

Note: Restaurant Area is not To Exceed 2550 Sq. Ft.

SEE SHEET 3 OF 7 FOR CURRENT SITE BOUNDARY AND LAYOUT

Parking Tabulation

Required Parking
 DANCE 5750 SF @ 10/1000 = 58 SPACES
 Retail 3500 SF @ 5/1000 = 70 SPACES
 Office 3000 SF @ 3/1000 = 10 SPACES
 Restaurant (2500 SF @ 1/1000) = 25 SPACES
 Total Required = 163 Spaces (PER MODIFIED PARKING AGENT 4/DPPE)
 Total Provided = 84 Spaces

DRAINAGE DESIGN DATA

FERTILIZE USING STD 14-14-14 FERTILIZER AT 15 LBS/1000 S.F.
 STAPLES @ 12" (NO. 8 GA - 8" LENGTH) EXIST GRADE
 4" BURIED END OF JUTE STRIP IN 4" TRENCH
 SLOPE 1:1 FOR SECT A-A 3:1 FOR SECT B-B
 (K-31 TALL FESCUE @ 1.37 LBS/1000 S.F.)
 JUTE THATCHING, OVERLAP STRIPS MIN. 2"

TYPICAL CHANNEL NO SCALE

SECTION A-A	SECTION B-B
A = 1.60	A = 3.0
T = 8.1	T = 6.0
n = 0.2	n = 0.5
R ^{2/3} = 0.342	R ^{2/3} = 0.65
S = 12%	S = 2%
V _{1/2} = 1.346	V _{1/2} = 0.144
h = 0.03	h = 0.03
d = 4.42'	d = 1.9'
Q = 4.3 CFS	Q = 132 CFS
V = 3.5' / SEC.	V = 4.4' / SEC.

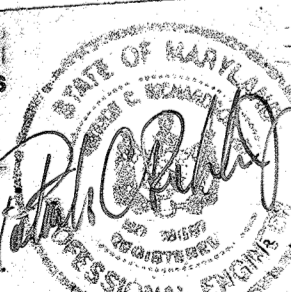
LAND OF SUN INTERNATIONAL VENTURES LLC
 TAX MAP 24, PAR 670
 LOT PAR A
 PLAT: #10649
 USE: COMMERCIAL
 ZONED: B-1

AINI-BERA SECTION X-X

1" BAND C-3 BITUMINOUS CONCRETE SURFACE
 2" BAND C-2 BITUMINOUS CONCRETE BINDER
 1" CRUSHED RUN BASE
 BASE WILL BE PAVED IN ACCORDANCE WITH C-30-3
 CLEARING & GRADING: ARTICLE C-1
 SUBGRADE: ARTICLE C-2
 BASE COURSE: ARTICLE C-2B
 BINDER COURSE: ARTICLE C-31 OF C-33
 SURFACE COURSE: ARTICLE C-31
 ALL CONSTRUCTED IN ACCORDANCE WITH THE HOWARD CO. ROAD CONSTRUCTION CODE & SPECIFICATIONS.
TYPICAL SECTION OF PAVING
 NO SCALE

HENRY J. BRASENNE

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. 16597, Expiration Date: 8/15/15



FOR REVISION OF THIS ONLY (REVISION #3) (REVISION #2)

EXIST. CAT TEL. CO. POLE RECEPTOR 12" R/W, LINES 19, FOLD 5/42

EXISTING CONCRETE ENTRANCE BUILT PER S.R.C. STANDARDS
 US ROUTE 40, EAST BOUND LANE

I CERTIFY THAT THIS PLAN MEETS THE REQUIREMENTS OF THE HOWARD SOIL CONSERVATION DISTRICT FOR SOIL EROSION & SEDIMENT CONTROL.
 George Chalk ARCHITECT 4/7/12 DATE

I CERTIFY THAT THIS SITE WILL BE DEVELOPED IN ACCORD WITH THIS PLAN FOR SEDIMENT AND EROSION CONTROL.
 R. David Long 8/15/12 DATE

6" HI-PRESSURE GAS

Item No.	Description	Date
1	STORMWATER AS-BUILT	5/22/11
2	EXISTING STORM DRAIN FOUND	10/4/11
3	ADD PIPES PER METEOR. STUDY/LANDS, PLANNING & SOIL	07-11-13
4	REVISE GRADING, PARKING LAYOUT, HANDICAP ACCESS	8-31-98

VANMAR ASSOCIATES, INC. ENGINEERS, ARCHITECTS, PLANNERS 210 SOUTH WASH STREET, SUITE 200 BALTIMORE, MD 21201 (410) 551-2800 (301) 551-0000 (410) 551-2701
 2/20/09 REVISED PARKING AREA & STRIPING, REVISED SIGN LOCATION AND UPDATE PARKING TABULATION



Revision of 8/15/18

APPROVED FOR PUBLIC WATER AND PUBLIC SEWERAGE SYSTEMS: HOWARD COUNTY HEALTH DEPT.
 COUNTY HEALTH OFFICER DATE 9/1/12

APPROVED: HOWARD COUNTY OFFICE OF PLANNING & ZONING
 PLANNING DIRECTOR DATE 9/1/12

APPROVED FOR PUBLIC WATER, PUBLIC SEWERAGE & STORM DRAINAGE SYSTEMS & GRADINGS
 HOWARD COUNTY DEPARTMENT OF PUBLIC WORKS
 DIRECTOR DATE 9/1/12
 CHIEF, BUREAU OF HIGHWAYS DATE 9/1/12

APPROVED: THIS DEVELOPMENT PLAN IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD COUNTY SOIL CONSERVATION DISTRICT
 DISTRICT SOIL CONSERVATIONIST DATE 9-1-12
 APPROVED: PATRICK ZEMER DATE 9-1-12

NOTE: APPROVALS APPLY TO DRAWING I & ME-1

AS-BUILT CERTIFICATION: I HEREBY CERTIFY THAT, BY MY SEAL, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS. PATRICK C. RICHARDSON, JR. PE #16597 DATE 05/22/19

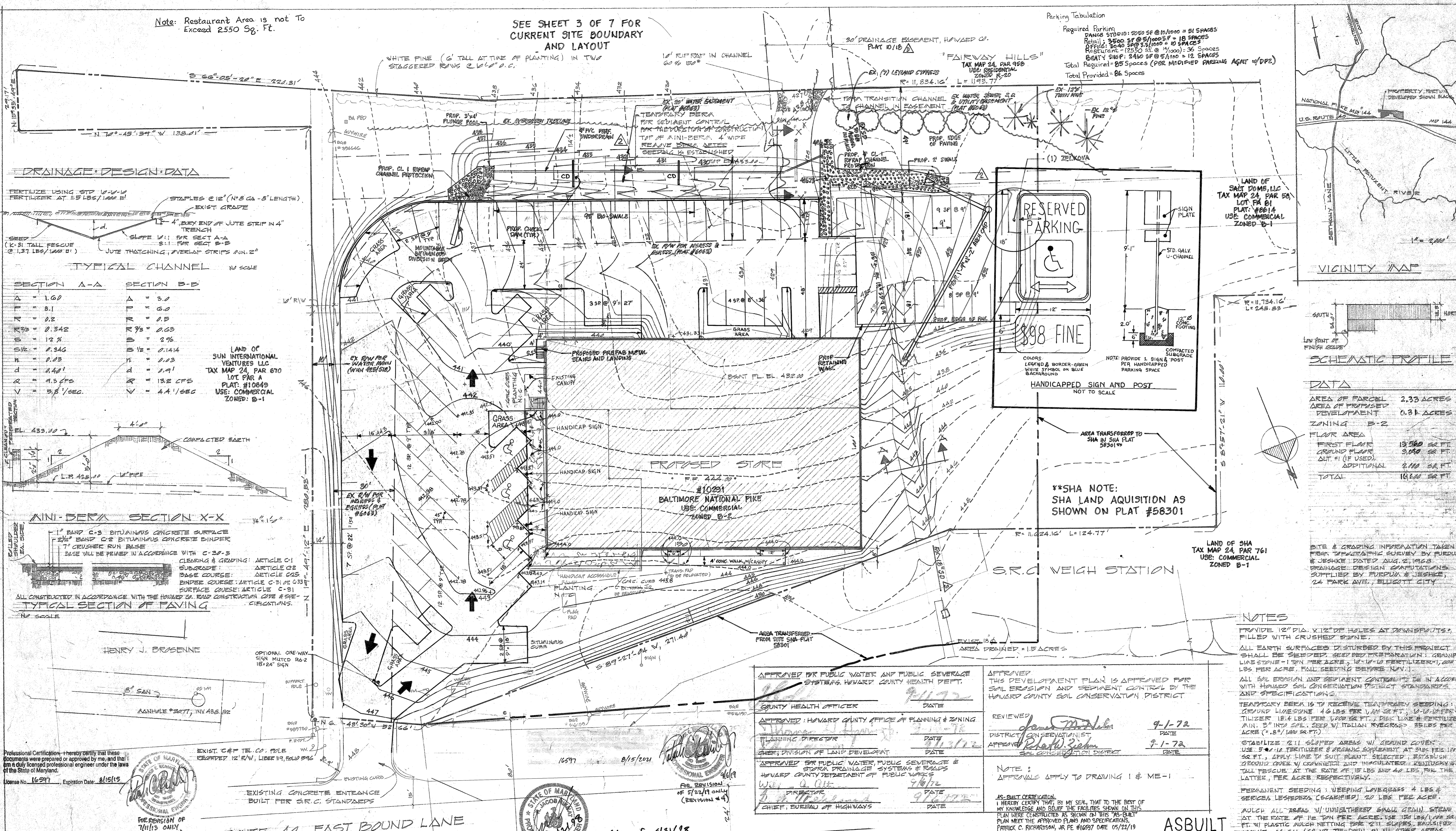
ASBUILT

LEGEND
 - - - - - EXIST. CONTOURS
 - - - - - FINISH CONTOURS
 + + + + + NEW SPOT ELEVATIONS

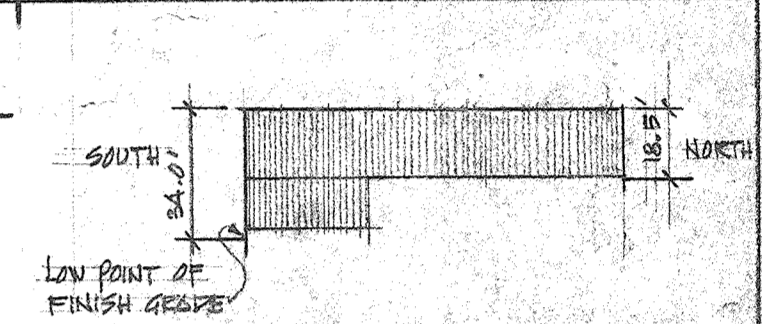
SITE & GRADING PLAN
 GEORGE RABINEK A.I.A. ARCHITECT
 3804 ARBUTUS AVE, BALTIMORE, MD
 TELEPHONE 484-1733

PROPOSED NOVELTY STORE FOR
 AR R. DAVID LONG AGENT
 OWNER: MARIE N. LONG
 ADDRESS: 8852 C TOWN-CTRY BL., ELLICOTT/CITY, MD.
 PROPERTY LOCATION: U.S. RT. 40, HOWARD COUNTY,
 SECOND ELECTION DISTRICT, TAX MAP #24, PARCEL #58

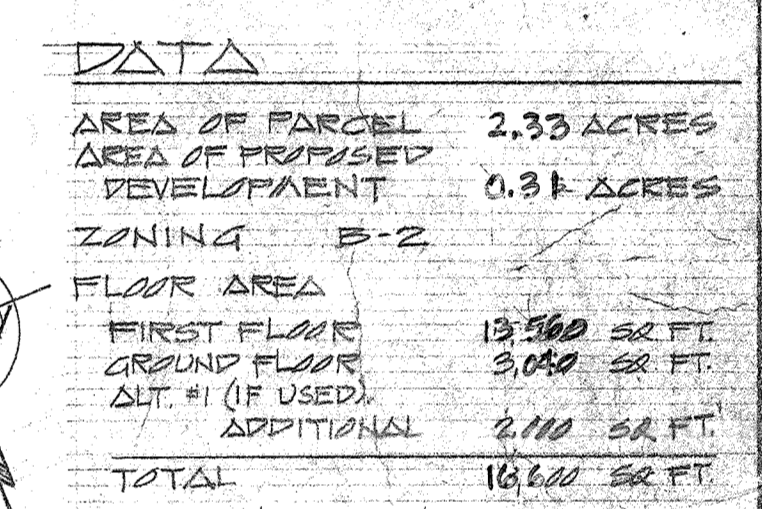
ARCHITECTURAL REGISTRATION BOARD
 STATE OF MARYLAND
 DATE: 4-27-12
 SHEET
 OF 7



VICINITY MAP



SCHEMATIC PROFILE



DATA

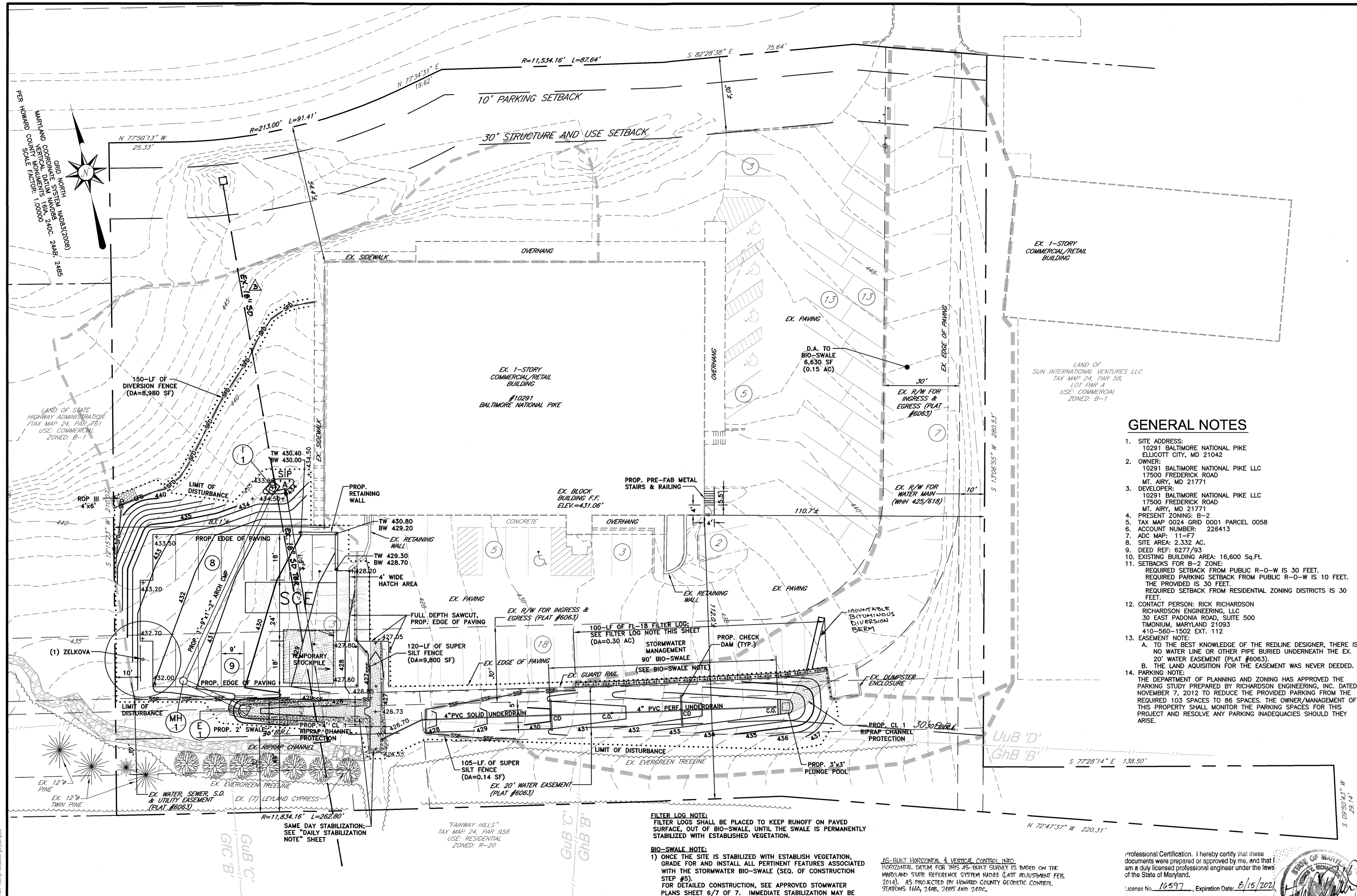
AREA OF PARCEL	2.33 ACRES
AREA OF PROPOSED DEVELOPMENT	0.31 ACRES
ZONING	B-2
FLOOR AREA	
FIRST FLOOR	13,500 SQ. FT.
GROUND FLOOR	3,000 SQ. FT.
ALT. #1 (IF USED)	
ADDITIONAL	2,100 SQ. FT.
TOTAL	16,600 SQ. FT.

NOTE: SHA LAND ACQUISITION AS SHOWN ON PLAT #58301

NOTES

- PROVIDE 12" DIA. X 12" DEEP HOLES AT DOWNSPROUTS, FILLED WITH CRUSHED STONE.
- ALL EARTH SURFACES DISTURBED BY THIS PROJECT SHALL BE SEEDED. SEED BED PREPARATION: GRIND LIME STONE - 1 TON PER ACRE, 12-18" D FERTILIZER, 200 LBS PER ACRE. PAUL SEEDING BEFORE NOV. 1.
- ALL SOIL EROSION AND SEDIMENT CONTROL TO BE IN ACCORD WITH HOWARD SOIL CONSERVATION DISTRICT STANDARDS AND SPECIFICATIONS.
- TEMPORARY BERA IS TO RECEIVE TEMPORARY SEEDING: GRIND LIME STONE 40 LBS PER 1,000 SQ. FT., 10-12" D FERTILIZER 18.4 LBS PER 1,000 SQ. FT., DISC LIKE FERTILIZER MIN. 2" INTO SOIL, SEED V. ITALIAN KYEGRASS 35 LBS PER ACRE (= .8" / 1000 SQ. FT.)
- STABILIZE 2:1 SLOPED AREAS W/ GRASS COVER. USE 5-0-10 FERTILIZER & ORGANIC SUPPLEMENT AT 200 LBS PER 100 SQ. FT., APPLY LIME TO SUIT PLANT SELECTED. ESTABLISH GRASS COVER W/ CRUMBLED AND INCULCATED KENTUCKY 31 TALL FESCUE AT THE RATE OF 15 LBS AND 40 LBS PER THE LATTER, PER ACRE RESPECTIVELY.
- PERMANENT SEEDING: WEEPING LOVERGRASS 4 LBS & SERICHA LESPEREDA (SCARIFIED) 20 LBS PER ACRE.
- MULCH ALL AREAS W/ UNWEATHERED SMALL GRASS STEAM AT THE RATE OF 10 TON PER ACRE. USE 150 LBS / 1000 SQ. FT. W/ PLASTIC MULCH NETTING PER 2:1 SLOPES. ESTABLISHED ASPHALT .84 GAL / SQ. YD. TIE-DOWN IN ALL OTHER AREAS.
- NO SIGNS, WALLS OR FENCES TO BE CONSTRUCTED ON THE SITE AT THIS TIME.

SDP 72-95



SEQUENCE OF CONSTRUCTION

- OBTAIN GRADING PERMIT AND NOTIFY HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES & PERMITS AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBANCE @ 410-313-2455.
- INSTALL STABILIZED CONSTRUCTION ENTRANCE, DIVERSION FENCE, RIPRAP OUTLET PROTECTION, SUPER SILT FENCE AND FILTER LOG AT LOCATIONS SHOWN ON PLAN. (3 DAYS)
- UPON RECEIVING NOTIFICATION TO PROCEED FROM THE INSPECTOR, BEGIN SITE GRADING INCLUDING ROUGH GRADING FOR THE BIO-SWALE FACILITY (DO NOT EXCAVATE FOR FILTER MEDIA AT THIS STAGE). INSTALL STORM DRAIN AND STRUCTURES FROM 1-1 TO E-1. ONCE 1-1 INSTALLATION IS COMPLETE, INSTALL STANDARD INLET PROTECTION, TYPE 'A'. (15 DAYS)
- BEGIN PARKING LOT CONSTRUCTION. INSTALL STONE AND BASE COURSE. (30 DAYS)
- FINE GRADE AND PERMANENTLY STABILIZE ONCE FINISHED GRADES HAVE BEEN ACHIEVED. (NOTE: CUT MATERIAL SHALL BE PLACED IN TEMPORARY STOCKPILE AREA OR HAULED OFF-SITE IMMEDIATELY) ONCE VEGETATION HAS BEEN ESTABLISHED, BEGIN INSTALLATION OF BIO-SWALE COMPONENTS INCLUDING UNDERDRAIN, FILTER MEDIA, CHECK DAMS AND RIPRAP CHANNEL PROTECTION. PERMANENTLY STABILIZE. (30 DAYS)
- INSTALL SURFACE PAVING. (2 DAYS)
- FINE GRADE REMAINING AREAS AND PROVIDE PERMANENT STABILIZATION. (2 DAYS)
- WITH PERMANENT STABILIZATION ESTABLISHED AND WITH APPROVAL FROM THE SEDIMENT CONTROL INSPECTOR REMOVE ANY REMAINING SEDIMENT CONTROL AND STABILIZE AREAS DISTURBED AS PART OF THE REMOVAL. (2 DAYS)

STABILIZATION NOTE

TEMPORARY OR PERMANENT STABILIZATION IS TO BE PERFORMED AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR OR WITHIN THE TIME FRAMES REQUIRED BY THE 2011 STANDARD AND SPECIFICATIONS, WHICHEVER IS MORE RESTRICTIVE.

STANDARD SEDIMENT CONTROL NOTES

- A MINIMUM OF 48 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY DEPARTMENT OF INSPECTIONS, LICENSES AND PERMITS, SEDIMENT CONTROL DIVISION PRIOR TO THE START OF ANY CONSTRUCTION (313-1855).
- ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND REVISIONS THEREOF.
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN: A) 3 CALENDAR DAYS FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES AND ALL SLOPES GREATER THAN 3:1; B) 7 DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
- ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED ABOVE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDING (SEC. B-4-5), TEMPORARY SEEDING (SEC. B-4-4) AND MULCHING (SEC. B-4-3). TEMPORARY STABILIZATION WITH MULCH ALONE CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER GERMINATION AND ESTABLISHMENT OF GRASSES.
- ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- SITE ANALYSIS:

TOTAL AREA OF SITE	2.33 AC
AREA DISTURBED	0.31 AC
AREA TO BE ROOFED OR PAVED	0.11 AC
AREA TO BE VEGETATIVELY STABILIZED	0.20 AC
TOTAL CUT	810 CY
TOTAL FILL	10 CY
OFFSITE WASTE/BORROW AREA LOCATION	IBD
- ANY SEDIMENT CONTROL PRACTICE THAT IS DISTURBED BY GRADING ACTIVITY FOR PLACEMENT OF UTILITIES MUST BE REPAIRED ON THE SAME DAY OF DISTURBANCE.
- ADDITIONAL SEDIMENT CONTROL MUST BE PROVIDED, IF DEEMED NECESSARY BY THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.
- ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.
- TRENCHES FOR THE CONSTRUCTION OF UTILITIES IS LIMITED TO THREE PIPE LENGTHS OR THAT WHICH SHALL BE BACK-FILLED AND STABILIZED BY THE END OF EACH WORKDAY, WHICHEVER IS SHORTER.
- ANY CHANGES OR REVISIONS TO THE SEQUENCE OF CONSTRUCTION MUST BE REVIEWED AND APPROVED BY THE PLAN APPROVAL AUTHORITY PRIOR TO PROCEEDING WITH CONSTRUCTION.
- A PROJECT IS TO BE SEQUENCED SO THAT GRADING ACTIVITIES BEGIN ON ONE GRADING UNIT (MAXIMUM ACREAGE OF 20 AC PER GRADING UNIT) AT A TIME. WORK MAY PROCEED TO A SUBSEQUENT GRADING UNIT WHEN AT LEAST 50 PERCENT OF THE DISTURBED AREA IN THE PRECEDING GRADING UNIT HAS BEEN STABILIZED AND APPROVED BY THE ENFORCEMENT AUTHORITY UNLESS OTHERWISE SPECIFIED AND APPROVED BY THE APPROVAL AUTHORITY. NO MORE THAN 30 ACRES CUMULATIVELY MAY BE DISTURBED AT A GIVEN TIME.

GENERAL NOTES

- SITE ADDRESS: 10291 BALTIMORE NATIONAL PIKE ELLICOTT CITY, MD 21042
- OWNER: 10291 BALTIMORE NATIONAL PIKE LLC 17500 FREDERICK ROAD MT. AIRY, MD 21771
- DEVELOPER: 10291 BALTIMORE NATIONAL PIKE LLC 17500 FREDERICK ROAD MT. AIRY, MD 21771
- PRESENT ZONING: B-2
- TAX MAP 0024 GRID 0001 PARCEL 0058
- ACCOUNT NUMBER: 226413
- ADC MAP: 11-F7
- SITE AREA: 2.332 AC
- DEED REF: 6277/93
- EXISTING BUILDING AREA: 16,600 Sq.Ft.
- SETBACKS FOR B-2 ZONE:
 - REQUIRED SETBACK FROM PUBLIC R-0-W IS 30 FEET.
 - REQUIRED PARKING SETBACK FROM PUBLIC R-0-W IS 10 FEET. THE PROVIDED IS 30 FEET.
 - REQUIRED SETBACK FROM RESIDENTIAL ZONING DISTRICTS IS 30 FEET.
- CONTACT PERSON: RICK RICHARDSON RICHARDSON ENGINEERING, LLC 30 EAST PADONIA ROAD, SUITE 500 TIMONIUM, MARYLAND 21093 410-560-1502 EXT. 112
- EASEMENT NOTE:
 - A. TO THE BEST KNOWLEDGE OF THE REDLINE DESIGNER, THERE IS NO WATER LINE OR OTHER PIPE BURIED UNDERNEATH THE EX. 20' WATER EASEMENT (PLAT #6063).
 - B. THE LAND ADJOINING FOR THE EASEMENT WAS NEVER DEEDED.
- PARKING NOTE: THE DEPARTMENT OF PLANNING AND ZONING HAS APPROVED THE PARKING STUDY PREPARED BY RICHARDSON ENGINEERING, INC. DATED NOVEMBER 7, 2012 TO REDUCE THE PROVIDED PARKING FROM THE REQUIRED 103 SPACES TO 86 SPACES. THE OWNER/MANAGEMENT OF THIS PROPERTY SHALL MONITOR THE PARKING SPACES FOR THIS PROJECT AND RESOLVE ANY PARKING INADEQUACIES SHOULD THEY ARISE.

DAILY STABILIZATION NOTE:

FOR RIPRAP OUTFALLS (WHERE THE INSTALLATION OF CONTROLS WOULD BE MINIMAL); CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE STABILIZED BY THE END OF THE WORK DAY. STABILIZATION SHALL BE AS FOLLOWS:

- FOR OUTFALLS, THE APPLICATION OF STONE AND CONCRETE (LEVEL SPREADER).
- FOR VEGETATED AREAS:
 - a) PERMANENT SEED AND SOIL STABILIZATION MATING OR SOD FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
 - b) PERMANENT SEED AND MULCH FOR ALL OTHER AREAS. ANY AREAS WHICH CANNOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWNSLOPE SIDE (SEE UTILITY NOTE).

UTILITY NOTE

- CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY.
- PLACE ALL EXCAVATED MATERIAL ON THE UPHILL SIDE OF THE TRENCH.
- ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE REPAIRED IMMEDIATELY.

FILTER LOG NOTE:
FILTER LOGS SHALL BE PLACED TO KEEP RUNOFF ON PAVED SURFACE, OUT OF BIO-SWALE, UNTIL THE SWALE IS PERMANENTLY STABILIZED WITH ESTABLISHED VEGETATION.

BIO-SWALE NOTE:
1) ONCE THE SITE IS STABILIZED WITH ESTABLISH VEGETATION, GRADE FOR AND INSTALL ALL PERTINENT FEATURES ASSOCIATED WITH THE STORMWATER BIO-SWALE (SEQ. OF CONSTRUCTION STEP #5). FOR DETAILED CONSTRUCTION, SEE APPROVED STORMWATER PLANS SHEET 6/7 OF 7. IMMEDIATE STABILIZATION MAY BE ACHIEVED BY USE OF SOD.
2) CHECK DAMS SHALL NOT BE USED FOR SEDIMENT CONTROL.

AS-BUILT HORIZONTAL & VERTICAL CONTROL INFO:
HORIZONTAL DATUM FOR THIS AS-BUILT SURVEY IS BASED ON THE MARYLAND STATE REFERENCE SYSTEM NAD83 (LAST ADJUSTMENT FEB. 2014). AS PROJECTED BY HOWARD COUNTY GEODETIC CONTROL STATIONS 1624, 2486, 2485 AND 242C.

VERTICAL DATUM FOR THIS AS-BUILT SURVEY IS NORTH AMERICAN VERTICAL DATUM (NAVD) 1988 AS PROJECTED BY THE ABOVE MENTIONED HOWARD COUNTY GEODETIC CONTROL STATIONS, OR HOWARD COUNTY VERTICAL CONTROL BENCH MARKS, 1624, 2486, 2485 AND 242C.

THE INSTRUMENTS WERE USED IN PERFORMING THIS AS-BUILT SURVEY: TOPCON DS2056G, 1 SEC ROBOTIC TOTAL STATION AND PRISM AND A TOPCON HYPER V R.K.GPS UNIT.

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. 16597, Expiration Date: 6/15/2022

AS-BUILT CERTIFICATION: I HEREBY CERTIFY THAT, BY MY SEAL, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.

PATRICK C. RICHARDSON, JR. PE #16597 DATE: 5/22/19

BIO-SWALE STORMWATER NOTE

- ONCE THE SITE IS STABILIZED WITH ESTABLISH VEGETATION, GRADE FOR AND INSTALL ALL PERTINENT FEATURES ASSOCIATED WITH THE STORMWATER BIO-SWALE (SEQ. OF CONSTRUCTION STEP #5). FOR DETAILED CONSTRUCTION, SEE APPROVED STORMWATER PLANS SHEET 6/7 OF 7. IMMEDIATE STABILIZATION MAY BE ACHIEVED BY USE OF SOD.
- CHECK DAMS SHALL NOT BE USED FOR SEDIMENT CONTROL.

ESC LEGEND

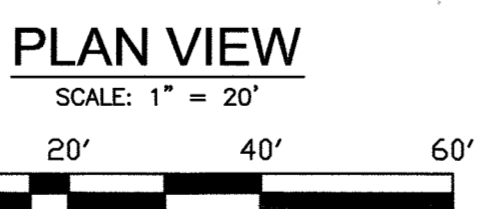
- SSC STABILIZED CONSTRUCTION ENTRANCE W/ MOUNTABLE BERM
- SSF SUPER SILT FENCE
- SFD FENCE DIVERSION
- STP TEMPORARY STOCKPILE
- ROP III ROCK OUTLET PROTECTION
- SIP STANDARD INLET PROTECTION
- FLG FILTER LOG

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

John R. Robertson
SOIL CONSERVATION DISTRICT

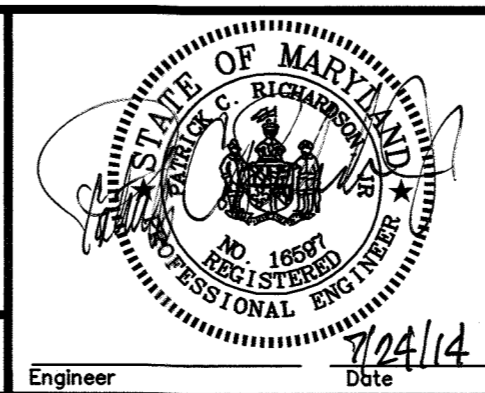
THE SIMPLIFIED ECP APPROVAL GRANTED ON JULY 11, 2013

APPROVED: DEPARTMENT OF PLANNING AND ZONING
Chief, Development Engineering Division
Chief, Division of Land Development
Director



Richardson Engineering, LLC

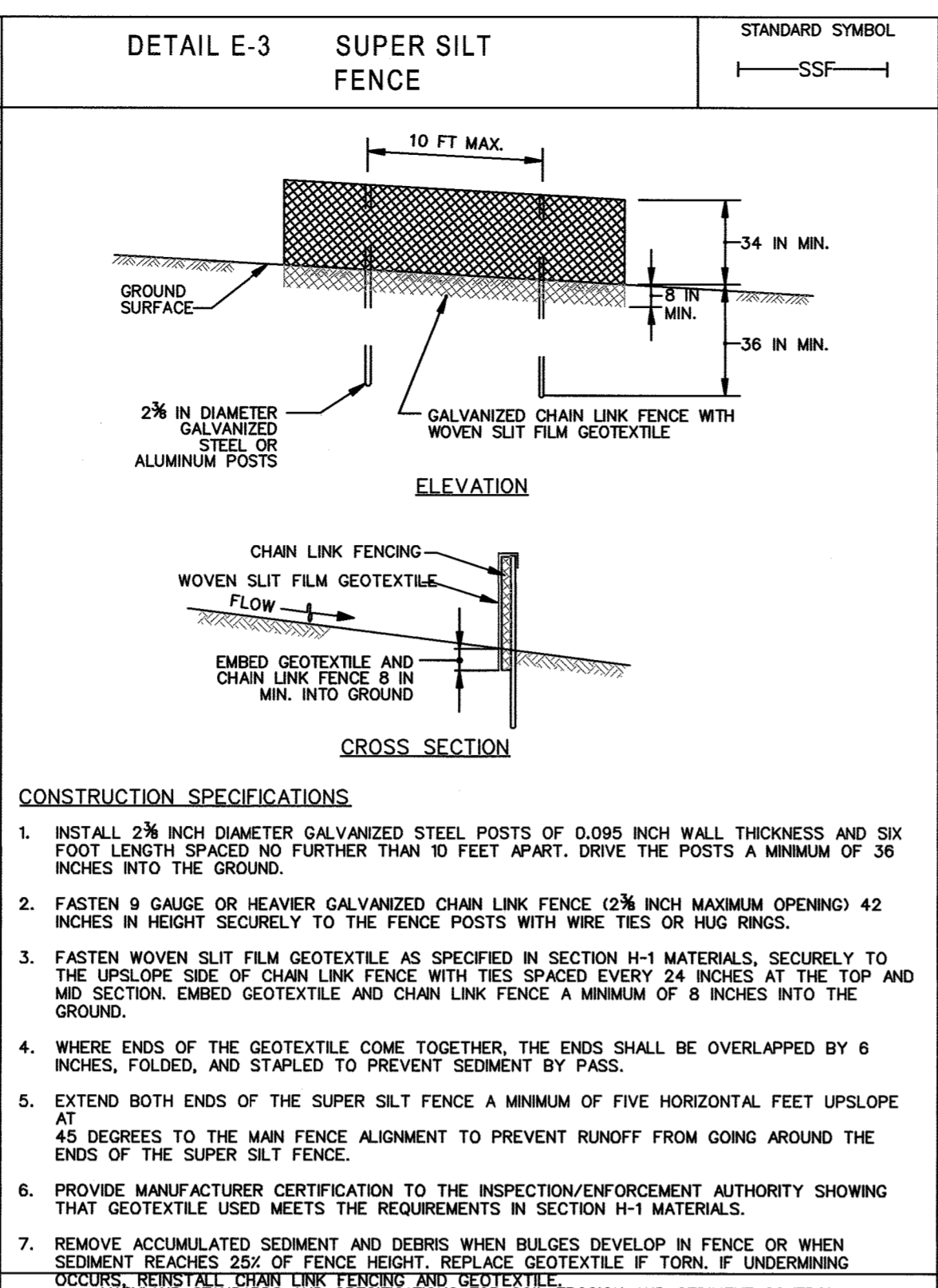
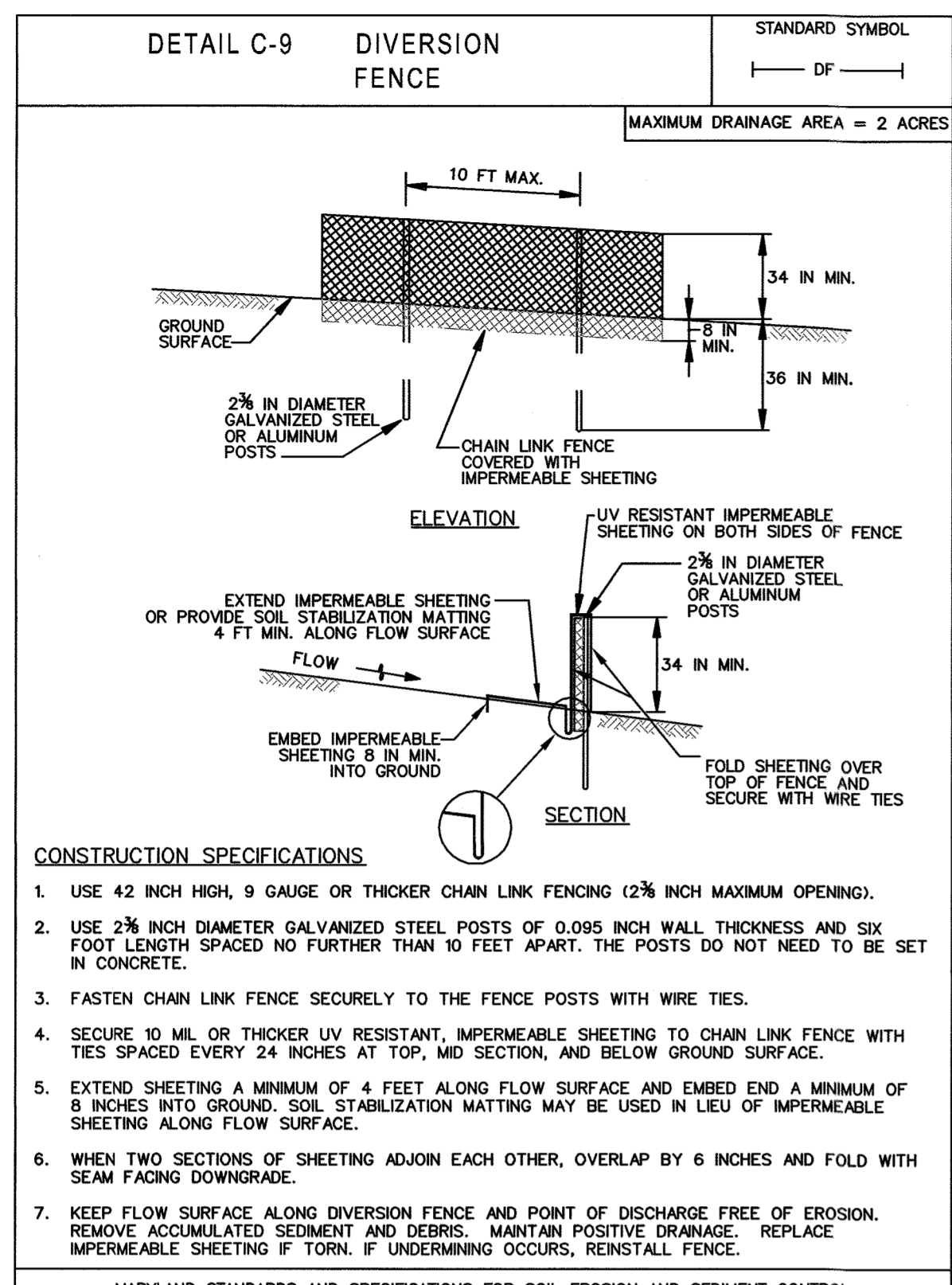
30 East Padonia Road, Suite 500
Timonium, Maryland 21093
Phone: 410-560-1502 Fax: 443-901-1208



OWNERS/DEVELOPER
OWNER: 10291 BALTIMORE NATIONAL PIKE LLC 17500 FREDERICK ROAD MT. AIRY, MD 21771
DEVELOPER: 10291 BALTIMORE NATIONAL PIKE LLC 17500 FREDERICK ROAD MT. AIRY, MD 21771

NOVELTY STORE
10291 BALTIMORE NATIONAL PIKE
REVISED SITE DEVELOPMENT PLAN
ESC PLAN (SDP 72-095)

Subdivision Name	Section/Area	Lot/Parcel No.
MARIE N. LONG PROPERTY	N.A.	58 PAR A
PLAT #	Grid #	Zoning
6063	1	B-2
Tax Map No.	Election District	Census Tract
24	2	-
Water Code	Sewer Code	
---	---	



H-1 STANDARDS & SPECIFICATIONS FOR MATERIALS

Table H.1: Geotextile Fabrics

PROPERTY	TEST METHOD	MD	CD	MD	CD	MD	CD
GRAB TENSILE STRENGTH	ASTM D-4490	200 lb	200 lb	200 lb	200 lb	200 lb	200 lb
TENSILE ELONGATION	ASTM D-4490	15%	10%	15%	15%	50%	50%
PROXIMAL TENSILE STRENGTH	ASTM D-4490	75 lb	75 lb	100 lb	80 lb	80 lb	80 lb
PUNCTURE STRENGTH	ASTM D-6241	450 lb	450 lb	800 lb	800 lb	450 lb	450 lb
APPEARANT OPENING SIZE	ASTM D-4751	U.S. Sieve 30 (0.59 mm)	U.S. Sieve 30 (0.21 mm)	U.S. Sieve 70 (0.21 mm)	U.S. Sieve 70 (0.21 mm)	U.S. Sieve 70 (0.21 mm)	U.S. Sieve 70 (0.21 mm)
PERMITTIVITY	ASTM D-4491	0.05 sec ⁻¹	0.28 sec ⁻¹	0.28 sec ⁻¹	0.28 sec ⁻¹	1.1 sec ⁻¹	1.1 sec ⁻¹
ULTRAVIOLET RESISTANCE RETAINED AT 500 HOURS	ASTM D-4355	70% strength	70% strength	70% strength	70% strength	70% strength	70% strength

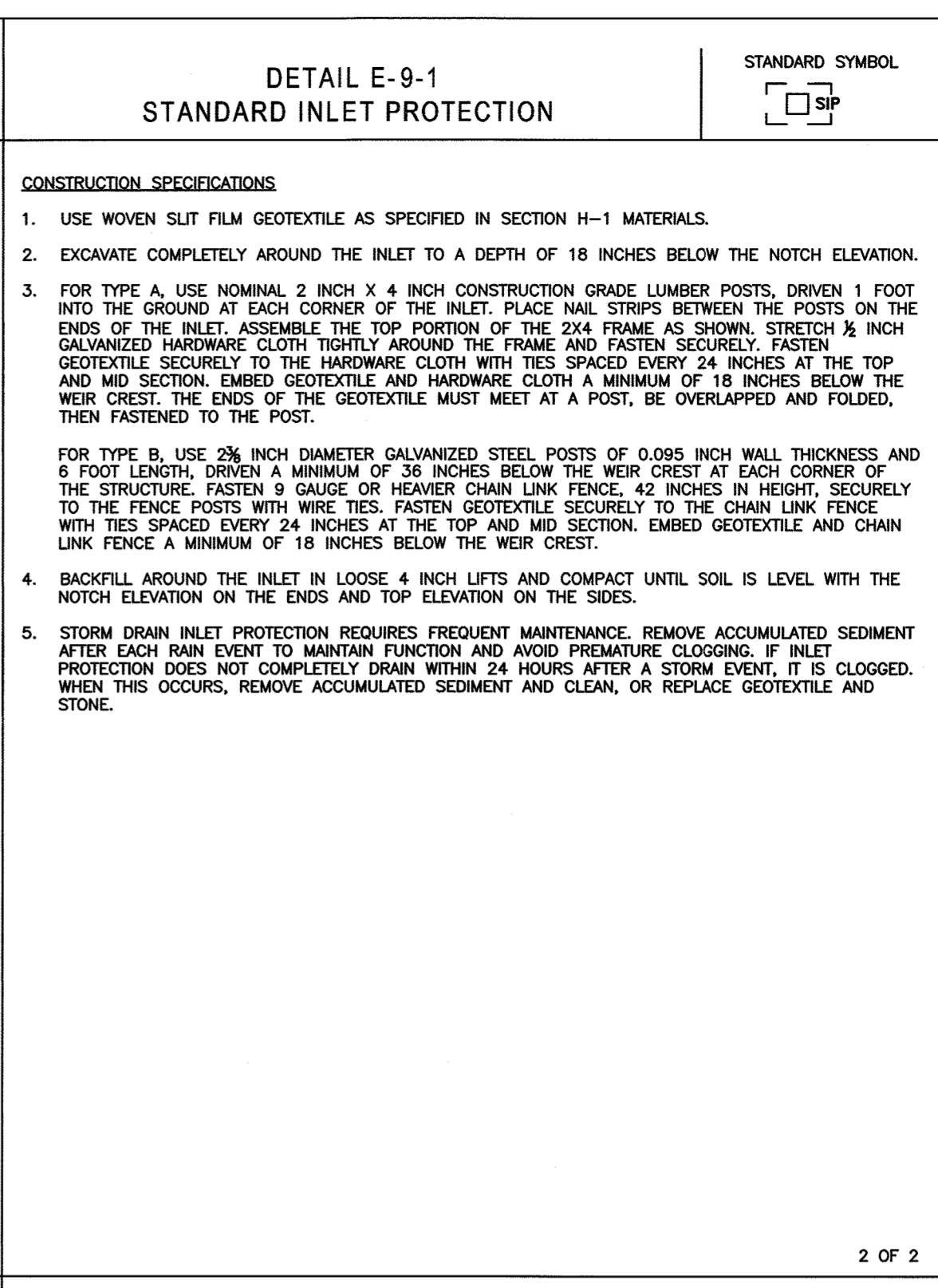
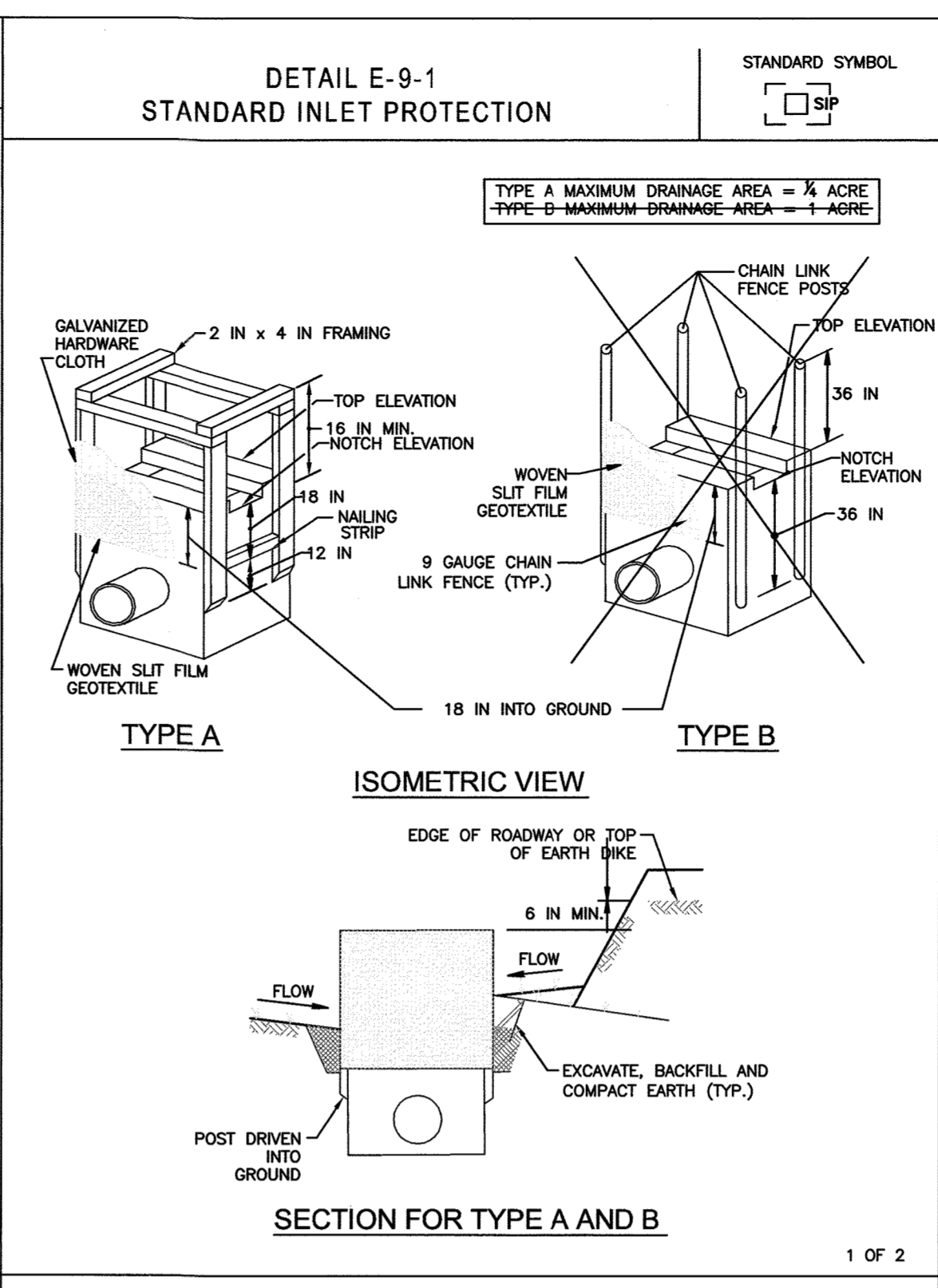
NOTE: ALL NUMERIC VALUES EXCEPT APPARENT OPENING SIZE (AOS) REPRESENT MINIMUM AVERAGE ROLL VALUES (MARV). MARV IS CALCULATED AS THE TYPICAL MINUS TWO STANDARD DEVIATIONS. MD IS MACHINE DIRECTION; CD IS CROSS DIRECTION.

VALUES FOR AOS REPRESENT THE AVERAGE MAXIMUM OPENING.

GEOTEXTILES MUST BE EVALUATED BY THE NATIONAL TRANSPORTATION PRODUCT EVALUATION PROGRAM (NTPPEP) AND CONFORM TO THE VALUES IN TABLE H.1.

THE GEOTEXTILE MUST BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS AND MUST BE ROT AND MILDWEAR RESISTANT. THE GEOTEXTILE MUST BE MANUFACTURED FROM FIBERS CONSISTING OF LONG CHAIN SYNTHETIC POLYMERS AND COMPOSED OF A MINIMUM OF 95 PERCENT BY WEIGHT OF POLYOLEFINS OR POLYESTERS, AND FORMED INTO A STABLE NETWORK SO THE FILAMENTS OR YARNS RETAIN THEIR DIMENSIONAL STABILITY RELATIVE TO EACH OTHER, INCLUDING SELVAGES.

WHEN MORE THAN ONE SECTION OF GEOTEXTILE IS NECESSARY, OVERLAP THE SECTIONS BY AT LEAST ONE FOOT. THE GEOTEXTILE MUST BE PULLED TIGHT OVER THE APPLIED SURFACE. EQUIPMENT MUST NOT RUN OVER THE EXPOSED FABRIC. WHEN PLACING RIPRAP ON GEOTEXTILE, DO NOT EXCEED A ONE FOOT DROP HEIGHT.



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

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

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

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

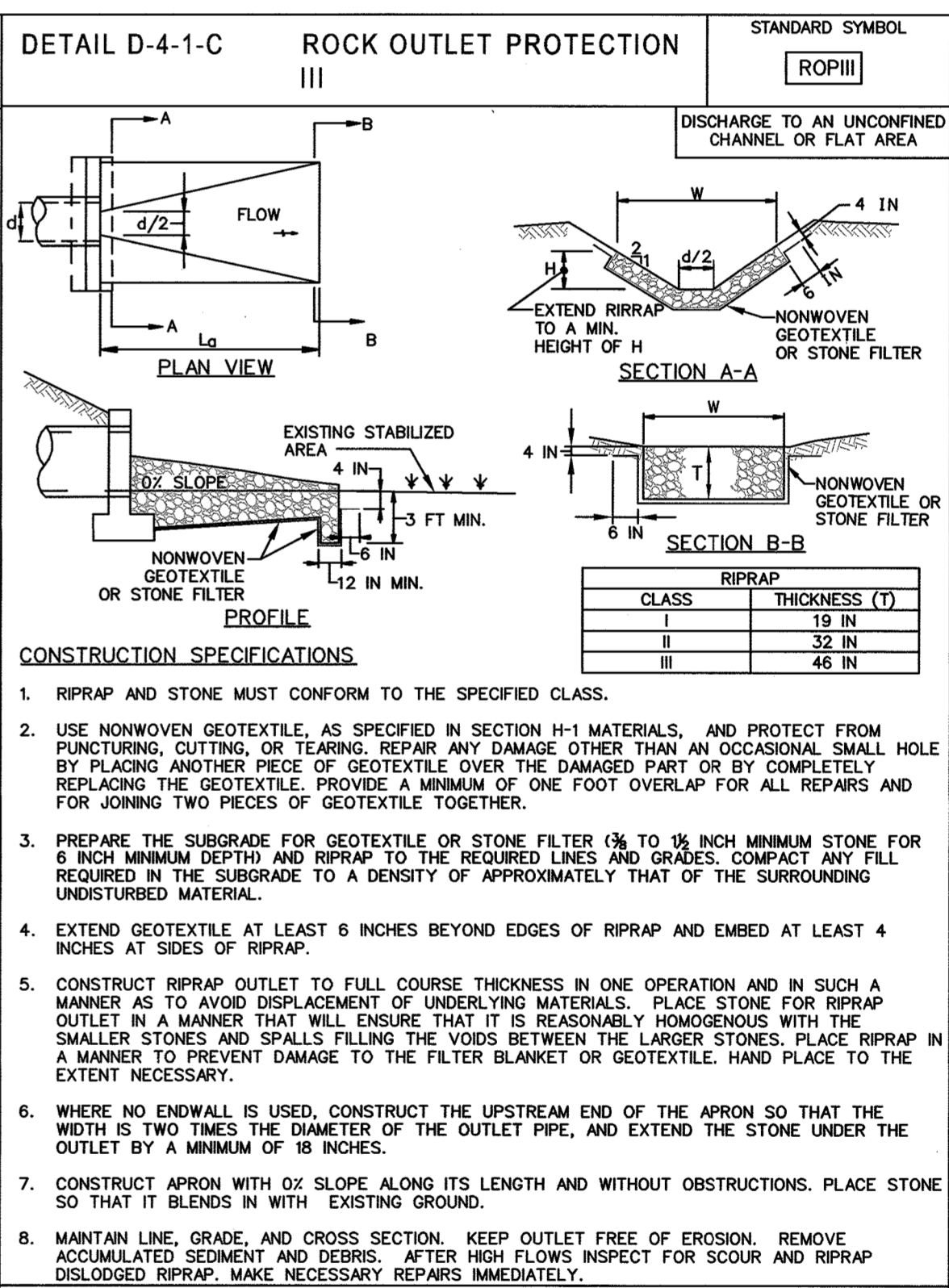
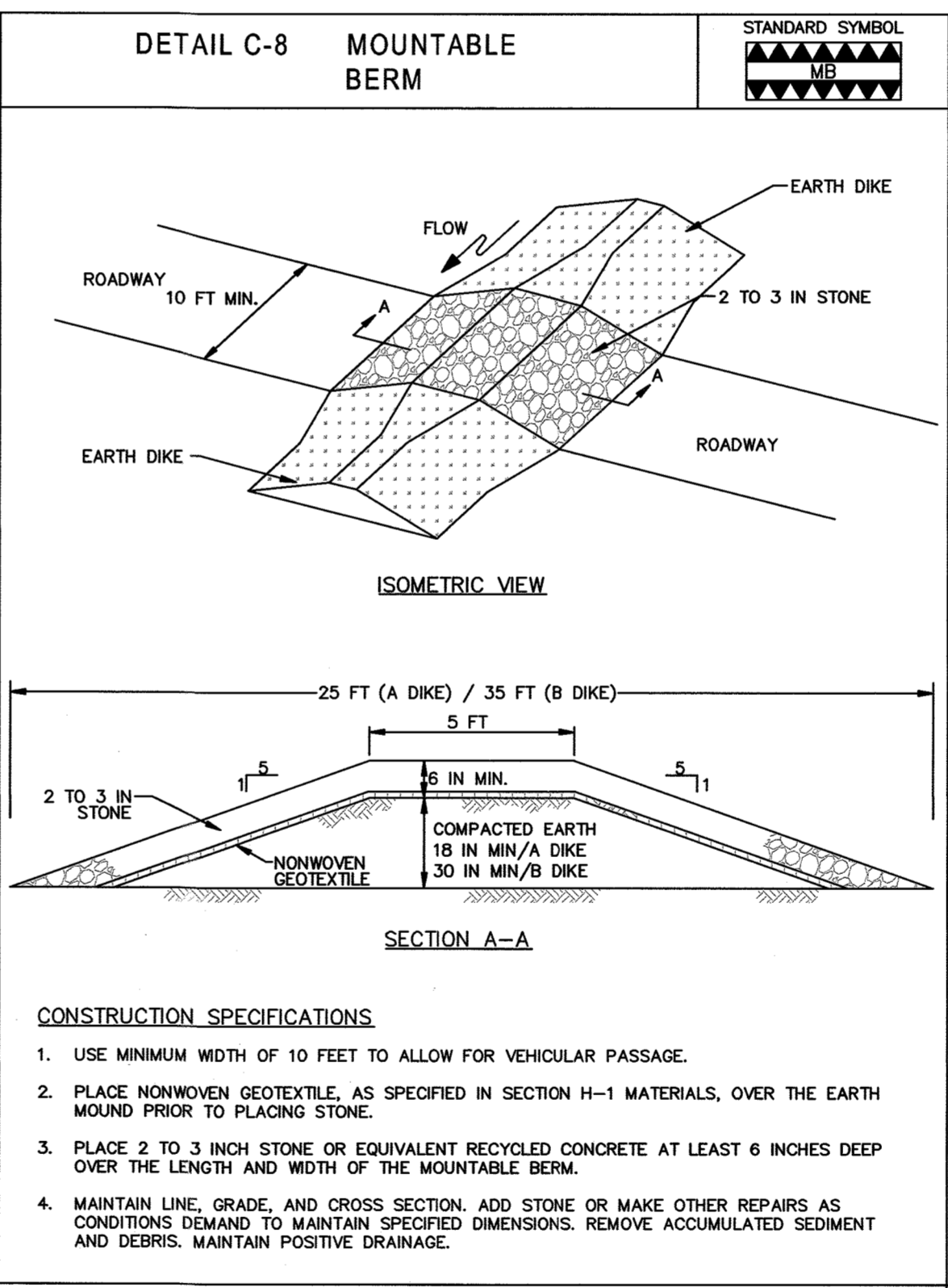
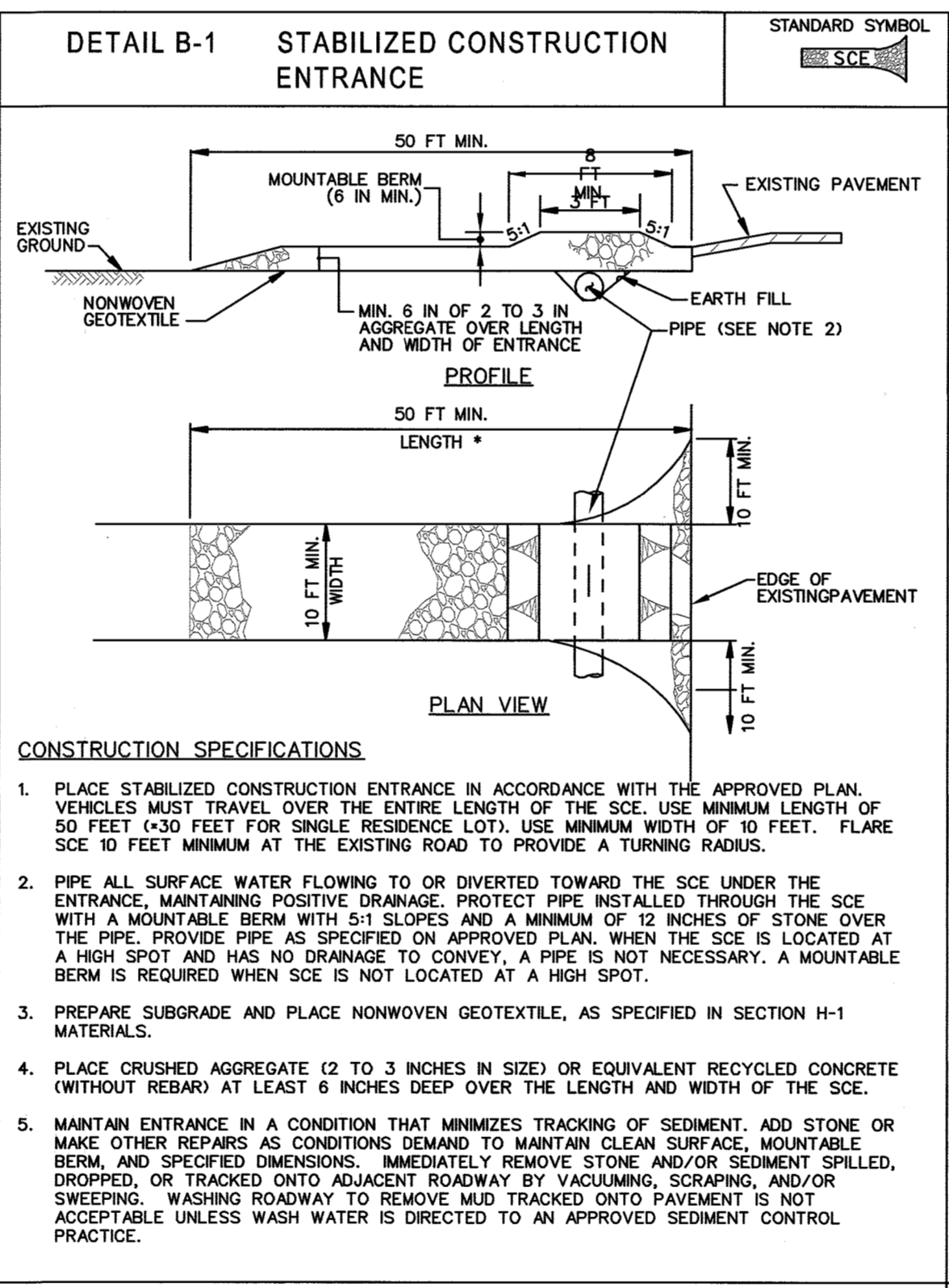
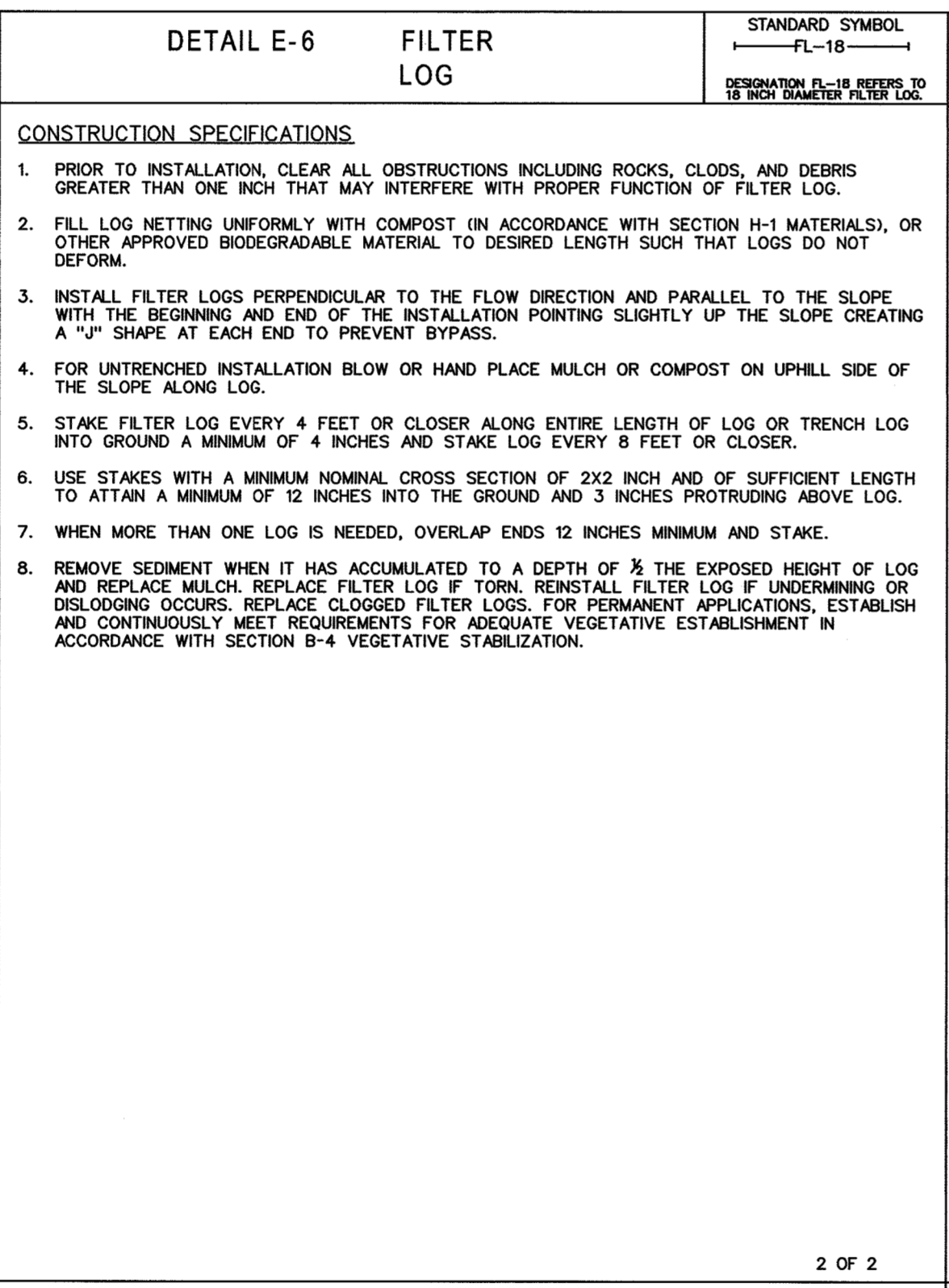
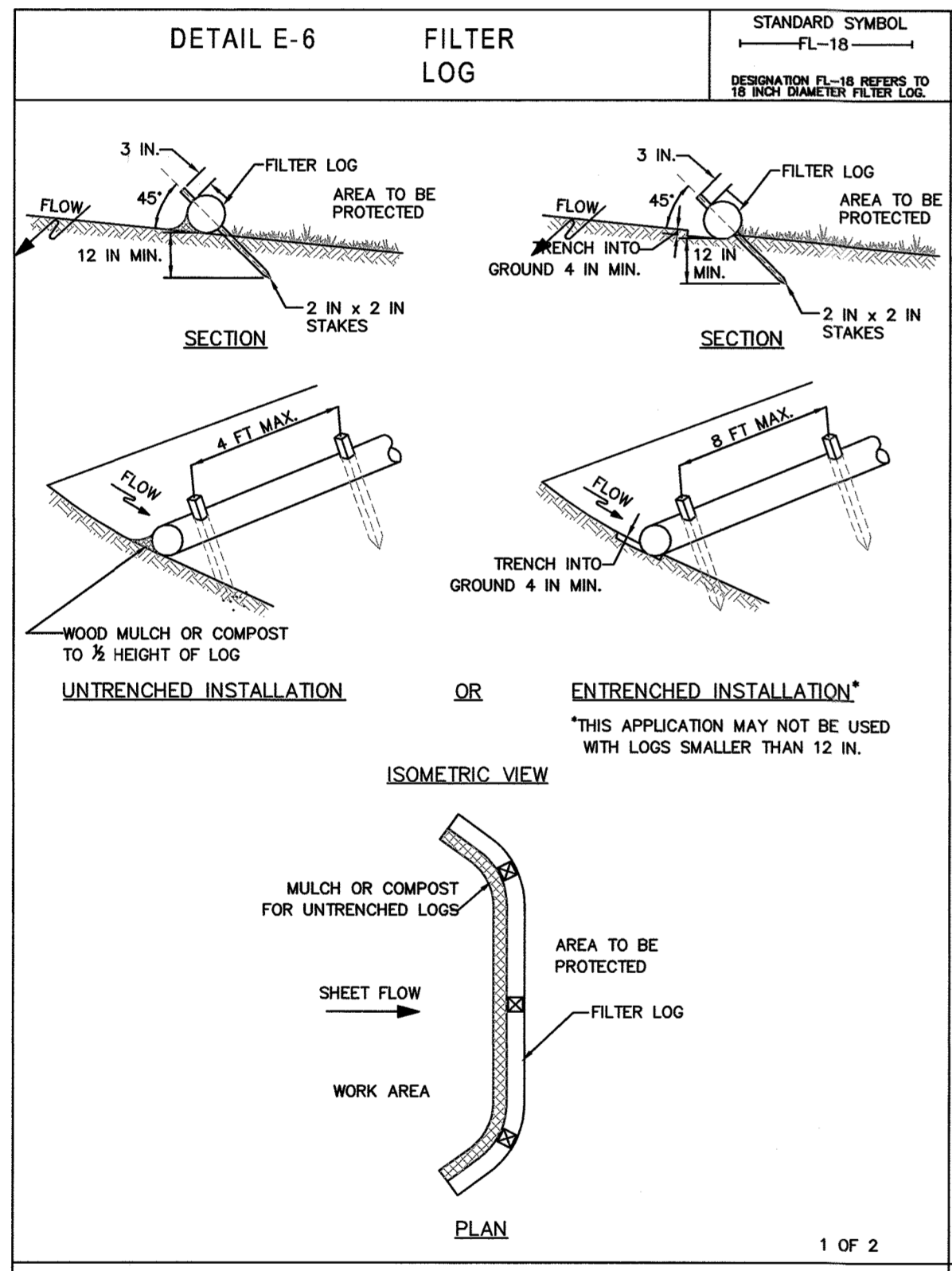
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U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE 2011

MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division

Chief, Division of Land Development

Director

10-1-14

10-06-14

10/2/14

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

John K. Roberts 10/2/14

SOIL CONSERVATION DISTRICT DATE

Richardson Engineering, LLC

30 East Padonia Road, Suite 500
Timonium, Maryland 21093
Phone: 410-560-1502 Fax: 443-901-1208

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. 16597, Expiration Date: 8/15/2021

9/6/19

PROFESSIONAL CERTIFICATION: I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NUMBER 16597, EXPIRATION DATE: 08-15-2015

DESIGN AND DRAWINGS ARE BASED ON MARYLAND COORDINATE SYSTEM (MCS). HORIZONTAL - NAD 83/91. VERTICAL - NAVD 88.

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.

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ADDRESS CHART

Lot/Parcel #	Street Addresses
58 PAR A	10291 BALTIMORE NATIONAL PIKE

PERMIT INFORMATION CHART

Subdivision Name	Section/Area	Lot/Parcel No.			
MARIE N. LONG PROPERTY	N.A.	58 PAR A			
PLAT #	Grid #	Zoning	Tax Map No.	Election District	Census Tract
6063	1	B-2	24	2	-
Water Code	Sewer Code				
--	--				

NOVELTY STORE

10291 BALTIMORE NATIONAL PIKE
REVISED SITE DEVELOPMENT PLAN
ESC DETAILS (SDP 72-095)

2ND ELECTION DISTRICT HOWARD COUNTY, MARYLAND

DESIGNED BY:	SCALE	TAX MAP	ADC MAP 11	JOB #	SHEET
BTK	AS SHOWN	24	GRID F7	12004	4
DRAWN BY:	DEED REF.	GRID	PLAT REF.	FILES	NO.
BTK	1	1	DA JOBS 2012\12004	DRRAWINGS\12004sdp-esc3-4.dwg	7
CHECKED BY:	PARCEL	NO.	DATE	REVISION	BY
PCR	6277/93	58 PAR A	6063	09-09-13	

DATE: 7/24/14

7/24/14

SDP-72-095

"NO AS-BUILT ON THIS SHEET"

DATE: 5/22/14

ASBUILT

B-4-2 STANDARDS AND SPECIFICATIONS

SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

The process of preparing the soils to sustain adequate vegetative stabilization.

To provide a suitable soil medium for vegetative growth.

Conditions Where Practice Applies: Where vegetative stabilization is to be established.

Criteria: A. Soil Preparation

- 1. Temporary Stabilization
a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment...
2. Permanent Stabilization
a. A soil test is required for any earth disturbance of 5 acres or more...

B-4-3 STANDARDS AND SPECIFICATIONS continued

- c. Hydrosediment: Apply seed uniformly with hydroseder (slurry includes seed and fertilizer)...
ii. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P2O5 (phosphorus), 200 pounds per acre; K2O (potassium), 200 pounds per acre...
iii. Limes: Use only ground agricultural limestones (up to 3 tons per acre may be applied by hydrosediment at any time...)

- 2. Application
a. Apply mulch to all seeded areas immediately after seeding...
b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches...
c. Wood cellulose fiber used as mulch must be applied at a net dry weight of 1500 pounds per acre...

B-4-4 STANDARDS AND SPECIFICATIONS

- 1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardness Zone (from Figure B.3)...
2. For sites having soil tests performed, use and show the recommended rates by the testing agency...
3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3.A.1.b. and maintain until the next seeding season.

Table with 5 columns: No., SPECIES, APPLICATION RATE (Lbs/Ac), SEEDING DATE, SEEDING DEPTH, FERTILIZER RATE (10-20-20), LIME RATE. Rows include BARLEY, OATS, CEREAL RYE, ANNUAL REYGRASS, PEARL MILLET.

B-4-3 STANDARDS AND SPECIFICATIONS

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

- A. Seeding
1. Specifications
a. All seed must meet the requirements of the Maryland State Seed Law...
b. Mulch alone may be applied between the fall and spring seeding dates only if the ground is frozen...
c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species...

B-4-5 STANDARDS AND SPECIFICATIONS

- 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.
Conditions Where Practice Applies: Exposed soils where ground cover is needed for 6 months or more.
Criteria: A. Seed Mixtures
1. General Use
a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardness Zone (from Figure B.3) and based on the site condition or purpose...

B-4-1 STANDARDS AND SPECIFICATIONS

INCREMENTAL STABILIZATION

- Definition: Establishment of vegetative cover on cut and fill slopes.
Purpose: To provide timely vegetative cover on cut and fill slopes as work progresses.
Conditions Where Practice Applies: Any cut or fill slope greater than 15 feet in height. This practice also applies to stockpiles.
Criteria: A. Incremental Stabilization - Cut Slopes
1. Excavate and stabilize cut slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all cut slopes as the work progresses...

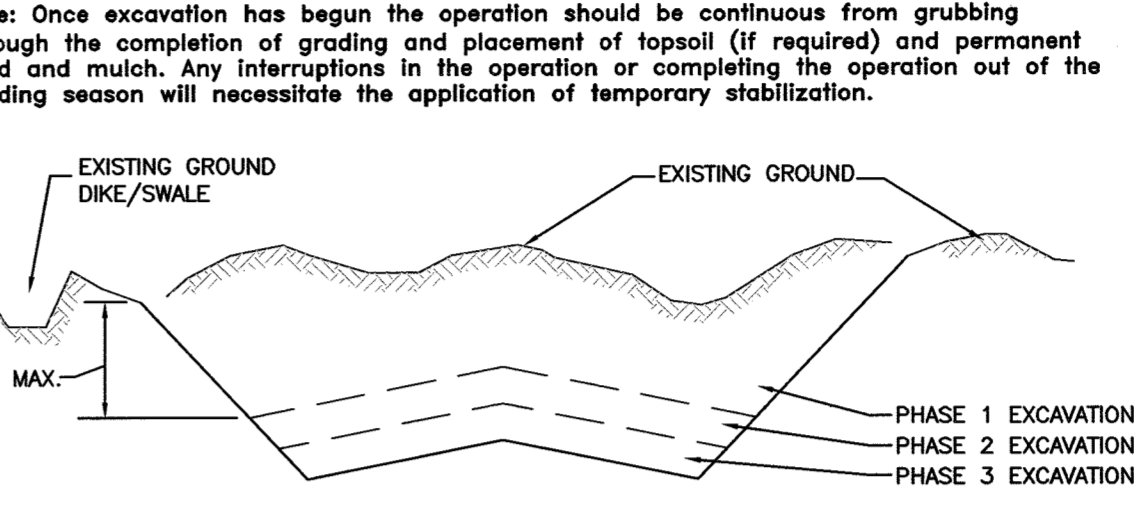


Figure B.1: Incremental Stabilization - Cut

B. Incremental Stabilization - Fill Slopes

- 1. Construct and stabilize fill slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all slopes as the work progresses.
2. Stabilize slopes immediately when the vertical height of a lift reaches 15 feet, or when the grading operation ceases as prescribed in the plans.
3. At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.
4. Construction sequence example (Refer to Figure B.2):
a. Construct and stabilize all temporary swales or dikes that will be used to divert runoff around the fill. Construct all levees on low side of fill unless other methods shown on the plans address this area.
b. At the end of each day, install temporary water conveyance practice(s), as necessary, to intercept surface runoff and convey it down the slope in a non-erosive manner.
c. Place Phase 1 fill, prepare seedbed, and stabilize.
d. Place Phase 2 fill, prepare seedbed, and stabilize.
e. Place final phase fill, prepare seedbed, and stabilize. Overseed previously seeded areas as necessary.

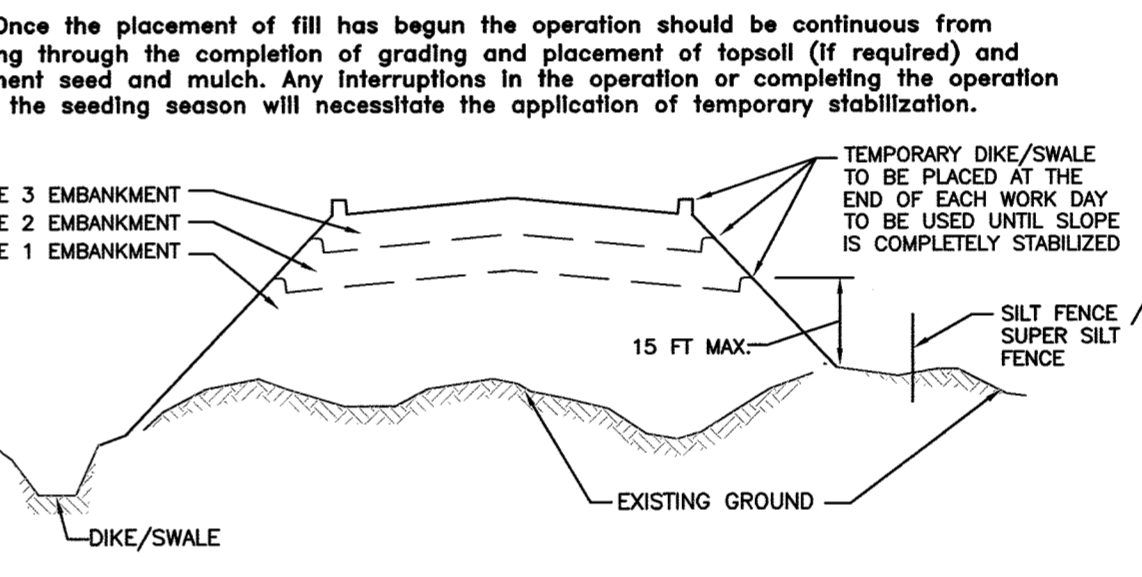


Figure B.2: Incremental Stabilization - Fill

B-4-8 STANDARDS AND SPECIFICATIONS

- STOCKPILE AREA
Definition: A mound or pile of soil protected by appropriately designed erosion and sediment control measures.
Purpose: To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.
Conditions Where Practice Applies: Stockpile areas are utilized when it is necessary to salvage and store soil for later use.
Criteria: 1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading.
3. Runoff from the stockpile area must drain to a suitable sediment control practice.
4. Access the stockpile area from the upgrade side.
5. Catch water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.
6. Where runoff concentrates along the toe of the stockpile fill an appropriate erosion/sediment control practice must be used to intercept the discharge.
7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization.
8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting.

The stockpile area must continuously meet the requirements for Adequate Vegetative Establishment in accordance with Section B-4 Vegetative Stabilization. Side slopes must be maintained at no steeper than a 2:1 ratio. The stockpile area must be kept free of erosion. If the vertical height of a stockpile exceeds 20 feet for 2:1 slopes, 30 feet for 3:1 slopes, or 40 feet for 4:1 slopes, benching must be provided in accordance with Section B-3 Land Grading.

ADDRESS CHART: Lot/Parcel # 58 PAR A, Street Addresses 10291 BALTIMORE NATIONAL PIKE. PERMIT INFORMATION CHART: Subdivision Name MARIE N. LONG PROPERTY, Section/Area N.A., Lot/Parcel No. 58 PAR A.

OWNERS/DEVELOPER: NOVELTY STORE, 10291 BALTIMORE NATIONAL PIKE. REVISED SITE DEVELOPMENT PLAN, ESC NOTES (SDP 72-095). DESIGNED BY: BTK, DRAWN BY: BTK, CHECKED BY: PCR.

APPROVED: DEPARTMENT OF PLANNING AND ZONING. Chief, Development Engineering Division: [Signature], Date: 10-06-14. Chief, Division of Land Development: [Signature], Date: 10/9/14.

Richardson Engineering, LLC. 30 East Padonia Road, Suite 500, Timonium, Maryland 21093. Phone: 410-560-1502, Fax: 443-901-1208. Professional Engineer Seal for [Signature], License No. 16597, Expiration Date: 8/15/2021.

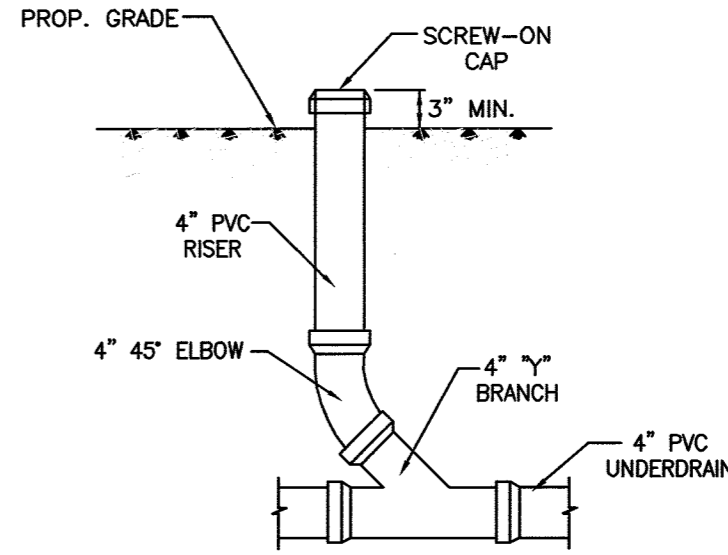
THIS DEVELOPMENT IS APPROVED FOR SOIL EROSION AND SEDIMENT CONTROL BY THE HOWARD SOIL CONSERVATION DISTRICT. [Signature], DATE: 5/22/14. ASBUILT. [Signature], DATE: 10/2/14. DESIGN AND DRAWINGS ARE BASED ON MARYLAND COORDINATE SYSTEM (MCS). HORIZONTAL - NAD 83/91. VERTICAL - NAVD 88.

BALTIMORE NATIONAL PIKE
(U.S. ROUTE 40)
EX. R.O.W. VARIES

TABLE B.4.1 MATERIALS SPECIFICATIONS FOR MICRO-BIORETENTION, RAIN GARDENS & LANDSCAPE INFILTRATION

MATERIAL	SPECIFICATION/TEST METHOD	SIZE	NOTES
PLANTINGS	SEE APPENDIX A, TABLE A.4	N/A	PLANTINGS ARE SITE SPECIFIC
PLANTING SOIL (2" TO 4" DEEP)	LOAMY SAND (80-85%) & COMPOST (35-40%) OR SANDY LOAM (30%) COARSE SAND (30%) COMPOST (40%)	N/A	USDA SOIL TYPES LOAMY SAND OR SANDY LOAM; CLAY CONTENT < 5%
ORGANIC CONTENT	MIN. 10% BY DRY WEIGHT (ASTM D 2974)		
MULCH	SHREDDED HARDWOOD		AGED 6 MONTHS, MINIMUM; NO PINE OR WOOD CHIPS
PEA GRAVEL DIAPHRAM	PEA GRAVEL: ASTM D-448	NO. 8 OR NO. 9 (1/8" TO 3/8")	
GEOTEXTILE		N/A	PE TYPE 1 NONWOVEN
GRAVEL (UNDERDRAINS & INFILTRATION BERMS)	ASHTO M-43	NO. 57 OR NO. 6 AGGREGATE (3/8" TO 3/4")	
UNDERDRAIN PIPING	F758, TYPE PS 28 OR ASHTO M-278	4" TO 6" RIGID SCHEDULE 40 PVC OR SDR35	SLOTTED OR PERFORATED PIPE; 3/8" PERF. @ 6" ON CENTER, 4 HOLES PER ROW; MINIMUM OF 3" OF GRAVEL OVER PIPES; NOT NECESSARY UNDERNEATH PIPES. PERFORATED PIPE SHALL BE WRAPPED WITH 1/4" GALVANIZED HARDWARE CLOTH.
CAST-IN-PLACE CONCRETE (IF REQUIRED)	MISHA MIX NO. 3, 1" @ 3500 PSI @ 28 DAYS, NORMAL WEIGHT, AIR-ENTRAINED; REINFORCING TO MEET ASTM-615-80	N/A	ON-SITE TESTING OF Poured-in-place concrete required: 28 DAY STRENGTH & SLUMP TEST; ALL CONCRETE DESIGN (CAST-IN-PLACE OR PRE-CAST) NOT USING PREVIOUSLY APPROVED STATE OR LOCAL STANDARDS REQUIRES DESIGN DRAWINGS SEALED & APPROVED BY A PROFESSIONAL STRUCTURAL ENGINEER LICENSED IN THE STATE OF MARYLAND. - DESIGN TO INCLUDE MEETING AGI CODE 350.9/89; VERTICAL LOADING (H=10 OR H=20); ALLOWABLE HORIZONTAL LOADING (BASED ON SOIL PRESSURES); AND ANALYSIS OF POTENTIAL CRACKING.
SAND	ASHTO-M-6 OR ASTM-C-33	0.02" TO 0.04"	SAND SUBSTITUTIONS SUCH AS DIABASE AND GRANITONE (ASHTO) #10 ARE NOT ACCEPTABLE. NO CALCIUM CARBONATE OR DOLOMITIC SAND SUBSTITUTIONS ARE ACCEPTABLE. NO "ROCK DUST" CAN BE USED FOR SAND

THE SIMPLIFIED ECP APPROVAL
GRANTED ON JULY 11, 2013



CLEANOUT DETAIL

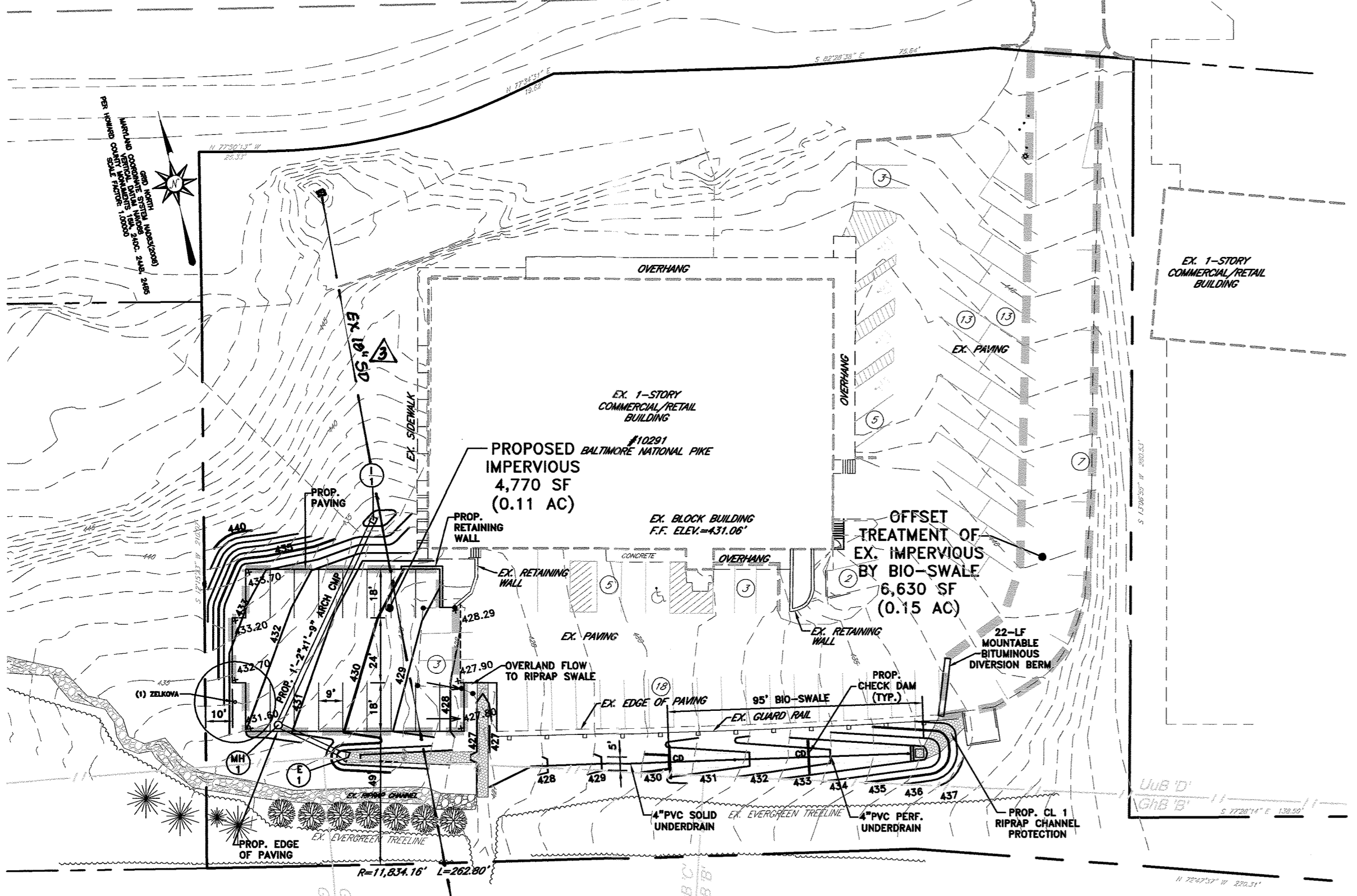
SCALE: 1/16" = 1"

ENVIRONMENTAL NOTES

1. WATERSHED: PATUXENT RIVER
2. THE SITE DOES NOT LIE WITHIN THE CHESAPEAKE BAY CRITICAL AREA.
3. NO FLOODPLAINS OR WETLANDS EXIST ON SITE.
4. HYDROLOGIC SOIL GROUP: UuB - 'D' SOILS; GuB - 'C' SOILS; G1C & G1B - 'B' SOILS
5. PROPOSED IMPROVEMENTS WILL ADD APPROXIMATELY 4,770 SF OF IMPERVIOUS AREA.
6. THIS PROJECT COMPLIES WITH THE REGULATIONS OF SECTION 15.1200 OF THE HOWARD COUNTY CODE FOR FOREST CONSERVATION WITH AN OBLIGATION APPLIED TO 13,600-SF OF SITE DISTURBANCE. THE TOTAL REFORESTATION/AFFORESTATION REQUIRED IS 0.05-AC (2,178 S.F.). A FEE-IN-LIEU PAYMENT OF \$1,633.50 (2,178 S.F. x \$0.75/SF) WILL BE ACCESSED. THIS OBLIGATION IS TO FULFILL THE CHANGES UNDER REDLINE REVISION #2.

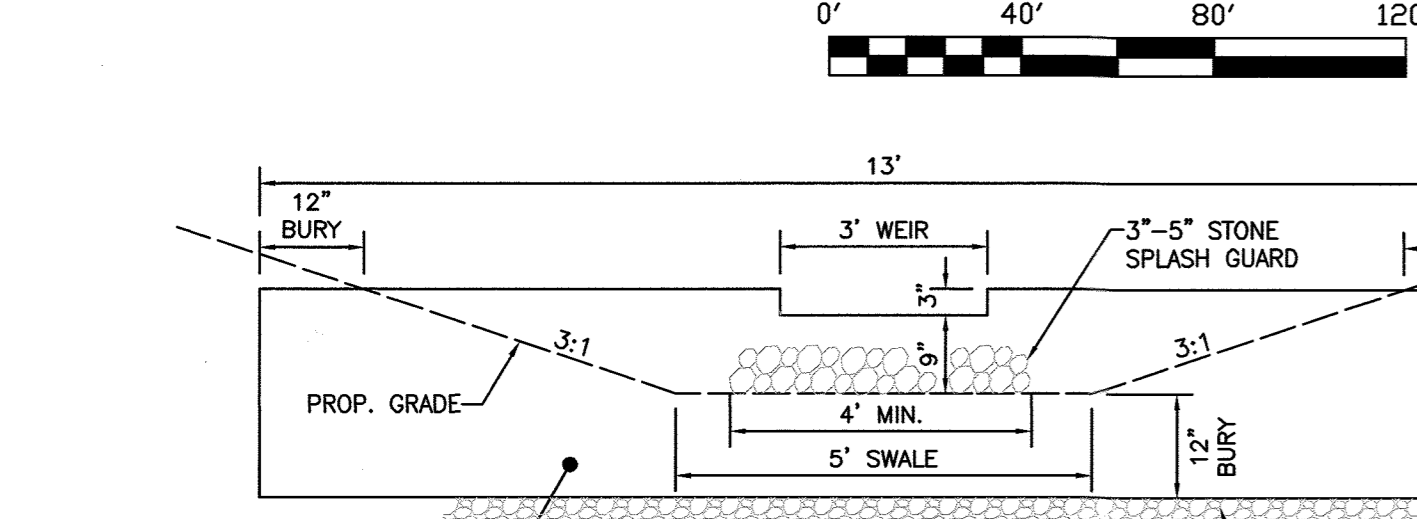
SITE ANALYSIS DATA CHART

1. SITE AREA	2.33 AC
2. AREA OF WETLAND AND WETLAND BUFFERS	0.0 AC
3. AREA OF FLOODPLAIN	0.0 AC
4. AREA OF FOREST	0.12 AC
5. AREA OF STEEP SLOPES 15% AND GREATER	0.09 AC
6. AREA OF STEEP SLOPES 25% AND GREATER	0.31 AC
7. LIMIT OF DISTURBANCE	0.56 AC
8. GREEN OPEN AREA	0.56 AC
9. PROPOSED IMPERVIOUS AREA	0.11 AC
10. PROPOSED/EXISTING USE OF THE SITE	COMMERCIAL



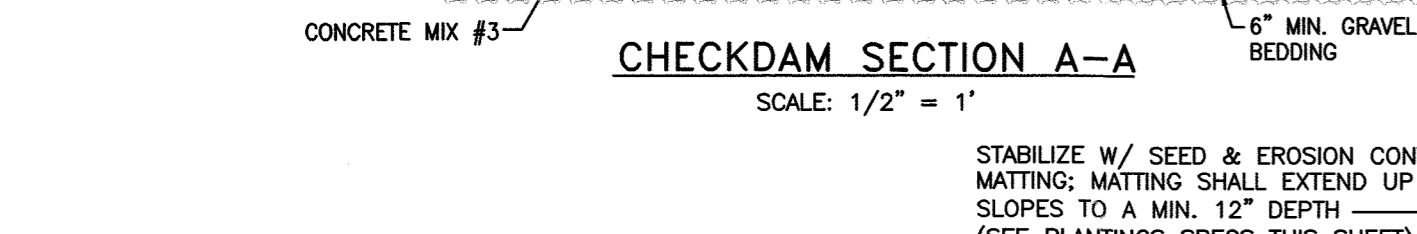
DRAINAGE AREA MAP

SCALE: 1" = 40'



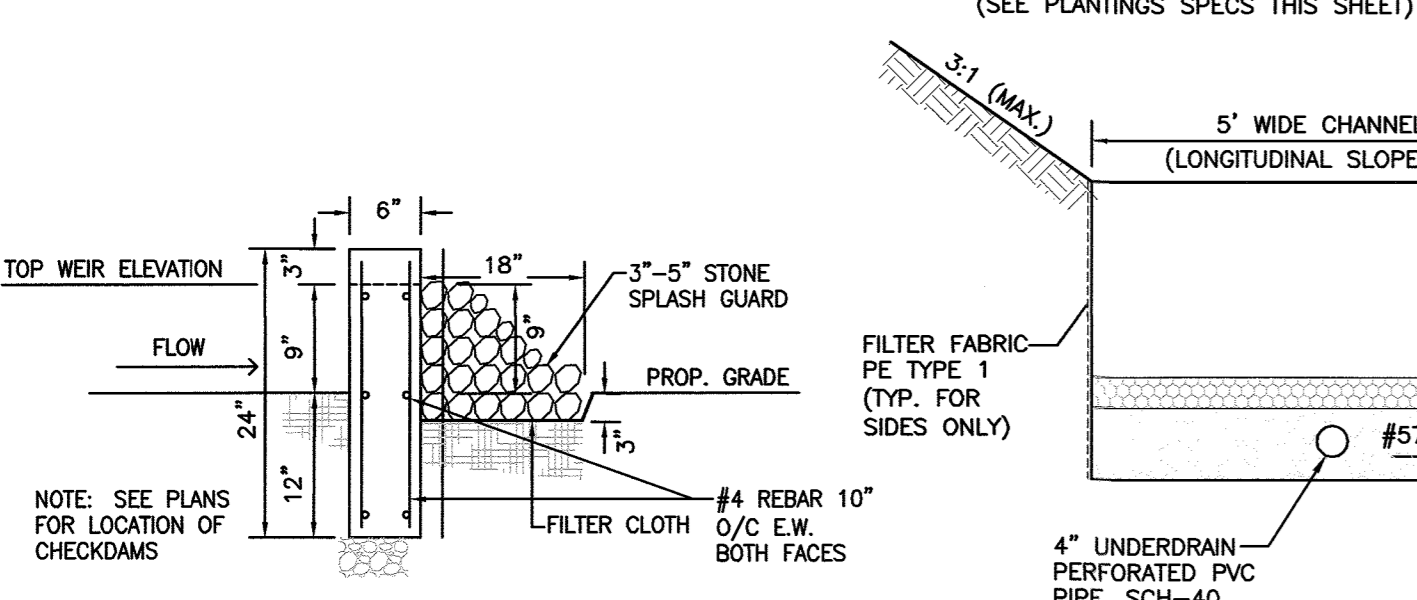
GRASS CHANNEL SECTION

SCALE: 3/4" = 1'



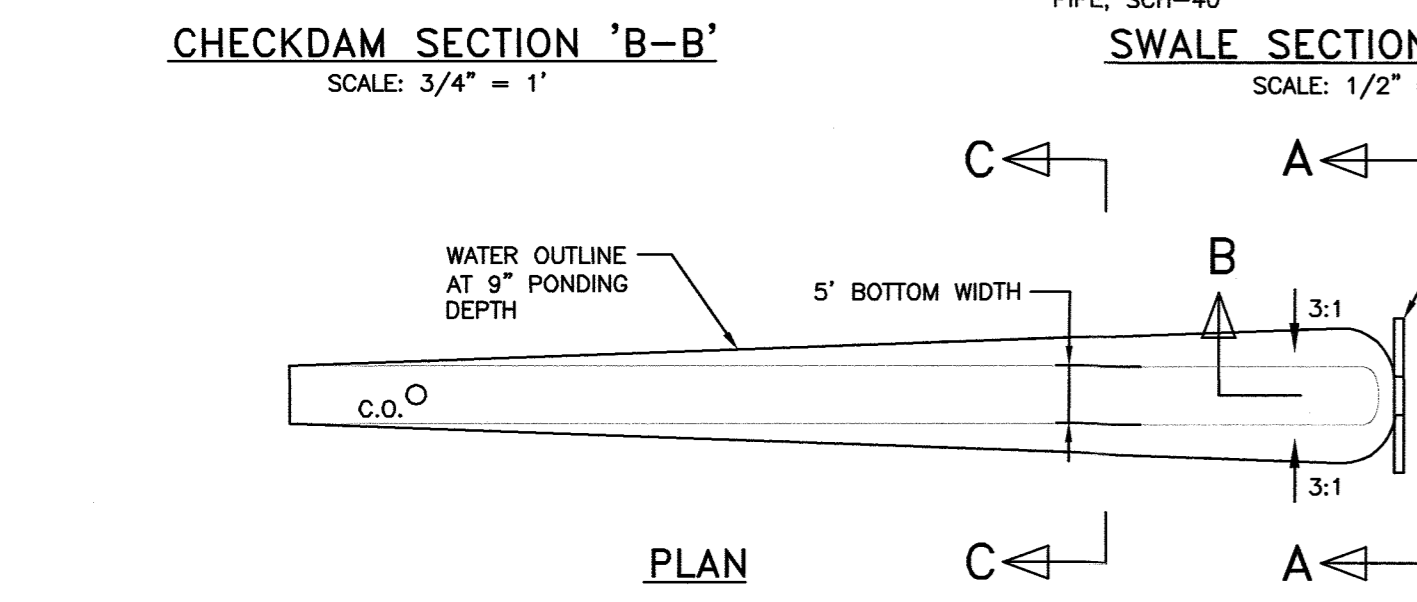
CHECKDAM SECTION A-A

SCALE: 1/2" = 1'



SWALE SECTION 'C-C'

SCALE: 1/2" = 1'



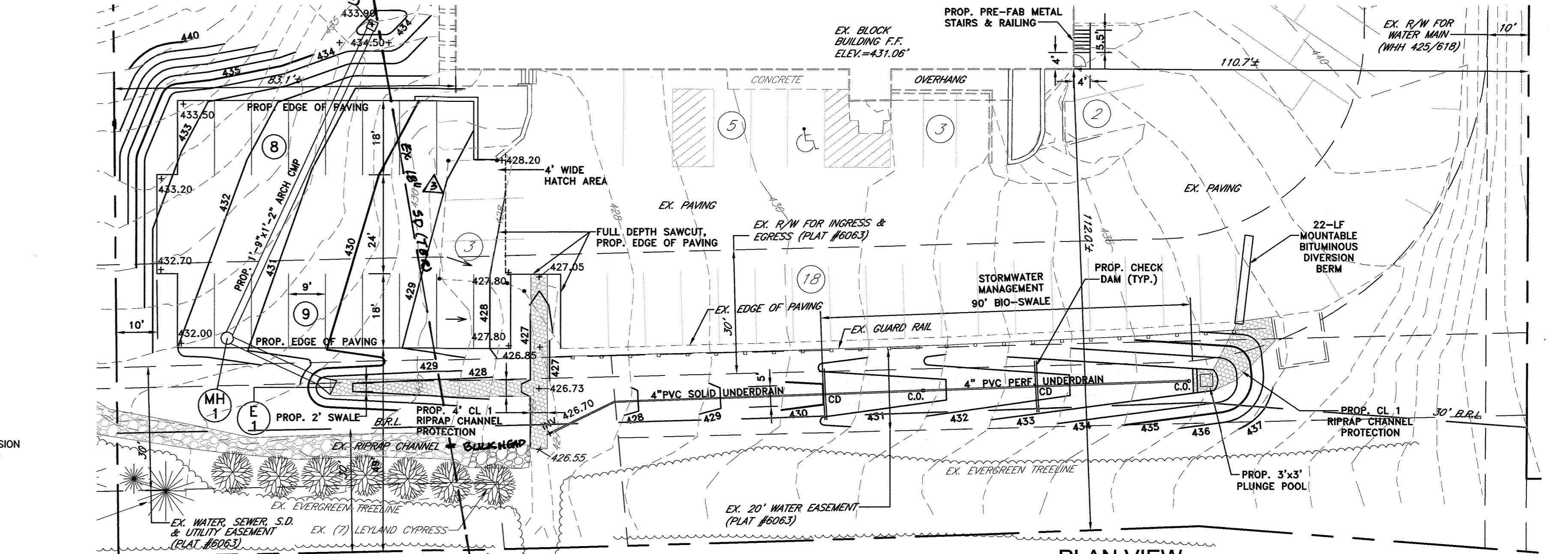
BIO-SWALE & CHECKDAM DETAIL

NOT TO SCALE

SCALE: 1/16" = 1'

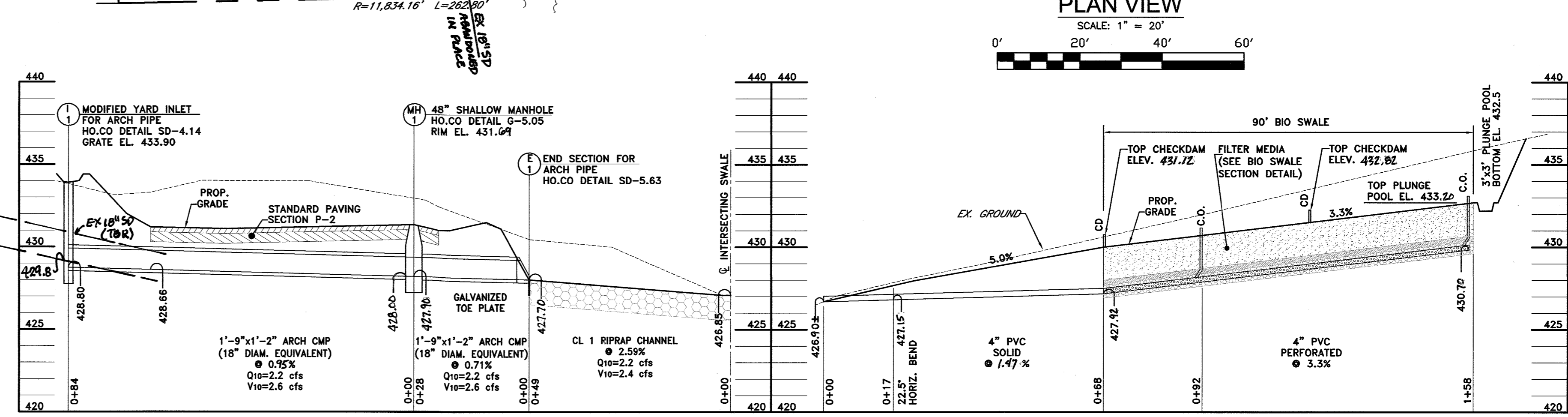
APPROVED: DEPARTMENT OF PLANNING AND ZONING
 Chief, Development Engineering Division
 Chief, Division of Land Development
 Director

Date: 10-1-14
 Date: 10-06-14
 Date: 10/2/14



PLAN VIEW

SCALE: 1" = 20'



STORM DRAIN PROFILE

SCALE: H: 1" = 20'

V: 1" = 5"

BIO SWALE PROFILE

SCALE: H: 1" = 20'

V: 1" = 5"

LIMIT OF DISTURBANCE = 13,600 SF (0.31 AC.) ASBUILT

STRUCTURE SCHEDULE

NO.	TYPE	DESIGN Q (10-YR)	INVERT IN	INVERT OUT	TOP OF RM	REMARKS
I-1	YARD INLET SD-4.14	2.2	NA	428.80	433.90	N 587464.75 E 134955.76
MH-1	48" SHALLOW MH C-5.05	2.2	428.00	427.90	431.69	N 587398.55 E 1349506.51
E-1	END SECTION SD-5.63	2.2	NA	427.70	NA	N 587381.14 E 1349529.07

AS-BUILT CERTIFICATION
 I HEREBY CERTIFY THAT, BY MY SEAL, THAT TO THE BEST OF MY KNOWLEDGE AND BELIEF THE FACILITIES SHOWN ON THIS PLAN WERE CONSTRUCTED AS SHOWN ON THIS "AS-BUILT" PLAN MEET THE APPROVED PLANS AND SPECIFICATIONS.
 PATRICK C. RICHARDSON, JR. PE #16597 DATE: 5/22/19

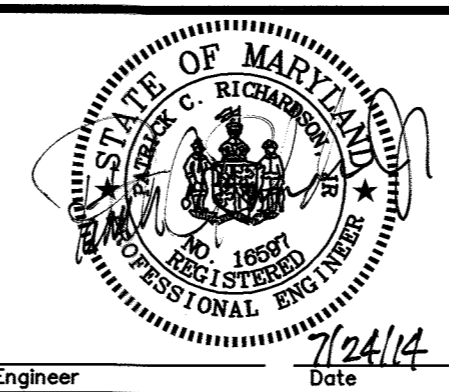
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Professional Certification. I hereby certify that these documents were prepared or approved by me, and that I am a duly licensed professional engineer under the laws of the State of Maryland.
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DESIGN AND DRAWINGS ARE BASED ON MARYLAND COORDINATE SYSTEM (MCS).
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 VERTICAL - NAVD 88.

Richardson Engineering, LLC

30 East Podonia Road, Suite 500
 Timonium, Maryland 21093
 Phone: 410-550-1502 Fax: 443-901-1208



OWNERS/DEVELOPER
 OWNER:
 10291 BALTIMORE NATIONAL PIKE LLC
 17500 FREDERICK ROAD
 MT. AIRY, MD 21771
 DEVELOPER:
 10291 BALTIMORE NATIONAL PIKE LLC
 17500 FREDERICK ROAD
 MT. AIRY, MD 21771

NOVELTY STORE
 10291 BALTIMORE NATIONAL PIKE
 REVISED SITE DEVELOPMENT PLAN
 SWM PLAN & PROFILE (SDP 72-095)
 2ND ELECTION DISTRICT
 HOWARD COUNTY, MARYLAND

DATE	REVISION	BY
5/22/19	STORMWATER ASBUILT	BTB
10/1/18	EMST STORM DRAIN FOUND FOR	RENG
7/24/14	ADDITIONAL SHEETS FOR SWM	BY

DRAWING COMPLETED 09-09-13

SCALE	TAX MAP	ADC MAP	JOB #	SHEET
AS SHOWN	GRID 24	GRID F7	12004	6
DEED REF.	PARCEL	PLAT REF.	FILES	NO.
6277/93	58 PAR A	6063	DOBS\2012\12004\DRAWINGS\12004sdp-swm-82.dwg	7

CONSTRUCTION SPECIFICATIONS

All stormwater management facilities shall be constructed in accordance with Baltimore County's "Standard Specifications and Details for Construction", (1985) and the N.R.C.S. Maryland "Standards and Specifications for Ponds", (MD-378, 2000). These specifications are appropriate to all ponds within the scope of the standard practice MD-378. All references to ASTM and ASHTO specifications apply to the most recent version.

SITE PREPARATION

Areas designated for borrow areas, embankment, and structural works shall be cleared, grubbed and stripped of topsoil. All trees, vegetation, roots and other objectionable material shall be removed. Channel banks and sharp breaks shall be sloped to no steeper than 1:1. All trees shall be cleared and grubbed within 15 feet of the toe of the embankment. Areas to be covered by the pond or reservoir will be cleared of all trees, brush, logs, fences, rubbish and other objectionable material unless otherwise designated on the plans. Trees, brush and stumps shall be cut approximately level with the ground surface. For dry stormwater management ponds, a minimum of a 25 foot radius around the inlet structure shall be cleared. All cleared and grubbed material shall be disposed of outside and below the limits of the dam and reservoir as directed by the owner or his representative. When specified, a sufficient quantity of topsoil will be stockpiled in a suitable location for use on the embankment and other designated areas.

EARTH FILL

The fill material shall be taken from approved designated borrow areas. It shall be free of roots, stumps, wood, rubbish, stones greater than 6", frozen or other objectionable materials. Fill material for the center of the embankment shall conform to Unified Soil Classification (C, SC, CH, or CL) and must have at least 30% passing #200 sieve. Consideration may be given to the use of other materials in the embankment if designed by a Geotechnical Engineer. Such special designs must have construction supervised by a Geotechnical Engineer. Materials used in the outer shell of the embankment must have the capability to support vegetation of the quality required to prevent erosion of the embankment.

B. PLACEMENT

On which fill is to be placed shall be scarified prior to placement of fill. Fill materials shall be placed in maximum 8 inch thick (before compaction) layers of four compact passes of a sheepfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble yet not be so wet that water will seep out. The minimum required density shall not be less than 95% of maximum dry density with a moisture content within +/- 2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by ASHTO method T-99 (Standard Proctor).

C. COMPACTION

The movement of the hauling and spreading equipment over the fill shall be controlled so that the entire surface of each lift shall be traversed by not less than one tread track of the equipment or compaction shall be achieved by a minimum of four compact passes of a sheepfoot, rubber tired or vibratory roller. Fill material shall contain sufficient moisture such that the required degree of compaction will be obtained with the equipment used. The fill material shall contain sufficient moisture so that if formed into a ball it will not crumble yet not be so wet that water will seep out. The minimum required density shall not be less than 95% of maximum dry density with a moisture content within +/- 2% of the optimum. Each layer of fill shall be compacted as necessary to obtain that density, and is to be certified by the Engineer at the time of construction. All compaction is to be determined by ASHTO method T-99 (Standard Proctor).

CUT OFF TRENCH AND IMPERVIOUS CORE

The cutoff trench shall be excavated into impervious material along or parallel to the centerline of the embankment as shown on the plans. The bottom width of the trench shall be governed by the equipment used for excavation, with the minimum width being four feet. The depth shall be at least four feet below existing grade or as shown on the plans. The side slopes of the trench shall be 1 to 1 or flatter. The backfill material for the core trench shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

EMBANKMENT CORE

The core shall be parallel to the centerline of the embankment as shown on the plans. The top width of the core shall be a minimum of four feet. The height shall extend up to at least the 10 year water elevation or as shown on the plans. The side slopes shall be 1 to 1 or flatter. The core shall be compacted with construction equipment, rollers, or hand tampers to assure maximum density and minimum permeability. In addition, the core shall be placed concurrently with the outer shell of the embankment.

STRUCTURE BACKFILL

Backfill adjacent to pipes or structures shall be of the type and quality conforming to that specified for the adjoining fill material. The fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material needs to fill completely all spaces under and adjacent to the pipe. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of the structure. Under no circumstances shall equipment be driven over any part of a concrete structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Structure backfill may be flowable fill meeting the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 313 as modified. The mixture shall have a 100-200 psi; 28 day unconfined compressive strength. The flowable fill shall have a minimum pH of 4.0 and a minimum resistivity of 2,000 ohm-cm. Material shall be placed such that a minimum of 6" (measured perpendicular to the outside of the pipe) of flowable fill shall be under (bedding), over and, on the sides of the pipe. It only needs to extend up to the spring line for rigid conduits. Average slump of the fill shall be 7" to assure flowability of the material. Adequate measures shall be taken (sand bags, etc.) to prevent floating the pipe. When using flowable fill, all metal pipe shall be bituminous coated. Any adjoining soil fill shall be placed in horizontal layers not to exceed four inches in thickness and compacted by hand tampers or other manually directed compaction equipment. The material shall completely fill all voids adjacent to the flowable fill zone. At no time during the backfilling operation shall driven equipment be allowed to operate closer than four feet, measured horizontally, to any part of a structure. Under no circumstances shall equipment be driven over any part of a structure or pipe unless there is a compacted fill of 24" or greater over the structure or pipe. Backfill material outside the structural backfill (flowable fill) zone shall be of the type and quality conforming to that specified for the core of the embankment or other embankment materials.

PIPE CONDUITS

All pipes shall be circular in cross section. All perforated pipes shall have a minimum of 3.31 square inches of opening per square foot of pipe surface (ex. 30 3/8 inch holes per square foot). Perforations are to be uniformly spaced around the full periphery of the pipe. Any holes blocked or partially blocked by bituminous coating shall be opened prior to installation.

- A. REINFORCED CONCRETE PIPE** - All of the following criteria shall apply for reinforced concrete pipe:
1. Materials - Reinforced concrete pipe shall have bell and spigot joints with rubber gaskets and shall equal or exceed ASTM C-361.
 2. Bedding - Reinforced concrete pipe shall be laid in a concrete bedding/cradle for their entire length. This bedding/cradle shall consist of high slump concrete placed under the pipe and up the sides of the pipe at least 50% of its outside diameter with a minimum thickness of 6 inches or 3/4 whichever is greater. Where a concrete cradle is not needed for structural purposes, flowable fill may be used as described in the "Structure Backfill" section of this standard. Gravel bedding is not permitted.
 3. Laying pipe - Bell and spigot pipe shall be placed with the bell end upstream. Joints shall be made in accordance with recommendations of the manufacturer of the material. After joints are sealed for the entire line, the bedding shall be placed so that all spaces under the pipe are filled. Care shall be exercised to prevent any deviation from the original line and grade of the pipe. The first joint must be located within 4 feet of the riser.
 4. Backfilling - shall conform to "Structure Backfill".
 5. Connections - All connections (to anti-seep collars, riser, etc.) shall be watertight.
 6. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

- B. PLASTIC PIPE** - All of the following criteria shall apply for plastic pipe:
1. Materials - PVC pipe shall be PVC-1120 or PVC-1220 conforming to ASTM D-1785 or ASTM D-2241. Corrugated high density polyethylene (HDPE) pipe, couplings and fittings shall conform to following: 4"-10" inch pipe shall meet the requirements of ASHTO M252 Type S, and 12" through 24" inch shall meet the requirements of ASHTO M294 Type S.
 2. Joints and connections to anti-seep collars shall be completely watertight.
 3. Bedding - the pipe shall be firmly and uniformly bedded throughout its entire length where rock or soft, spongy or other unstable soil is encountered, all such material shall be removed and replaced with suitable earth compacted to provide adequate support.
 4. Backfilling shall conform to "Structure Backfill".
 5. Other details (anti-seep collars, valves, etc.) shall be as shown on the drawings.

C. DRAINAGE DIAPHRAGMS - When a drainage diaphragm is used, a registered professional engineer will supervise the design and construction inspection.

D. CONCRETE - Concrete shall meet the requirements of Maryland Department of Transportation, State Highway Administration Standard Specifications for Construction and Materials, Section 414, Mix No. 3.

CARE OF WATER DURING CONSTRUCTION

All work on permanent structures shall be carried out in areas free from water. The Contractor shall construct and maintain all temporary dikes, levees, cofferdams, drainage channels, and stream diversions necessary to protect the areas to be occupied by the permanent works. The contractor shall also furnish, install, operate, and maintain all necessary pumping and other equipment required for removal of water from the various parts of the work and for maintaining the excavations, foundations, and other parts of the work free from water as required or directed by the engineer for constructing each part of the work. After having served their purpose, all temporary protective works shall be removed or leveled and graded to the extent required to prevent obstruction in any degree whatsoever of the flow of water to the spillway or outlet works and so as not to interfere in any way with the operation or maintenance of the structure. Stream diversions shall be maintained until full flow can be passed through the permanent works. The removal of water from the required excavation and the foundation shall be accomplished in a manner and to the extent that will maintain stability of the excavated slopes and bottom of required excavations and will allow satisfactory performance of all construction operations. During the placing and compacting of material in required excavations, the water level at the locations being refilled shall be maintained below the bottom of the excavation at such locations which may require draining the water to sumps from which the water shall be pumped.

STABILIZATION All borrow areas shall be graded to provide drainage and left in a slightly condition. All exposed surfaces of the embankment, spillway, spoil and borrow areas, and berms shall be stabilized by seeding, liming, fertilizing, mulching or sodding in accordance with the MD SCS, Standard Specifications for Critical Area Planting (MD 342) or as shown on the accompanying drawings.

A.SOD

1. Specifications - Sod shall be "K-31" Tall Fescue or Kentucky Bluegrass/Red Fescue mixture or approved sod. Class of turfgrass sod shall be Maryland or Virginia state certified or approved sod.
2. Site Preparation - Where soil is acidic or composed of heavy clays, ground limestone shall be spread at the rate of 100 lbs./1000 sq. ft. In all soils 5-10-5 fertilizer or approved equal shall be applied at the rate of 30 lbs./1000 sq.ft. Fertilizer shall be uniformly applied and mixed into the top 3" of soil with the required lime. Slow release nitrogen, at the rate of 3.5 lbs/1000 sq. ft., shall be applied to the prepared soil immediately prior to sod installation. This material shall be approximately one-third immediately available and two-thirds water insoluble nitrogen. Urea formaldehyde (UF) and isobutylidene (IBDU) meet these standards.
3. Sod Installation - The first row of sod shall be laid in a straight line with subsequent rows placed parallel to and lightly wedged against each other. Lateral joints shall be staggered to promote more uniform growth and strength. Insure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots. On sloping areas where erosion may be a problem, sod shall be laid with long edges parallel to the contour and with staggered joints. Secure the sod by tamping or pegging or other approved methods. As sodding is completed in any one section, the entire area shall be rolled or tamped to insure solid contact of roots with the soil surface. Sod shall be watered immediately after rolling or tamping until the underside of the new sod pad and solid surface below the sod are thoroughly wet. The operation of laying, tamping and irrigating for any piece of sod shall be completed within eight hours.

B. SEEDING

- Seeding Mix, fertilizing and mulching shall be as follows:
- 50% Kenblue Kentucky Bluegrass
 - 40% Pennlawn Creeping Red Fescue
 - 10% Streaker Belding
- Applied at a rate of 150 pounds per acre.
- (or)
- Rebel II Tall Fescue (125 pounds per acre)
 - Pennfenn Perennial Ryegrass (15 pounds per acre)
 - Kenblue Kentucky Bluegrass (10 pounds per acre)
- FOR AREAS OTHER THAN SPECIFIED BIOTRENTION AREA
- (or)
- Pennlawn Creeping Red Fescue (70 pounds per acre)
 - Aurora Hard Fescue (50 pounds per acre)
 - Common White Clover (6 pounds per acre)
 - Winter Rye (45 pounds per acre)
- (or)
- 70% Forager Tall Fescue
 - 30% Chemung Crown Vetch Inoculated
- Applied at a rate of 55 lbs/acre Optimum Planting date March 1st - April 30th

EROSION AND SEDIMENT CONTROL

Construction operations will be carried out in such a manner that erosion will be controlled and water and air pollution minimized, as shown on these plans and as set forth in the latest "Standards & Specifications for Soil Erosion and Sediment Control in Developing Areas" of the Soil Conservation Service of Maryland, Baltimore County Soil Conservation District, as amended.

FENCING

Fencing shall be 42" high chain fence constructed in accordance with the latest Maryland State Highway Administration Standard Details 615.02 and 615.03. The specifications for a 6"-0" fence shall be used, substituting 42" fabric and 6"-8" line posts. Gate shall be constructed in accordance with State Highway Administration Standard Detail 692.01 with 42" fabric, fabric top fence and gate shall conform to ASHTO Designation M18-74. Dark vinyl coating is required for the fence posts and wire fabric in accordance with the Landscape Manual adopted by Resolution 56-90, October 1, 1990.

FILTER CLOTH

1. All filter cloth shall conform to the 1994 Maryland Standards and Specifications for Soil Erosion and Sediment control, or the latest edition.

ROCK RIPRAP

Rock riprap shall meet the requirements of Maryland Department of Transportation, State Highway Administration standard specifications for construction and materials, Section 901. The riprap shall be placed to the required thickness in one operation. The rock shall be delivered and placed in a manner that will insure the riprap in place shall be reasonably homogeneous with the larger rocks uniformly distributed and firmly in contact one to another with the smaller rocks filling the voids between the larger rocks. Filter cloth shall be placed under all riprap and shall meet the requirements of Maryland Department of Transportation Standard Specifications for Construction and Materials, Section 921.09.

GABIONS

All gabions shall be PVC-coated woven wire baskets. Stone shall be 4" to 7" inches. (class IV gabions).

CONSTRUCTION INSPECTION BY DESIGNATED ENGINEERS

The construction of the pond and embankment, and certification that the pond and embankment have been built in accordance with the plans shall be under the supervision of a Registered Professional Engineer. The engineer shall be notified sufficiently in advance of construction in order that arrangements can be made for:

- (1) Inspection of pipe trench and bedding,
- (2) Inspection of riser and anti-seep collars and,
- (3) Supervision of embankment construction and compaction testing. The engineer shall direct the handling of water during construction, minor changes not affecting the integrity of the dam in order to compensate for unusual soil conditions, and the removal and replacement of defective fill.

INSPECTION

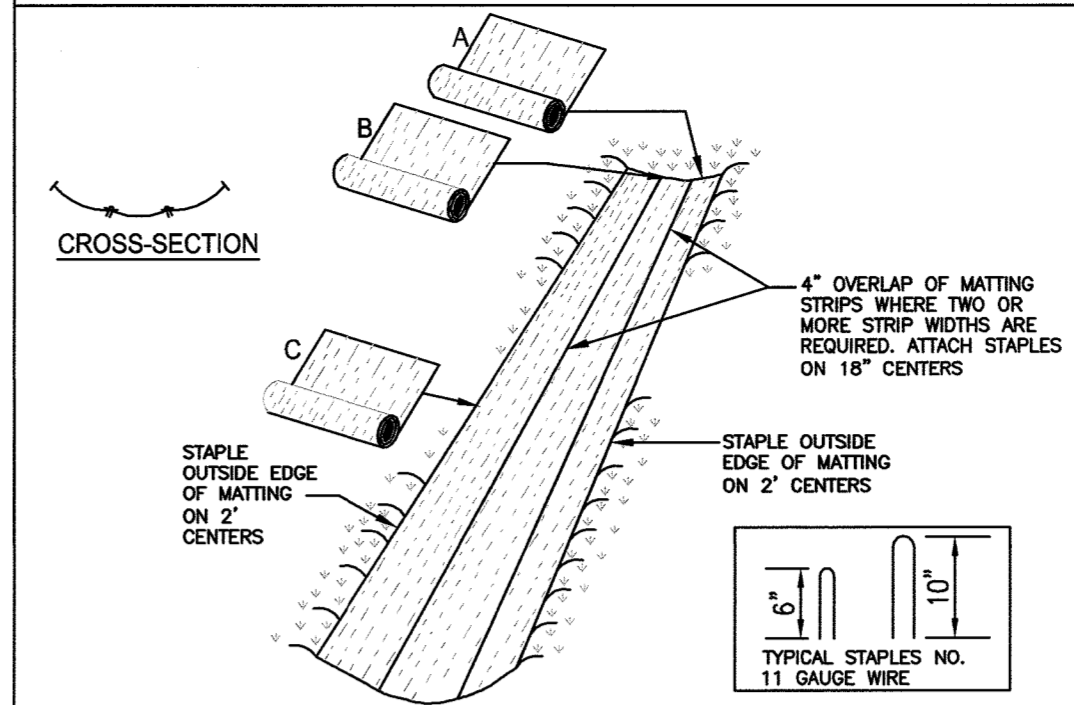
The contractor shall notify the engineer at least 5 working days prior to starting any work shown on these plans so that stormwater management pond may be inspected during construction.

REFERENCES

- Unless otherwise noted, all materials and construction practices shall conform to the following:
1. The Baltimore County, Maryland, Department of Public Works Standard Specifications for Construction Material 2000; ERRATA & ADDENDA
 2. "Standard Specifications for Construction and Materials", 2000, of the Maryland State Highway Administration, as amended.
 3. "Standards and Specifications, Pond," code 378, January 2000 of the Natural Resources Conservation Service of Maryland.

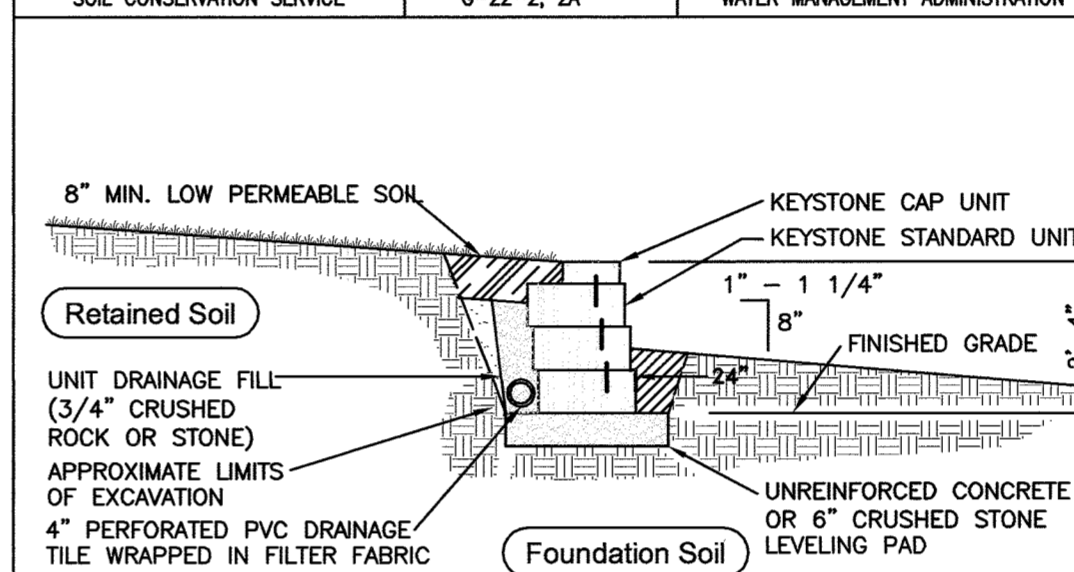
NOTE: PRUNE ONLY TO CORRECT OR IMPROVE FORM OR TO REMOVE DEAD, CONFLICTING OR DAMAGED BRANCHES. SEE SPECIFICATIONS FOR ALL MATERIAL AND ADDITIONAL REQUIREMENTS.

DETAIL 30 - EROSION CONTROL MATTING



- CONSTRUCTION SPECIFICATIONS**
1. KEY-IN THE MATTING BY PLACING THE TOP ENDS OF THE MATTING IN A NARROW TRENCH 6" IN DEPTH. BACKFILL THE TRENCH AND TAMP FIRMLY TO CONFORM TO THE CHANNEL CROSS-SECTION. SECURE WITH A ROW OF STAPLES ABOUT 4" DOWN SLOPE FROM THE TRENCH. SPACING BETWEEN STAPLES IS 6".
 2. STAPLE THE 4" OVERLAP IN THE CHANNEL CENTER USING AN 18" SPACING BETWEEN STAPLES.
 3. BEFORE STAPLING THE OUTER EDGES OF THE MATTING, MAKE SURE THE MATTING IS SMOOTH AND IN FIRM CONTACT WITH THE SOIL.
 4. STAPLES SHALL BE PLACED 2" APART WITH 4 ROWS FOR EACH STRIP. 2 OUTER ROWS, AND 2 ALTERNATING ROWS DOWN THE CENTER.
 5. WHERE ONE ROLL OF MATTING ENDS AND ANOTHER BEGINS, THE END OF THE TOP STRIP SHALL OVERLAP THE UPPER END OF THE LOWER STRIP BY 4", SHIPLAP FASHION, REINFORCE THE OVERLAP WITH A DOUBLE ROW OF STAPLES SPACED 6" APART IN A STAGGERED PATTERN ON EITHER SIDE.
 6. THE DISCHARGE END OF THE MATTING LINER SHOULD BE SIMILARLY SECURED WITH 2 DOUBLE ROWS OF STAPLES.
- NOTE: IF FLOW WILL ENTER FROM THE EDGE OF THE MATTING THEN THE AREA EFFECTED BY THE FLOW MUST BE KEPT-IN.

U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE	PAGE G-22-2, 2A	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION
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TYPICAL GRAVITY WALL SECTION

Standard Unit = 1' Setback

NOTES:

1. THE PROPOSED CONSTRUCTION OF THE RETAINING WALL SHALL BE PERFORMED UNDER THE OBSERVATION OF A MARYLAND REGISTERED PROFESSIONAL ENGINEER.
2. THE LEVELING PAD IS TO BE CONSTRUCTED OF CRUSHED STONE OR 2000 PSI ± UNREINFORCED CONCRETE.
3. SECURE ALL CAP UNITS WITH KEYSTONE KAPSAEL OR EQUAL.

FOUNDATION SOILS MUST BE EXAMINED BY THE SOILS ENGINEER TO ASSURE THE ACTUAL FOUNDATION SOIL STRENGTH MEETS OR EXCEEDS ASSUMED DESIGN STRENGTHS.

LEVELING PAD DETAIL

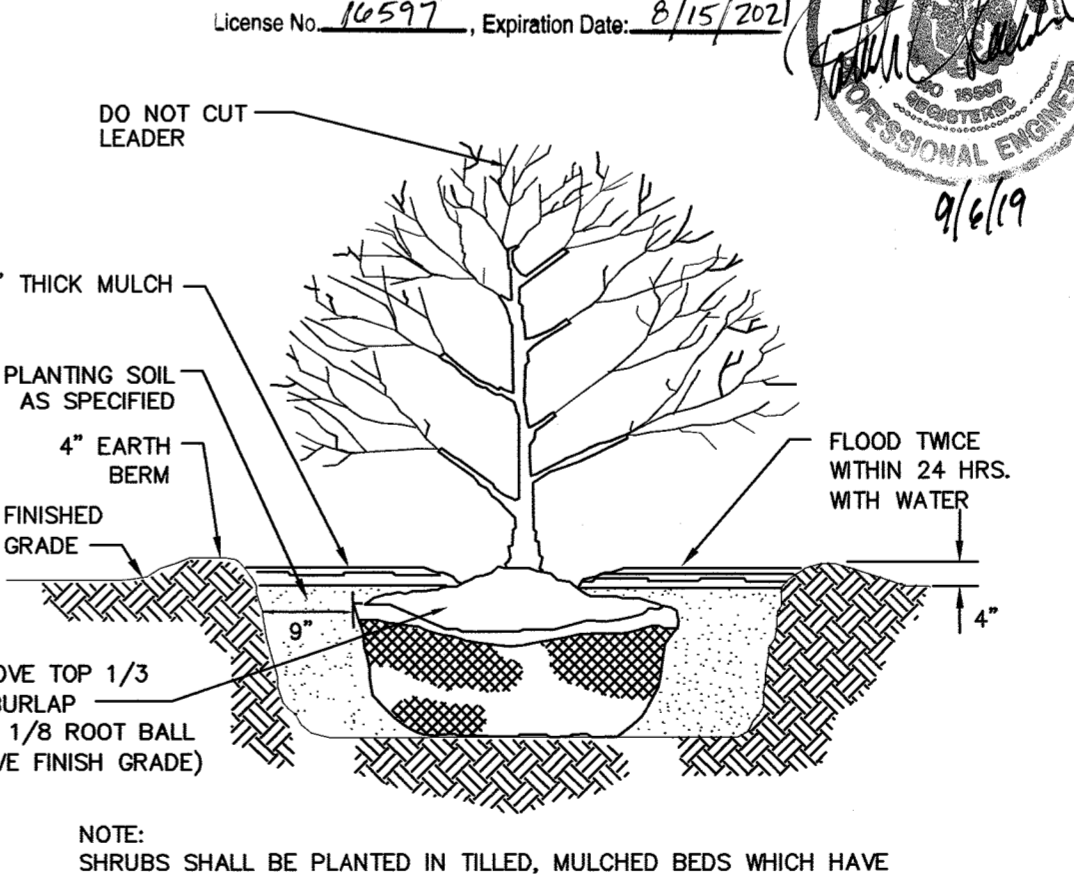
NOT TO SCALE

RETAINING WALL SECTION

NOT TO SCALE

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. 10597, Expiration Date: 8/15/2023



NOTE: SHRUBS SHALL BE PLANTED IN TILLED, MULCHED BEDS WHICH HAVE BEEN AMENDED WITH EITHER PEAT MOSS OR COMPOSTED LEAF MOLD.

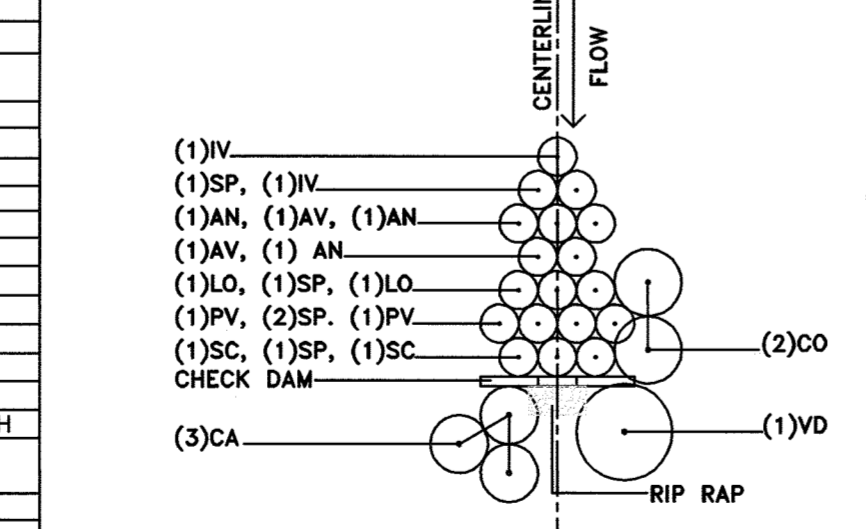
SHRUB PLANTING DETAIL

NOT TO SCALE

SWM BIO-SWALE FACILITIES PLANT LIST

QUANTITY	KEY BOTANICAL NAME	COMMON NAME	SIZE	SPACING	CONDITION	COMMENT
4	CO CEPHALANTHUS OCCIDENTALIS	BITTONBUSH	12-18" HT	9' O.C.		
6	CA CLETHRA ALNIFOLIA	SWEET PEPPERBUSH	12-18" HT	9' O.C.	CONT.	
2	VB VIBURNUM DENTATUM	ARROWWOOD	12-18" HT	9' O.C.		
HERBACEOUS EMERGENT						
3	AN (S) ASTER NOVIBELGII	NEW YORK ASTER	1 GAL	11'	CONT	
2	AV (S) ANDROPOGON VIRGINICUS	BROOM SEDGE	1 GAL	18" O.C.	CONT	
2	IV (S) IRIS VERSICOLOR	BLUE WATER IRIS	1 GAL	18" O.C.	CONT	
2	LO (S) LEARNIS ORYXOIDES	RICE CATGRASS	2" O.C.	BR/PP		
2	PV (S) PANICUM VIRGATUM	SWITCHGRASS	18" O.C.	BR/PP		
2	SC (S) SCIRPUS CYPERINUS	WOOL GRASS	1 GAL	18" O.C.	CONT	
5	SP (P) SCIRPUS PUNGENA	COMMON THREE-SQUARE	4" O.C.	BR/PP	6" MIN. WATER DEPTH	

NOTE: PRIMARY (P) SPECIES SHOULD CONSIST OF 25% OF THE PLANT SPECIES INSTALLED. A MINIMUM OF FOUR (4) SECONDARY (S) SPECIES SHOULD BE ESTABLISHED IN THE PLANTING AREA.



BIO-SWALE LANDSCAPING DETAIL

SCALE: 1" = 10'

APPROVED: DEPARTMENT OF PLANNING AND ZONING

Chief, Development Engineering Division: 10-1-14

Chief, Division of Land Development: 10-06-14

Director: 10/1/14

Richardson Engineering, LLC

30 East Padonia Road, Suite 500
Timonium, Maryland 21093
Phone: 410-560-1502 Fax: 443-901-1208

OWNERS/DEVELOPER

OWNER: 10291 BALTIMORE NATIONAL PIKE LLC
17500 FREDERICK ROAD
MT. AIRY, MD 21771

DEVELOPER: 10291 BALTIMORE NATIONAL PIKE LLC
17500 FREDERICK ROAD
MT. AIRY, MD 21771

NOVELTY STORE

10291 BALTIMORE NATIONAL PIKE
REVISED SITE DEVELOPMENT PLAN
SWM NOTES (SDP 72-095)

DESIGNED BY: BTK
DRAWN BY: BTK
CHECKED BY: PCR

NOVEMBER 14, 2014

DATE: 7/24/14

ADDITIONAL SHEETS FOR SWM: 09-09-13

SCALE: AS SHOWN
GRID: 24
DEED REF: 1
PARCEL: 6277/93

TAX MAP: 24
GRID F7
PLAT REF: 1
DRAWING NO: 12004

NO. 7
OF 7

SDP-72-095