REFLECTIVE LETTERS AND A RED REFLECTIVE ARROW. THE BORDER SHALL HAVE A 3/8" STROKE. THE LETTERS SHALL BE 6" HIGH WITH A 1" STROKE. THE ARROW SHALL HAVE A STROKE NOTE LESS THAN 2". THE OVERALL SIGN MEASUREMENTS SHALL BE 12" BY 18";
(E.) ANY OBSTRUCTION OR CONDITION THAT DETERS OR HINDERS ACCESS TO A FOG IS PROHIBITED. A MINIMUM CLEAR SPACE OF 15 FEET (7.5 FEET ON ALL SIDES) SHALL BE MAINTAINED.
33. PROJECT IS SUBJECT TO WP-23-063 REQUEST FOR A VARIANCE TO SECTION 16.1205(A)(3) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. REQUESTING TO REMOVE 3 SPECIMEN TREES (ST-04, ST-06 AND ST-08). APPROVAL WAS GRANTED ON FEBRUARY 13, 2023 SUBJECT TO THE FOLLOWING CONDITIONS:
A. THE ALTERNATIVE COMPLIANCE APPROVAL IS LIMITED TO THE REMOVAL OF SPECIMEN TREES #4, #6, AND #8 ONLY AS DEPICTED ON THE EXHIBIT. ANY PROPOSAL TO REMOVE ANY OTHER SPECIMEN TREE WILL REQUIRE A NEW ALTERNATIVE COMPLIANCE REQUEST OR AN AMENDMENT TO THIS ALTERNATIVE COMPLIANCE REQUEST.
B. A MINIMUM OF 6 (SIX) NATIVE, 3" DBH, SHADE TREES SHALL BE PROVIDED AS MITIGATION FOR THE REMOVAL OF THE 3 (THREE) SPECIMEN TREES FROM THE PROPERTY. LANDSCAPING SURETY IN THE AMOUNT OF \$300.00 PER TREE SHALL BE PROVIDED WITH THE APPLICANT'S GRADING PERMIT AS PART OF THE SITE DEVELOPMENT PLAN.
34. PROJECT IS SUBJECT TO WP-22-057 REQUEST FOR A VARIANCE TO SECTION 16.128(C)(1) OF THE SUBDIVISION AND LAND DEVELOPMENT REGULATIONS. REQUESTING HOLD A VIRTUAL PRE-SUBMISSION COMMUNITY MEETING. APPROVAL WAS GRANTED ON DECEMBER 2, 2021 SUBJECT TO THE FOLLOWING CONDITIONS:
A. THE PETITIONER MUST COMPLY WITH THE DEPARTMENT OF PLANNING AND ZONING'S VIRTUAL PRESUBMISSION MEETING GUIDELINES FOR APPLYING AND HOSTING A VIRTUAL PUBLIC MEETING (ATTACHED).
35. SHA TRACKING NO. 23AP00001XX
36. USE MD 104.02-10 FOR TRAFFIC CONTROL DURING CONSTRUCTION
37. HEALTH DEPARTMENT APPROVAL OF THIS SITE DEVELOPMENT PLAN (SDP) DOES NOT ENSURE APPROVAL OF BUILDING PERMIT APPLICATIONS ASSOCIATED WITH THIS PLAN. PERMIT PLANS FOR CERTAIN FACILITIES TO BE CONSTRUCTED WITHIN THE LIMITS DESCRIBED BY THIS SDP WILL REQUIRE REVIEW AND APPROVAL BY THE HEALTH DEPARTMENT. SUCH FACILITIES MAY INCLUDE, BUT ARE NOT LIMITED TO, THOSE WHICH HAVE SWIMMING POOLS, OR THAT SELL PREPARED OR PACKAGED FOODS, OR THAT MAY HAVE EQUIPMENT THAT EMITS RADIATION.

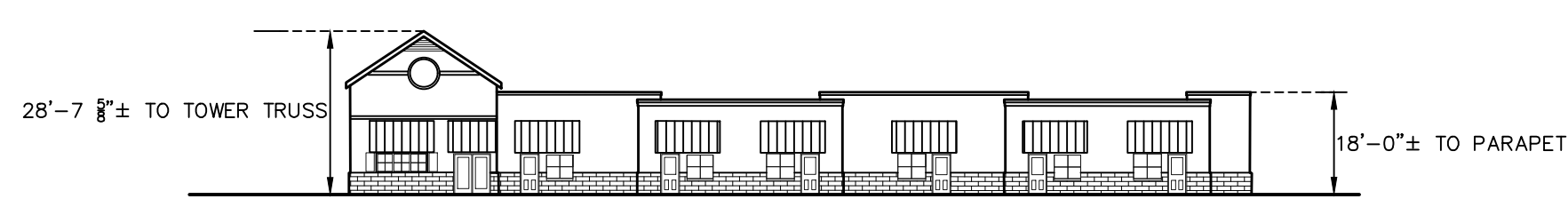
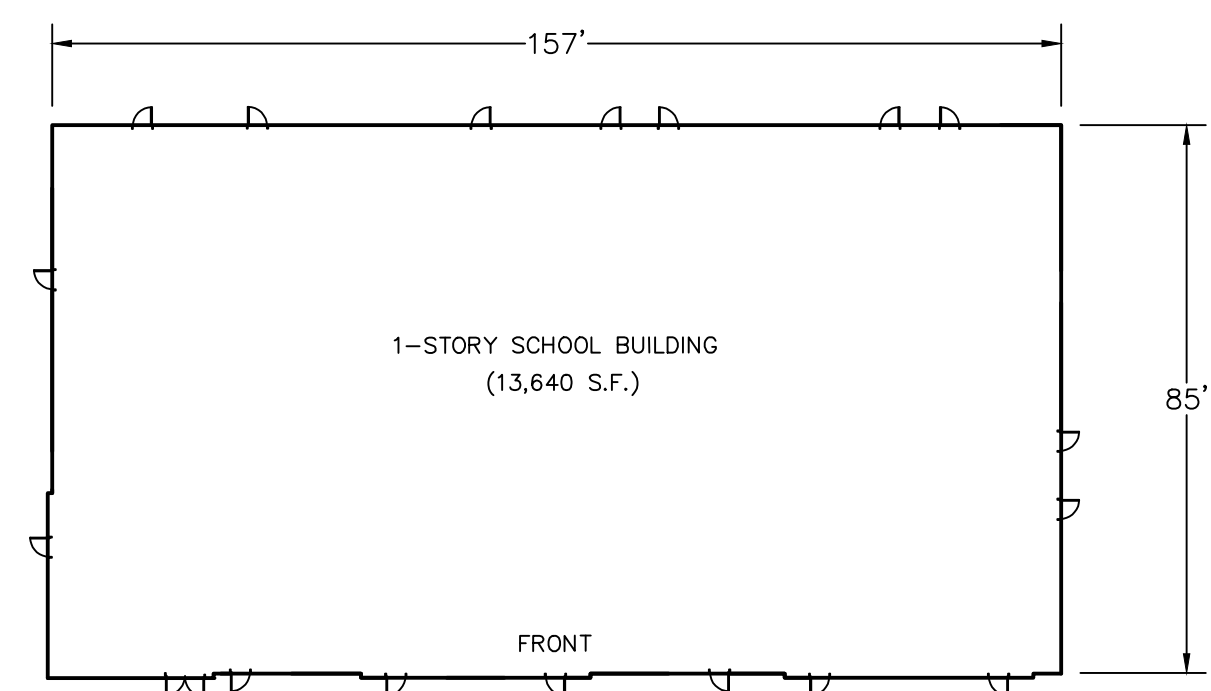
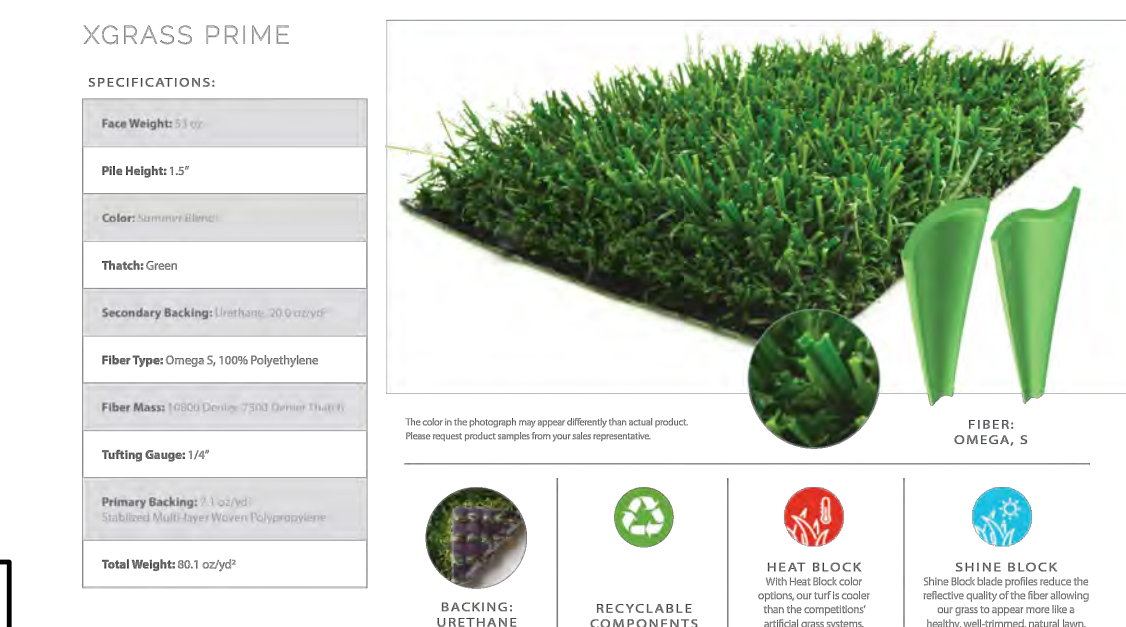


VICINITY MAP

SCALE: 1"=2000'
ADC MAP: 17 (G-7)
STA. No. 31DB N 569583.589, E 1369155.211, EL. 492.348 (NAVD88)
STA. No. 31D4 N 571700.664, E 1369606.417, EL. 494.445 (NAVD88)



XGRASS INNOVATIVE TURF SOLUTIONS



SCHOOL BUILDING
SCALE: 1"=30'

NOTE: BUILDING ELEVATIONS MUST MEET THE CONDITIONS OF APPROVAL PROVIDED IN BA-20-014C

STORMWATER MANAGEMENT PRACTICES

ADDRESS	MICRO-BIORETENTION (M-6) NUMBER
4959 WATERLOO ROAD, ELKBRIDGE 21075	2

ADDRESS CHART

BUILDING	ADDRESS
SCHOOL BUILDING	4959 WATERLOO ROAD, ELKBRIDGE 21075

PERMIT INFORMATION BLOCK

SUBDIVISION NAME:		SECTION/AREA:		PARCEL:
				169
PLAT NO.	BLOCK(S)	ZONING	TAX MAP NO.	ELECTION DISTRICT
		R-20	31	1ST
		CENSUS TRACT		
		601105		

GENERAL NOTES

- THE SUBJECT PROPERTY IS ZONED R-20, PER THE COMPREHENSIVE ZONING PLAN, MAPS AND AMENDED REGULATIONS EFFECTIVE ON 10/06/13
- PROPERTY IS BEING DEVELOPED AS A CONDITIONAL USE FOR A DAY CARE SCHOOL. A CONDITIONAL USE PETITION BA-22-014C WAS APPROVED ON 9/23/2022. CONDITIONS OF APPROVAL ARE:
A. THE USE SHALL BE CONDUCTED IN CONFORMANCE WITH, AND THE CONDITIONAL USE ONLY TO THE USES AND STRUCTURES AS DESCRIBED IN THE CONDITIONAL USE PETITION DATED MAY 4, 2022, AND THE REVISED CONDITIONAL USE PLAN DATED MAY 22, 2022, AND NOT TO ANY OTHER ACTIVITIES, USES, STRUCTURES OR ADDITIONS ON THE PROPERTY;
B. PETITIONER SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS;
C. PETITIONER SHALL ENDEAVOR TO ENSURE THAT THE OWNER/OPERATOR OF THE FACILITY, IF ONE IS SELECTED AT THE TIME, SHALL BE PRESENT AT ANY REQUIRED FUTURE PUBLIC MEETINGS OR HEARINGS;
D. PETITIONER SHALL ENDEAVOR TO ENSURE THAT THE DESIGN AND MASSING OF PROPOSED STRUCTURES SHALL BE COMPATIBLE IN SCALE AND CHARACTER WITH RESIDENTIAL PROPERTIES IN THE VICINITY OF THE SITE.
- SITE ANALYSIS DATA:**
LOCATION: TAX MAP: 31 GRID: 8 PARCEL: 169 (P1, P2, P3)
ELECTION DISTRICT : FIRST
ZONING: R-20
TOTAL AREA: 2.52 AC.±
LIMIT OF DISTURBED AREA: 3.08 AC.± (INCLUDING OFFSITE)
TOTAL NUMBER OF UNITS : 1
TYPE OF PROPOSED UNIT : CHILD DAY CARE CENTER AND NURSERY SCHOOL
PROPOSED USE FOR SITE : COMMERCIAL (CONDITIONAL USE -CHILD DAY CARE CENTER AND NURSERY SCHOOL).
BUILDING COVERAGE: 13,640 S.F. (12.40% OF SITE)
GROSS FLOOR AREA: 13,640 S.F.
DEED REFERENCE: 21181 / 268
DPZ FILE NUMBERS BA-22-014C, ECP-19-016, ECP-22-055
- PROJECT ANALYSIS:**
AREA OF BUILDING=13,640 SQ.FT.
AREA WITHIN BUILDING ENVELOPE=44,400 SQ.FT.
AREA OF GREEN SURFACES REQUIRED=0.2X44,400=8,880 SQ.FT.
AREA OF PLAY GROUND REQUIRED
AREA OF PLAYGROUND PROVIDED=14,700 SQ.FT. PROPOSED NUMBER OF STUDENTS=195
- PARKING ANALYSIS:**
AREA OF BUILDING=13,640 SQ.FT.
PARKING REQUIRED=13.6X3=41 SPACES
PARKING PROVIDED=43 SPACES
THE EXISTING TOPOGRAPHY SHOWN HERE IS TAKEN FROM GIS AND VERIFIED BY MILDENBERG, BOENDER & ASSOC, INC. IN OCT. 2021.
THE BOUNDARY SHOWN IS BASED ON A FIELD RUN MONUMENTED BOUNDARY SURVEY PERFORMED ON OR ABOUT OCT. 2021 BY MILDENBERG, BOENDER & ASSOC.
THE COORDINATES SHOWN HEREON ARE BASED UPON THE HOWARD COUNTY GEODETIC CONTROL WHICH IS BASED UPON THE MARYLAND STATE PLANE COORDINATE SYSTEM, HOWARD COUNTY MONUMENT NO:31DB &31D4 WHICH IS USED FOR THIS PROJECT.
STA. No. 31DB N 569583.589, E 1369155.211, EL. 492.348 (NAVD88)
STA. No. 31D4 N 571700.664, E 1369606.417, EL. 494.445 (NAVD88)
- EXISTING UTILITIES ARE TAKEN FROM FIELD RUN SURVEY PREPARED BY MILDENBERG, BOENDER & ASSOC, INC. DATED OCT. 2021.
- WATER IS PUBLIC; CONTRACT NO. 64-W.
- SEWER IS PUBLIC; CONTRACT NO. 302-S.
- THERE ARE NO STEEP SLOPES OR FLOOD PLAINS ON THIS SITE.
- THERE ARE NO STREAMS, WETLANDS, OR THEIR ASSOCIATED BUFFERS ON THIS SITE.
- BASED ON AVAILABLE COUNTY DATA, NO HISTORIC STRUCTURES OR BURIAL GROUNDS EXIST ON SITE.
- THIS SITE IS NOT LOCATED IN A HISTORIC DISTRICT.
- FOREST STAND DELINEATION PERFORMED BY ECO-SCIENCE PROFESSIONALS, INC. IN JULY 2022.
- SUMMARY OF FINDINGS FOR APFO TRAFFIC ANALYSIS PREPARED BY THE TRAFFIC GROUP.
A. DATE OF REPORT: DECEMBER 9, 2022
B. DATE OF COUNTY(S) INTERSECTIONS WERE COUNTED EITHER 9/27/22, 10/13/22, 10/20/22, OR 10/25/22.
C. REPORT SUBMITTED AS PART OF PLAN NUMBER:SDP-23-025
D. HOWARD COUNTY PUBLIC SCHOOLS WERE IN SESSION DURING ALL COUNT DATES.
E. STUDY INTERSECTIONS ARE ALL UNDER STATE JURISDICTION AND 2025 LOS FOR AM (PM) ARE:
MD 103 AT LONG GATE PARKWAY -A (A)
MD 103 AT MD 104 -A (B)
MD 104 AT WATER GROVE LANE/SITE ACCESS -A (A)
MD 104 AT MD 100 WESTBOUND RAMP -B (B)
MD 104 AT MD 108 -A (A)
MD 108 AT MD 100 EASTBOUND RAMP -A (A)
MD 103 AT BRIGHTFIELD ROAD/MONTGOMERY ROAD -B (C)
- F. ALL INTERSECTIONS ARE PROJECTED TO MAINTAIN ACCEPTABLE LEVELS OF SERVICE AND MITIGATION IS NOT REQUIRED.
- STORMWATER MANAGEMENT REQUIREMENTS WILL BE SATISFIED VIA MICRO-BIORETENTION (M-6). ALL FACILITIES WILL BE PRIVATELY OWNED AND MAINTAINED.
- THE FOREST CONSERVATION PLAN AND ASSOCIATED FOREST STAND DELINEATION WILL BE REVIEWED FOR COMPLIANCE WITH THE FOREST CONSERVATION ACT AT THE SUBDIVISION PLAN, SITE DEVELOPMENT PLAN OR GRADING PERMIT STAGES. UNDER COUNTY LAW, ONLY A MD LICENSED FORESTER, MD LICENSED LANDSCAPE ARCHITECT OR AN ISA CERTIFIED ARBORIST WHO IS ALSO A STATE QUALIFIED PROFESSIONAL MAY PREPARE FOREST STAND DELINEATIONS, FOREST CONSERVATION PLANS OR OTHER REQUIRED COUNTY FOREST CONSERVATION PROGRAM DOCUMENTS.
- FOREST CONSERVATION OBLIGATIONS IN ACCORDANCE WITH SECTION 16.1200 OF THE HOWARD COUNTY CODE AND FOREST CONSERVATION MANUAL FOR THIS PROJECT WILL BE FULFILLED BY PLACING THE 2.41 ACRES OF REFORESTATION FOR OUTSIDE WATERSHED IN A FOREST RETENTION BANK (2:1 RATIO) AT WINCOPIA FARMS, F-13-103, AS 4.827 ACRE OF RETENTION. WINCOPIA FARMS IS LOCATED ON TAX MAP NO. 47 AND IDENTIFIED AS PARCEL 472, SITUATED ON THE EAST SIDE OF GORMAN ROAD, SHOWN ON SHEET 69 OF F-13-103. FOR THE REMAINING 0.4 ACRES OF OBLIGATION WILL BE ADDRESSED BY A PAYMENT OF FEE-IN-LIEU IN THE AMOUNT OF \$21,750 WILL BE POSTED WITH THE DEVELOPER'S AGREEMENT.
- NO GRADING, REMOVAL OF VEGETATIVE COVER OR TREES, OR PLACEMENT OF NEW PAVING OR STRUCTURES IS PERMITTED WITHIN THE LIMITS OF WETLANDS, STREAM(S), OR THEIR BUFFERS, AND FOREST CONSERVATION EASEMENT AREAS.
- FINANCIAL SURETY FOR THE REQUIRED PERIMETER AND PARKING LOT LANDSCAPING IN THE AMOUNT OF \$33,060 FOR 40 SHADE TREES, 117 EVERGREEN TREES AND 117 SHRUBS SHALL BE POSTED WITH THE DEVELOPER'S AGREEMENT FOR THIS SITE DEVELOPMENT PLAN.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING UTILITIES OR AGENCIES AT LEAST 48 HOURS PRIOR TO EXCAVATION WORK BEING DONE.
MISS UTILITY 1-800-257-7777
VERIZON TELEPHONE COMPANY (410) 725-9976
HOWARD COUNTY BUREAU OF UTILITIES (410) 313-4900
AT&T CABLE LOCATION DIVISION (410) 393-3533
BALTIMORE GAS AND ELECTRIC (410) 685-0123
STATE HIGHWAY ADMINISTRATION (410) 531-5533
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC WORKS/BUREAU OF ENGINEERING/ CONSTRUCTION INSPECTION DIVISION AT (410)313-1880 AT LEAST FIVE (5) WORKING DAYS PRIOR TO THE START OF WORK.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE LATEST STANDARDS AND SPECIFICATIONS OF HOWARD COUNTY PLUS MSHA STANDARDS AND SPECIFICATIONS IF APPLICABLE.
- ANY DAMAGE TO THE COUNTY RIGHT-OF-WAY SHALL BE CORRECTED AT THE DEVELOPER'S EXPENSE.
- THE OWNER, TENANT AND/OR THEIR AGENTS SHALL BE RESPONSIBLE FOR MAINTENANCE OF THE REQUIRED LANDSCAPING PLANT MATERIALS, BERMS, FENCES AND WALLS, ALL PLANT MATERIALS SHALL BE MAINTAINED IN GOOD GROWING CONDITION, AND WHEN NECESSARY, REPLACED WITH NEW MATERIALS TO ENSURE CONTINUED COMPLIANCE WITH APPLICABLE REGULATIONS. ALL OTHER REQUIRED LANDSCAPING SHALL BE PERMANENTLY MAINTAINED IN GOOD CONDITION, AND WHEN NECESSARY, REPAIRED OR REPLACED.
- A KNOX BOX (FIRE DEPARTMENT ACCESS BOX) IS REQUIRED TO BE PLACED ON THE FRONT OF THE BUILDING(S). IT SHALL BE PLACED TO THE RIGHT OF THE MAIN ENTRANCE AT A RANGE OF 4'-5" IN HEIGHT AND NO MORE THAN 6' LATERALLY FROM THE DOOR. THE BOX SHALL BE ELECTRONICALLY SUPERVISED TO NOTIFY THE OWNER THAT IT IS BEING ACCESSED (INTEGRATED WITH THE FIRE ALARM SYSTEM). NFPA-1 10.12.1 PRE-SUBMISSION COMMUNITY MEETING WAS HELD VIRTUALLY ON JAN 6, 2022 AT 6:00 PM.
ALL PLAN DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
- TRAFFIC CONTROL DEVICES, MARKINGS AND SIGNING SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). ALL STREET AND REGULATORY SIGNS SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF ANY ASPHALT.

Y:\21-000\Primrose2\Work\PHH-2023-0606\DWG\1-COVER SHEET-REG.dwg, 4/15/2024, 12:24:12 PM, SamerAlomer

DEVELOPER CERTIFICATION

I/WE 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 THE RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF TRAINING AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) APPROVED TRAINING PROGRAM FOR THE CONTROL 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.

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS

Developed by: Michael Davis 4/17/2024
COUNTY HEALTH OFFICER
HOWARD COUNTY HEALTH DEPARTMENT

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

Approved by: Alexander Bratovic 4/18/2024
HOWARD SOIL CONSERVATION DISTRICT

APPROVED: DEPARTMENT OF PLANNING AND ZONING 4/17/2024
Bill Edmondson
CHIEF, DEVELOPMENT ENGINEERING DIVISION

DESIGNER'S SIGNATURE: Sam Alomer 4/15/2024
DATE

SAMER A. ALOMER, P.E. MD REGISTRATION NO. 26859, P.E.

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.

APPROVED: DEPARTMENT OF PLANNING AND ZONING 4/17/2024
Bill Edmondson
CHIEF, DEVELOPMENT ENGINEERING DIVISION

CHIEF, DIVISION OF LAND DEVELOPMENT 4/18/2024
Yvonne Eschberg
DIRECTOR, DEPARTMENT OF PLANNING AND ZONING



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. 26859, EXP. DATE 08/08/25

04/15/24 Sam Alomer 4/15/2024
DATE: SAMER A. ALOMER, P.E.

OWNER
WAVERLY INVESTORS INC.
8544 SCHOLARS LANE
SUITE 200
ELLCOTT CITY, MD 21043
410-707-7054

DEVELOPER
KRISH PROPERTIES, LLC
8544 SCHOLARS LANE
LAUREL, MD 20723
202-247-7434

MILDENBERG, BOENDER & ASSOC., INC.
 Engineers Planners Surveyors
 8818 FORREST ST. SUITE 300, ELLICOTT CITY, MD 21043
 (410) 997-0296 Tel. (410) 997-0298 Fax.

PRIMROSE SCHOOL
 ELKBRIDGE
 TAX MAP: 31 - PARCEL : 169 (P1,P2,P3) GRID 08 ZONING R-20
 HOWARD COUNTY, MARYLAND
 FIRST ELECTION DISTRICT
 COVER SHEET
 SHA TRACKING NO. 23AP0001XX

Project: 21-040
 date: 4.15.2024
 illustration: JCB
 scale: 1"=30'
 approval: MAM
 SAA


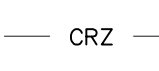
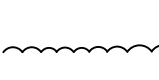
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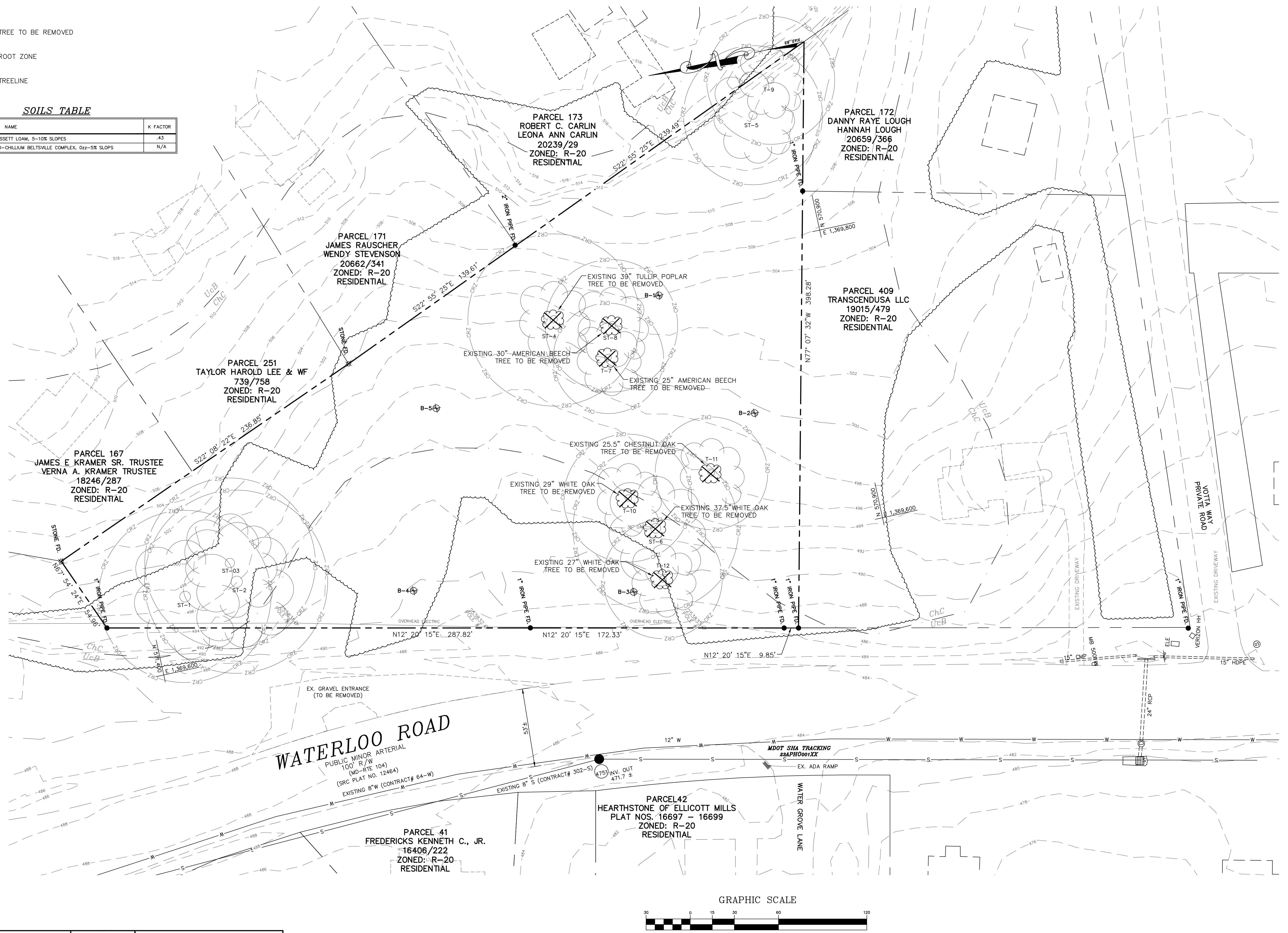
SDP-23-025

LEGEND

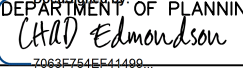
-  EXISTING TREE TO BE REMOVED
-  CRZ — CRITICAL ROOT ZONE
-  EXISTING TREELINE

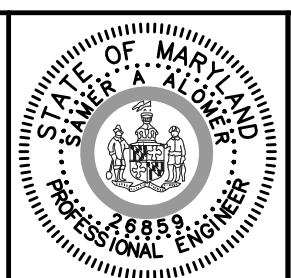
SOILS TABLE

SYMBOL	RATING	NAME	K FACTOR
ChC	(C)	GHILLUM-RUSSETT LOAM, 5-10% SLOPES	.43
UcB	(C)	URBAN LAND-CHILLIUM BELTSVILLE COMPLEX, 0z2-5% SLOPS	N/A



Y:\21-000\Primrose2\Work\PHH1 - 2023-0608\DWG2-EXISTING CONDITIONS.Rvt.dwg, 4/15/2024 12:26:19 PM, SameAlomer

APPROVED: 	DEPARTMENT OF PLANNING AND ZONING	4/17/2024
CHEF, DEVELOPMENT ENGINEERING DIVISION	DATE	4/17/2024
CHEF, DIVISION OF LAND DEVELOPMENT	DATE	4/18/2024
DIRECTOR, DEPARTMENT OF PLANNING AND ZONING	DATE	



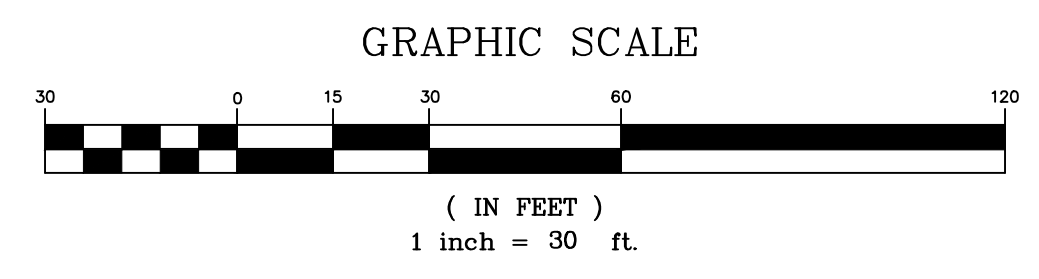
PROFESSIONAL CERTIFICATION

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. 22655, EXP. DATE 08/08/25

04/15/24 Sam Alomer
Samer A. Alomer, P.E. DATE: 04/15/2024

OWNER
WAVERLY INVESTORS INC.
8318 FORREST ST.
SUITE 200
ELLICOTT CITY, MD 21043
410-707-7054

DEVELOPER
KRISH PROPERTIES, LLC
8544 SCHOLARS LANE
LAUREL, MD 20723
202-247-7434



Project	21-040	date	3.19.2024
Illustration	JCB	engineering	MMM
scale	1"=30'	approval	SAA

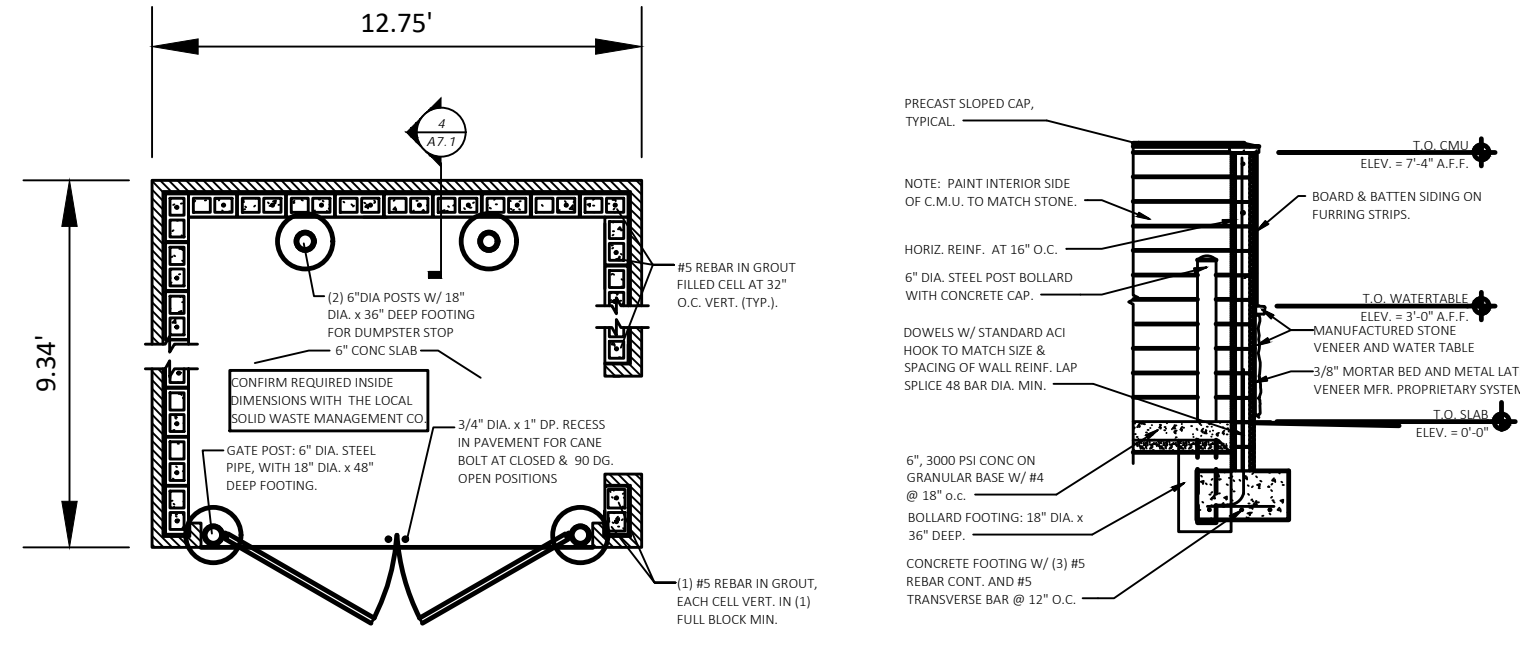
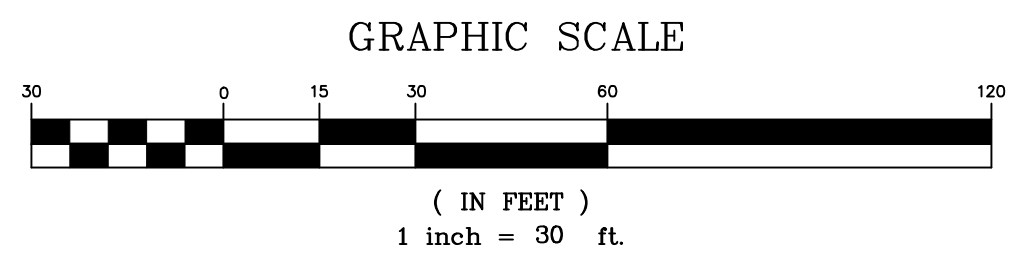
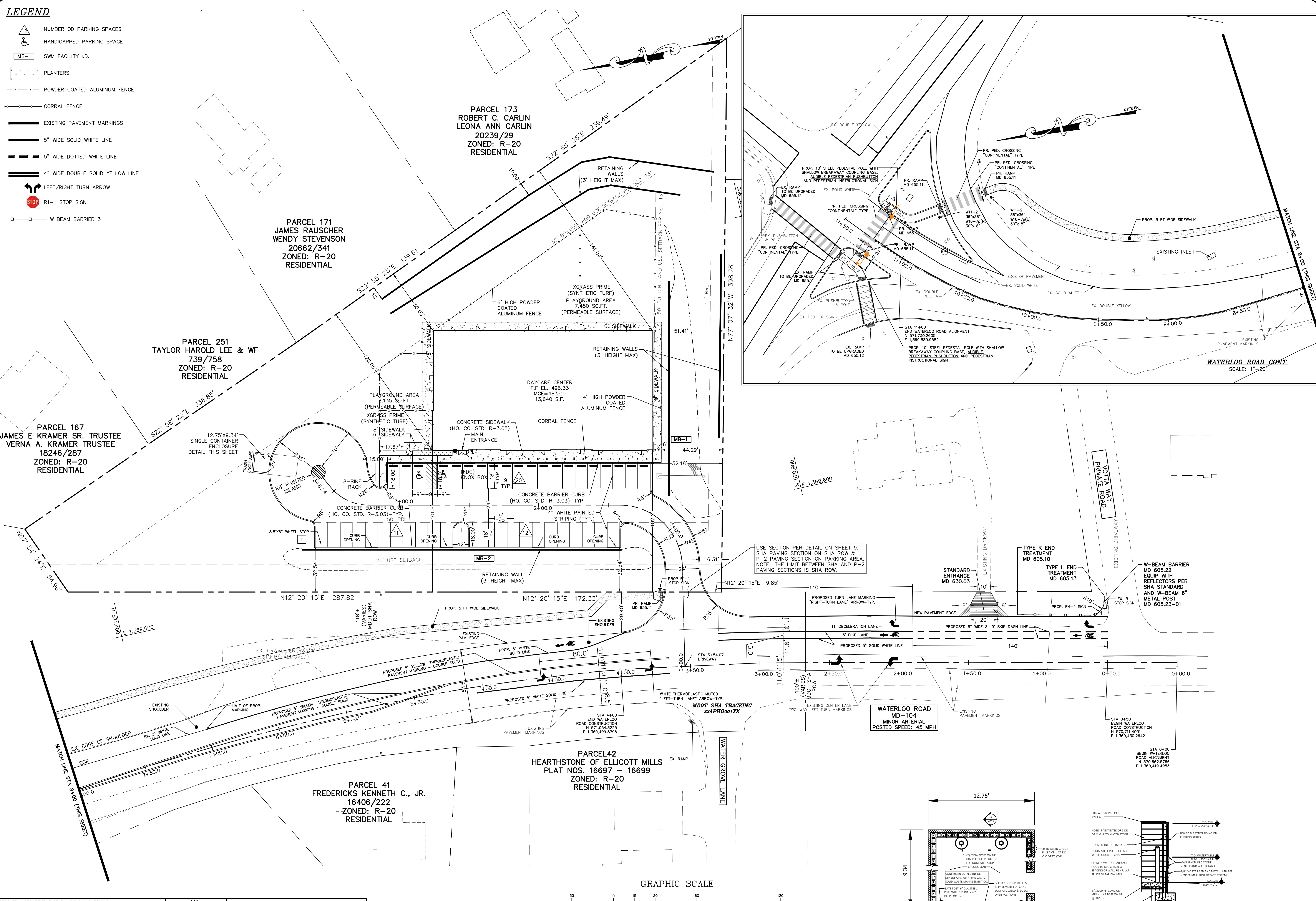
no.	description	date

PRIMROSE SCHOOL
ELKRIDGE
TAX MAP: 31 - PARCEL : 169 (P1,P2,P3) GRID 08 ZONING R-20
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
EXISTING CONDITIONS

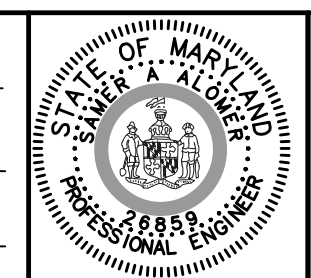
MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
8318 FORREST ST. SUITE 300, ELICOTT CITY, MD 21043
(410) 997-0296 Tel. (410) 997-0298 Fax.

LEGEND

- NUMBER OF PARKING SPACES
- HANDICAPPED PARKING SPACE
- SWM FACILITY I.D.
- PLANTERS
- POWDER COATED ALUMINUM FENCE
- CORRAL FENCE
- EXISTING PAVEMENT MARKINGS
- 5' WIDE SOLID WHITE LINE
- 5' WIDE DOTTED WHITE LINE
- 4' WIDE DOUBLE SOLID YELLOW LINE
- LEFT/RIGHT TURN ARROW
- R1-1 STOP SIGN
- W BEAM BARRIER 31"



APPROVED: DEPARTMENT OF PLANNING AND ZONING
4/17/2024
CHIEF, DEVELOPMENT ENGINEERING DIVISION
4/17/2024
CHIEF, DIVISION OF LAND DEVELOPMENT
4/18/2024
DIRECTOR, DEPARTMENT OF PLANNING AND ZONING



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. 26850 EXP. DATE 08/08/25
04/15/24 Sam Alomer
SAMER A. ALOMER, P.E.

OWNER
WAVERLY INVESTORS INC.
8318 FORREST ST.
SUITE 200
ELLICOTT CITY, MD 21043
410-707-7054

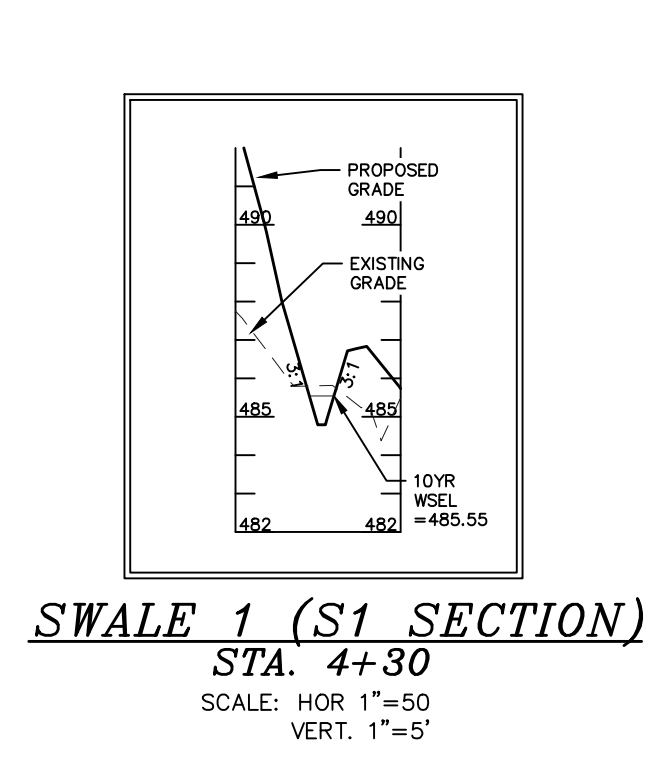
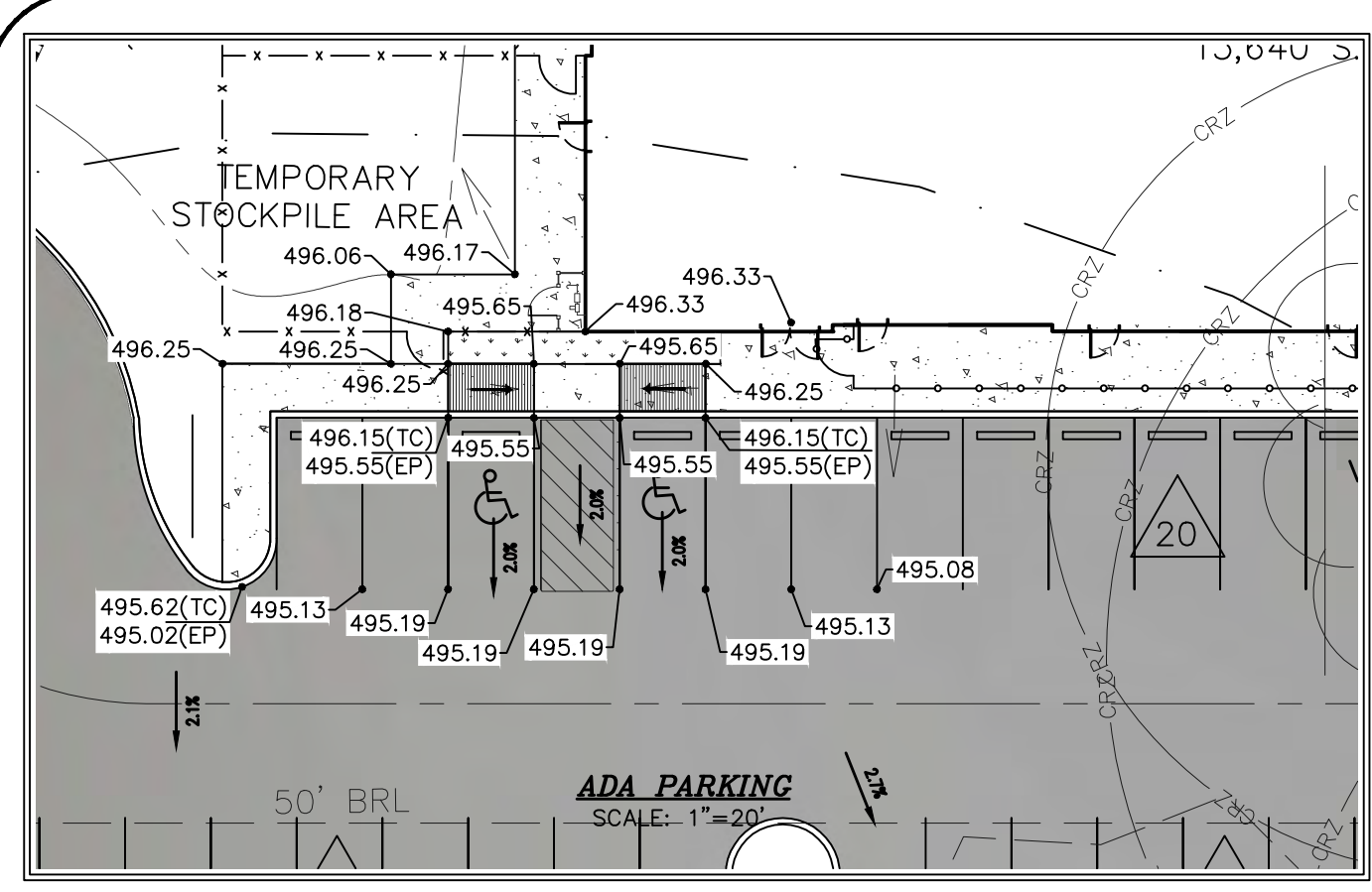
DEVELOPER
KRISH PROPERTIES, LLC
8544 SCHOLARS LANE
LAUREL, MD 20723
202-247-7434

Project	21-040	date	4.15.2024
Illustration	JCB	engineering	MMM
scale	1"=30'	approval	SA4

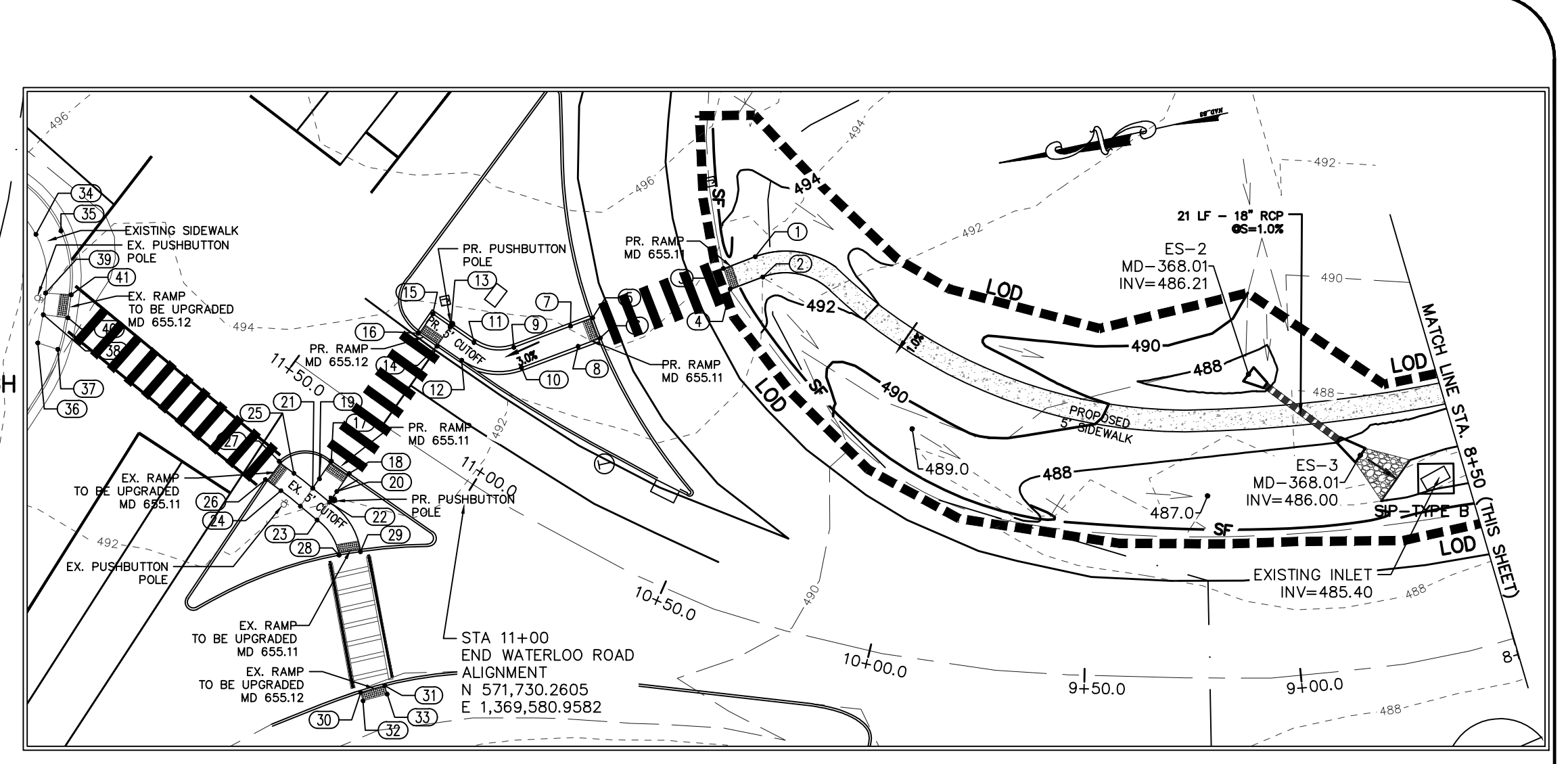
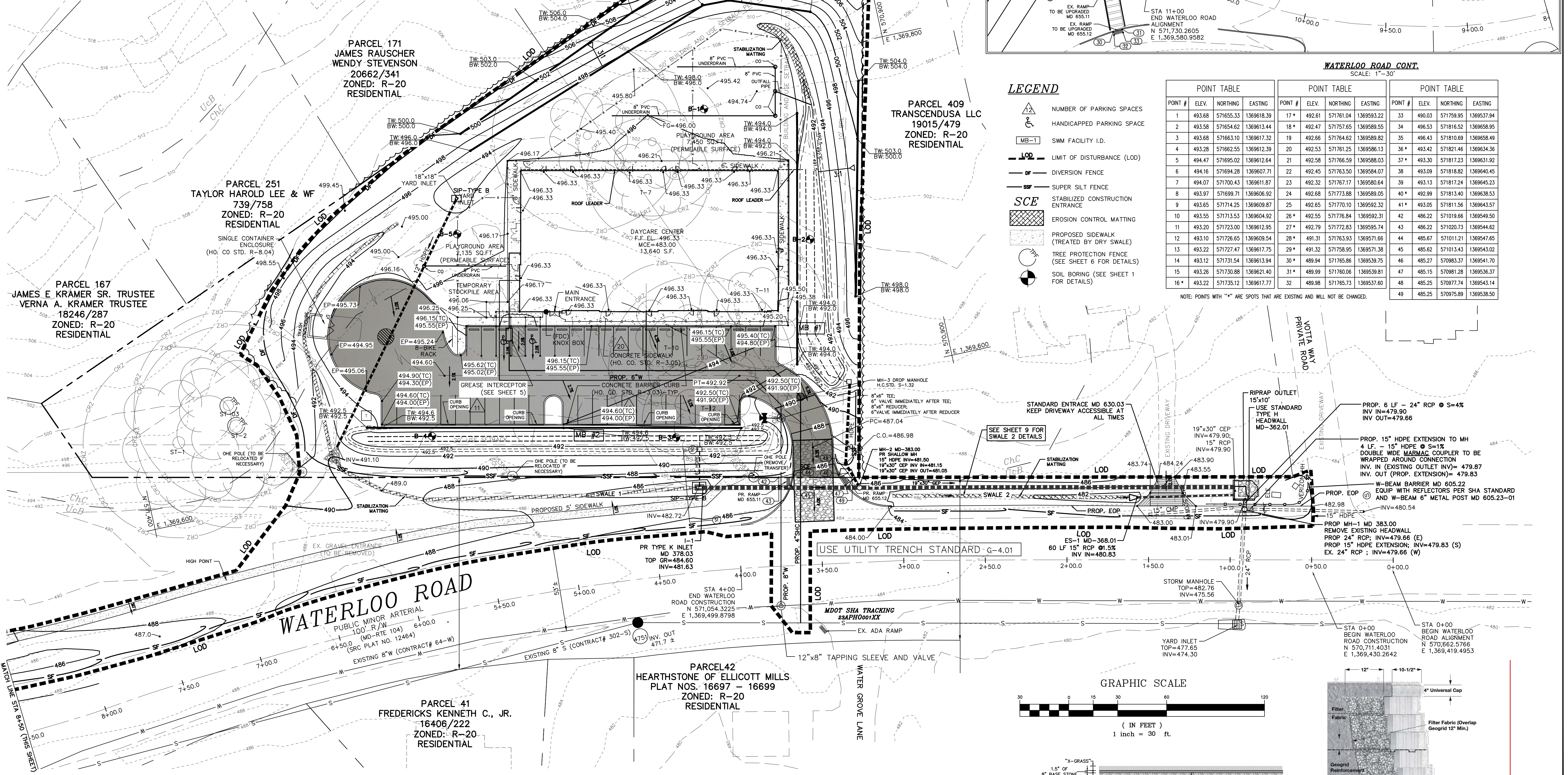
no.	description	date

PRIMROSE SCHOOL
ELKBRIDGE
TAX MAP: 31 - PARCEL : 169 (P1,P2,P3) GRID 08 ZONING R-20
HOWARD COUNTY, MARYLAND
FIRST ELECTION DISTRICT
HORIZONTAL LAYOUT AND MARKING PLAN

MILDENBERG, BOENDER & ASSOC., INC.
Engineers Planners Surveyors
8818 FORREST ST. SUITE 300, ELLICOTT CITY, MD 21043
(410) 997-0296 Tel. (410) 997-0298 Fax.

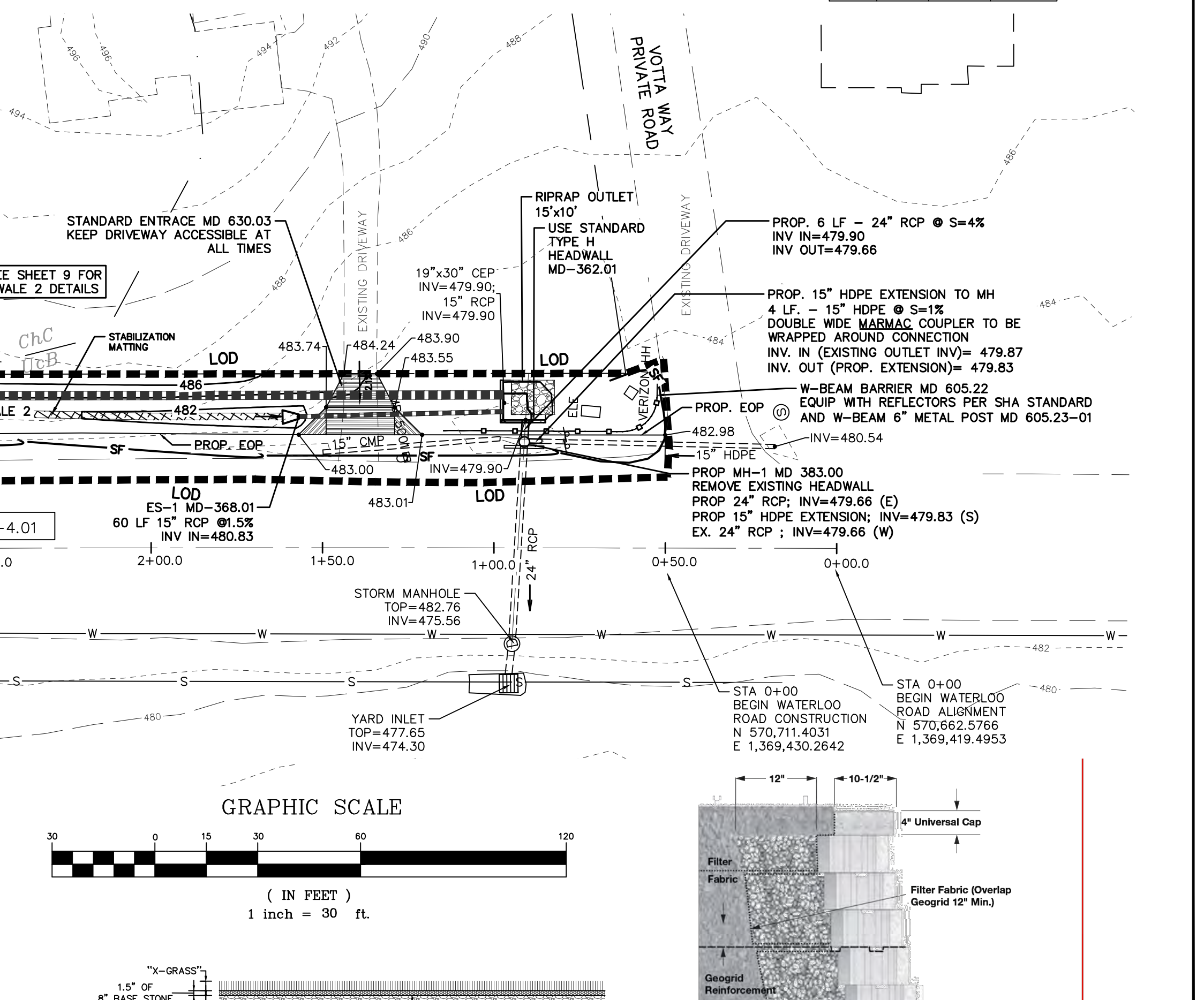


IMPORTANT NOTE: PROVIDE SOIL STABILIZATION MATTING FOR ALL PROPOSED SLOPES GREATER THAN 5%. SAME DAY STABILIZATION WILL BE IMPLEMENTED IN ALL ROW GRADING.



- LEGEND: NUMBER OF PARKING SPACES, HANDICAPPED PARKING SPACE, SWM FACILITY I.D., LIMIT OF DISTURBANCE (LOD), DIVERSION FENCE, SUPER SILT FENCE, STABILIZED CONSTRUCTION ENTRANCE, EROSION CONTROL MATTING, PROPOSED SIDEWALK, TREE PROTECTION FENCE, SOIL BORING, etc.

POINT TABLE with columns for POINT #, ELEV., NORTHING, EASTING, and multiple columns for different points.



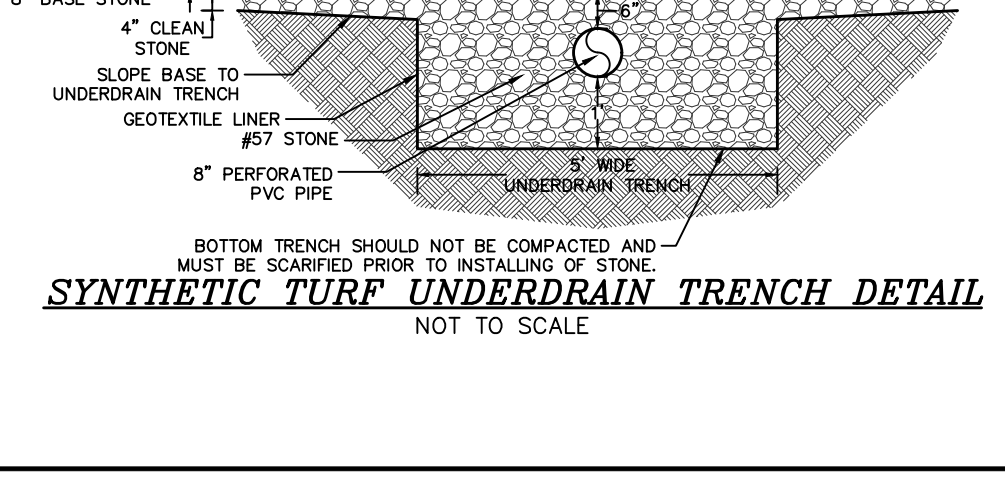
DEVELOPER CERTIFICATION: I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION, OR SEDIMENT CONTROL PLAN...

DESIGN CERTIFICATION: I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS...

APPROVED: DEPARTMENT OF PLANNING AND ZONING, HOWARD COUNTY HEALTH OFFICER, CHIEF, DIVISION OF LAND DEVELOPMENT, DIRECTOR, DEPARTMENT OF PLANNING AND ZONING.

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...

OWNER: WAYERLY INVESTORS INC. DEVELOPER: KRISH PROPERTIES, LLC

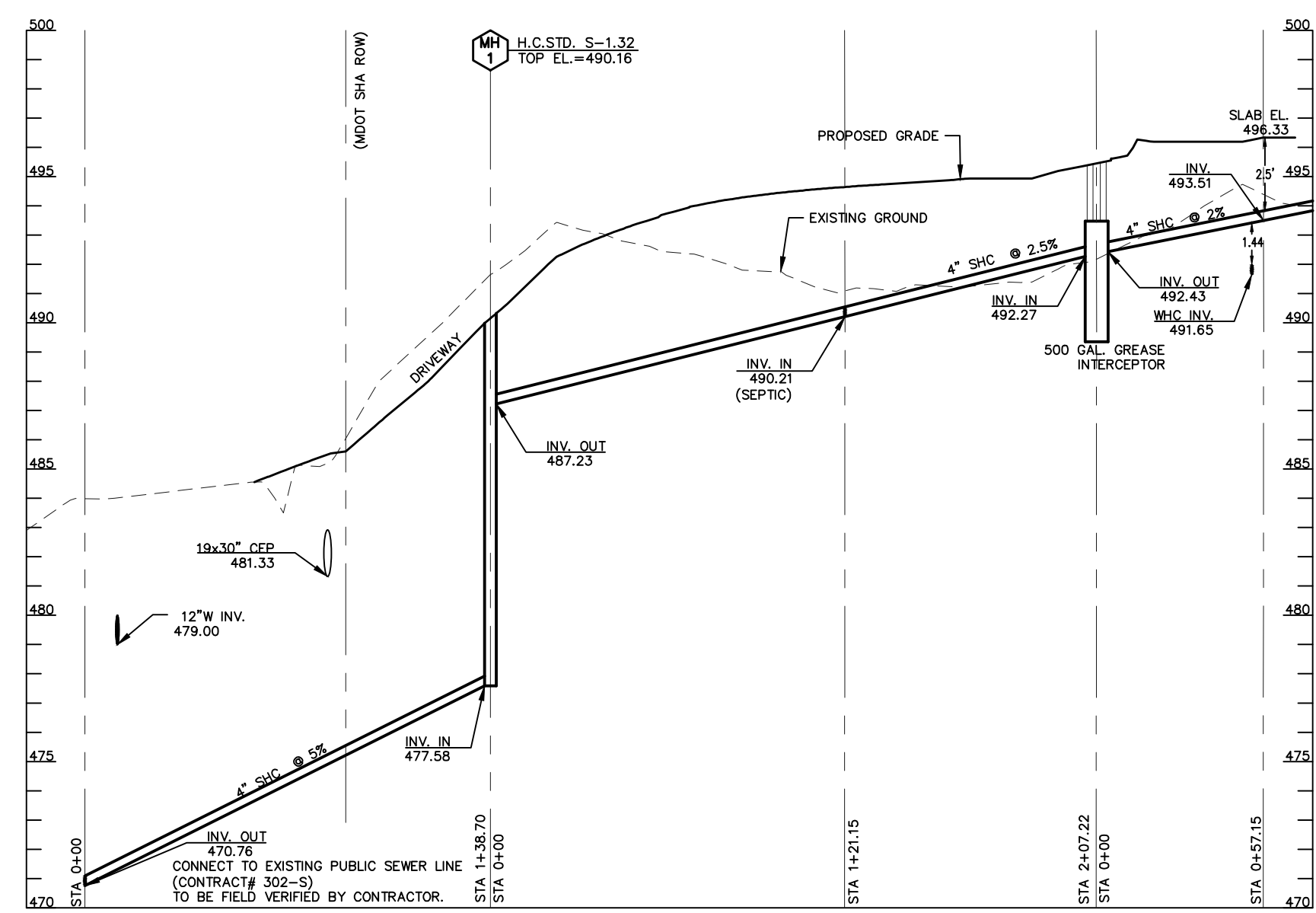


Project information table with columns for date, illustration, scale, and approval.

Revision table with columns for no., description, and date.

PRIMROSE SCHOOL, ELLICOTT CITY, MARYLAND. TAX MAP: 31 - PARCEL: 169 (P1,P2,P3) GRID 08 ZONING R-20. FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND.

MILDENBERG, BOENDER & ASSOC., INC. Engineers Planners Surveyors. 8318 ROBERT ST. SUITE 300, ELLICOTT CITY, MD 21043. (410) 997-0296 Tel. (410) 997-0298 Fax.



SHC PROFILE (MAIN TO GREASE INTERCEPTOR)

SCALE: HOR 1"=50
 VERT. 1"=5'

SHC PROFILE

SCALE: HOR 1"=50
 VERT. 1"=5'

SPECIFICATIONS

- 4" FPT inlet/outlet with 4" plain end adapters, single inlet and triple outlet.
- Unit weight - w/ cast iron covers: 528 lbs. (For wet weight add 4.254 lbs.)
- Maximum operating temperature: 150° F continuous
- Capacities - Liquid: 510 gal.
Grease: 3,048 lbs. (417 gal.) @100 GPM
Solids: 128 gal.
- Built-in flow control. For series installations, only install flow control on the first unit in the series if necessary.
- For gravity drainage applications only.
- Do not use for pressure applications.
- Cover placement allows full access to tank for proper maintenance.
- Vents not required unless per local code.
- Engineered inlet and outlet diffusers with inspection ports are removable to inspect / clean piping.
- Integral air relief / Anti-siphon / Sampling access.
- Adjustable cover adapters provide up to 4" of additional height.
- Designed for below-grade, above-grade, indoor or outdoor installations.
- Safety Star® access restricter built into each cover adapter, prevents accidental entry to tanks (450 lb rating).

ENGINEER SPECIFICATION GUIDE

Schier Great Basin™ grease interceptor model # GB-500 shall be factory guaranteed and made in USA of seamless, rotationally-molded polyethylene with minimum 7/16" uniform wall thickness. Flow control cartridge shall be PVC. Interceptor shall be furnished for above or below-grade installation with adjustable cover adapter. Safety Star® access restricter built into each cover adapter, and three outlet options. Interceptor shall be certified to ASME A112.14.3 (Type C) and CSA B481.1. Interceptor flow rate shall be 100 GPM. Interceptor grease capacity shall be 3,048 lbs. Cover shall provide water-tight seal and have minimum 16,000 lbs. load capacity.

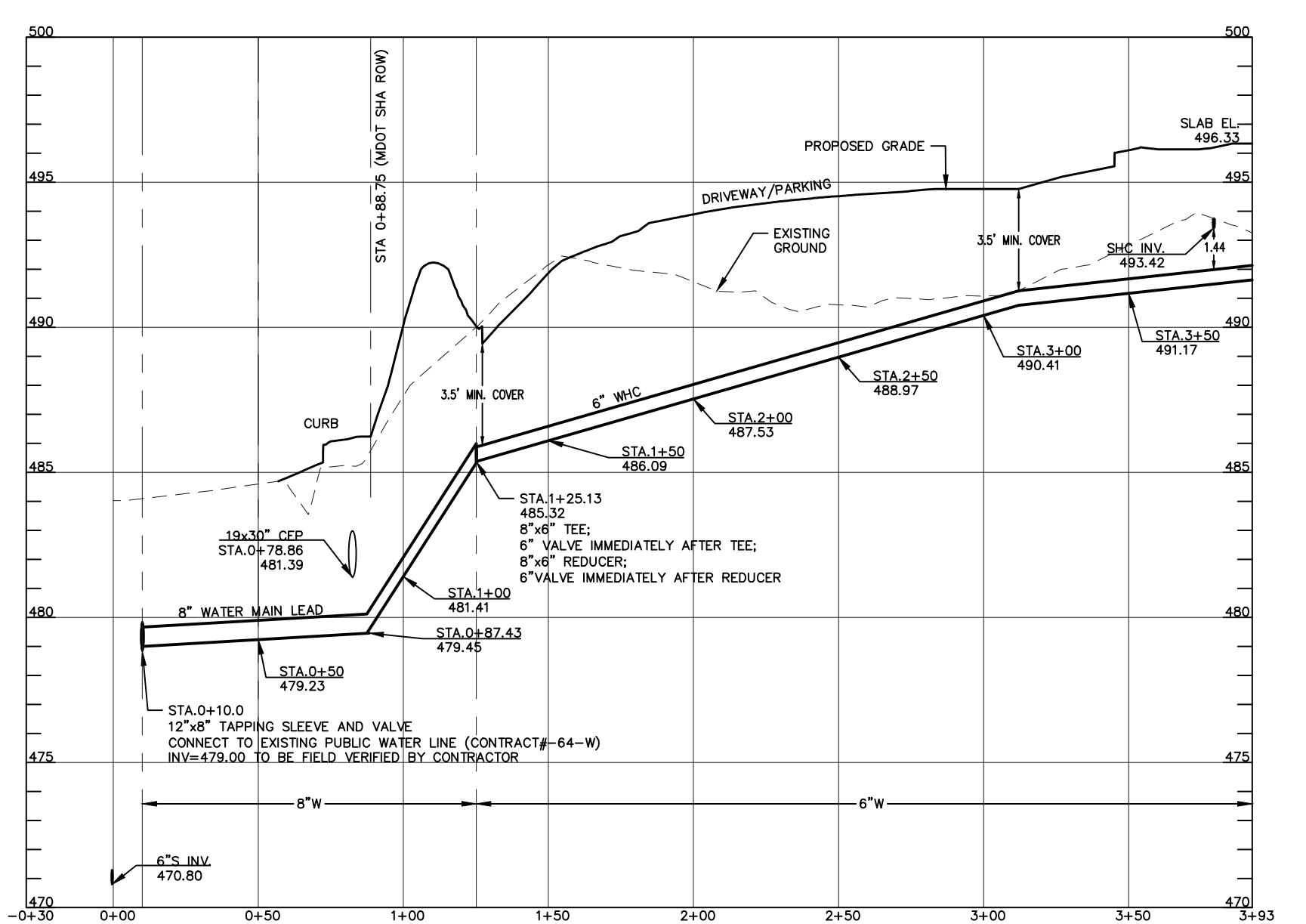
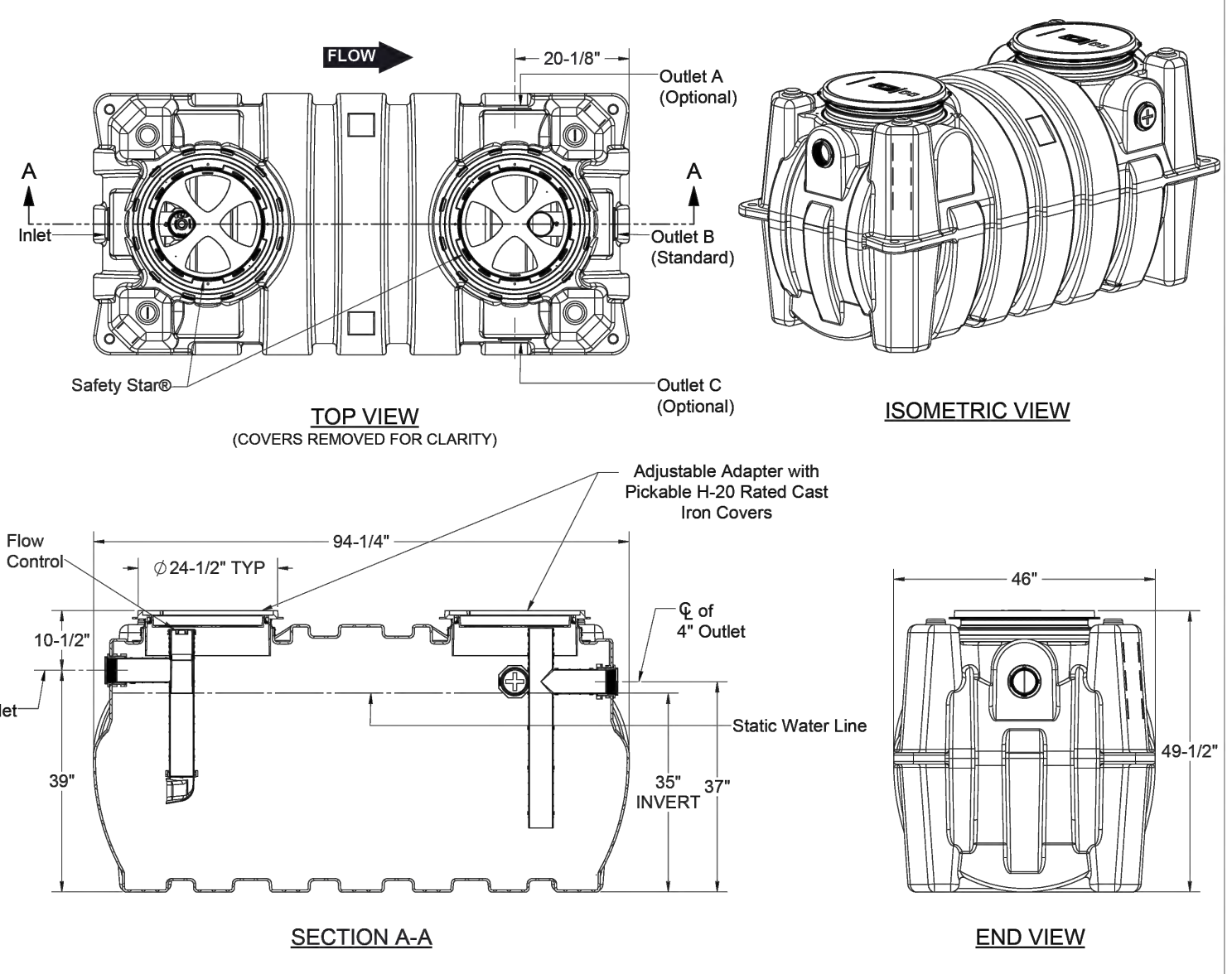
CERTIFIED PERFORMANCE

Great Basin™ hydromechanical grease interceptors are third party performance-tested and listed by IAPMO to ASME #A112.14.3 and CSA B481.1 grease interceptor standards and greatly exceed requirements for grease separation and storage. They are compliant to the Uniform Plumbing Code and the International Plumbing Code.

SPECIFICATION SHEET

MODEL NUMBER: GB-500	PART NUMBER: 4075-001-01
DESCRIPTION: GB-500 GREASE INTERCEPTOR 100 GPM, 4" INLET/OUTLET, H-20 RATED CAST IRON COVERS	
DWG BY: C. BUSENTZ	DATE: 4/14/2022
REV: -	ECO: -

SCHIER
 6455 Woodland Dr
 Shawnee, KS 66218
 Tel: 913-851-3300
 Fax: 913-851-3399
 schierproducts.com



WHC PROFILE

SCALE: HOR 1"=50
 VERT. 1"=5'

QUANTITIES FOR ESTIMATING PURPOSES ONLY

DIA.	SLOPE	CONCRETE END SECTION					CONCRETE FOOTER				
		A	B	C	D	E	W	X	CONC. C.Y.	STEEL LBS.	
12"	3:1	8"	2'-0"	4'-0"	6'-0"	7'-0"	3'-0"	12"	0.08	2.01	
15"	3:1	6"	2'-4"	3'-10"	5'-2"	7'-4"	3'-4"	12"	0.10	2.38	
18"	3:1	10 1/2"	2'-2"	4'-0"	6'-2"	3'-0"	4'-0"	12"	0.11	2.76	
21"	3:1	9"	3'-0"	3'-1 1/2"	6'-11 1/2"	3'-6"	4'-6"	12"	0.13	3.13	
24"	3:1	11"	3'-7"	2'-8"	6'-3"	4'-0"	5'-0"	15"	0.17	3.51	
27"	3:1	10 1/2"	4'-1 1/2"	2'-0"	5'-11 1/2"	4'-0"	5'-6"	15"	0.19	3.89	
30"	3:1	11'-1"	4'-5"	1'-10"	6'-3"	5'-0"	5'-0"	15"	0.21	4.26	
33"	3:1	1'-2"	4'-7"	2'-2"	6'-0"	5'-6"	6'-4"	15"	0.23	4.64	
36"	3:1	1'-3 1/2"	5'-3"	3'-1"	8'-4"	6'-0"	7'-3"	15"	0.25	5.02	

SEE NOTE 3 ABOVE FOR CONCRETE FOOTER

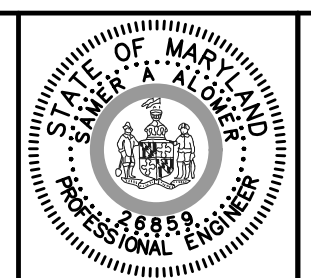
NOTES

- THE CONCRETE VALLEY GUTTER TO BE USED IN CONNECTION WITH THIS INLET, WILL BE WARRPED FROM THE STANDARD SECTION TO MEET THE SECTION AT THE END OF THE INLET. THIS TRANSITION WILL TAKE PLACE WITH A DISTANCE OF TEN (10) FEET FROM THE INLET. GUTTER TO BE PAID FOR SEPARATELY.
- PIPE OUTLETS AND GUTTER APPROACHES CAN BE REVISED TO MEET EXISTING CONDITIONS.
- INLET MAY BE CONSTRUCTED OF REINFORCED CONCRETE (MIN 2" NO. 2) OR BRICK, CHAMFER INSIDE CORNER 1/4" R. REINFORCEMENT NO. 4 BARS @ 6" C/C. 2" COVER.
- GRATINGS ARE SUBJECT TO APPROVAL FOR EACH JOB. ANY TYPE OF SUBSTANTIAL TRANSVERSE BARS MAY BE USED WHICH WILL SUPPORT A MINIMUM UNIFORM LOAD OF 50 LBS./SQ. FT. THE TRANSVERSE BARS SHALL BE WELD RIGID BY SPACER BARS.
- AREA TO BE MADE UP OF TWO EQUAL PANELED WIDTHS, ARRANGED FOR BOLTING TOGETHER IN THE FIELD.
- ALL MATERIAL TO BE HOT DIPPED GALVANIZED.

STANDARD NO. MD 378.03

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS
 County Health Officer
 Michael Davis
 DATE: 4/17/2024

APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 DATE: 4/17/2024
 Chief, Division of Land Development
 DATE: 4/18/2024
 Director, Department of Planning and Zoning



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. 26889, EXP. DATE 08/08/25
 04/15/24 Sam Alomer
 DATE: 4/15/2024
 SAMER A. ALOMER, P.E.

OWNER: WAVERLY INVESTORS INC. 8318 FORREST ST. SUITE 200 ELLICOTT CITY, MD 21043 410-707-7054
 DEVELOPER: KRISH PROPERTIES, LLC 8544 SCHOLARS LANE LAUREL, MD 20723 202-247-7434

Maryland Department of Transportation
 STATE HIGHWAY ADMINISTRATION
 STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
 STANDARD CONCRETE END SECTION
 ROUND CONCRETE PIPE
 STANDARD NO. MD 368.01

Maryland Department of Transportation
 STATE HIGHWAY ADMINISTRATION
 STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES
 STANDARD SINGLE OR DOUBLE OPENING
 TYPE K INLET OPEN-END GRATE
 NON-TRAFFIC AREAS
 STANDARD NO. MD 378.03

Project	3.19.2024
date	engineering
21-040	MM
illustration	MM
JCB	score
approval	SA
1"=30'	date
description	revisions
date	no.

Project	3.19.2024
date	engineering
21-040	MM
illustration	MM
JCB	score
approval	SA
1"=30'	date
description	revisions
date	no.

PRIMROSE SCHOOL
 ELKBRIDGE
 TAX MAP: 31 - PARCEL : 169 (PLP2.P3) GRID 08 ZONING R-20
 HOWARD COUNTY, MARYLAND
 FIRST ELECTION DISTRICT
 UTILITIES PROFILES AND OTHER DETAILS

MILDENBERG, BOENDER & ASSOC., INC.
 Surveyors
 Planners
 Engineers
 8318 FORREST ST. SUITE 300, ELLICOTT CITY, MD 21043
 (410) 997-0296 Tel. (410) 997-0298 Fax.

STANDARD SEDIMENT CONTROL NOTES

- 1. A PRE-CONSTRUCTION MEETING MUST OCCUR WITH THE HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS...
2. PRIOR TO THE START OF EARTH DISTURBANCE...
3. PRIOR TO THE START OF ANOTHER PHASE OF CONSTRUCTION OR OPENING OF A GRADING UNIT...

- 4. ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE...
5. ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE, AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION...
6. SITE ANALYSIS: TOTAL AREA OF SITE: 2.52 ACRES...

- 7. ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES...
8. ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY...
9. TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIECE LENGTHS...
10. ANY MAJOR CHANGES OR REVISIONS TO THE PLAN OR SEQUENCE OF CONSTRUCTION MUST BE REVIEWED...

STANDARD STABILIZATION NOTE

FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
1. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERMETER DIKES, SWALES, DITCHES...

OPERATION & MAINTENANCE SCHEDULE FOR MICRO-BIOTRENTION (M-B)

- A. THE OWNER SHALL MAINTAIN THE PLANT MATERIAL MULCH LAYER AND SOIL LAYER ANNUALLY...
B. THE OWNER SHALL PERFORM A PLANT IN THE SPRING AND IN THE FALL OF EACH YEAR...
C. THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS...

DEVELOPER CERTIFICATION
I HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS APPROVED EROSION AND SEDIMENT CONTROL PLAN...

DESIGN CERTIFICATION
I HEREBY CERTIFY THAT THIS PLAN HAS BEEN DESIGNED IN ACCORDANCE WITH CURRENT MARYLAND EROSION AND SEDIMENT CONTROL LAWS, REGULATIONS AND STANDARDS...

APPROVED: DEPARTMENT OF PLANNING AND ZONING
4/17/2024
CHIEF, DEVELOPMENT ENGINEERING DIVISION
4/17/2024
CHIEF, DIVISION OF PLANNING AND DEVELOPMENT
4/18/2024

(B-4-3) STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

DEFINITION: THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.
PURPOSE: TO PREVENT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION...
CRITERIA: 1. SEED MIXTURES: A. GENERAL USE: 1. SELECT ONE OR MORE OF THE SPECIES OF MIXTURES LISTED IN TABLE B.3...

2. APPLICATOR: 1. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1...
3. MULCHING: 1. MULCHING MATERIALS (IN ORDER OF PREFERENCE): a. STRAW, b. WOOD CELLULOSE FIBER MULCH...

4. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS): 1. FERTILIZER: a. NUTRIENT RATIO TO DETERMINE EXACT RATES AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER...
2. LIME: a. SOIL pH BETWEEN 6.0 AND 7.0...

(B-4-3) STANDARDS AND SPECIFICATION FOR STOCKPILE AREA

DEFINITION: A STOCKPILE OF SOIL OR MULCH PROTECTED BY APPROPRIATELY DESIGNED EROSION AND SEDIMENT CONTROL PRACTICES...
PURPOSE: TO PROVIDE A DESIGNATED LOCATION FOR THE TEMPORARY STORAGE OF SOIL THAT CONTROLS THE POTENTIAL FOR EROSION, SEDIMENTATION, AND CHANGES TO DRAINAGE PATTERNS...
CRITERIA: 1. LOCATION: a. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED...

EROSION AND SEDIMENT CONTROL NOTES

- 1. ALL SEDIMENT CONTROL OPERATIONS ARE TO BE DONE IN ACCORDANCE WITH SECTION 219 OF THE HOWARD COUNTY VOLUME IV DESIGN MANUAL...
2. ALL EROSION AND SEDIMENT CONTROL DEVICES SHALL BE INSTALLED AS THE FIRST ORDER OF BUSINESS...
3. ALL EXCAVATED MATERIALS SHALL BE STOCKPILED ON THE UPGRADE SIDE OF THE MAIN TRENCH...

TEMPORARY SEEDING FOR SITE STABILIZATION
Table with columns: PLANT SPECIES, SEEDING RATE (LB/AC), SEEDING DEPTH (INCHES), RECOMMENDED SEEDING DATES BY PLANT HARDNESS ZONE.

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT I HAVE READ THESE DOCUMENTS AND I HAVE PREPARED OR APPROVED BY ME AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND...

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

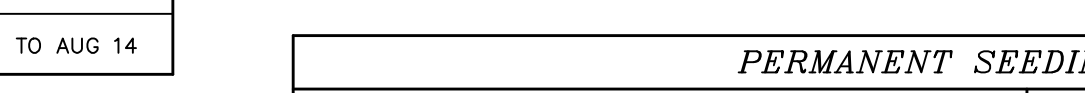
DEFINITION: THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.
PURPOSE: TO PREVENT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION...
CRITERIA: 1. SEED MIXTURES: A. GENERAL USE: 1. SELECT ONE OR MORE OF THE SPECIES OF MIXTURES LISTED IN TABLE B.3...

2. APPLICATOR: 1. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1...
3. MULCHING: 1. MULCHING MATERIALS (IN ORDER OF PREFERENCE): a. STRAW, b. WOOD CELLULOSE FIBER MULCH...

4. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS): 1. FERTILIZER: a. NUTRIENT RATIO TO DETERMINE EXACT RATES AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER...
2. LIME: a. SOIL pH BETWEEN 6.0 AND 7.0...

(B-4-4) STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION: TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS.
PURPOSE: TO STOP ERODING VEGETATION THAT PROVIDES COVER ON DISTURB SOIL.
CRITERIA: 1. LOCATION: a. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED...



PERMANENT SEEDING SUMMARY
Table with columns: NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING DEPTHS, N, P2O5, K2O, LIME RATE.

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

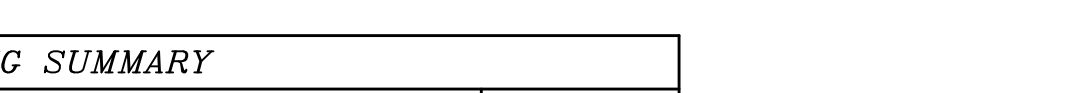
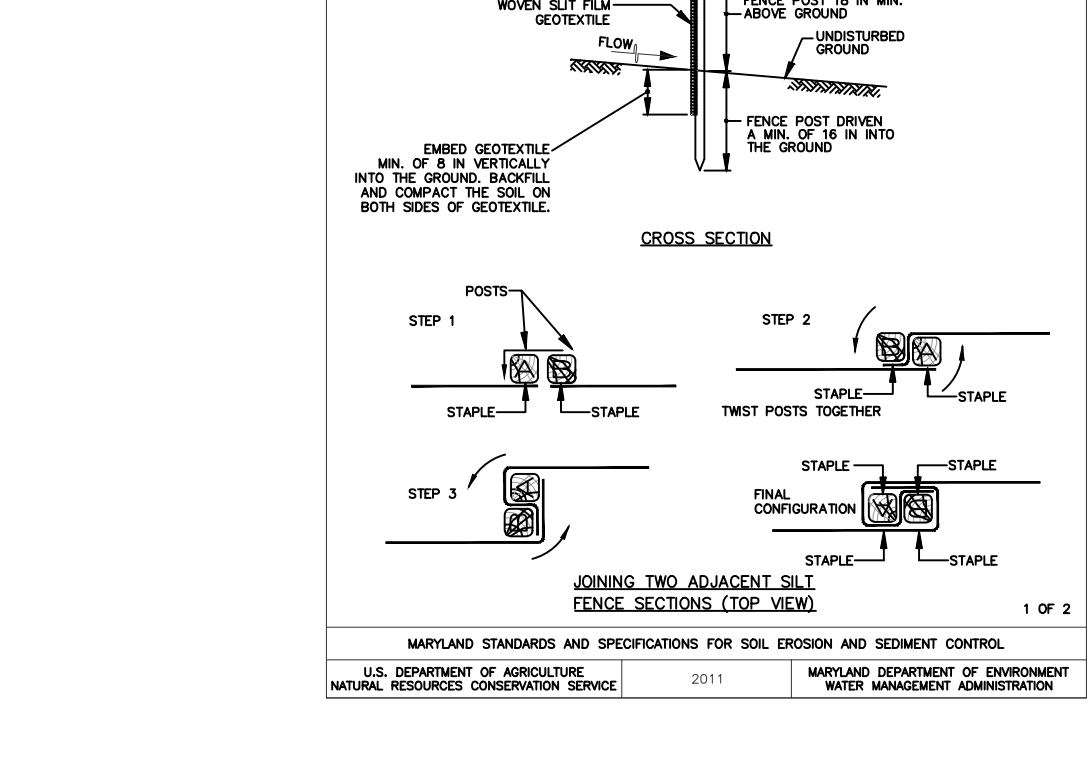
DEFINITION: THE APPLICATION OF SEED AND MULCH TO ESTABLISH VEGETATIVE COVER.
PURPOSE: TO PREVENT DISTURBED SOILS FROM EROSION DURING AND AT THE END OF CONSTRUCTION...
CRITERIA: 1. SEED MIXTURES: A. GENERAL USE: 1. SELECT ONE OR MORE OF THE SPECIES OF MIXTURES LISTED IN TABLE B.3...

2. APPLICATOR: 1. INCORPORATE SEED INTO THE SUBSOIL AT THE RATES PRESCRIBED ON TEMPORARY SEEDING TABLE B.1...
3. MULCHING: 1. MULCHING MATERIALS (IN ORDER OF PREFERENCE): a. STRAW, b. WOOD CELLULOSE FIBER MULCH...

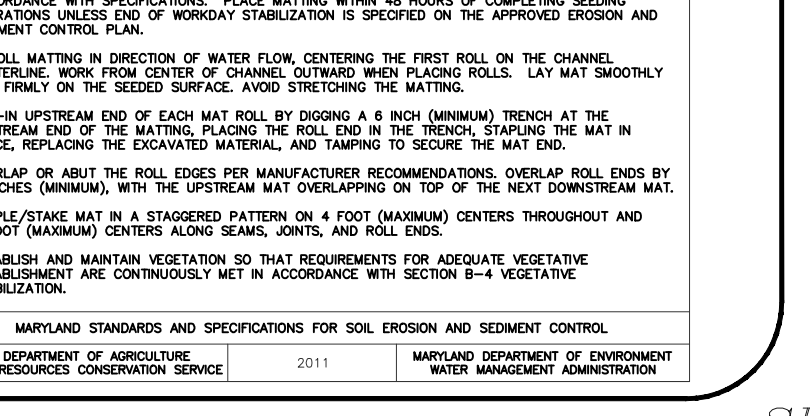
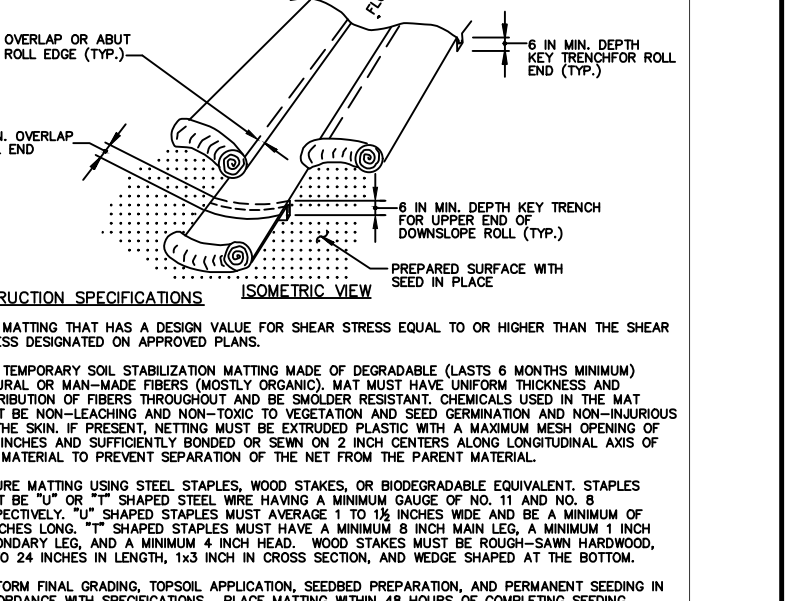
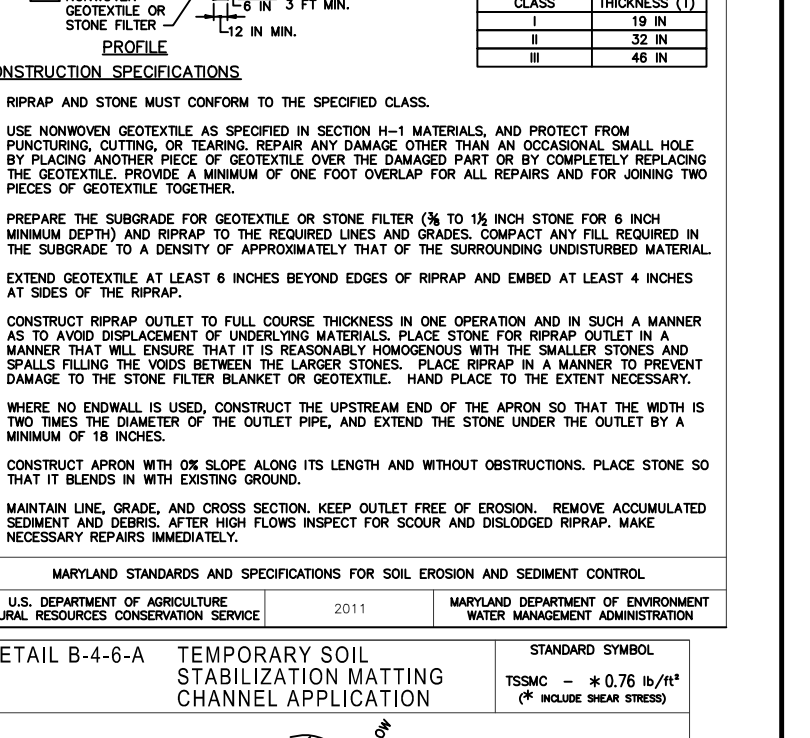
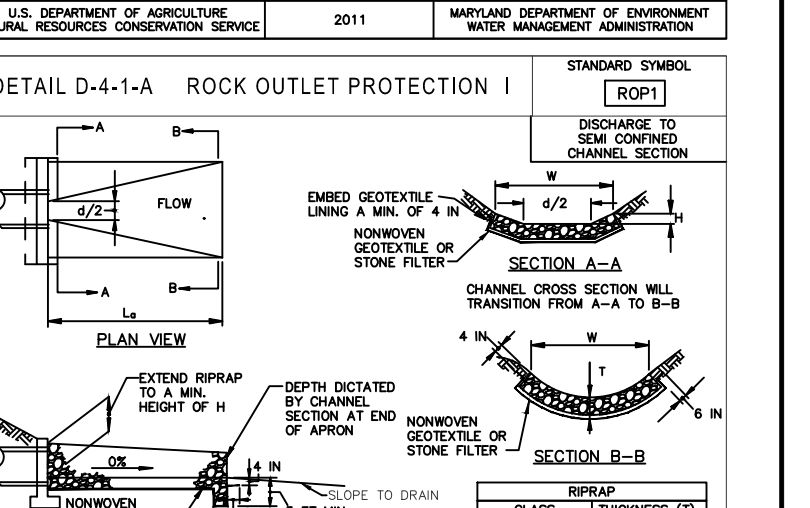
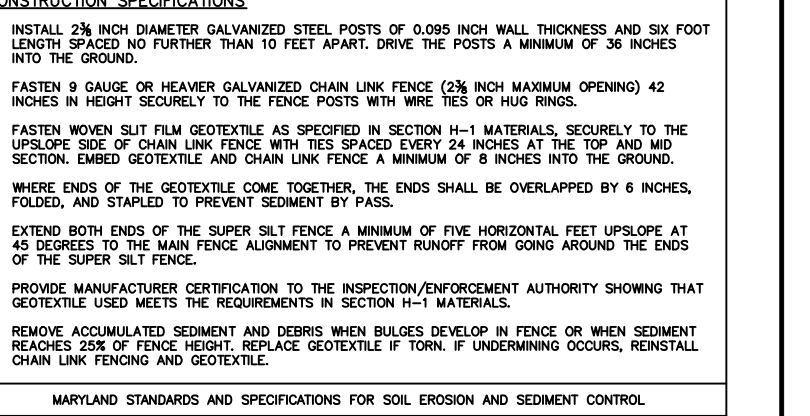
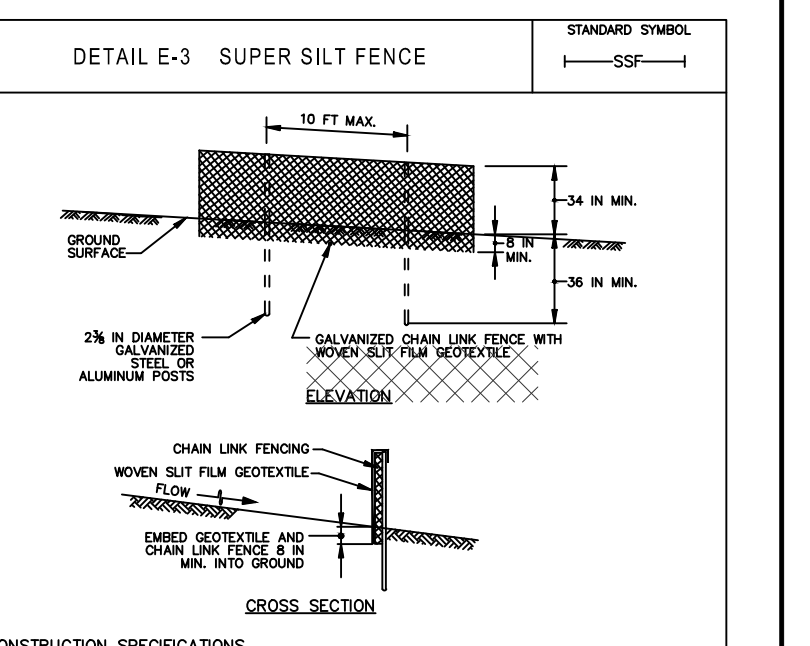
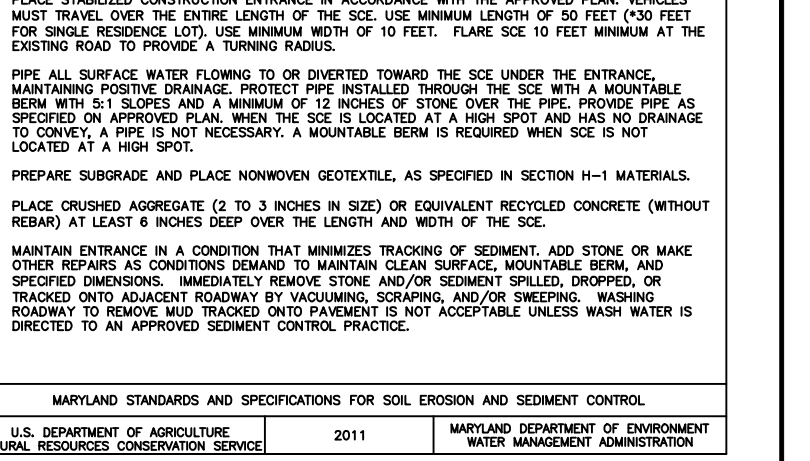
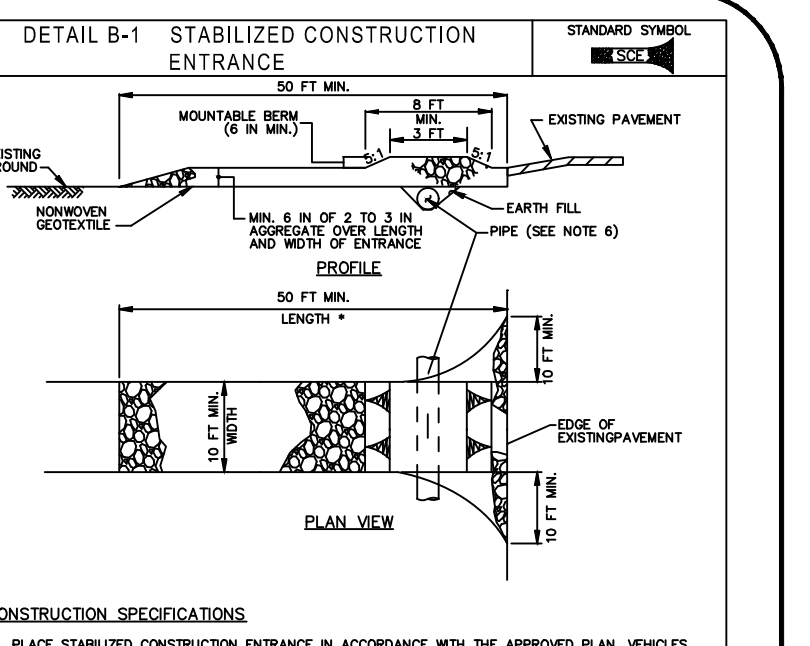
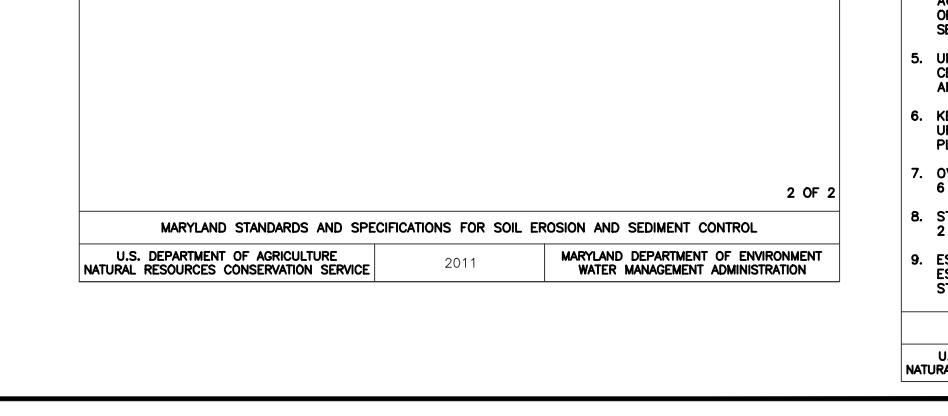
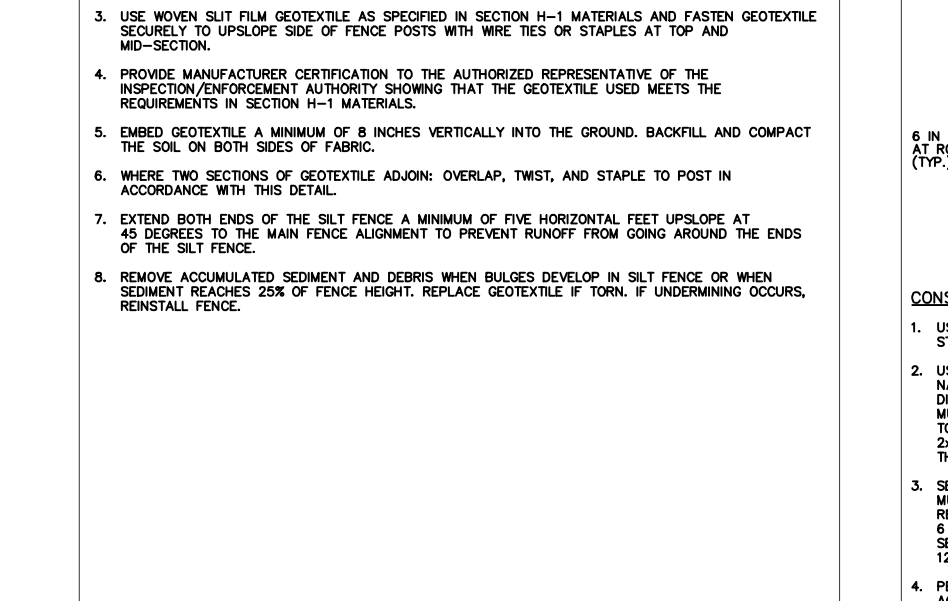
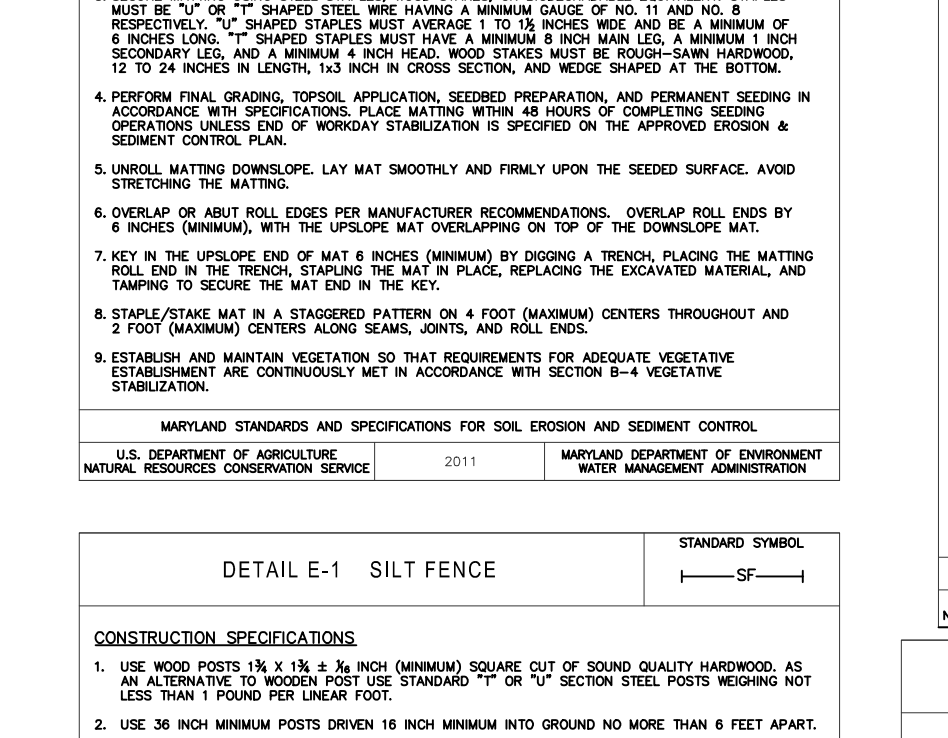
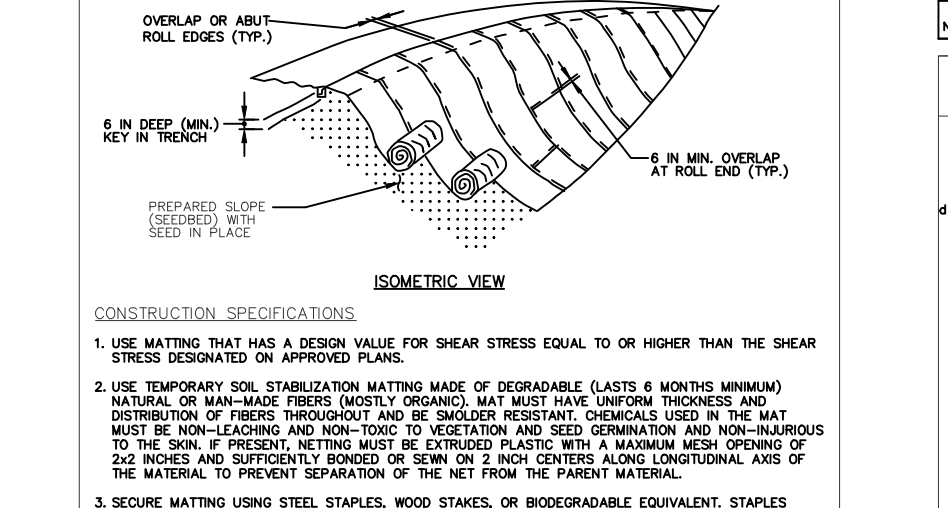
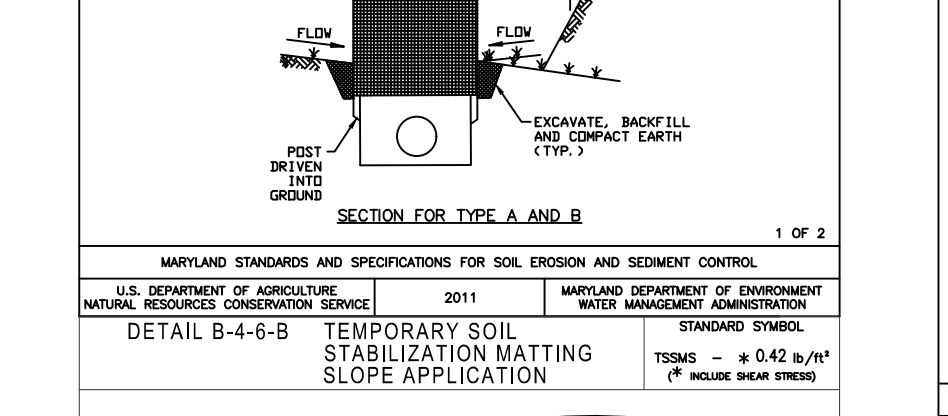
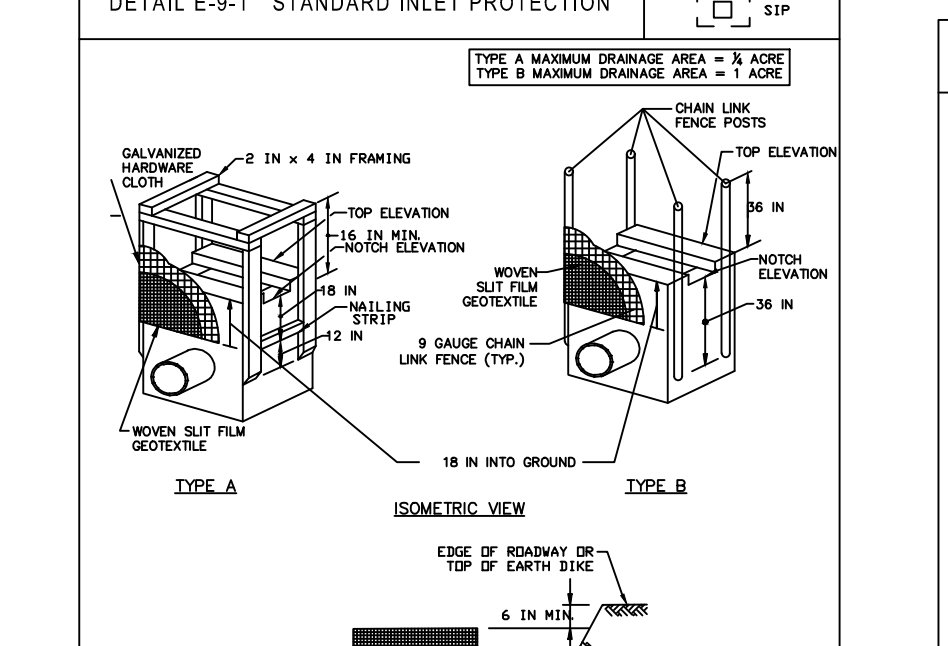
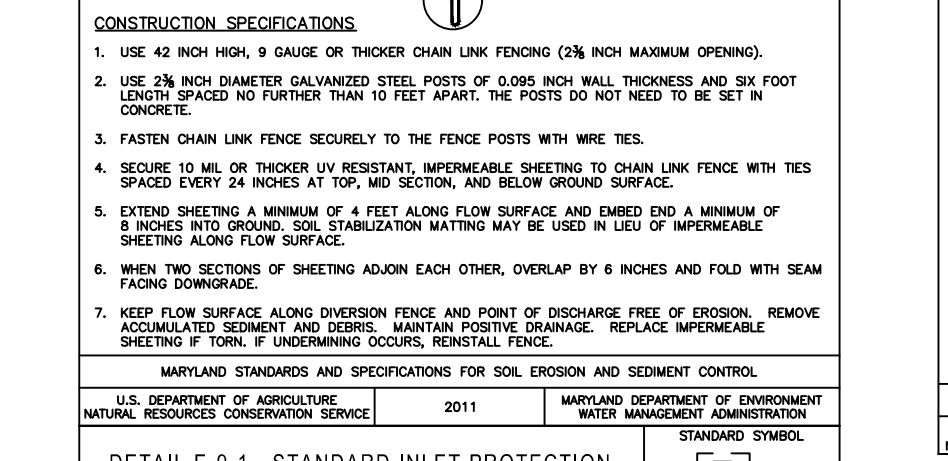
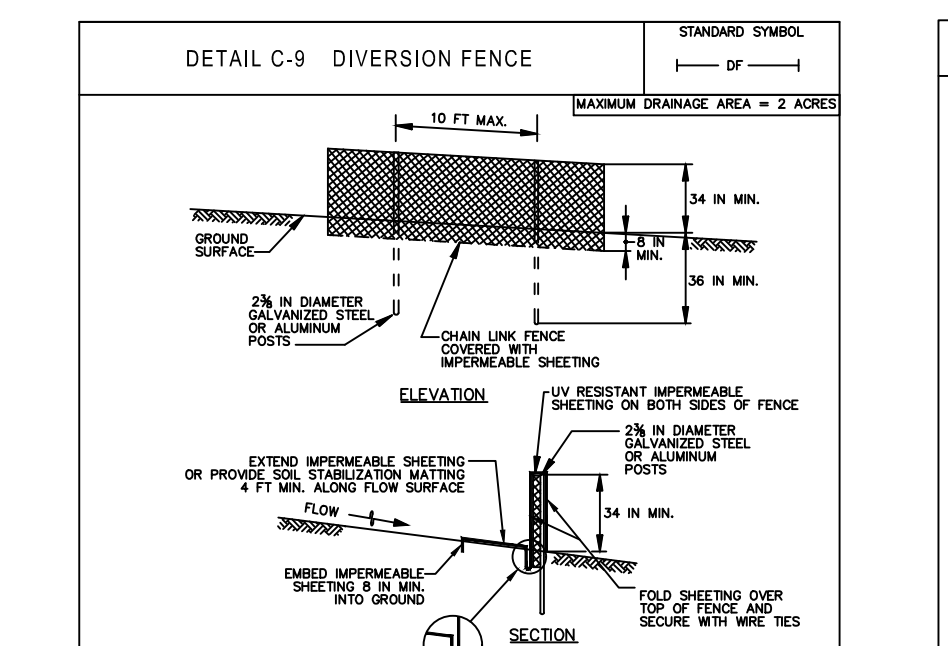
4. SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS): 1. FERTILIZER: a. NUTRIENT RATIO TO DETERMINE EXACT RATES AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER...
2. LIME: a. SOIL pH BETWEEN 6.0 AND 7.0...

(B-4-4) STANDARDS AND SPECIFICATIONS FOR TEMPORARY STABILIZATION

DEFINITION: TO STABILIZE DISTURBED SOIL WITH VEGETATION FOR UP TO 6 MONTHS.
PURPOSE: TO STOP ERODING VEGETATION THAT PROVIDES COVER ON DISTURB SOIL.
CRITERIA: 1. LOCATION: a. THE STOCKPILE LOCATION AND ALL RELATED SEDIMENT CONTROL PRACTICES MUST BE CLEARLY INDICATED...



PERMANENT SEEDING SUMMARY
Table with columns: NO., SPECIES, APPLICATION RATE (LB/AC), SEEDING DATES, SEEDING DEPTHS, N, P2O5, K2O, LIME RATE.



Project: 4.15.2024
21-040
description: JCB
revisions: MAM
scale: 1"=30'

DATE: 4/15/2024
PROJECT: 21-040
DESCRIPTION: JCB
REVISIONS: MAM
SCALE: 1"=30'

DATE: 4/15/2024
PROJECT: 21-040
DESCRIPTION: JCB
REVISIONS: MAM
SCALE: 1"=30'

DATE: 4/15/2024
PROJECT: 21-040
DESCRIPTION: JCB
REVISIONS: MAM
SCALE: 1"=30'

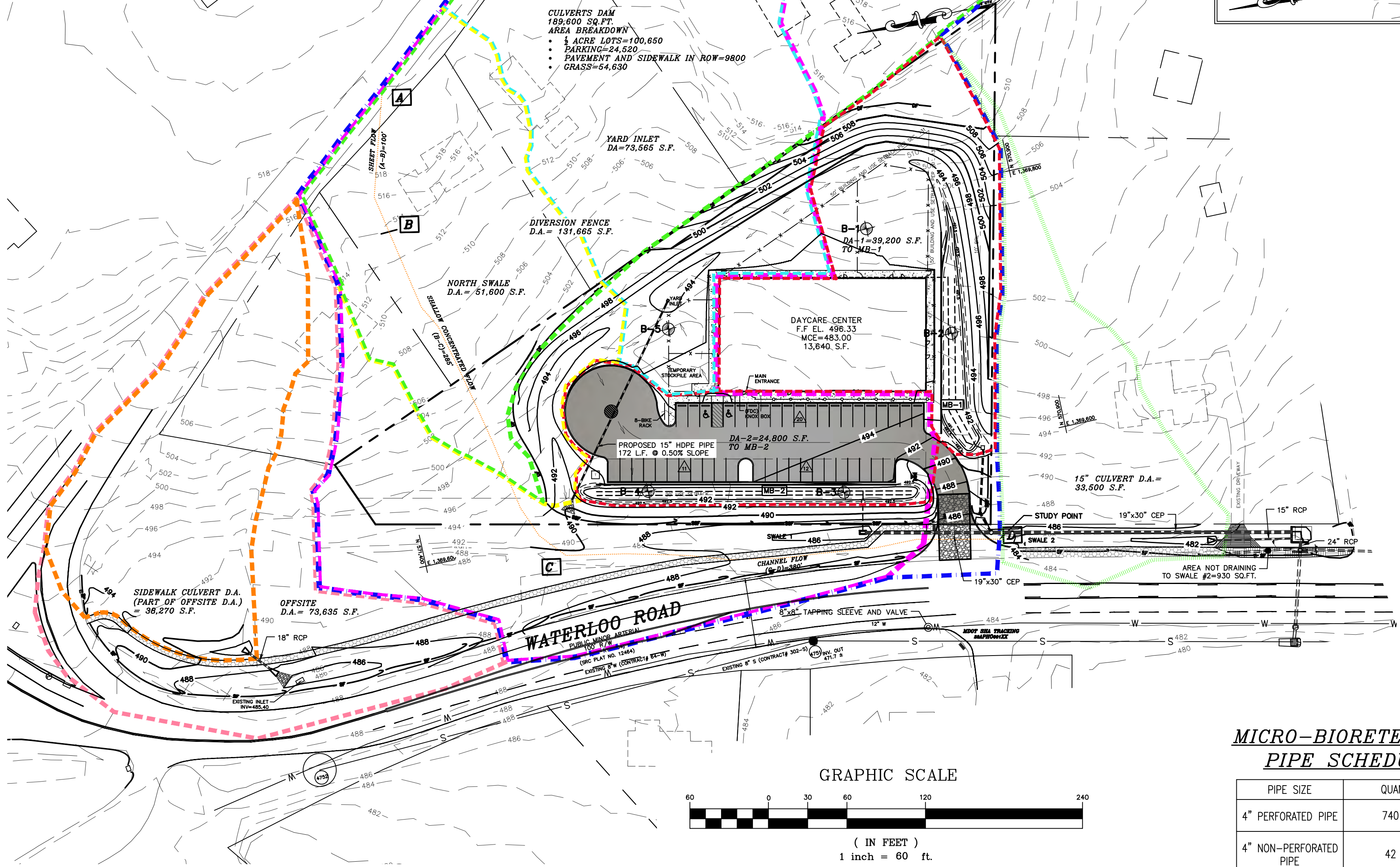
DATE: 4/15/2024
PROJECT: 21-040
DESCRIPTION: JCB
REVISIONS: MAM
SCALE: 1"=30'

DATE: 4/15/2024
PROJECT: 21-040
DESCRIPTION: JCB
REVISIONS: MAM
SCALE: 1"=30'

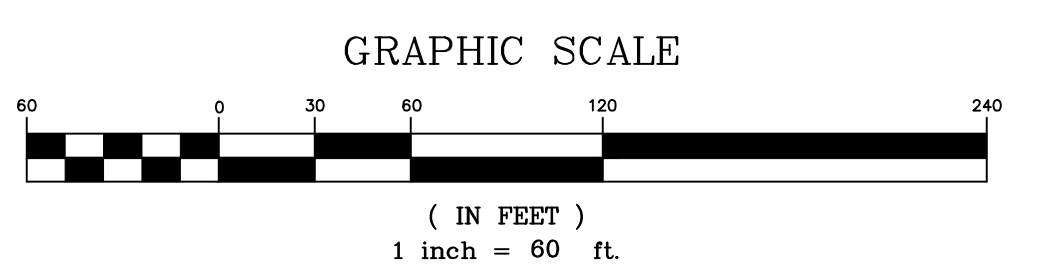
DATE: 4/15/2024
PROJECT: 21-040
DESCRIPTION: JCB
REVISIONS: MAM
SCALE: 1"=30'

LEGEND

- MB-1 DENOTES MICRO-BIORETENTION (M-6)
- DENOTES DRAINAGE AREA OF MICRO-BIORETENTION (M-6)
- DENOTES DRAINAGE AREA OF DRIVEWAY CULVERTS
- DENOTES DRAINAGE AREA OF 10-YR SWM
- DENOTES DRAINAGE AREA OF YARD INLET
- DENOTES DRAINAGE AREA OF NORTH SWALE
- DENOTES DRAINAGE AREA OF DIVERSION FENCE
- DENOTES DRAINAGE AREA OF OFFSITE (TO NORTH EXISTING INLET)
- DENOTES DRAINAGE AREA OF SIDEWALK CULVERT
- DENOTES DRAINAGE AREA OF 15" ADJACENT D/W CULVERT
- PROPOSED IMPROVEMENTS TREATED BY DRY SWALE
- FLOW PATH (TR-20 Tc)
- SOIL BORING (SEE SHEET C-7 FOR DETAILS)



DRAINAGE AREA MAP
SCALE: 1"=60'



MICRO-BIORETENTION PIPE SCHEDULE

PIPE SIZE	QUANTITY
4" PERFORATED PIPE	740 L.F.
4" NON-PERFORATED PIPE	42 L.F.
6" OUTFLOW PIPE	22 L.F.
15" OUTFLOW PIPE	65 L.F.

SWM PRACTICES SCHEDULE

AREA	PROPOSED PRACTICES	REQUIRED ESDv	PROVIDED ESDv
BUILDING	MICRO-BIORETENTION MB #1 (M-6)	1,934 C.F.	3,367 C.F.
DRIVEWAY	MICRO-BIORETENTION MB #1 (M-6)	2,145 C.F.	3,375 C.F.

MICRO-BIORETENTION SCHEDULE

FACILITY	TOP EL. (SURFACE)	WEIR EL. (PONDING)	BERM EL.	INV. IN.	INV. OUT.	SURFACE AREA	PONDING AREA	PONDING DEPTH	GRAVEL DEPTH BELOW UNDERDRAIN	SITE SLOPE	OVERFLOW CATCH BASIN
MB-1	491.50	492.50	493.00	487.83	486.00	1,420 S.F.	2,465 S.F.	12"	15"	3:1	24"x24"
MB-2	491.50	492.50	493.00	487.83	483.30	1,730 S.F.	3,290 S.F.	12"	24"	3:1	18"x18"

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

- THE OWNER SHALL MAINTAIN THE PLANT MATERIAL, MULCH LAYER AND SOIL LAYER ANNUALLY. MAINTENANCE OF MULCH AND SOIL IS LIMITED TO CORRECTING AREAS OF EROSION OR WASH OUT. ANY MULCH REPLACEMENT SHALL BE DONE IN THE SPRING. PLANT MATERIAL SHALL BE CHECKED FOR DISEASE AND INSECT INFESTATION AND MAINTENANCE WILL ADDRESS DEAD MATERIAL AND PRUNING ACCEPTABLE REPLACEMENT PLANT MATERIAL IS LIMITED TO THE FOLLOWING: 2000 MARYLAND STORMWATER DESIGN MANUAL VOLUME II, TABLE A.4.1 AND 2.
- THE OWNER SHALL PERFORM A PLANT INSPECTION IN THE SPRING AND IN THE FALL OF EACH YEAR. DURING THE INSPECTION, THE OWNER SHALL REMOVE DEAD AND DISEASED VEGETATION CONSIDERED BEYOND TREATMENT, REPLACE DEAD PLANT MATERIAL WITH ACCEPTABLE REPLACEMENT PLANT MATERIAL, TREAT DISEASED TREES AND SHRUBS, AND REPLACE ALL DEFICIENT STAKES AND WIRES.
- THE OWNER SHALL INSPECT THE MULCH EACH SPRING. THE MULCH SHALL BE REPLACED EVERY TWO TO THREE YEARS. THE PREVIOUS MULCH LAYER SHALL BE REMOVED BEFORE THE NEW LAYER IS APPLIED.
- THE OWNER SHALL CORRECT SOIL EROSION ON AN AS NEEDED BASIS, WITH A MINIMUM OF ONCE PER MONTH AND AFTER EACH HEAVY STORM.

10-YEAR STORM CALCULATIONS:

YARD INLET
Q=CIA: C=0.40
I=6.60
A=1.69 AC
Q = (0.40)(6.60)(1.69)
Q = 4.46 CFS

NORTH SWALE
Q=CIA: C=0.40
I=6.60
A=1.05 AC
Q = (0.40)(6.60)(1.18)
Q = 3.12 CFS

SWALE TO MB-1
Q=CIA: C=0.40
I=6.60
A=0.9 AC
Q = (0.40)(6.60)(0.9)
Q = 2.38 CFS

DIVERSION FENCE
Q=CIA: C=0.40
I=6.05
A=3.02 AC
Q = (0.40)(6.05)(3.02)
Q = 7.31 CFS

18" SIDEWALK CULVERT
Q=CIA: C=0.60
I=6.60
A=1.08 AC
Q = (0.60)(6.60)(0.88)
Q = 4.01 CFS

FOR SWALE:
CHANNEL SLOPE = 0.93%
CHANNEL DEPTH = 0.78'
CHANNEL WIDTH = 20"
CHANNEL WIDTH = 24"
SIDE SLOPE = 24:1
MANNING'S N = 0.035
FLOW DEPTH = 0.39'
VELOCITY = 1.84 FPS
R = 0.19
T = (62.4)(0.19)(0.009)
T = 0.11 PSF

FOR 12" HDPE PIPE:
SLOPE = 1.0%
DIAMETER = 12"
MANNING'S N = 0.011
FLOW DEPTH = 0.89'
VELOCITY = 6.03 FPS

SWALE 1
Q = 10.67 CFS
CHANNEL SLOPE = 2.0%
FLOW DEPTH = 0.79'
VELOCITY = 3.77 FPS
R = 0.46
T = (62.4)(0.46)(0.020)
T = 0.57 PSF

SWALE 2
Q = 2.70 CFS
CHANNEL SLOPE = 1.8%
FLOW DEPTH = 0.36'
VELOCITY = 2.56 FPS
R = 0.28
T = (62.4)(0.28)(0.018)
T = 0.31 PSF

FOR 15" DRIVEWAY CULVERT:
SLOPE = 1.5%
DIAMETER = 15"
MANNING'S N = 0.013
FLOW DEPTH = 0.95'
VELOCITY = 2.69 CFS

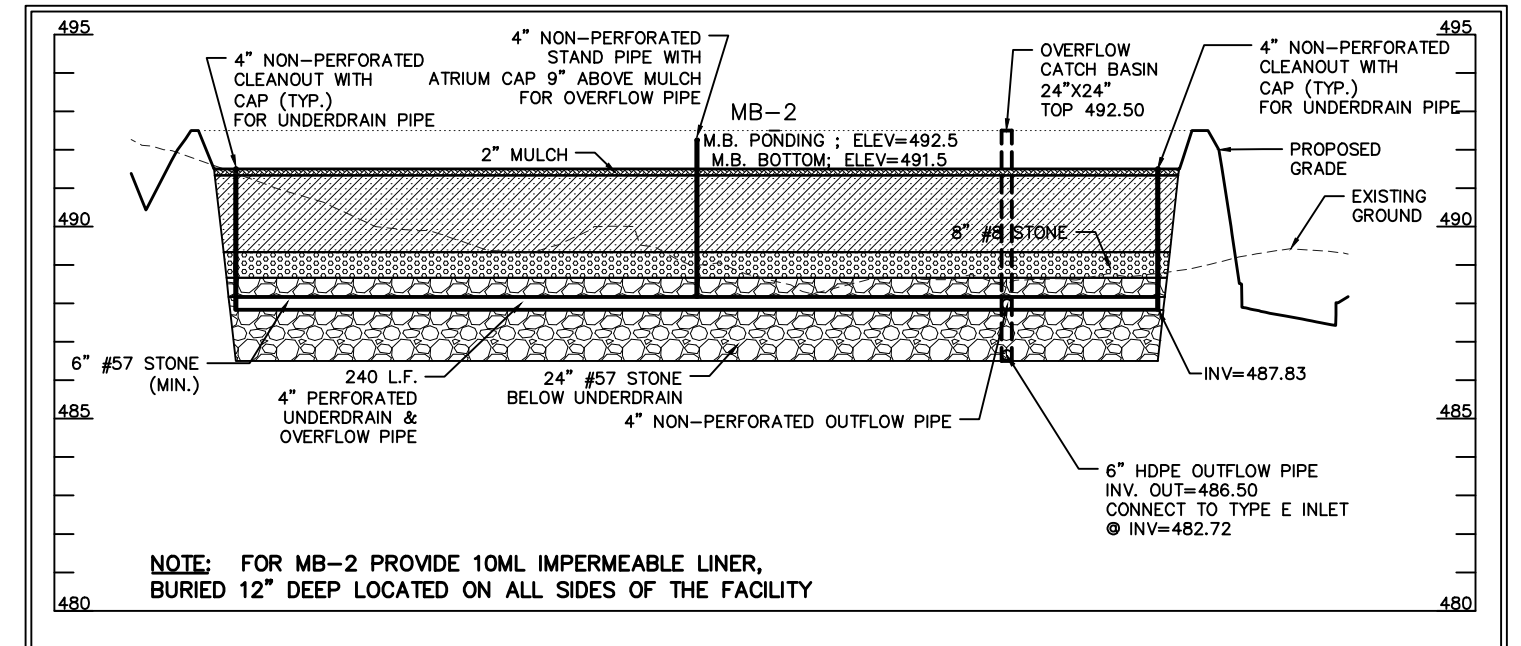
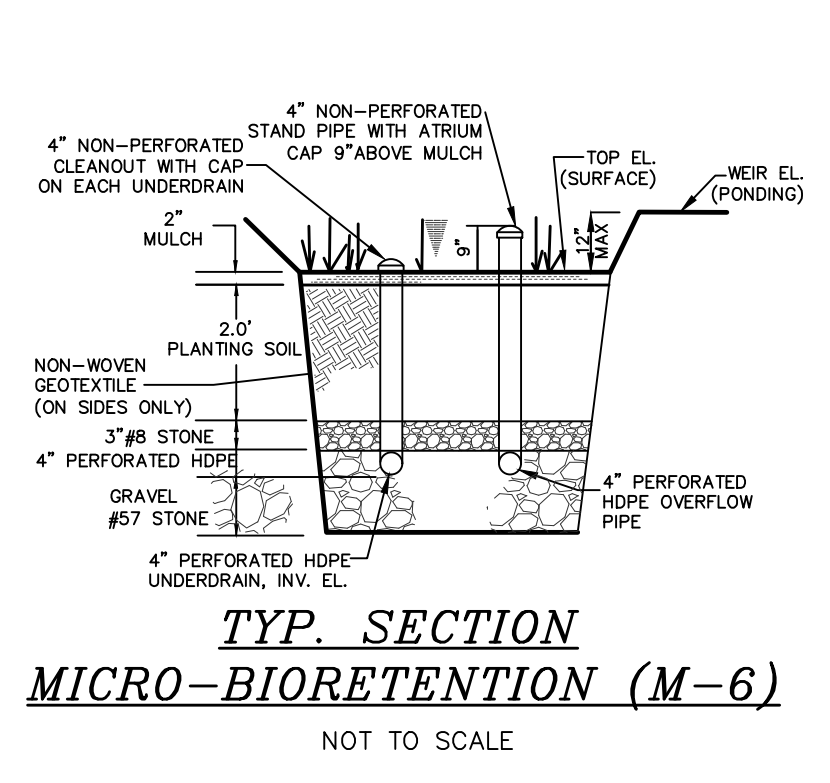
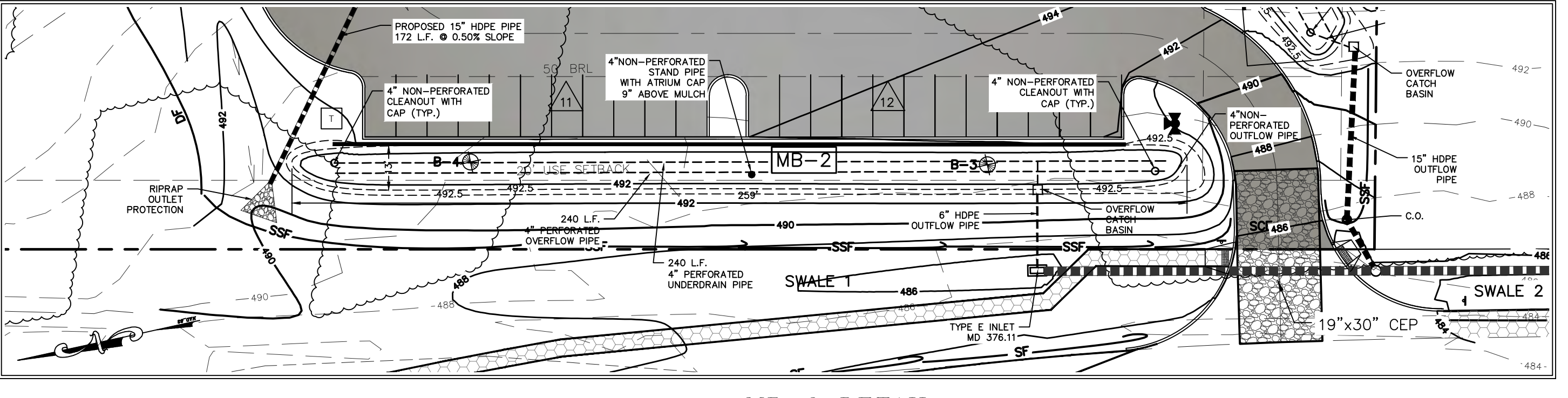
SWALE 1 SECTION STA. 4+30.00
N.T.S.

SWALE 2 SECTION STA. 2+00.00
N.T.S.

APPROVED: DEPARTMENT OF PLANNING AND ZONING
DATE: 4/17/2024
CHIEF, DEVELOPMENT ENGINEERING DIVISION
DATE: 4/17/2024
CHIEF, DIVISION OF LAND DEVELOPMENT
DATE: 4/18/2024
DIRECTOR, DEPARTMENT OF PLANNING AND ZONING

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. 26858 EXP. DATE 08/08/25
DATE: 04/15/24
Name: Sam Alomer
Firm: SAMER A. ALOMER, P.E.
DATE: 4/15/2024

OWNER: WAVERLY INVESTORS INC. 8316 FOREST ST. SUITE 200 ELLICOTT CITY, MD 21043 410-707-7054
DEVELOPER: KRISH PROPERTIES, LLC 8544 SCHLARS LANE LAUREL, MD 20723 202-247-7434



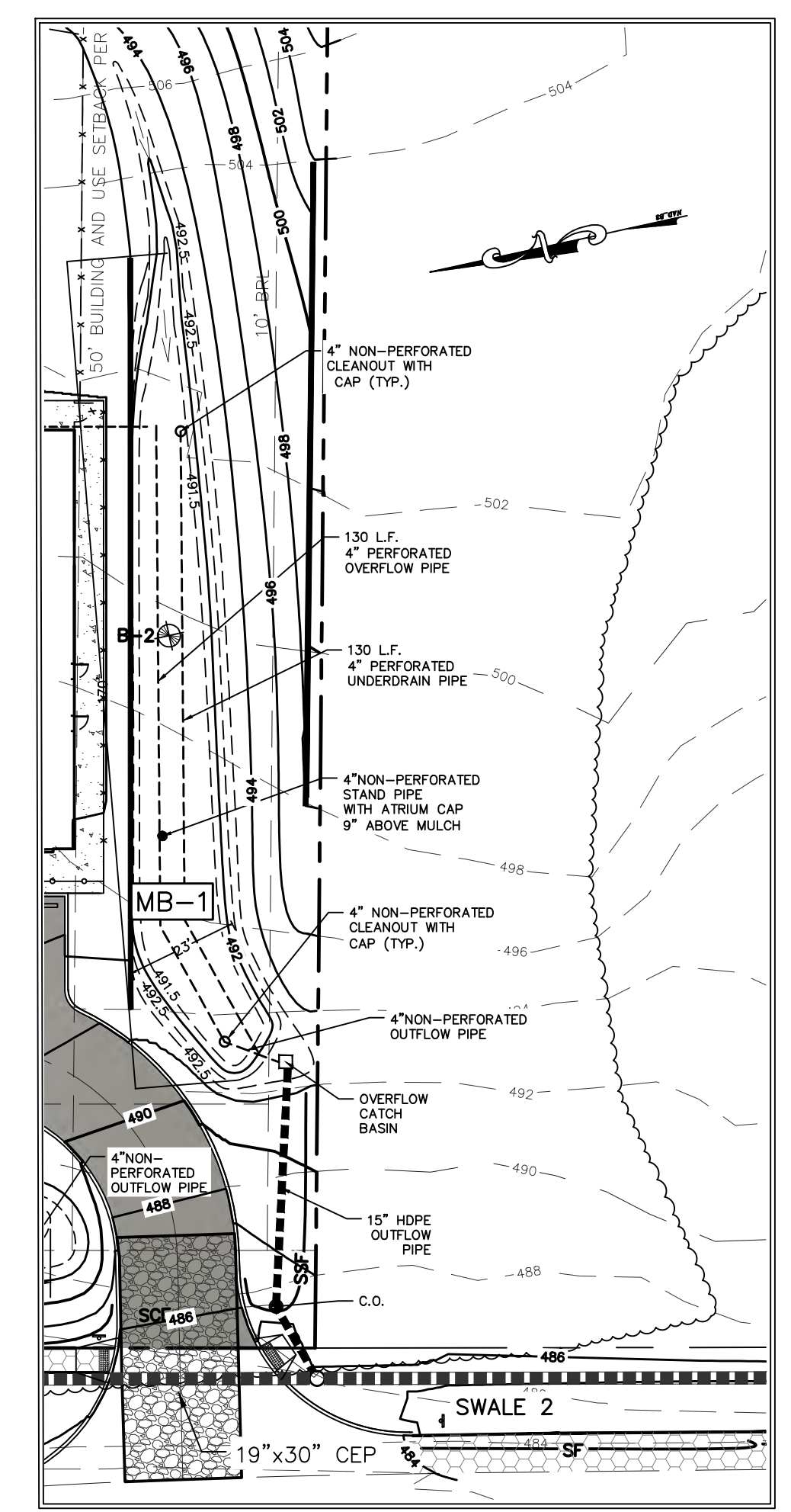
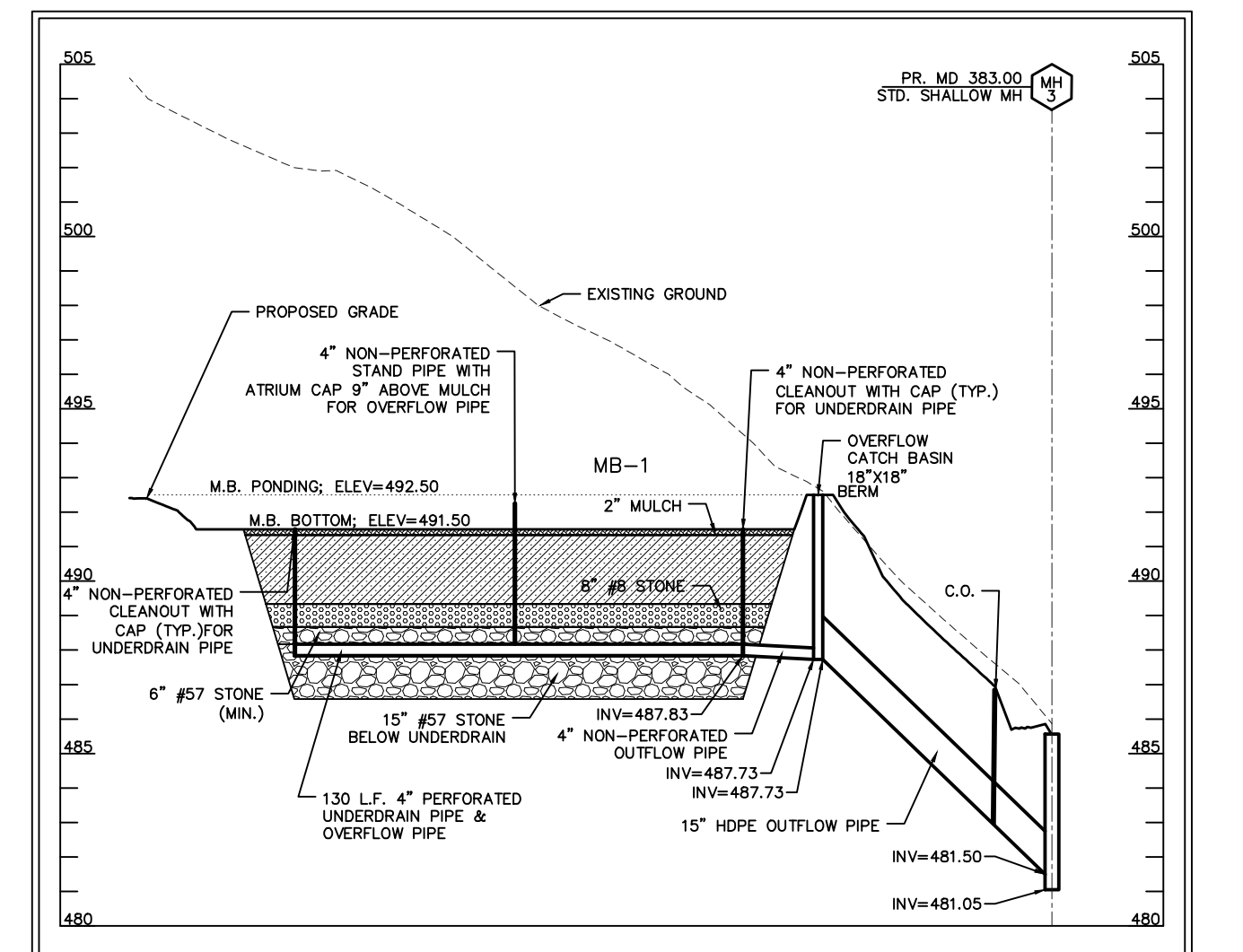
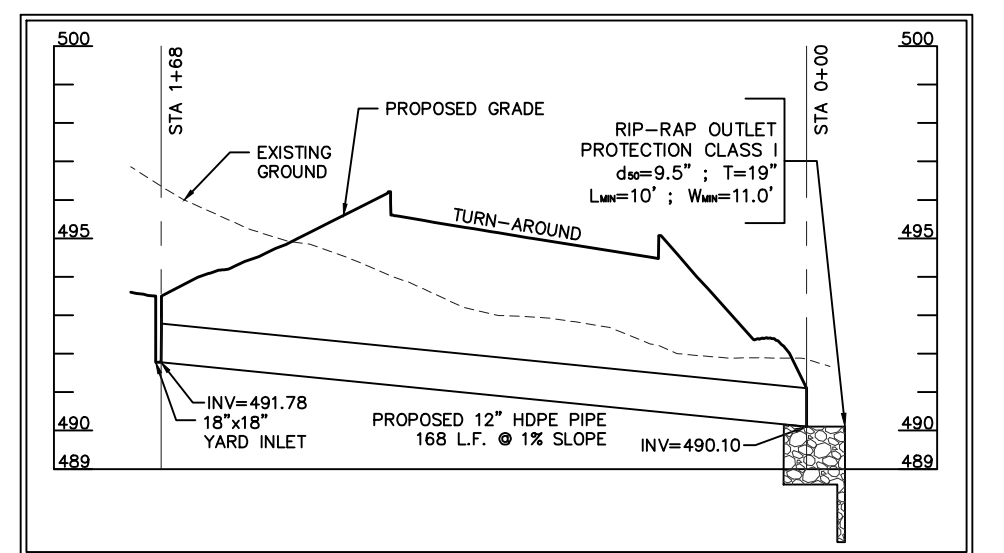
MILDENBERG BOENDER & ASSOC., INC.
Project: Primrose School Ellicott City
Test Date: February 22, 2023
Soils: Limited undisturbed exploration.
No. of borings: 5
Posting Method: Excavator
Findings:
Boring: Cosemwater: Rocks: Hole depth: Notes:
SW95-1: No Cosemwater: No Rocks: 10-11: Acceptable
SW95-2: No Cosemwater: No Rocks: 10-11: Acceptable
SW95-3: Cosemwater @ 9': No Rocks: 10-11: Acceptable
SW95-4: Cosemwater @ 9': No Rocks: 10-11: Acceptable
SW95-5: Cosemwater @ 10': No Rocks: 10-11: Acceptable
All Depths below existing ground surface.
Sam Alomer, P.E.

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

MIXED PERENNIALS CUT-LEAF CONEFLOWER (1.5' SP.)
BEEBALM (1.5' SP.)
JOW-PYE-WEED (3' SP.)

INK BERRY

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



Project	date	4.15.2024
21-040	engineering	MMM
illustration	JCB	score
approval	SAA	1"=60'

date	description	revisions

PRIMROSE SCHOOL ELKBRIDGE
TAX MAP: 31 - PARCEL : 169 (PL,P2,P3) GRID 08 ZONING R-20
FIRST ELECTION DISTRICT HOWARD COUNTY, MARYLAND
SWM DRAINAGE AREA MAP AND SWM DETAILS

MILDENBERG BOENDER & ASSOC., INC.
Engineers Planners Surveyors
8816 FOREST ST. SUITE 300, ELLICOTT CITY, MD 21043
(410) 997-0296 Tel. (410) 997-0298 Fax.

