

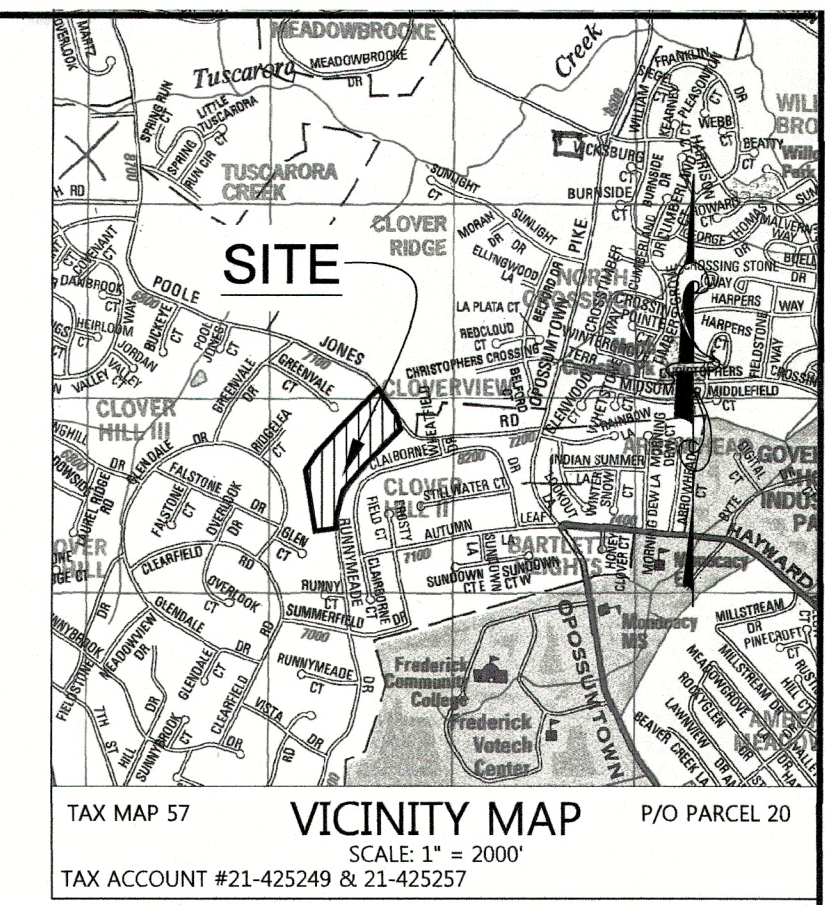
PRIVATE UTILITY NOTE:

UPON APPROVAL OF THE IMPROVEMENT PLANS AND PRIOR TO ISSUANCE OF GRADING PERMIT, A PLUMBING PERMIT THAT COVERS ON-SITE PRIVATE UTILITIES MUST BE APPLIED FOR. THE APPLICATION MUST BE APPROVED PRIOR TO START OF CONSTRUCTION FOR ALL PROPOSED PRIVATE PORTIONS OF UTILITIES INCLUDING STORM DRAIN, WATER & SEWER LINES, MONITORING MANHOLES, HYDRANTS, AND ANY OTHER ON-SITE UTILITY WORK. APPLICATIONS CAN BE SUBMITTED BY THE FREDERICK COUNTY LICENSED UTILITY CONTRACTOR VIA THE CITIZEN PORTAL: <https://planningandpermitting.fredrickcountymd.gov/>

REVIEWED IN ACCORDANCE WITH LOCAL COUNTY REQUIREMENTS. FREDERICK COUNTY ASSUMES NO LIABILITY FOR DESIGN AND/OR CONSTRUCTION. APPROVAL IS VALID FOR TWO (2) YEARS AFTER THE LAST DATE SHOWN ABOVE. THE PROJECT MUST BE UNDER CONSTRUCTION BEFORE THE APPROVAL EXPIRATION TO BE CONSIDERED ACTIVE. OTHERWISE, RESUBMITTAL OF PLANS, INCLUDING APPLICABLE FEES, MUST BE MADE TO DEVELOPMENT REVIEW FOR REAPPROVAL. FEES FOR RESUBMITTAL CANNOT BE WAIVED.

IMPROVEMENT PLANS FOR ENCLAVE AT CLOVER HILL SITUATED ON RUNNYMEADE DRIVE TUSCARORA ELECTION DISTRICT No. 21 FREDERICK COUNTY, MARYLAND

EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY LINE	---
---	BRL	---
---	RIGHT OF WAY LINE	---
---	CENTER LINE	---
---	EASEMENT LINE	---
---	BLDG. RESTRICTION LINE	20' B.R.L.
---	TREE	---
---	STORM DRAIN & MH	PROP. 15" SD
---	GAS LINE	---
---	ELECTRIC LINE	---
---	WATER LINE	PROP. 8" W
---	SANITARY SEWER	PROP. 8" S
---	UTILITY POLE	---
---	SOILS CLASSIFICATION/BOUNDARY	---
---	CONTOUR LINE	---
---	SPOT ELEVATION	x156.50
---	STREET SIGN	---
---	STREET LIGHTING	---
---	PIPE/GUTTER FLOW DIRECTION	---
---	PAVEMENT	---
---	CONCRETE	---
---	PAVEMENT TO BE REMOVED	---
---	STRUCTURE TO BE REMOVED	---



SOILS:
H8B- HAGERSTOWN LOAM, 3-8% SLOPES (HYDROLOGIC SOIL GROUP B)
H8B- HAGERSTOWN SILT LOAM, 3-8% SLOPES (HYDROLOGIC SOIL GROUP B)
D8B- DUFFIELD-HAGERSTOWN-URBAN LAND COMPLEX, 3-8% SLOPES, (HYDROLOGIC SOIL GROUP B)
THESE ARE NOT LISTED AS WET SOILS PER THE FREDERICK COUNTY SOIL SURVEY.

GENERAL CONSTRUCTION NOTES

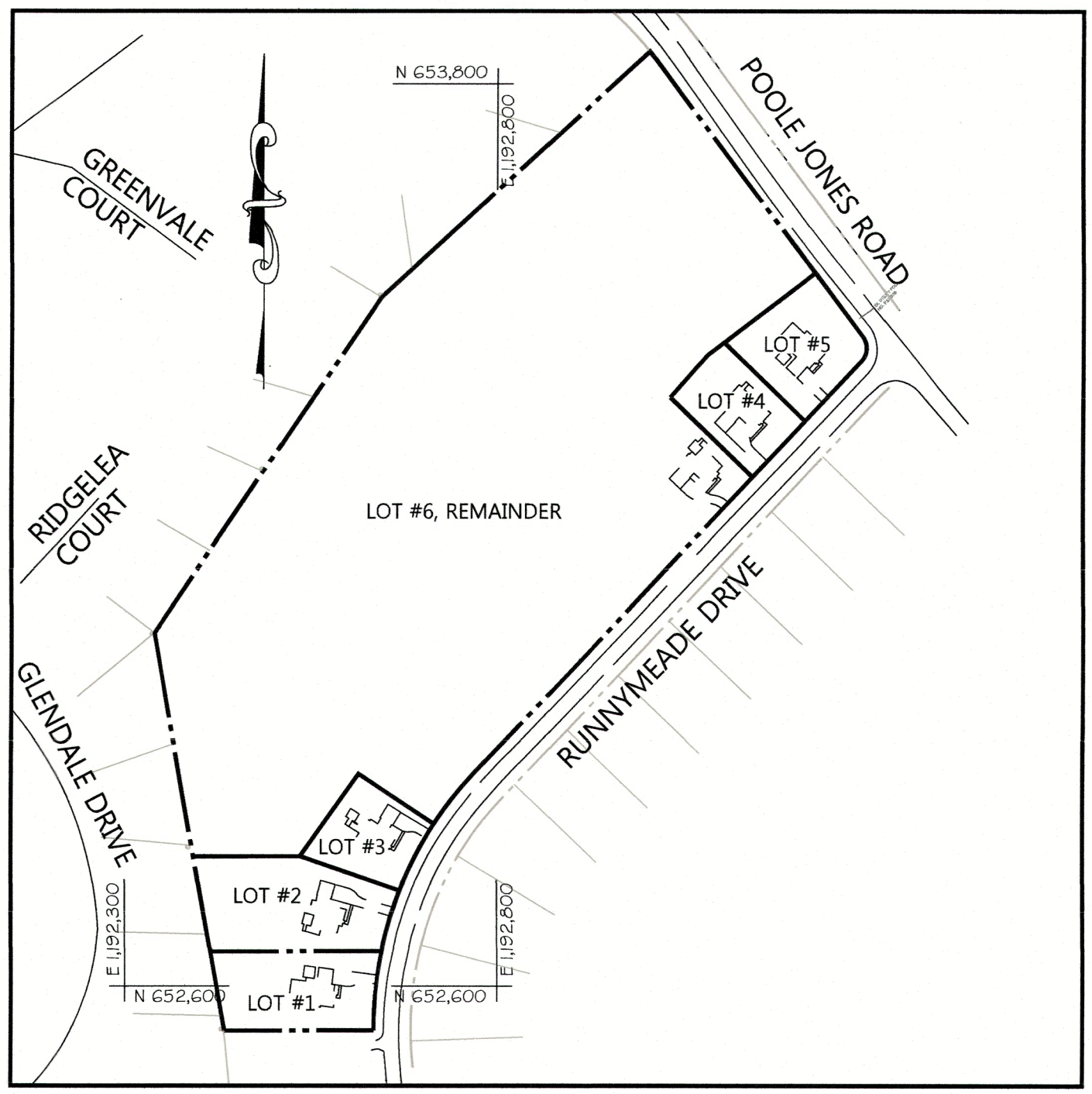
- ALL CONSTRUCTION ON THESE PLANS SHALL BE PERFORMED IN ACCORDANCE WITH BOOK OF STANDARDS, HIGHWAY AND INCIDENTAL STRUCTURES AND STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS BY MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION (MSHA), 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, BY WATER RESOURCES ADMINISTRATION, SOIL CONSERVATION SERVICE AND STATE SOIL CONSERVATION COMMITTEE AND 2009 MARYLAND STORMWATER DESIGN MANUAL, VOLUMES I & II, MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION.
- THE LOCATION OF EXISTING UTILITIES SHOWN IS APPROXIMATE ONLY. CONTRACTOR SHALL VERIFY THE EXISTENCE, LOCATION AND DEPTH OF ANY UTILITIES AND SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCY PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING THE ENGINEERING OFFICE OF DAFT MCCUNE WALKER (DMW) AT 301-696-9040 IN THE EVENT OF ANY DISCREPANCIES IN THE PLANS OR IN THE RELATIONSHIPS OF FINISHED GRADES TO EXISTING GRADE PRIOR TO BEGINNING WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF TRAFFIC ON ANY EXISTING ROADS IN ACCORDANCE WITH THE LATEST EDITION OF MARYLAND STATE HIGHWAY ADMINISTRATION AND FEDERAL (USDOT) FHWA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD). IF A SHA PUBLIC UTILITY PERMIT IS APPLIED FOR, THE CONTRACTOR SHALL BE NAMED AS THE TRAFFIC CONTROL MANAGER AND SHALL COMPLY WITH ALL SHA TRAFFIC CONTROL STANDARDS.
- THE CONTRACTOR SHALL NOTE THAT IN CASE OF A DISCREPANCY BETWEEN THE SCALED AND FIGURED DIMENSIONS SHOWN ON THESE PLANS, THE FIGURED DIMENSIONS SHALL GOVERN.
- IT SHALL BE DISTINCTLY UNDERSTOOD THAT THE FAILURE TO MENTION SPECIFICALLY ANY WORK WHICH WOULD NORMALLY BE REQUIRED TO COMPLETE THE PROJECT, SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY TO PERFORM SUCH WORK.
- THE CONTRACTOR SHALL NOTIFY THE FOLLOWING AT LEAST TWO WORKING DAYS BEFORE STARTING ANY CONSTRUCTION:
ALLEGHENY POWER: 301-695-5700
VERIZON TELEPHONE: 301-275-2515
FREDERICK GAS: 301-662-2151
FREDERICK COUNTY ENVIRONMENTAL COMPLIANCE SECTION: 301-600-3507
COMCAST/CABLE: 301-662-6822, EXT. 133
MISS UTILITY: 1-800-257-7777
- ALL EXISTING PAVING DISTURBED BY THE CONTRACTOR SHALL BE REPLACED TO THE THICKNESS AS SHOWN ON THE PAVEMENT PLAN OR TO THE SAME THICKNESS AS THE EXISTING PAVEMENT, WHICHEVER IS GREATER. PAVEMENT SHALL BE INSTALLED ACCORDING TO FREDERICK COUNTY AND MSHA SPECIFICATIONS.
- ALL RIP-RAP SHALL BE LOOSE-LAID STONE. RIP-RAP PLACED AT STORM DRAIN OUTFALLS IN EXISTING SWALES SHALL BE PLACED SO AS TO COMPLETELY LINE THE EXISTING SWALE WITH ONLY THE MINIMUM POSSIBLE GRADING OR SHAPING OF THE SWALE.
- INLETS IN SUMPS SHALL BE CONSTRUCTED LEVEL AT THE ELEVATION GIVEN IN THE STRUCTURE SCHEDULE. INLETS ON GRADE SHALL BE ADJUSTED SO THE GRADE ON THE TOP SLAB MATCHES THE GRADE OF THE STREET.
- ALL ROADS, DRIVES AND PARKING AREAS SHALL BE COMPACTED IN ACCORDANCE WITH STATE HIGHWAY ADMINISTRATION SPECIFICATIONS, SECTION 204 (EMBANKMENT AND SUBGRADE SECTION), LATEST EDITION.
- DMW IS NOT RESPONSIBLE FOR THE CONTRACTOR'S MEANS OR METHODS FOR CONSTRUCTION, INCLUDING BUT NOT LIMITED TO THE CONTRACTOR'S UTILIZATION OF MEN, MATERIALS, EQUIPMENT OR SAFETY MEASURES. IN THE PERFORMANCE OF ANY WORK FOR THIS CONSTRUCTION, THE CONTRACTOR ASSUMES ALL RESPONSIBILITY FOR PERFORMING THE WORK CORRECTLY, SAFELY AND IN CONFORMANCE WITH ALL FEDERAL, STATE AND LOCAL CODES AND/OR REGULATORY REQUIREMENTS.
- CERTAIN AREAS OF FREDERICK COUNTY ARE LOCATED WITHIN THE MONOCACY VALLEY REGION WHICH IS HISTORICALLY CONSIDERED TO CONTAIN SUBSURFACE LIMESTONE FORMATIONS WITH INHERENT SOLUTION CAVITIES COMMONLY REFERRED TO AS SINKHOLES. DMW RECOMMENDS THE PARTY RESPONSIBLE FOR CONSTRUCTION OF THIS DEVELOPMENT RETAIN THE SERVICES OF A PROFESSIONAL GEOTECHNICAL ENGINEER TO INVESTIGATE THE SITES SUITABILITY FOR CONSTRUCTION AND MAKE RECOMMENDATIONS FOR SITE DEVELOPMENT AND CORRECTIVE MEASURES IF SUBSURFACE CONDITIONS AFFECTING THE SITE ARE DISCOVERED.
- ANY ATTEMPTS TO ESTIMATE COSTS ASSOCIATED WITH ROCK HANDLING/REMOVAL AND/OR SUBSURFACE CONDITIONS MUST BE BASED ON GEOTECHNICAL REPORTS AND RECOMMENDATIONS. GEOTECHNICAL REPORTS MAY INCLUDE INFORMATION PERTINENT TO THE DEVELOPMENT OF THE SITE WHICH IS NOT INCLUDED ON THE PLANS. THE CONTRACTOR MUST CONSULT ANY EXISTING GEOTECHNICAL AND OTHER CONSULTANTS' REPORTS IN CONJUNCTION WITH THIS SET OF PLANS.
- ALL CONSTRUCTION SHALL CONFORM TO THE STATE OF MARYLAND HANDICAPPED CODE AND THE AMERICAN WITH DISABILITIES ACT (ADA) WHERE APPLICABLE.
- PLACEMENT OF ANY WORK SUCH AS CURB, GUTTER, SIDEWALK, DRIVEWAY APRONS, ETC. SHALL BE COMMENCED ONLY AFTER THE INSTALLATION OF ALL UTILITIES INCLUDING GAS LINES, ELECTRICAL LINES, STREET LIGHT CONDUITS, TELEVISION CABLE, WATER AND SEWER LINES AND ROOF DRAINS, ETC., ARE IN PLACE.
- SAFE AND LEGAL DISPOSAL OF DEMOLISHED ITEMS IS THE CONTRACTOR'S RESPONSIBILITY.
- SUBJECT AREA IS LOCATED IN ZONE "X" AS PER FLOOD INSURANCE MAP, PANEL No. 240 21C02/3E DATED AUG. 1, 2023. THERE ARE NO 100 YEAR FLOOD PLANS ON THE PROPERTY BEING DEVELOPED.
- THERE ARE NO WETLANDS OR WETLAND BUFFERS PRESENT ON THE PROPERTY BEING DEVELOPED.
- SITE SWM SHALL BE IN ACCORDANCE WITH THE "2009 MARYLAND STORMWATER DESIGN MANUAL", INCLUDING ALL REVISIONS AND ALL SUPPLEMENTS. A COMBINED SWM CONCEPT/SWM DEVELOPMENT PLAN (AP #14620) WAS APPROVED FOR THIS PROJECT ON 10-30-14.
- ANY EXCAVATION WORK WITHIN A COUNTY ROADWAY OR RIGHT-OF-WAY FOR THE PURPOSE OF THE INSTALLATION OF UTILITIES, STORM DRAINS, ETC. SHALL REQUIRE A PERMIT FROM THE FREDERICK COUNTY DEPARTMENT OF HIGHWAY OPERATIONS AT (301) 600-1664, AND THIS WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF THE ISSUED PERMIT.
- HORIZONTAL DATUM IS MARYLAND STATE PLANE (NAD 83/91).
- VERTICAL DATUM IS NAVD 27.
- THE BOUNDARY INFORMATION SHOWN HEREON IS BASED ON FIELD RUN TOPOGRAPHIC SURVEY PERFORMED BY DMW, INC. IN NOVEMBER 2013.
- DEED REFERENCE: LIBER 9910, FOLIO 001, TAX MAP 57, TAX #1 21-425249 & 21-425257, P/O PARCEL 20.
- PROPOSED WELLS WILL BE DRILLED, INSTALLED, TESTED AND APPROVED PRIOR TO FINAL PLAT RECORDATION. EXISTING SEPTIC SYSTEMS SHALL BE ABANDONED UNDER SUPERVISION OF THE HEALTH DEPARTMENT. EXISTING WELLS SCHEDULED FOR REUSE MUST BE TESTED AND INSPECTED BY THE HEALTH DEPARTMENT.
- THE PROPERTY ADDRESS AND STREET SIGNS SHALL BE FABRICATED AND POSTED IN ACCORDANCE WITH FREDERICK COUNTY PREMISE IDENTIFICATION ORDINANCE NO. 05-01-362.
- PORTIONS OF RUNNYMEADE DRIVE (WHERE SHOWN) WILL BE OVLAYED AT THE COMPLETION OF CONSTRUCTION.
- EXISTING STRUCTURES AND IMPROVEMENTS THAT CROSS OVER PROPOSED LOT LINES SHALL BE REMOVED. THE OWNER SHALL APPLY FOR THE APPROPRIATE DEMO PERMITS AND COMPLETE ALL WORK PRIOR TO RECORDATION.

**ATTACHMENT "E"
Pre-cast Material Acceptance Policy**
Effective Date: January 1, 2002
Revised February 6, 2003 and September 23, 2003

- All pre-cast concrete storm drainage structures, manhole frames and covers, and inlet grates to be installed in conjunction with storm drain systems within public street rights of way intended to be dedicated and accepted into the Frederick County public street system shall comply with SHA specifications as stated on the approved plans.
The County shall require separate certifications for the pre-cast concrete storm drainage structures, the manhole frames and covers, and the inlet grates.
The certifications shall be in accordance with all provisions of the Maryland State Highway (SHA) Administration's Standard Specifications for Construction and Materials dated January 2001, as they may be revised, including but not limited to: Sections 305.03.06, 909.04 except as indicated below.

Unless the improvement plans or contract documents expressly indicate the use of Federal or State funds for the project, the Certification for metal products is not required to include a Statement that "the material was melted and manufactured in the United States" (see TC-1.02, Section 909.00), and:

- Be manufactured or produced by entities listed on the current Maryland State Highway Office of Materials and Technology list of approved suppliers at the time of manufacturing.
 - Be accompanied by a certification from the producer, signed and sealed by a Professional Engineer currently licensed and registered in the State of Maryland, that the materials supplied comply with the contract documents and SHA specifications; and
 - Certification documents must be provided to the County inspector prior to installation, and the materials must pass a visual inspection by the County's inspector for defects, prior to installation.
- Frederick County shall have the right to obtain independent verification of any, and/or all of the materials utilized in the pre-cast manufacturing process to ensure that they comply with current SHA specifications. The verification shall be from an SHA approved Independent Testing Laboratory. All costs for the testing and verification process shall be borne by the other party to the executed developer Public Works Agreement with Frederick County.



PERMIT	APPLICABLE		TRACKING NO.	APPROVAL DATE	EXPIRATION DATE
	YES	NO			
SOIL CONSERVATION DISTRICT	X				
MDE WETLANDS AND WATERWAYS		X			
MDE NOI FOR STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITY	X				
CLOM/LOMR		X			
OTHER:		X			

ESD FACILITY #	DRAINAGE AREA (ACRES)	IMPERVIOUS AREA (ACRES)	Tc (MIN.)	RCN	PE REQUIRED (INCHES)	PE PROVIDED (INCHES)	ESDv REQUIRED (CU. FT.)	ESDv PROVIDED (CU. FT.)	ESDv AS-BUILT (CU. FT.)
1	5.90	0.43	0.347	64	1.6	2.0	2,766	3,110	
2	0.35	0.03	0.100	64	1.6	1.0	200	125	
3	0.45	0.03	0.100	63	1.6	1.0	222	139	
4	0.20	0.03	0.100	67	1.6	1.0	207	129	
TOTAL	6.90	0.53	0.347	64	1.6	1.8	3,395	3,503	

A pre-construction meeting shall be required with the Department of Engineering and Construction Management (DECM) to discuss construction phasing, unusual site conditions, special requirements, etc. Please call 301-600-3508, five (5) days in advance and between the hours of 7:30 A.M. and 3:30 P.M.

- All sidewalks shall be installed in accordance with current Americans with Disabilities Act (ADA) standards and laws.
- Progress meetings among representatives of DECM, the Contractor, and the Developer may be scheduled on an agreed time period to monitor construction progress.
- An inspection of the construction site/outline is required by DECM.
- All work, construction methods and materials shall be in accordance with the Maryland State Highway Administration (MD SHA) Standard Specifications for Construction and Materials dated July 2008, herein referred to as the SHA Gray Book, and all current revisions and supplements. These specifications and standards for items such as inlet and manhole structures are available online from the SHA website: <http://apps.roads.maryland.gov/BusinessWithSHA/bis/bisSpecs/deManualPub/publicationsonline/ohd/bookstid/index.asp>
- The contractor shall contact DECM 24 hours in advance of placing controlled fill within the proposed road right-of-way. Moisture/density testing is required in accordance with the approved specifications and Section 204 of the SHA Gray Book, and all current revisions and supplements. All moisture/density testing for fill areas, subgrade, culvert and structure backfill is to be performed and approved by the developer's geotechnical engineer and monitored by DECM. Any failing tests shall be documented so that the area may be re-tested in order to obtain final approval.
- If wet areas are determined present in the proposed road right-of-way, under drain and under drain outlets shall be installed to alleviate potential subgrade failure.
- Provide for drain curtains and outlets behind all curb and gutter monumental islands in the roadway median.
- All required roadway signs, barricades, stipling and pavement markings shall be in accordance with the latest Maryland version of the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD). The installation of all required roadway signs, including street name signs, shall commence the next business day after the placement of the base course asphalt.
- If required, a Maintenance of Traffic (MOT) plan shall be submitted to the Frederick County Community Development Division for written approval prior to commencement of the work. The contact number is 301-600-1138. Any anticipated road closures shall be requested in writing and require an approved MOT/retour plan. All road closure requests shall be approved in writing by the County prior to implementation.
- Benchmarks shall be established and maintained until acceptance of the roadway improvements.
- The contractor shall be required to contact DECM at least 24 hours in advance of installing storm drains, storm drainage appurtenances and curb and gutter. A proof roll is required prior to placing curb and gutter.
- Provide for weep gutters in an inlet throat opening to allow water in the gutter pan to enter into inlets after placing base paving.
- The contractor shall schedule proof roll inspections with DECM a minimum of 24 hours in advance prior to placement of base asphalt course, and after final satisfactory completion of subgrade density/moisture testing; SHA Gray Book, Specifications Section 204.03.04 shall apply.
- Prior to placing the surface asphalt course, the base course shall be inspected by DECM. The contractor is required to contact DECM a minimum of 24 hours in advance of placing the surface asphalt course.

The following shall be done prior to application placement of the final surface asphalt course:

- All existing base pavement shall be examined for any defective areas. Examples include, and are not limited to, subgrade failures, asphalt slippage, broken curb and gutter, settlement of paved areas and inlet and manhole structures, etc.
 - Review existing base asphalt for a smooth polished surface caused by construction and/or existing traffic. For example, during the home building process.
 - All areas and items as described in paragraphs a) and b) above shall be repaired or replaced in accordance with the original approved drawings to the satisfaction of DECM.
 - Polished surfaces shall be "skim milled" with a milling machine to roughen the base asphalt layer, and then tack coated, to enhance adhesion of the final surface asphalt course.
 - Check curb and gutter for damage and repair or replace.
 - Replace curb that has damage greater than 3" depth and 6" length/diameter.
 - Replace curb that has been cracked completely through and has settlement in excess of 1/8"
 - Replace curb at inlets if there are gaps greater than the 1/2" preformed expansion material.
 - When replacing curb, any joint spacing shall not be less than four (4) feet in length.
 - Repair any minor cracks and chips in curb.
 - Seal any cracks in gutter pan. Apply sealer to the entire gutter portion and 1" up the face of all joints, as per Section 602.03.019 of the SHA Standard Specifications.
- All work shall be completed in accordance with the approved plans and specifications prior to DECM recommending acceptance of the street(s) by the Board of County Commissioners (BOCC). All proposed streets to be accepted must pass a final walk-through inspection by DECM and the Frederick County Office of Highway Operations (OHO).
 - Please contact the DECM inspection staff or supervisor with any questions.

CERTIFICATION OF THE DISTURBED AREA QUANTITY

I hereby certify that the estimated total amount of area to be disturbed shown on these plans has been computed to 1995 cy. of excavation, 260 cy. of fill and the total area to be disturbed as shown on these plans has been determined to be 546,418 square feet, or 12.54 acres.

Daphne S. Matthews 42429
ENGINEER'S SIGNATURE P.E. NO.
DAPHNE MATTHEWS 08/27/2025
PRINT NAME DATE

ENGINEER'S DESIGN CERTIFICATION
I hereby certify this plan has been designed in accordance with local ordinances, COMAR 26.17.01, and 2011 Maryland Standards and Specifications for Soil Erosion Control and is contingent upon issuance of all applicable regulatory permits. If applicable, this plan is also designed in accordance with the requirements contained within USDA, NRCS "Standards and Specifications for Ponds MD-378" and the policies and procedures of the Maryland Department of the Environment Dam Safety Program.

Daphne S. Matthews 42429
ENGINEER'S SIGNATURE P.E. NO.
DAPHNE MATTHEWS 08/27/2025
PRINT NAME DATE

OWNER'S/DEVELOPER'S CERTIFICATION

We hereby certify that all clearing, grading, construction and/or development will be done pursuant to the plan, and that any responsible person involved in this construction project will have a Certificate of Attendance at a Maryland Department of the Environment approved training program for the control of sediment and erosion before beginning the project. We also certify that the site will be inspected at the end of each working day, and that any needed maintenance will be completed so as to ensure that all sediment control practices are left in operational condition. We authorize the right of entry for records on-site evaluation by the Frederick County Soil Conservation District Board or their authorized agents.

Timothy S. Hogan MARCH 6, 2025
SIGNATURE OWNER/DEVELOPER DATE
TIMOTHY S. HOGAN MANAGING MEMBER
PRINT NAME TITLE

TITLE	SHEET No.
COVER SHEET	1
DEMOLITION PLAN	2
STORMWATER PLAN	3
STORMWATER MANAGEMENT NOTES & DETAILS	4
SANITARY SEWER PLAN & PROFILES	5
SEWER NOTES & DETAILS	6
GRADING, SEDIMENT & EROSION CONTROL PLAN	7
SEDIMENT & EROSION CONTROL NOTES & DETAILS	8

PROJECT SUMMARY:
THE PURPOSE OF THIS PROJECT IS THE DESIGN AND CONSTRUCTION OF INFRASTRUCTURE TO SUPPORT THE DEVELOPMENT OF 5 SINGLE FAMILY LOTS AND THE REMAINDER. NO HOUSE CONSTRUCTION IS PROPOSED WITH THIS PLAN.

PLANNING REGION: TUSCARORA
W/S CLASSIFICATION: W-5/S-1
FREDERICK CO. W/S NO. 282-S
18A-S

FILE #: S-028
A/P #: PW 277422
Due Date:

FREDERICK COUNTY SOIL CONSERVATION DISTRICT
Erosion and Sediment Control Plan Approval
BY: *Daphne S. Matthews*
District Manager or Designee
DATE: 9/5/2025
Plan is valid for 2 years from date of approval

CALL "MISS UTILITY" AT 1-800-257-7777 FOR UTILITY LOCATIONS AT LEAST 5 DAYS PRIOR TO BEGINNING CONSTRUCTION.

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. 42,429, EXPIRATION DATE: 06-06-2026

LINGG PROPERTY CONSULTING
200 West Patrick Street, Suite 204
Frederick, Maryland, 21701
www.LinggPropertyConsulting.com
Land Use Consulting • Land Planning & Design • Project Management • Site Planning
Subdivision Planning • Zoning Enforcement Consulting • Development Rights & Approval Strategies
Civil Engineering & Land Surveying Management
Lingg@lpc.com • (301) 644-2121 • (301) 696-9221 • (301) 696-9221 • (301) 696-9221

DMW
DAFT MCCUNE WALKER INC.
8 EAST SECOND STREET SUITE 201 FREDERICK, MD 21701
P: 301.696.9040 F: 301.696.9041 WWW.DMW.COM

COVER SHEET
IMPROVEMENT PLANS for
ENCLAVE AT CLOVER HILL
SITUATED ON RUNNYMEADE DRIVE
TUSCARORA ELECTION DISTRICT NO. 21
FREDERICK COUNTY, MD

OWNER/DEVELOPER:
BETTER WORLD BUILDERS, LLC
2077 SOMERVILLE ROAD, SUITE 206 ANNAPOLIS, MD 21401
410-266-5100
ATTN: TIM HOGAN

DATE	BY	REVISIONS
06/11/2025	DSM	PER COUNTY # SCD COMMENTS
08/01/2025	DSM	PER COUNTY # SCD COMMENTS
08/27/2025	DSM	PER COUNTY COMMENTS

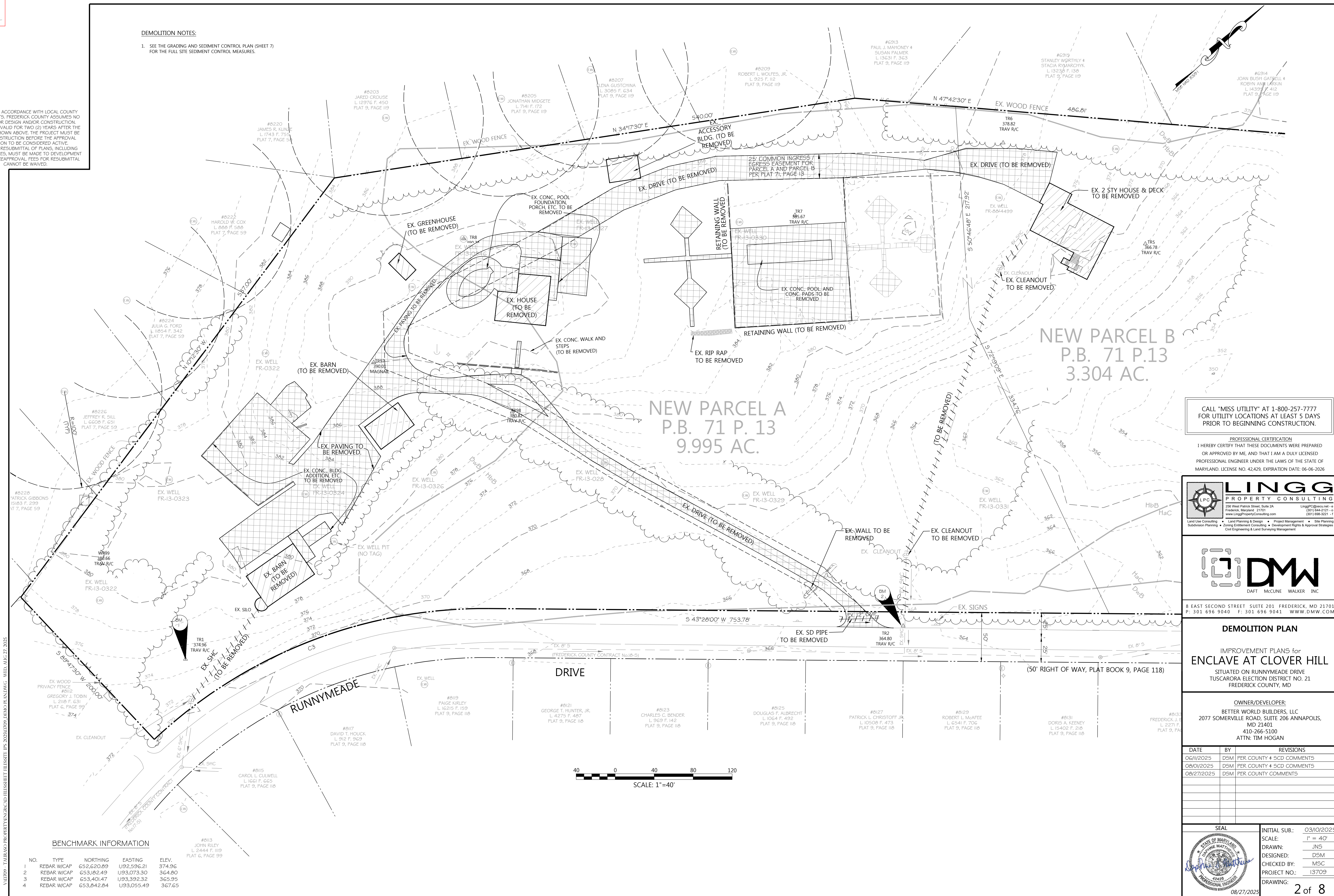
SCALE: AS SHOWN
DRAWN: JNS
DESIGNED: DSM
CHECKED BY: MSC
PROJECT NO.: 13709
DRAWING:

SEAL
STATE OF MARYLAND
FREDERICK COUNTY SOIL CONSERVATION DISTRICT
DAPHNE S. MATTHEWS
DISTRICT MANAGER
08/27/2025
INITIAL SUB: 03/01/2025
SCALE: AS SHOWN
DRAWN: JNS
DESIGNED: DSM
CHECKED BY: MSC
PROJECT NO.: 13709
DRAWING: 1 of 8

DEMOLITION NOTES:

- SEE THE GRADING AND SEDIMENT CONTROL PLAN (SHEET 7) FOR THE FULL SITE SEDIMENT CONTROL MEASURES.

REVIEWED IN ACCORDANCE WITH LOCAL COUNTY REQUIREMENTS, FREDERICK COUNTY ASSUMES NO LIABILITY FOR DESIGN AND/OR CONSTRUCTION. APPROVAL IS VALID FOR TWO (2) YEARS AFTER THE LAST DATE SHOWN ABOVE. THE PROJECT MUST BE UNDER CONSTRUCTION BEFORE THE APPROVAL EXPIRES. EXPIRATION TO BE CONSIDERED ACTIVE. OTHERWISE, RESUBMITTAL OF PLANS, INCLUDING APPLICABLE FEES, MUST BE MADE TO DEVELOPMENT REVIEW FOR REAPPROVAL. FEES FOR RESUBMITTAL CANNOT BE WAIVED.



NEW PARCEL A
 P.B. 71 P. 13
 9.995 AC.

NEW PARCEL B
 P.B. 71 P. 13
 3.304 AC.

CALL "MISS UTILITY" AT 1-800-257-7777 FOR UTILITY LOCATIONS AT LEAST 5 DAYS PRIOR TO BEGINNING CONSTRUCTION.

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. 42,429, EXPIRATION DATE: 06-06-2026

LINGG
 PROPERTY CONSULTING
 256 West Patrick Street, Suite 2A
 Frederick, Maryland 21701
 www.linggpropertyconsulting.com
 LinggPC@comcast.net
 (301) 644-2121 ext. 1
 (301) 696-3221 ext. 1

Land Use Consulting • Land Planning & Design • Project Management • Site Planning
 Subdivision Planning • Zoning Entitlement Consulting • Development Rights & Approval Strategies
 Civil Engineering & Land Surveying Management

DW
 DAFT MCCUNE WALKER INC.
 8 EAST SECOND STREET SUITE 201 FREDERICK, MD 21701
 P: 301 696 9040 F: 301 696 9041 WWW.DMW.COM

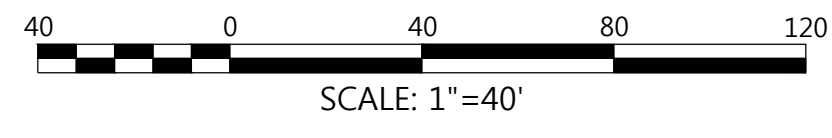
DEMOLITION PLAN
 IMPROVEMENT PLANS for
ENCLAVE AT CLOVER HILL
 SITUATED ON RUNNYMEADE DRIVE
 TUSCARORA ELECTION DISTRICT NO. 21
 FREDERICK COUNTY, MD

OWNER/DEVELOPER:
 BETTER WORLD BUILDERS, LLC
 2077 SOMERVILLE ROAD, SUITE 206 ANNAPOLIS,
 MD 21401
 410-266-5100
 ATTN: TIM HOGAN

DATE	BY	REVISIONS
06/11/2025	DSM	PER COUNTY # 5CD COMMENTS
08/01/2025	DSM	PER COUNTY # 5CD COMMENTS
08/27/2025	DSM	PER COUNTY COMMENTS

SEAL
 STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 42429
 08/27/2025

INITIAL SUB: 03/10/2025
 SCALE: 1" = 40'
 DRAWN: JNS
 DESIGNED: DSM
 CHECKED BY: MSC
 PROJECT NO: 13709
 DRAWING: 2 of 8



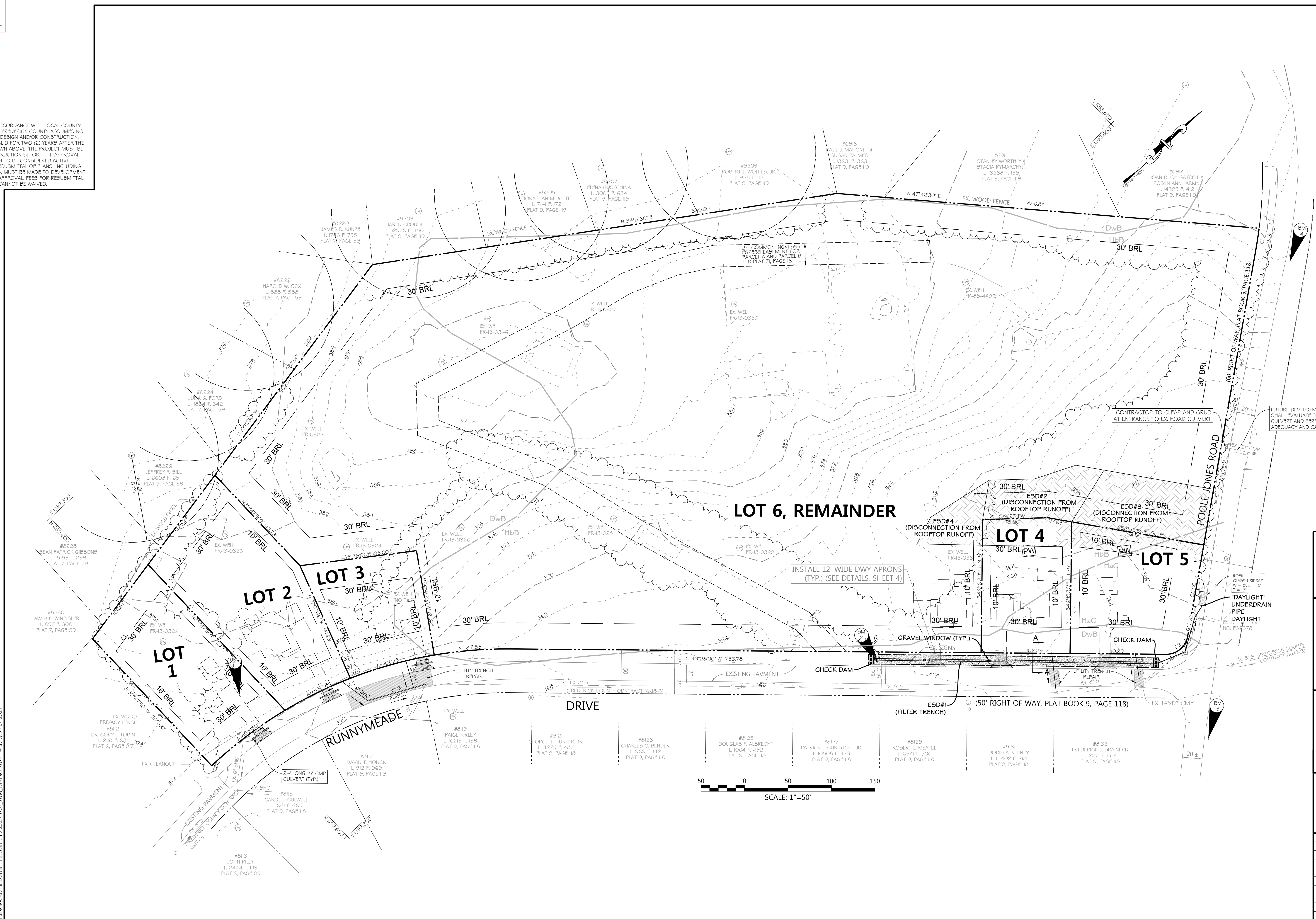
BENCHMARK INFORMATION

NO.	TYPE	NORTHING	EASTING	ELEV.
1	REBAR WCAP	652,620.89	1192,596.21	374.96
2	REBAR WCAP	653,182.49	1193,073.30	364.80
3	REBAR WCAP	653,401.47	1193,392.32	365.95
4	REBAR WCAP	653,842.84	1193,055.49	367.65

#813
 JOHN RILEY
 L. 2444 F. 119
 PLAT 6, PAGE 99

V:\1709 - TAIKANG PROPERTY CONSULTING\1709-DMNO PLANS\DWG - WED, AUG 27, 2025

REVIEWED IN ACCORDANCE WITH LOCAL COUNTY REQUIREMENTS. FREDERICK COUNTY ASSUMES NO LIABILITY FOR DESIGN AND/OR CONSTRUCTION. APPROVAL IS VALID FOR TWO (2) YEARS AFTER THE LAST DATE SHOWN ABOVE. THE PROJECT MUST BE UNDER CONSTRUCTION BEFORE THE APPROVAL EXPIRES. EXPIRATION TO BE CONSIDERED ACTIVE OTHERWISE, RESUBMITTAL OF PLANS, INCLUDING APPLICABLE FEES, MUST BE MADE TO DEVELOPMENT REVIEW FOR REAPPROVAL. FEES FOR RESUBMITTAL CANNOT BE WAIVED.



FUTURE DEVELOPMENT OF LOT 6 REMAINDER SHALL EVALUATE THE CONDITION OF THE CULVERT AND PERFORM A DETAILED ADEQUACY AND CAPACITY ANALYSIS

CALL "MISS UTILITY" AT 1-800-257-7777 FOR UTILITY LOCATIONS AT LEAST 5 DAYS PRIOR TO BEGINNING CONSTRUCTION.

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. 42,429. EXPIRATION DATE: 06-06-2026

LINGG
 PROPERTY CONSULTING
 258 West Patrick Street, Suite 2A
 Frederick, Maryland 21701
 www.LinggPropertyConsulting.com
 Land Use Consulting • Land Planning & Design • Project Management • Site Planning
 Subdivision Planning • Zoning Entitlement Consulting • Development Rights & Approval Strategies
 Civil Engineering & Land Surveying Management

DMW
 DAFT McCUNE WALKER INC.
 8 EAST SECOND STREET SUITE 201 FREDERICK, MD 21701
 P: 301.696.9040 F: 301.696.9041 WWW.DMW.COM

STORMWATER PLAN
 IMPROVEMENT PLANS for
ENCLAVE AT CLOVER HILL
 SITUATED ON RUNNYMEADE DRIVE
 TUSCARORA ELECTION DISTRICT NO. 21
 FREDERICK COUNTY, MD

OWNER/DEVELOPER:
 BETTER WORLD BUILDERS, LLC
 2077 SOMERVILLE ROAD, SUITE 206 ANNAPOLIS,
 MD 21401
 410-266-5100
 ATTN: TIM HOGAN

DATE	BY	REVISIONS
06/10/2025	DSM	PER. COUNTY + SCD COMMENTS
08/07/2025	DSM	PER. COUNTY + SCD COMMENTS
08/27/2025	DSM	PER. COUNTY COMMENTS

SEAL

 INITIAL SUB: 03/10/2025
 SCALE: 1" = 50'
 DRAWN: JNS
 DESIGNED: DSM
 CHECKED BY: MSC
 PROJECT NO.: 13709
 DRAWING: 3 of 8
 08/27/2025

BENCHMARK INFORMATION

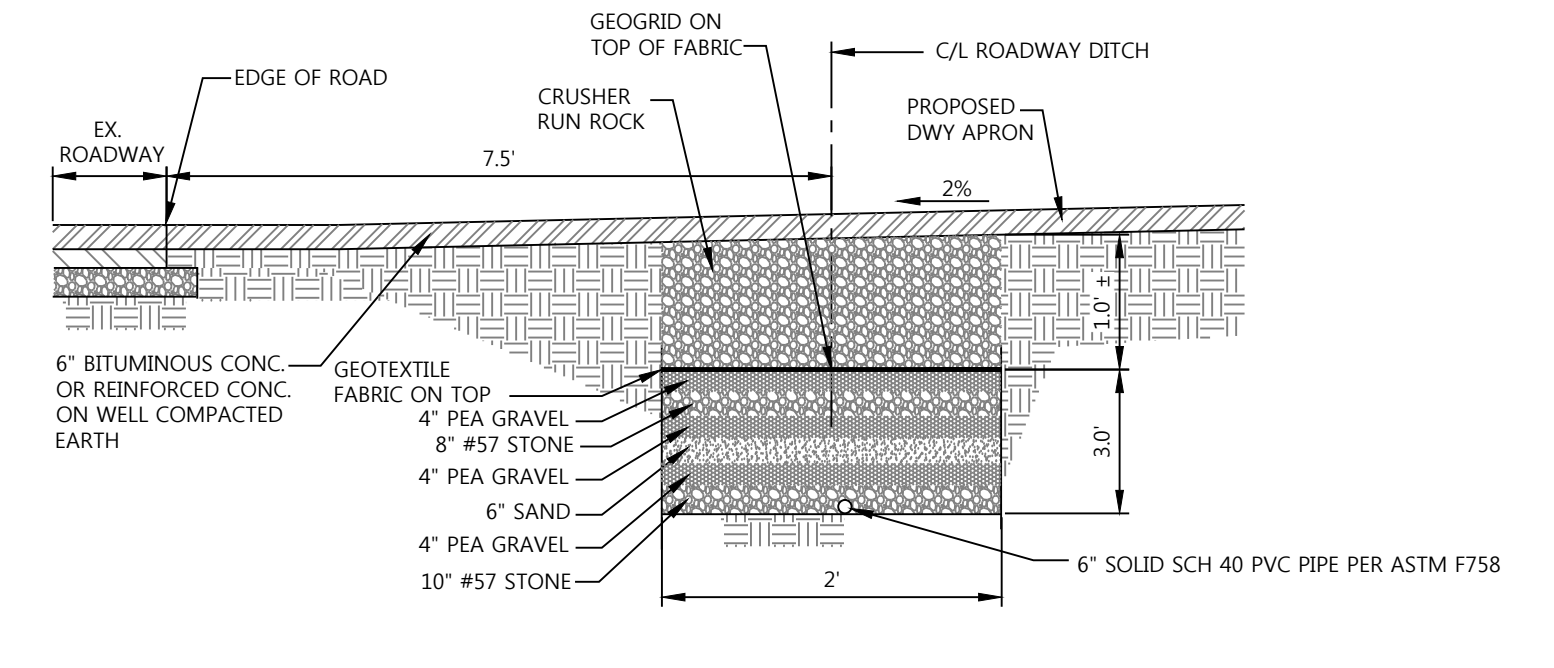
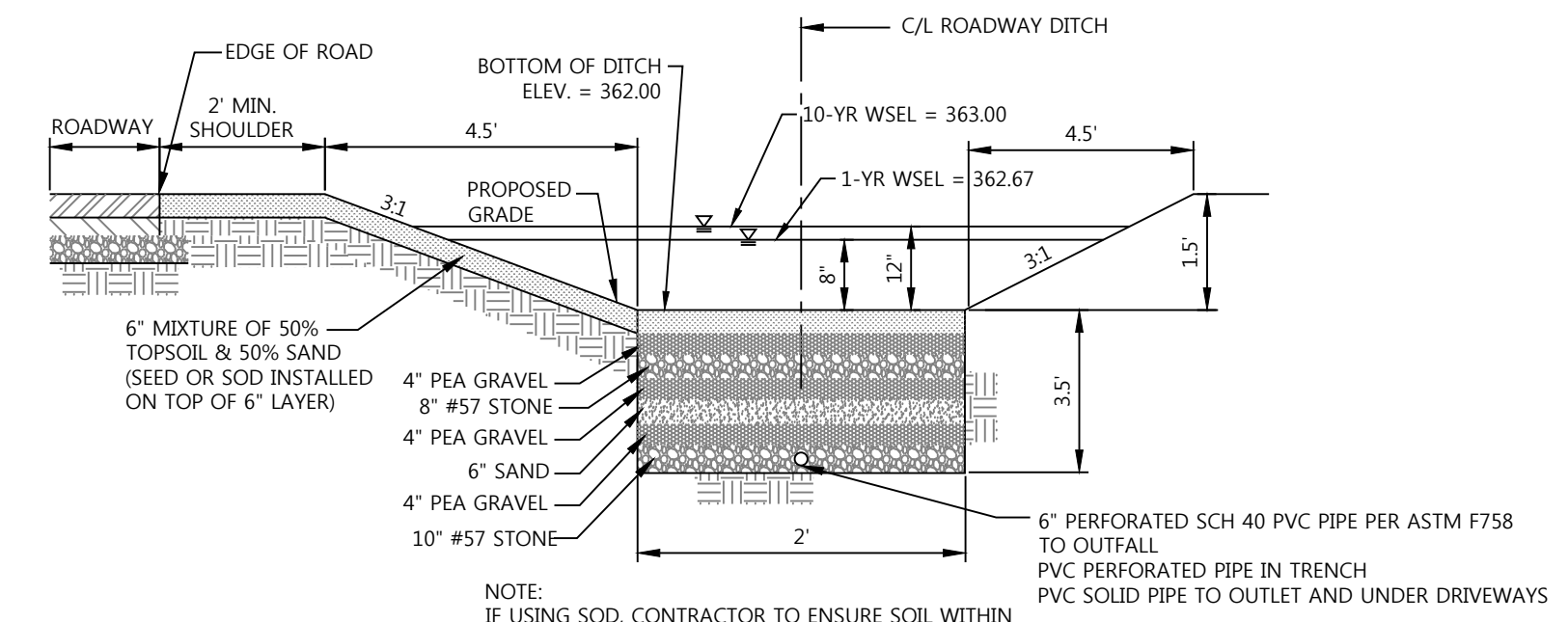
NO.	TYPE	NORTHING	EASTING	ELEV.
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2	REBAR WCAP	653,162.49	1,193,073.30	364.80
3	REBAR WCAP	653,401.47	1,193,392.32	365.95
4	REBAR WCAP	653,842.84	1,193,055.49	367.65

V30709 - TAURASO PROPERTY ENCLAVE AT CLOVER HILL SHEET 1P5 20250709 SWM DRAWING.DWG - WED, AUG 27, 2025

Table B.3.3 Open Channel Systems and Filter Strip Materials Specifications

Material	Specification	Size	Notes
dry swale soil	USCS, M.L. SM, SC	n/a	soil with a higher percent organic content is preferred
dry swale sand	ASTM C-33 fine aggregate concrete sand	0.02" to 0.04"	
check dam (pressure treated)	AWPA Standard Co	6" by 6" or 8" by 8"	do not coat with crossbreed; embed at least 3" into side slopes
check dam (natural wood)	Black Locust, Red Mulberry, Cedars, Catalpa, White Oak, Chestnut Oak, Black Walnut	6" to 12" diameter; notch as necessary	do not use the following, as these species have a predisposition towards rot: Ash, Beech, Birch, Elm, Hackberry, hemlock, Hickories, Maples, Red and Black Oak, Pines, Poplar, Spruce, Sweetgum, Willow
filter strip sand/gravel pervious berm	sand: per dry swale sand gravel, AASHTO M-43	sand: 0.02" to 0.04" gravel: 1/2" to 1"	mix with approximately 25% loam soil to support grass cover crop, sand (35-60%), silt (30-55%), and gravel (10-25%) see bioretention planting soil notes for more detail
pea gravel diaphragm and curtain drain	ASTM D 448	varies (No. 6) or (1/8" to 3/8")	use clean bank-run gravel
underdrain gravel	AASHTO M-43	0.25" to 0.75"	
underdrain	F 758 Type PS 24 or AASHTO M-278	4" to 6" rigid schedule 40 PVC or SDR35	3/8" perf @ 6" on center, 4 holes per row, minimum of 3" of gravel over pipes; not necessary underdrain pipes
geotextile	Class "C" - apparent opening size (ASTM-D-4751), grab tensile strength (ASTM-D-4632), puncture resistance (ASTM-D-4833)	n/a	
rip rap	per county criteria, if none given, use MSHA Standards and Specs Section 905	size per county DOT requirements based on 10-year design flows	

FILTER TRENCH QUANTITY TABLE	
Facility #	I
Bottom Area Dimensions	275 Ft. x 2 Ft.
Bottom Surface Area	650 Sq. Ft.
Temp. Ponding Depth	1.50 Ft.
Pea Gravel Volume	650 Cu. Ft.
#57 Stone Volume	975 Cu. Ft.
Sand Volume	325 Cu. Ft.
Excavation Volume	2,275 Cu. Ft.
Number of Check Dams	2
Height of Check Dams	1.0 Ft.
4" Perf. Underdrain	Yes



SECTION A-A
 TYPICAL SECTION - ESD#1 (FILTER TRENCH)
 NOT TO SCALE

TYPICAL SECTION - FILTER TRENCH THROUGH DRIVEWAY
 NOT TO SCALE

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FILTER TRENCH (ESD#1)

Appendix B.3. Construction Specifications for Sand Filters, Bioretention and Open Channels

B.3.C' Specifications for Open Channels and Filter Strips

1. Material Specifications

The recommended construction materials for open channels and filter strips are detailed in Table B.3.3.

2. Dry Swales

Permeable soil mixture (20" to 30" deep) should meet the bioretention "planting" soil specifications.

Check dams, if required, shall be placed as specified.

System to have 6" of freeboard, minimum above 2 year water surface elevation.

Side slopes to be 3:1 maximum; (4:1 or flatter is preferred).

No gravel or perforated pipe is to be placed under driveways.

Bottom of facility to be above the seasonally high water table per Table 2 of Appendix D.1.

Seed with flood/drought resistant grasses; see Appendix A, Section 2.4.

Longitudinal slope to be 4%, maximum.

Bottom width to be 8" maximum to avoid braiding; larger widths may be used if proper berming is supplied. Width to be 2' minimum.

3. Wet Swales

Follow above information for dry swales, with the following exceptions: the seasonally high water table may inundate the swale, but not above the design bottom of the channel [NOTE: if the water table is stable within the channel, the WQ_s storage may start at this point - see Figure 3.19]

Excavate into undisturbed soils; do not use an underdrain system.

4. Filter Strips

Construct pea gravel diaphragms 12" wide, minimum, and 24" deep minimum.

Pervious berms to be a sand/gravel mix (sand (35-60%), silt (30-55%), and gravel (10-25%)). Berms to have overflow weirs with 6 inch minimum head.

Slope range to be 2% minimum to 6% maximum.

5. Plant Selection

Recommended grass species for use in establishing permanent ground cover are provided in Section 2.4 of Appendix A.

Construction Criteria:

Construction specifications for swales can be found in Appendix B.3. In addition, the following items should be addressed during the construction of projects with swales:

- **Erosion and Sediment Control:** Swales are often used for conveying runoff to sediment trapping devices during site construction. Care should be taken to ensure proper construction where stormwater management swales are used for this purpose. After the drainage area is completely stabilized, accumulated sediment should be removed and the swale excavated to the required dimensions. Any required infrastructure (e.g., check dams, underdrains) may then be installed, the bottom and side slopes scarified, and a good stand of vegetation established.

Inspection:

- Regular inspections shall be made during the following stages of construction:
 - During placement and backfill of underdrains and the installation of diaphragms, foreboys, check dams, or weirs.
 - Upon completion of final grading and establishment of permanent stabilization.

Maintenance Criteria:

The following items should be addressed to ensure proper maintenance and long-term performance of swales:

- For grassed swales, regular mowing (at least bi-annually) is critical in order to reduce competition from weeds and irrigation may be needed during dry weather to establish vegetation. Sparsely vegetated areas need to be re-seeded to maintain dense coverage.
- If water does not drain within 48 hours, the bottom soil should be filled and revegetated.
- Inspections should be performed once a year to assess slope integrity, vegetative health, soil stability, compaction, erosion, ponding, and sedimentation. Periodic removal of sediment, litter, or obstructions should be done as needed. Eroded side slopes and the swale bottom should be repaired and stabilized where needed.

DISCONNECTION FROM ROOFTOP RUNOFF (ESD#2-4)

Construction Criteria:

The following items should be addressed during the construction of projects with planned rooftop disconnections:

- **Erosion and Sediment Control:** Erosion and sediment control practices (e.g., sediment traps) shall not be located in vegetated areas receiving disconnected runoff.
- **Site Disturbance:** Construction vehicles and equipment should avoid areas receiving disconnected runoff to minimize disturbance and compaction. Should areas receiving disconnected runoff become compacted, scarifying the surface or rototilling the soil to a depth of four to six inches shall be performed to ensure permeability. Additionally, amendments may be needed for tight, clayey soils.

Inspection:

A final inspection shall be conducted before use and occupancy approval to ensure that sizing for treatment areas have been met and permanent stabilization has been established.

Maintenance Criteria:

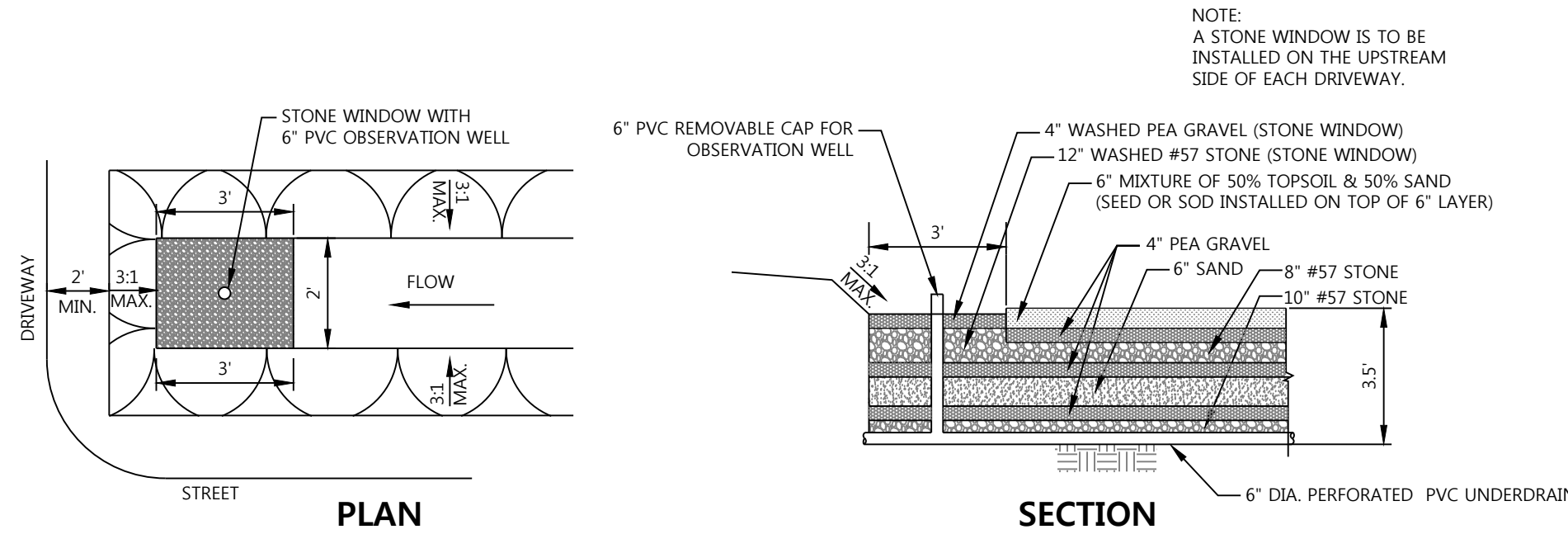
Maintenance of areas receiving disconnected runoff is generally no different than that required for other lawn or landscaped areas. The areas receiving runoff should be protected from future compaction (e.g., by planting trees or shrubs along the perimeter). In commercial areas, foot traffic should be discouraged as well.

Table A.7 Common Grass Species for Open Channels

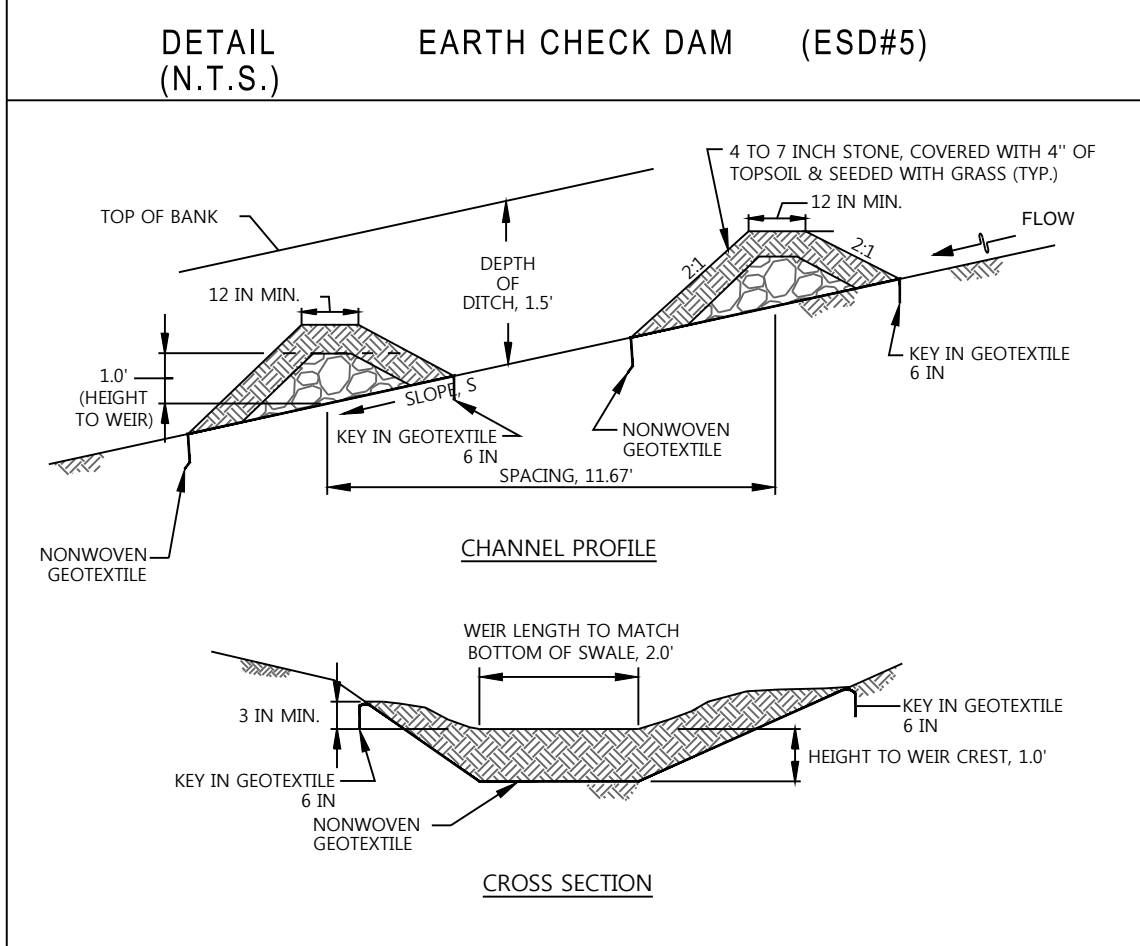
Common Name	Scientific Name	Notes
Big Bluestem	<i>Andropogon gerardii</i>	Warm, not for Wet Swale
Creeping Bentgrass	<i>Agrostis palustris</i>	Cool,
Red Fescue	<i>Festuca rubra</i>	Cool, not for Wet Swale
Reed Canary grass	<i>Phalaris arundinacea</i>	Cool, Wet Swale
Redtop	<i>Agrostis alba</i>	Cool,
Smooth Brome	<i>Bromus inermis</i>	Cool, not for Wet Swale
Switch grass	<i>Panicum virgatum</i>	Warm

Note 1: These grasses are sod-forming and can withstand frequent inundation, and are thus ideal for the swale or grass channel environment. Most are salt-tolerant, as well. Cool refers to cool season grasses that do well in the western part of the State. Warm refers to warm season grasses that work well in the eastern part of the State (see Table A.8).

Note 2: Where possible, one or more of these grasses should be in the seed mixes. For a more thorough listing of seed mixes, consult the 1994 Maryland Standard and Specifications for Soil Erosion and Sediment Control (MDE, 1994) or the MD NRCS Code 391 Riparian Forest Buffer Standard, Table 2 (Zone 3).



TYPICAL SECTION - FILTER TRENCH WITH STONE WINDOW
 NOT TO SCALE



CALL "MISS UTILITY" AT 1-800-257-7777 FOR UTILITY LOCATIONS AT LEAST 5 DAYS PRIOR TO BEGINNING CONSTRUCTION.

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 LinggPC@proton.net • (301) 664-2121 • (301) 696-3221 • 1

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STORMWATER MANAGEMENT NOTES & DETAILS
 IMPROVEMENT PLANS for ENCLAVE AT CLOVER HILL
 SITUATED ON RUNNYMEADE DRIVE
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 PROJECT NO.: 13709
 DRAWING: 4 of 8
 08/27/2025

PIPED ENTRANCE
 HOUSE
 LIMITS OF PROPOSED ENTRANCE
 21' LOCAL ROAD
 23' COLLECTOR ROAD
 10' MINIMUM WIDTH *
 20' MIN LENGTH (PIPE)
 17' x 18' MIN. SIZE (PIPE)
 6' DITCH
 7' RADIUS (See Option)
 24'-1" PAVEMENT
 R/W

SWALED ENTRANCE
 HOUSE
 LIMITS OF PROPOSED ENTRANCE
 21' LOCAL ROAD
 23' COLLECTOR ROAD
 10' MINIMUM WIDTH *
 7' RADIUS (See Option)
 6' DITCH
 24'-1" PAVEMENT
 R/W

APRON OPTION
 12' MIN. (Common)
 10' MIN.
 19' MIN.
 7'-1" EDGE OF PAVEMENT

STANDARD CROSS SECTION PIPED
 6' BITUMINUS CONCRETE OR REINFORCED CONCRETE NON WELL COMPACTED EARTH
 21' LOCAL ROAD
 23' COLLECTOR ROAD
 8" W/LINE
 4' LOCAL ROAD
 7' COLLECTOR ROAD
 25' MIN. LANDING AREA
 5% MAX. GRADE
 *PIPE SIZE TO BE PROVIDED AS FOR IMPROVEMENT PLAN OR AS DETERMINED IN THE FIELD BY DPM. ALL SLOPES 1% OR MORE IN HEIGHT REQUIRE END SECTIONS.

STANDARD CROSS SECTION SWALED
 6' BITUMINUS CONCRETE OR REINFORCED CONCRETE NON WELL COMPACTED EARTH
 21' LOCAL ROAD
 23' COLLECTOR ROAD
 8" W/LINE
 4' LOCAL ROAD
 7' COLLECTOR ROAD
 25' MIN. LANDING AREA
 4.25% MAX. GRADE

Revisions:
 Note:
 * Common Driveway for 2 to 3 lots 12' minimum width
 ** Finished slopes shall not be steeper than 2:1
 * All Construction shall comply with both sides of this Permit.
 Backfill, seed and straw around edges of apron prior to final inspection.
 All dimensions are minimum and may be exceeded provided drainage is not affected.

SPECIFICATIONS FOR DRIVEWAY INSTALLATION OPEN SECTION ROADWAY ONLY APPENDIX 7
 DETAIL NO. APPX 07
 DATE: 2000

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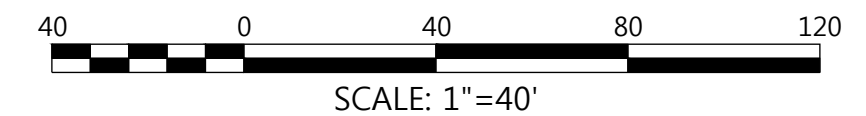
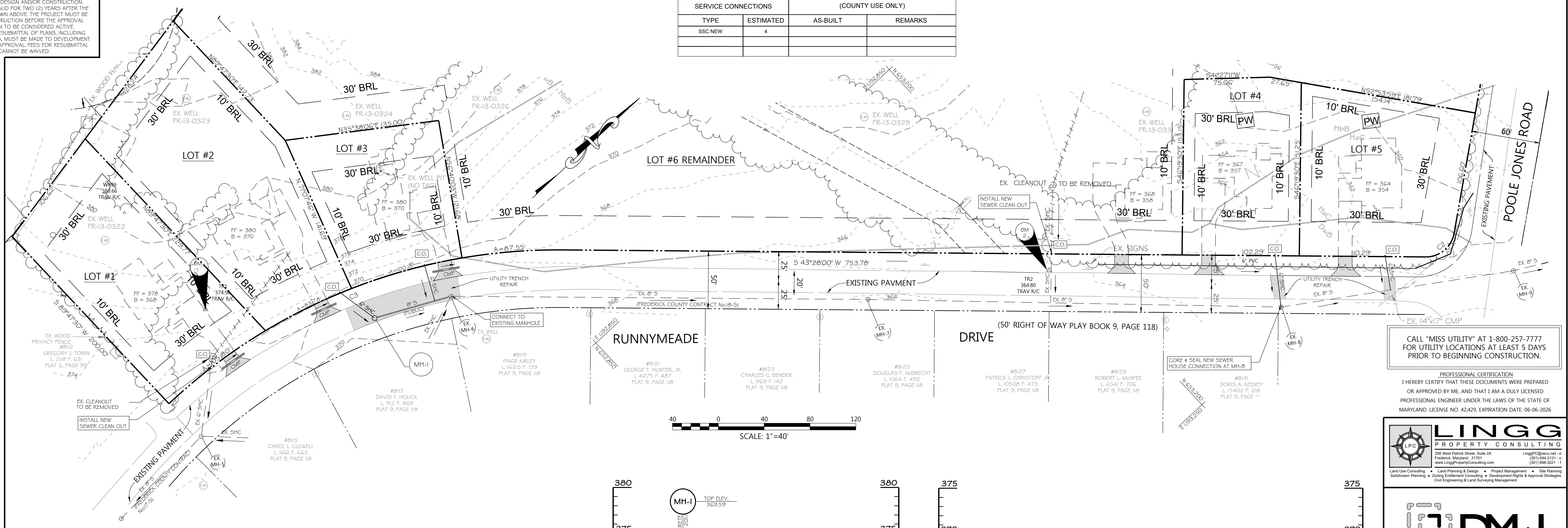
- NOTES:**
- SHCS CONNECTING TO THE EXISTING SEWER LINE SHALL USE THE MODIFIED SADDLE CONNECTION DETAIL SHOWN ON SHEET 6.
 - SHCS CONNECTING TO EXISTING MH (LOTS #3 & 4) SHALL BE MADE BY CORE AND SEAL METHODS. EXISTING MH BENCHES MUST BE RE-SHAPED AS NECESSARY TO PROPERLY CHANNELIZE FLOW.
 - ALL SHCS SHALL BE INSTALLED AT A SLOPE OF 2% (MIN.) TO 5% (MAX.). SEE DETAIL 206.2 ON SHEET 6.
 - ANY SEPTIC SYSTEMS ON THIS PROPERTY SHALL BE PROPERLY ABANDONED UNDER THE DIRECTION OF THE FREDERICK COUNTY HEALTH DEPARTMENT PRIOR TO PLAT APPROVAL.
 - FINAL SIZE, LOCATION AND ELEVATION FOR HOUSES AND DRIVEWAYS TO BE DETERMINED ON FUTURE PLOT PLANS. GRINDER PUMPS TO BE INSTALLED FOR BASEMENTS BELOW THE COMPUTED LOWEST FLOOR ELEVATION IN THE SEWER SERVICE CONNECTIONS TABLE (THIS SHEET).

CONTRACT QUANTITIES TABLE				
ITEM	ESTIMATED QUANTITY	UNITS	AS-BUILT	
			AS-BUILT	SUPPLIER/MATERIAL (TO BE COMPLETED BY THE COUNTY)
8" SEWER	70	LF		
48" MH	1	EA		
6" CLEAN OUT	6	EA		

SEWER SERVICE CONNECTION QUANTITIES TABLE			
SERVICE CONNECTIONS		COUNTY USE ONLY	
TYPE	ESTIMATED	AS-BUILT	REMARKS
SSC NEW	4		

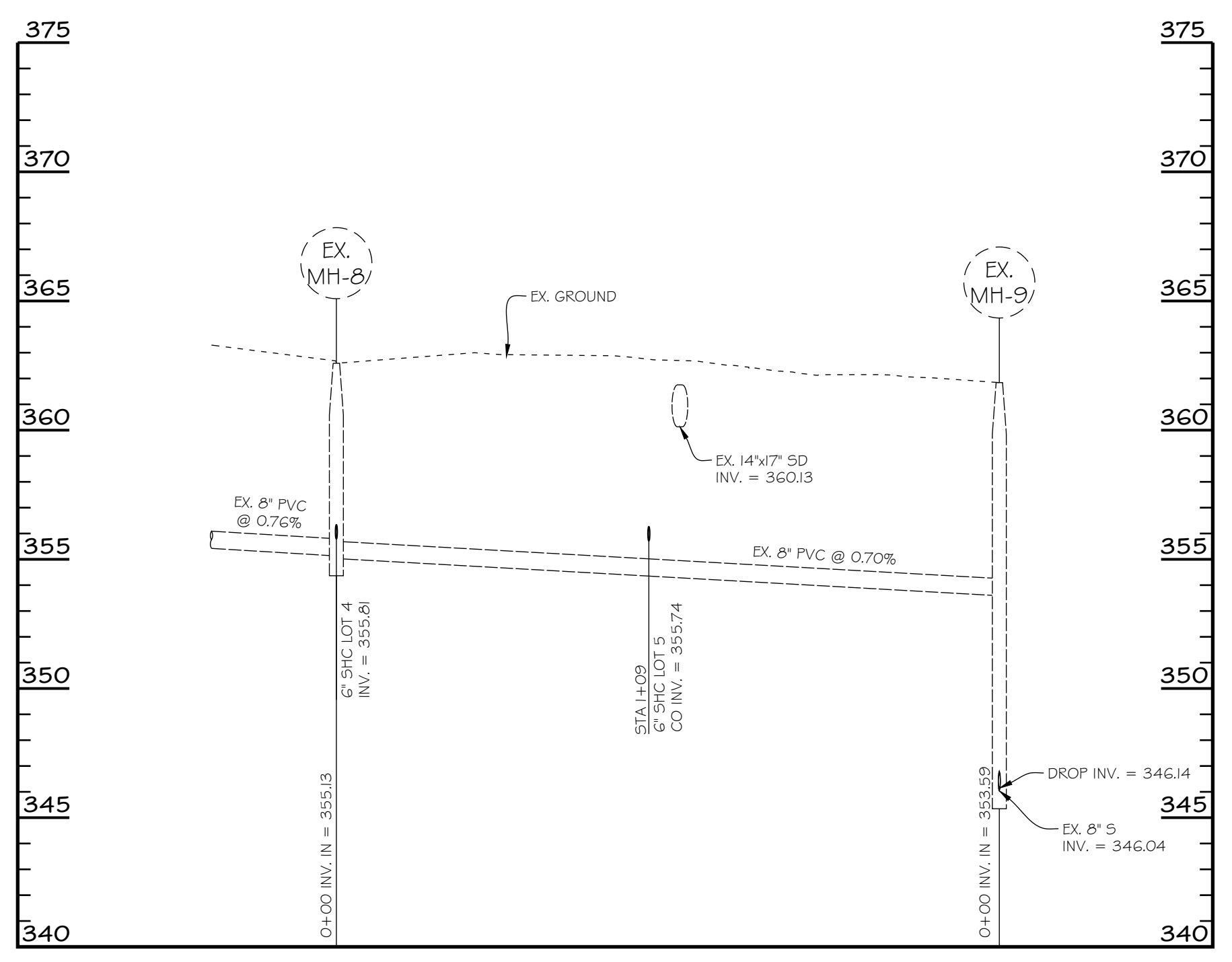
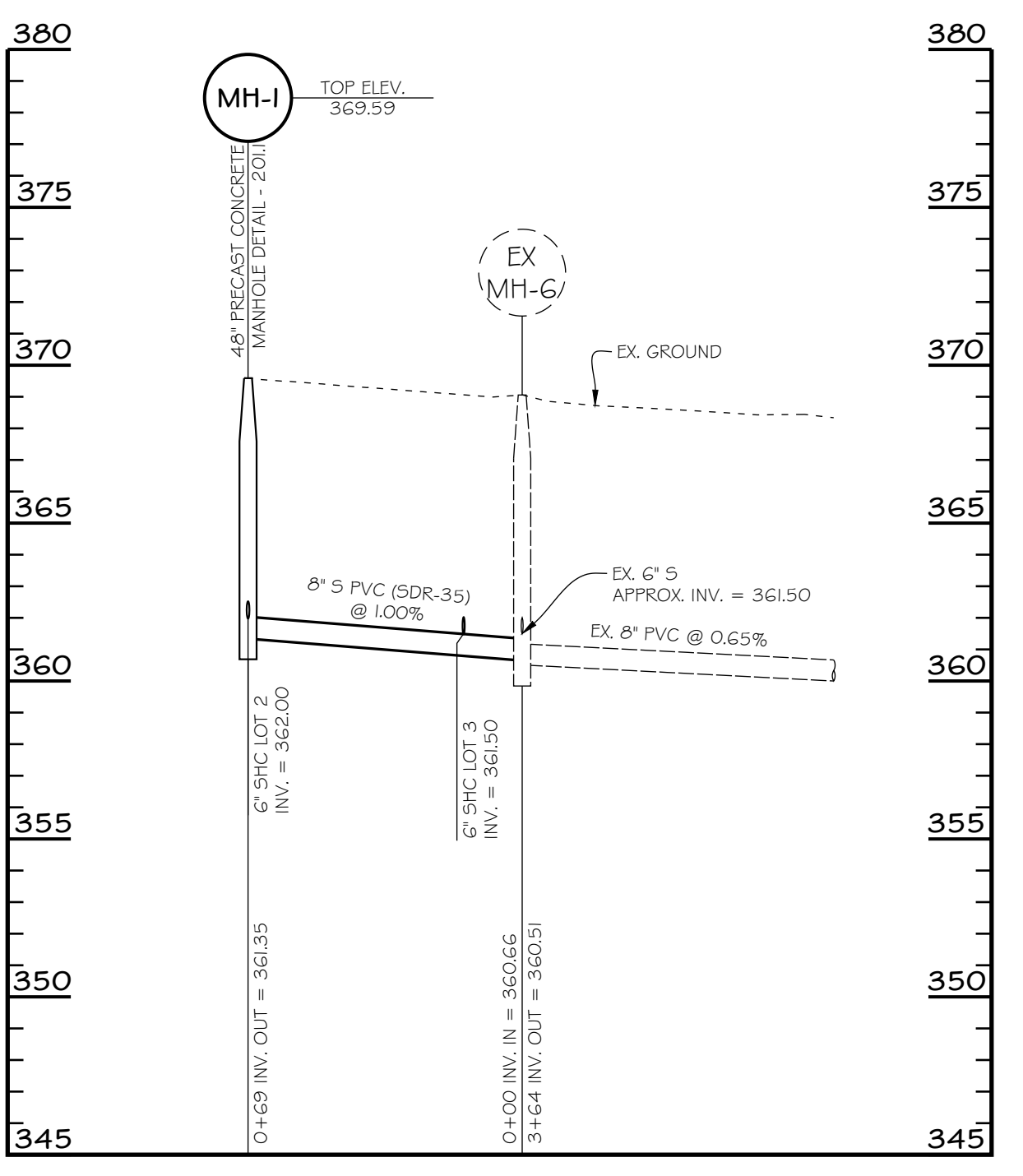
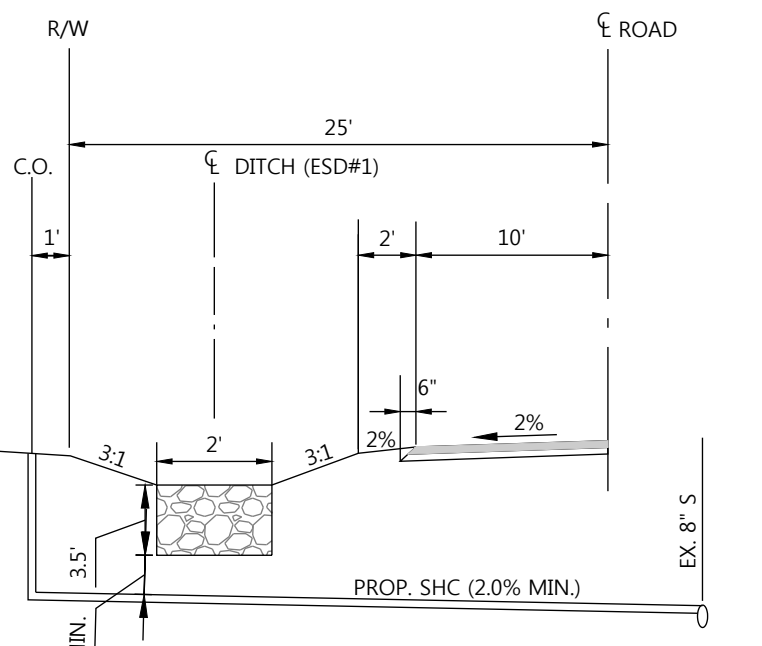
SEWER SERVICE CONNECTIONS										AS-BUILT INFORMATION					
LOT #	STREET NAME	LOWEST FLOOR ELEVATION	GRADE AT CLEANOUT	CLEANOUT INVERT ELEVATION	SHC LENGTH	RISER LENGTH	STATION	U/S MH	D/S MH	LENGTH	DEPTH	REMARKS			
1	RUNNYMEADE DRIVE	*369.78	370.60	*366.69	61	0	NA								
2	RUNNYMEADE DRIVE	366.13	364.37	362.76	38	0	MHI								
3	RUNNYMEADE DRIVE	364.83	363.68	362.16	33	0	STA. O+15								
4	RUNNYMEADE DRIVE	359.55	358.36	356.74	46	0	EX. MH-8								
5	RUNNYMEADE DRIVE	358.46	357.27	355.63	30	0	STA. I+09								
6R	RUNNYMEADE DRIVE	*361.54	364.60	*358.17	44	0	NA								

* FLOOR ELEVATION IS BASED ON ASSUMED INVERT ELEVATION AT THE CLEANOUT. CONTRACTOR SHALL TEST PIT TO CONFIRM ELEVATION OF EXISTING SHC.



REQUIREMENTS FOR TELEVISIONING SANITARY SEWER LINES

- ALL PUBLIC GRAVITY SEWER LINES AND LATERALS SHALL BE TELEVIEWED AS A CONDITION OF INSPECTION IN ORDER TO OBTAIN CONDITIONAL/OPERATIONAL ACCEPTANCE. TELEVISIONING SHALL BE DONE IN ACCORDANCE WITH SECTION 257L.11A.2 OF STANDARD SPECIFICATIONS. TELEVISIONING FIRMS MUST BE SUBMITTED AND APPROVED BY THE DWSU PRIOR TO THEIR USE. THE DVD MUST BE VIEWED AND APPROVED BY THE DWSU PRIOR TO ACCEPTANCE OF THE SEWER MAINS AND LATERALS AND PLACING ANY PORTION OF THE SYSTEM INTO SERVICE.
- THE FOLLOWING PROCEDURES MUST BE FOLLOWED:
- ALL SEWER MAINS AND LATERALS FOR THE PROJECT MUST BE INSTALLED, BACKFILLED AND COMPACTION TESTS REVIEWED AND APPROVED BY THE DWSU PRIOR TO TELEVISIONING.
 - COMPLETE ALL PRESSURE TESTS, DEFLECTION TESTS AND MH VACUUM TESTS PRIOR TO TELEVISIONING.
 - ALL MAINS AND LATERALS SHALL BE FLUSHED WITH WATER, DYED RED, IN A MANNER SUFFICIENT TO REMOVE ALL DIRT AND DEBRIS AND PROVIDE ENOUGH WATER TO DISCERN ANY STANDING WATER. FLUSHING WILL TAKE PLACE NO EARLIER THAN 48 HR. PRIOR TO TELEVISIONING AND WILL BE WITNESSED BY THE DWSU INSPECTOR. CONTRACTOR SHALL ENSURE THAT NO CONSTRUCTION DEBRIS IS FLUSHED INTO THE RECEIVING SEWER. STAND PIPES TO LATERALS WILL BE LABELED WITH LOT #, ETC. WITH A BOLD, BLACK, PERMANENT MARKER BY THE CONTRACTOR AND VERIFIED BY THE INSPECTOR AS CORRECT. PAN THE LOT # WITH THE CAMERA PRIOR TO INSERTING CAMERA INTO THE CLEANOUT STACK.
 - PROJECT NAME, NUMBER, DATE, TIME, TYPE, AND SIZE OF PIPE AND MH #+MH # OR LOT # WILL BE DISPLAYED ON THE SCREEN AT ALL TIMES AND MUST NOT OBSCURE THE VIEW OF THE SEWER PIPE. THERE MUST BE A RUNNING COUNT OF THE LINEAR FOOTAGE SHOWN ON THE SCREEN.
 - AFTER TELEVISIONING AND PRIOR TO CONDITIONAL ACCEPTANCE, IF THE DWSU DETERMINES THAT ANY INFILTRATION, DEBRIS OR DAMAGE MAY HAVE OCCURRED TO ANY MAIN OR LATERAL, THESE MUST BE FLUSHED AND TELEVIEWED AGAIN.
 - VIDEO OF ALL LINES AND LATERALS MUST BE PLACED ON ONE DVD IF SPACE PERMITS (IF NOT, PLACE MAINS ON ONE DVD AND LATERALS ON ANOTHER) IN A FORMAT THAT CAN BE VIEWED ON WINDOWS MEDIA PLAYER OR REAL PLAYER. A WRITTEN REPORT MUST BE PROVIDED FROM THE TELEVISIONING COMPANY CONTAINING A LOG NOTING THE INFORMATION IN ITEM 5 ABOVE, THE GENERAL CONDITION OF THE LINE/LATERAL AND ANY SPECIFIC FEATURES. THE MAIN LINES AND LATERALS LOG MUST BE KEPT IN THE SAME SEQUENCE AS SHOWN ON THE DVD.
 - TOLERANCES:
 - NO DIRT, STONE OR OTHER DEBRIS PERMITTED IN MAINS OR LATERALS.
 - NO STANDING WATER IN LATERALS.
 - THE DECISION TO ALLOW ANY STANDING WATER IN MAINS WILL BE DETERMINED BY THE DWSU BASED ON PIPE DIAMETER, % SLOPE AND/OR OTHER FACTORS AS DETERMINED BY THE DWSU.



BENCHMARK INFORMATION

NO.	TYPE	NORTHING	EASTING	ELEV.
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2	REBAR WCAP	653,822.49	1193,073.30	364.80
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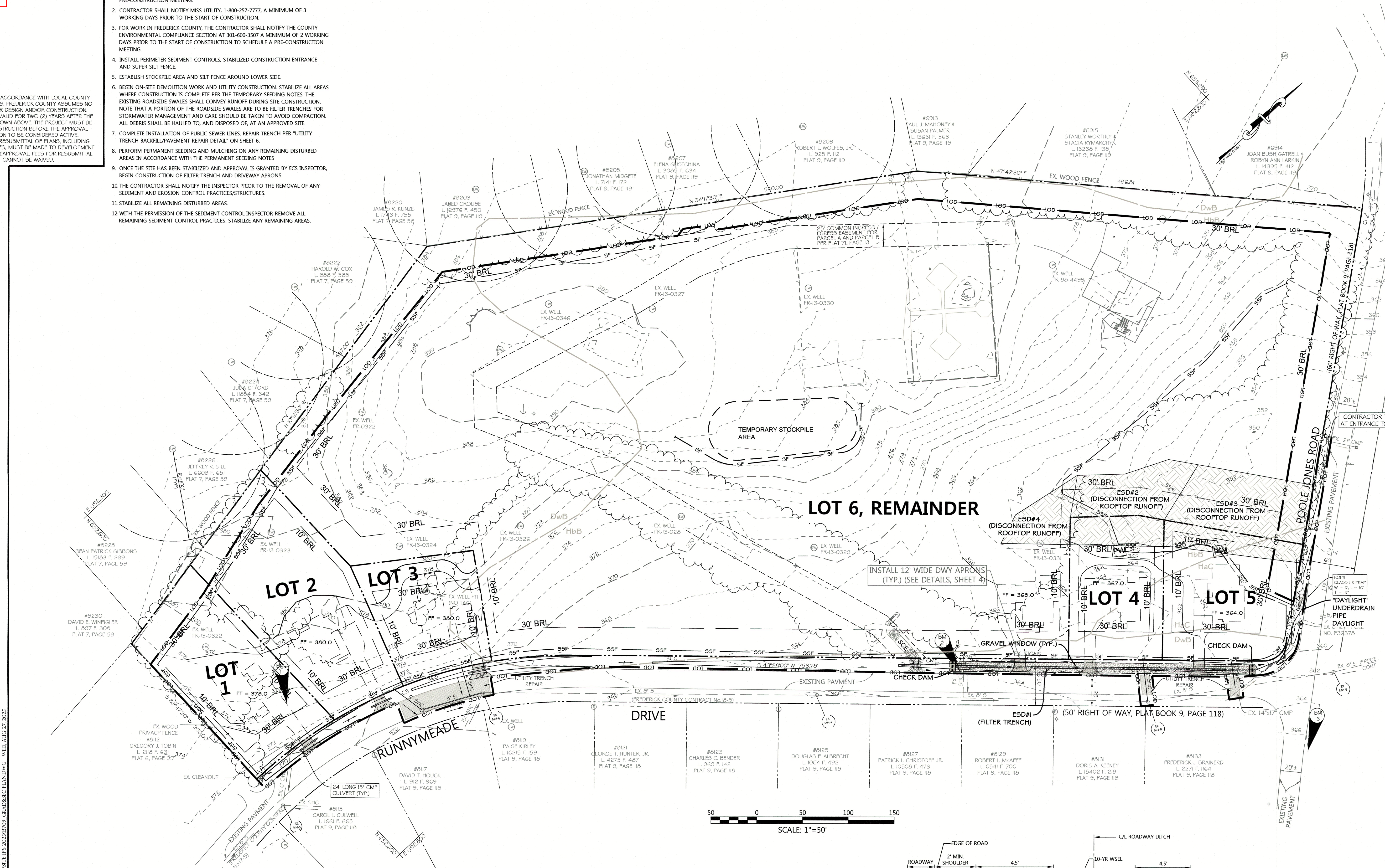
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 DESIGNED: DSM
 CHECKED BY: MSC
 PROJECT NO.: 13709
 DRAWING: 5 of 8
 08/27/2025

- SEQUENCE OF CONSTRUCTION**
1. AN MDE NOI SHALL BE OBTAINED AND COPY FURNISHED TO SITE INSPECTOR AT THE PRE-CONSTRUCTION MEETING.
 2. CONTRACTOR SHALL NOTIFY MISS UTILITY, 1-800-257-7777, A MINIMUM OF 3 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION.
 3. FOR WORK IN FREDERICK COUNTY, THE CONTRACTOR SHALL NOTIFY THE COUNTY ENVIRONMENTAL COMPLIANCE SECTION AT 301-600-3507 A MINIMUM OF 2 WORKING DAYS PRIOR TO THE START OF CONSTRUCTION TO SCHEDULE A PRE-CONSTRUCTION MEETING.
 4. INSTALL PERIMETER SEDIMENT CONTROLS, STABILIZED CONSTRUCTION ENTRANCE AND SUPER SILT FENCE.
 5. ESTABLISH STOCKPILE AREA AND SILT FENCE AROUND LOWER SIDE.
 6. BEGIN ON-SITE DEMOLITION WORK AND UTILITY CONSTRUCTION. STABILIZE ALL AREAS WHERE CONSTRUCTION IS COMPLETE PER THE TEMPORARY SEEDING NOTES. THE EXISTING ROADSIDE SWALES SHALL CONVEY RUNOFF DURING SITE CONSTRUCTION. NOTE THAT A PORTION OF THE ROADSIDE SWALES ARE TO BE FILTER TRENCHES FOR STORMWATER MANAGEMENT AND CARE SHOULD BE TAKEN TO AVOID COMPACTION. ALL DEBRIS SHALL BE HAULED TO, AND DISPOSED OF, AT AN APPROVED SITE.
 7. COMPLETE INSTALLATION OF PUBLIC SEWER LINES. REPAIR TRENCH PER "UTILITY TRENCH BACKFILL/PAVEMENT REPAIR DETAIL" ON SHEET 6.
 8. PERFORM PERMANENT SEEDING AND MULCHING ON ANY REMAINING DISTURBED AREAS IN ACCORDANCE WITH THE PERMANENT SEEDING NOTES.
 9. ONCE THE SITE HAS BEEN STABILIZED AND APPROVAL IS GRANTED BY ECS INSPECTOR, BEGIN CONSTRUCTION OF FILTER TRENCH AND DRIVEWAY APRONS.
 10. THE CONTRACTOR SHALL NOTIFY THE INSPECTOR PRIOR TO THE REMOVAL OF ANY SEDIMENT AND EROSION CONTROL PRACTICES/STRUCTURES.
 11. STABILIZE ALL REMAINING DISTURBED AREAS.
 12. WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE ALL REMAINING SEDIMENT CONTROL PRACTICES. STABILIZE ANY REMAINING AREAS.

REVIEWED IN ACCORDANCE WITH LOCAL COUNTY REQUIREMENTS. FREDERICK COUNTY ASSUMES NO LIABILITY FOR DESIGN AND/OR CONSTRUCTION. APPROVAL IS VALID FOR TWO (2) YEARS AFTER THE LAST DATE SHOWN ABOVE. THE PROJECT MUST BE UNDER CONSTRUCTION BEFORE THE APPROVAL EXPIRATION TO BE CONSIDERED ACTIVE. OTHERWISE, RESUBMITTAL OF PLANS, INCLUDING APPLICABLE FEES, MUST BE MADE TO DEVELOPMENT REVIEW FOR REAPPROVAL. FEES FOR RESUBMITTAL CANNOT BE WAIVED.



CALL "MISS UTILITY" AT 1-800-257-7777 FOR UTILITY LOCATIONS AT LEAST 5 DAYS PRIOR TO BEGINNING CONSTRUCTION.

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. 42,429, EXPIRATION DATE: 06-06-2026

LINGG PROPERTY CONSULTING
 206 West Patrick Street, Suite 201
 Frederick, Maryland 21701
 www.linggpropertyconsulting.com
 (301) 664-2121
 (301) 664-2121

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DW
 DAFT MCCLUNE WALKER INC
 8 EAST SECOND STREET SUITE 201 FREDERICK, MD 21701
 P: 301 696 9040 F: 301 696 9041 WWW.DMW.COM

GRADING, SEDIMENT & EROSION CONTROL PLAN
 IMPROVEMENT PLANS for
ENCLAVE AT CLOVER HILL
 SITUATED ON RUNNYMEADE DRIVE
 TUSCARORA ELECTION DISTRICT NO. 21
 FREDERICK COUNTY, MD

OWNER/DEVELOPER:
 BETTER WORLD BUILDERS, LLC
 2077 SOMERVILLE ROAD, SUITE 206 ANNAPOLIS,
 MD 21401
 410-266-5100
 ATTN: TIM HOGAN

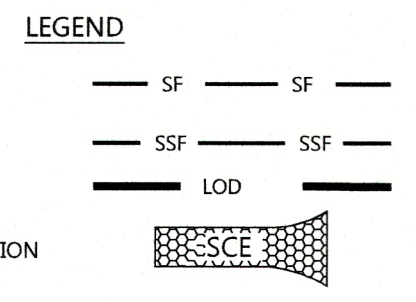
DATE	BY	REVISIONS
06/11/2025	DSM	PER COUNTY # 5CD COMMENTS
08/01/2025	DSM	PER COUNTY # 5CD COMMENTS
08/27/2025	DSM	PER COUNTY COMMENTS

SEAL
 STATE OF MARYLAND
 PROFESSIONAL ENGINEER
 TIM HOGAN
 LICENSE NO. 42,429
 EXPIRES 06-06-2026

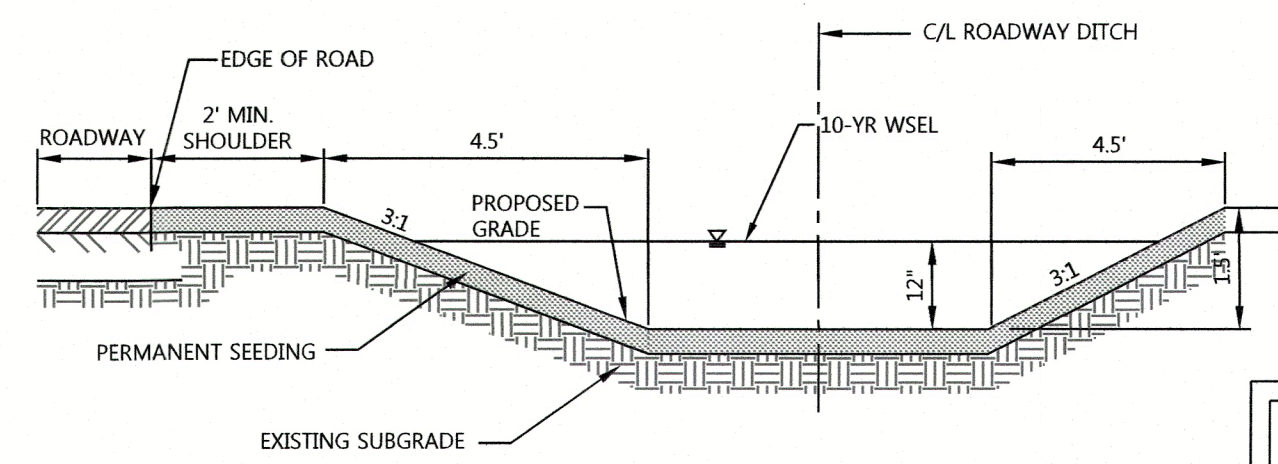
INITIAL SUB: 03/01/2025
 SCALE: 1" = 50'
 DRAWN: JNS
 DESIGNED: DSM
 CHECKED BY: MSC
 PROJECT NO.: 13709
 DRAWING: 7 of 8

BENCHMARK INFORMATION

NO.	TYPE	NORTHING	EASTING	ELEV.
1	REBAR WCAP	652,620.09	1192,596.21	374.36
2	REBAR WCAP	653,162.49	1193,073.30	364.80
3	REBAR WCAP	653,401.47	1193,392.32	365.95
4	REBAR WCAP	653,842.84	1193,055.49	367.65



- FREDERICK S.C.D. SEDIMENT & EROSION CONTROL NOTES**
1. ALL EROSION/SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED IN CONTINUOUS COMPLIANCE WITH THE LATEST VERSION OF "THE MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL".
 2. ALL UTILITIES, SUCH AS: STORM DRAIN, PUBLIC WATER, SANITARY SEWER, ELECTRIC POWER, TELEPHONE, CABLE AND GAS LINES, THAT ARE NOT IN PAVED AREAS AND ARE NOT UNDERGOING ACTIVE GRADING SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 3 DAYS OF INITIAL DISTURBANCE.
 3. THE OWNER/DEVELOPER OR THEIR DESIGNATE IS RESPONSIBLE FOR CONDUCTING ROUTINE INSPECTIONS AND REQUIRED MAINTENANCE. THE SITE AND CONTROLS SHOULD BE INSPECTED WEEKLY AND THE NEXT DAY AFTER EACH RAIN EVENT. ANY ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN A SUITABLE AREA AND SHALL BE TEMPORARILY OR PERMANENTLY STABILIZED.
- **ANY PROJECT THAT HAS A STATE ISSUED N.O.I. PERMIT MUST DOCUMENT EACH INSPECTION AND MAINTAIN AN INSPECTION LOG (PLEASE SEE THE N.O.I. FOR DETAILS).**



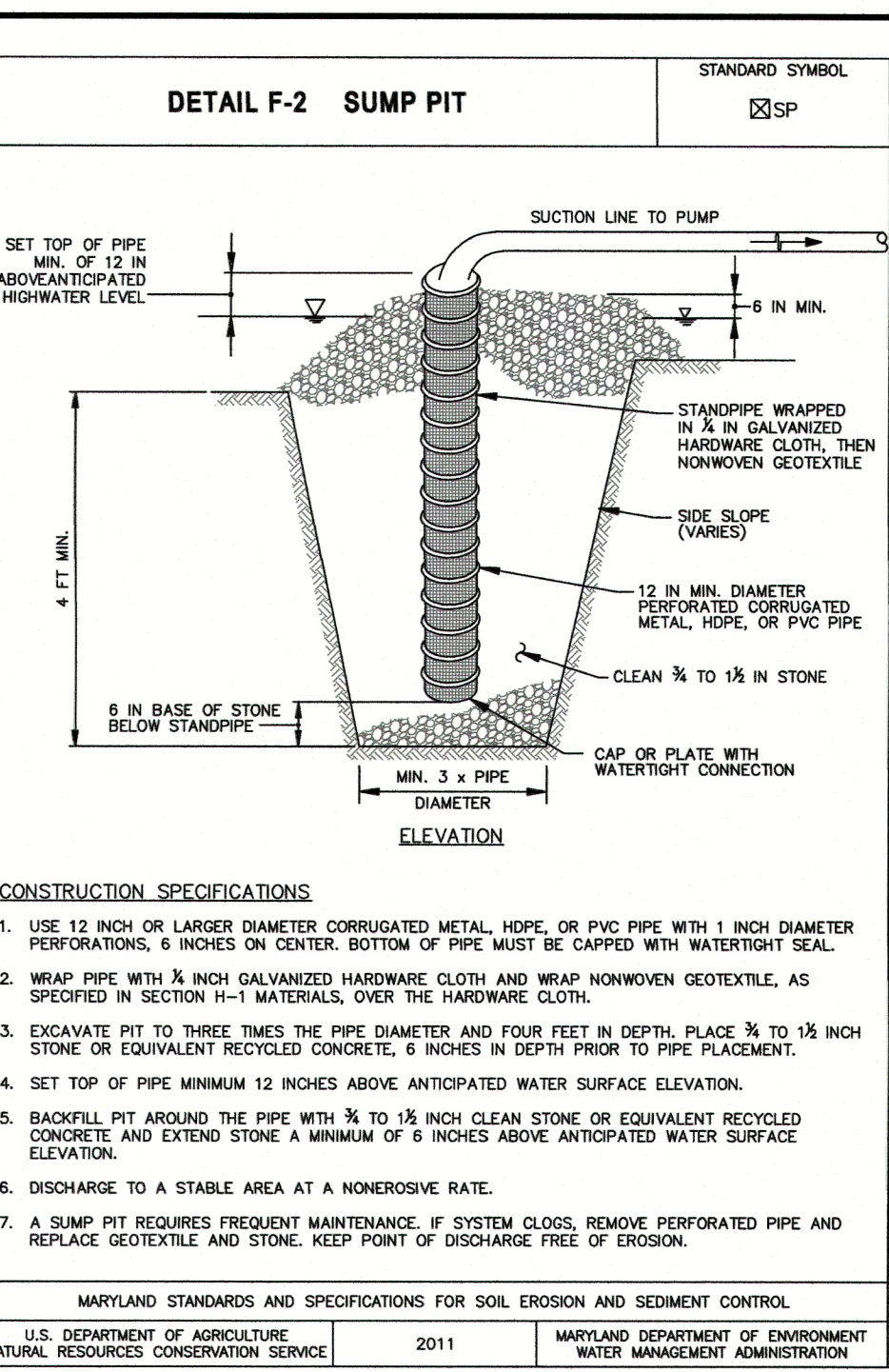
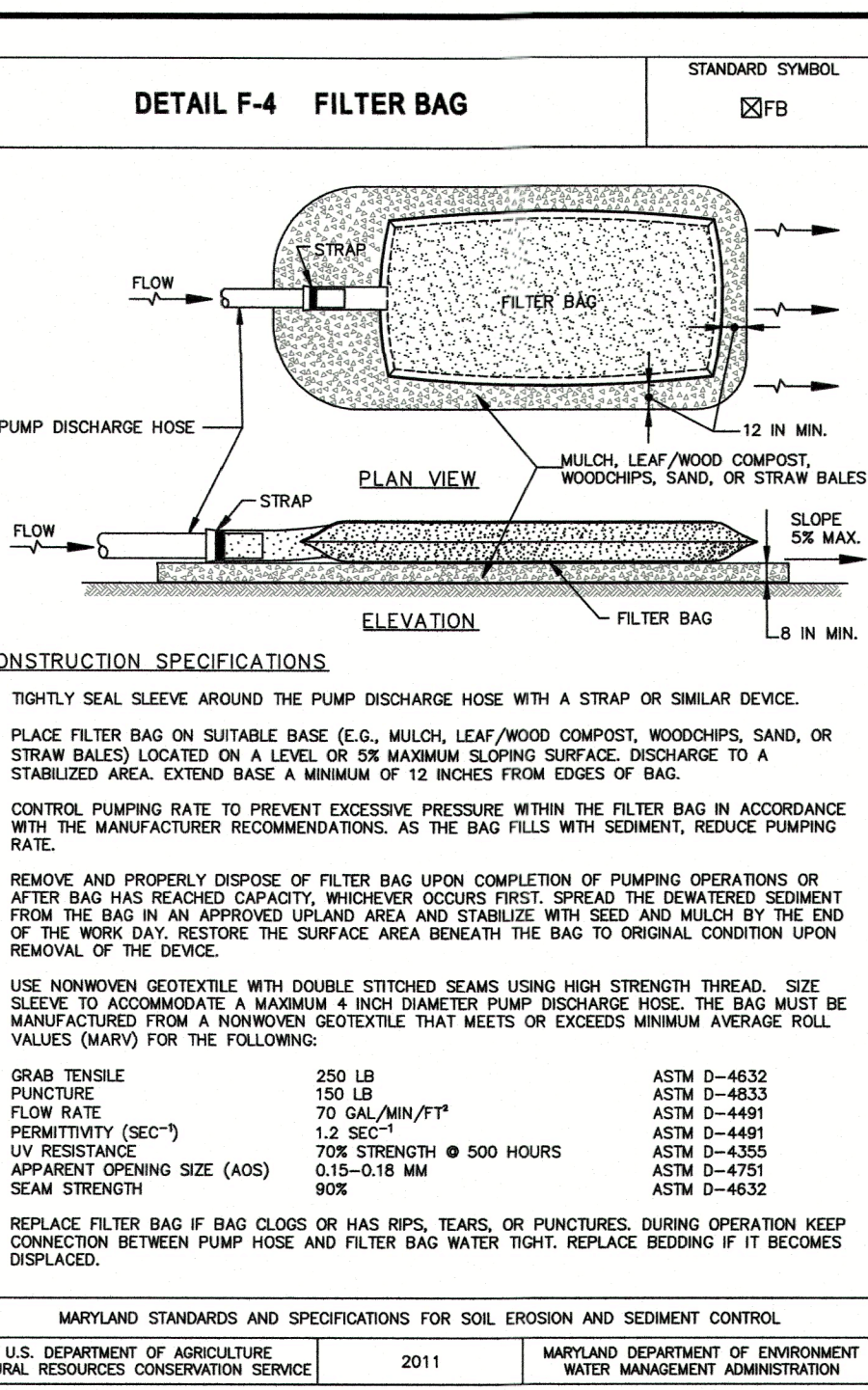
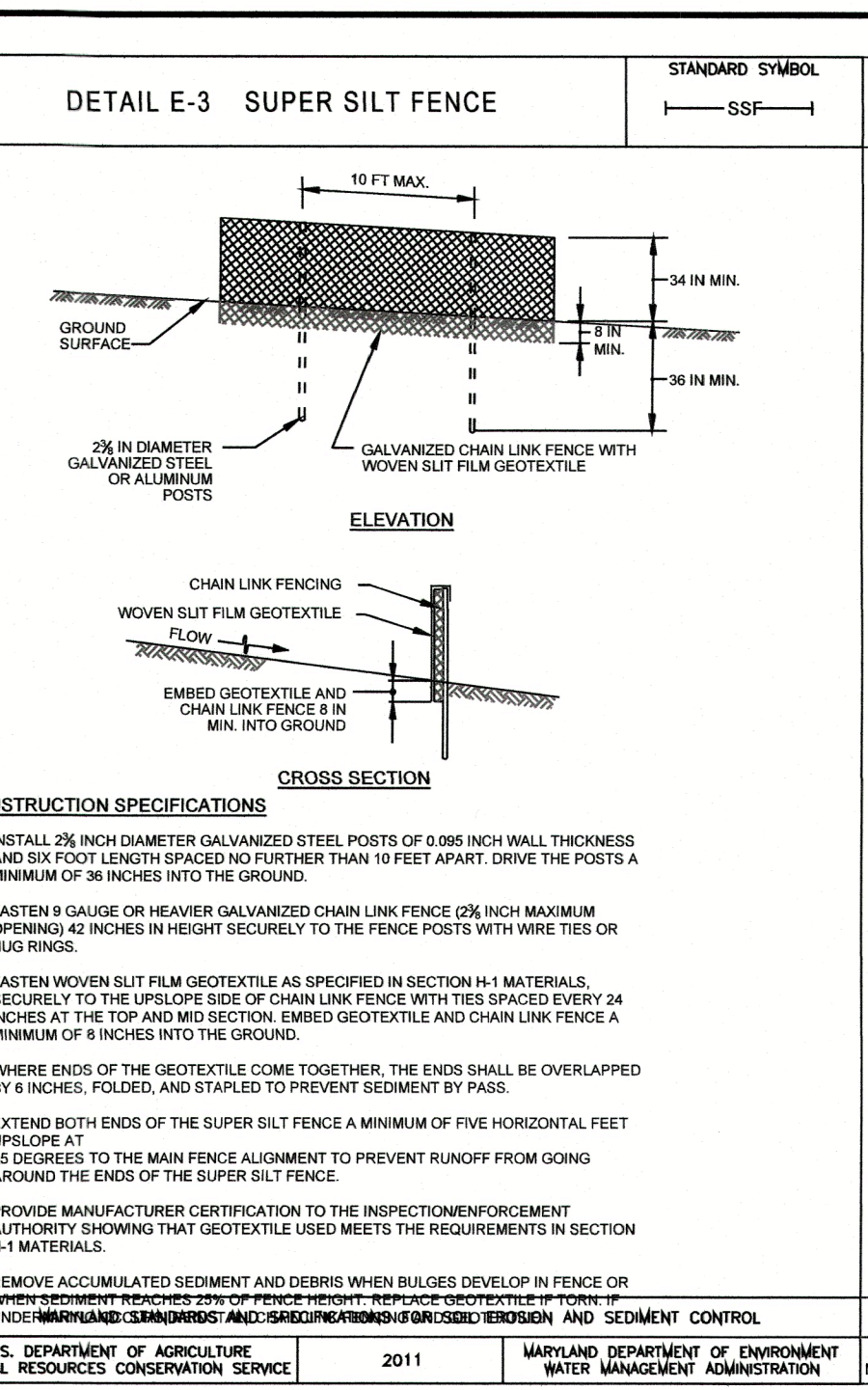
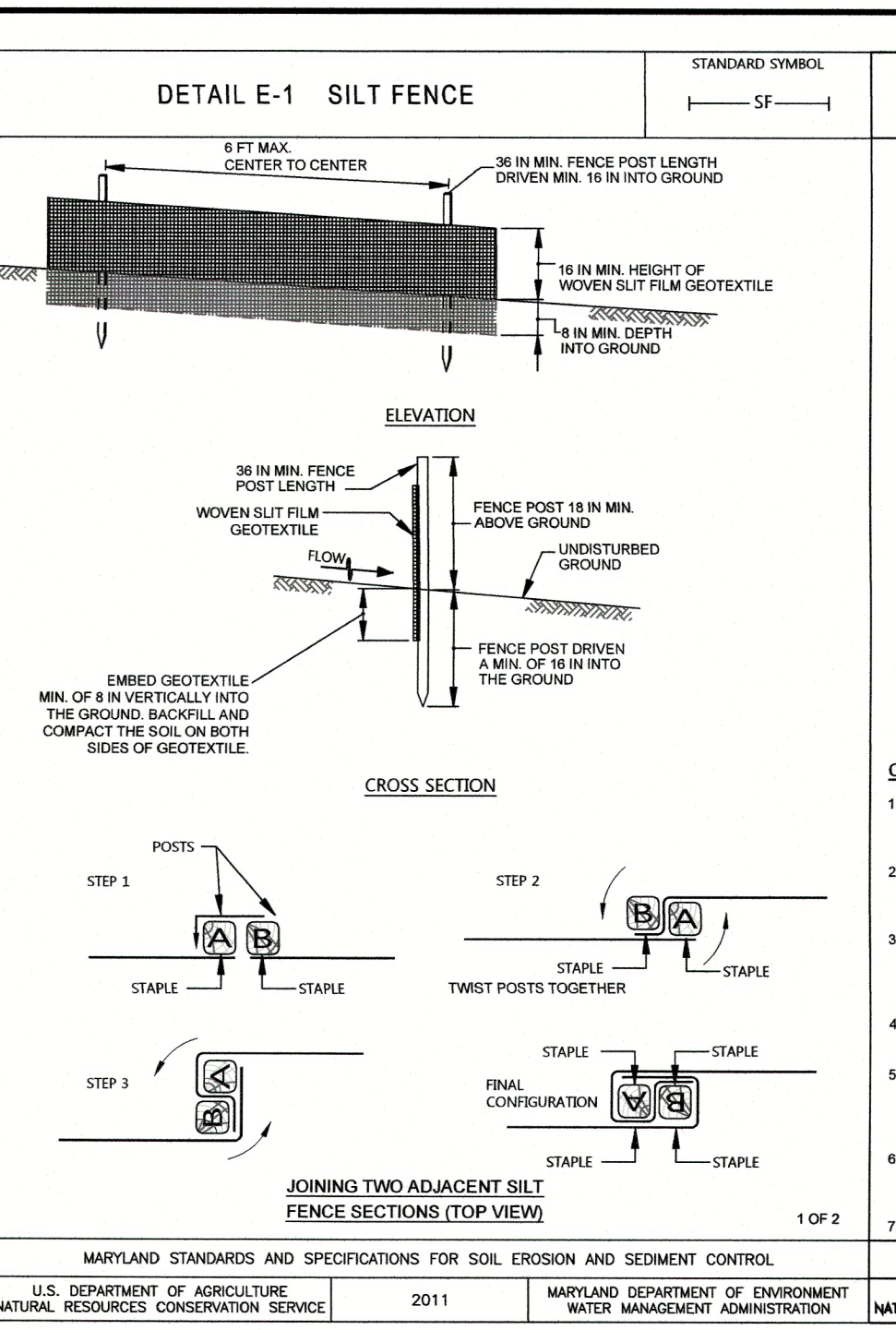
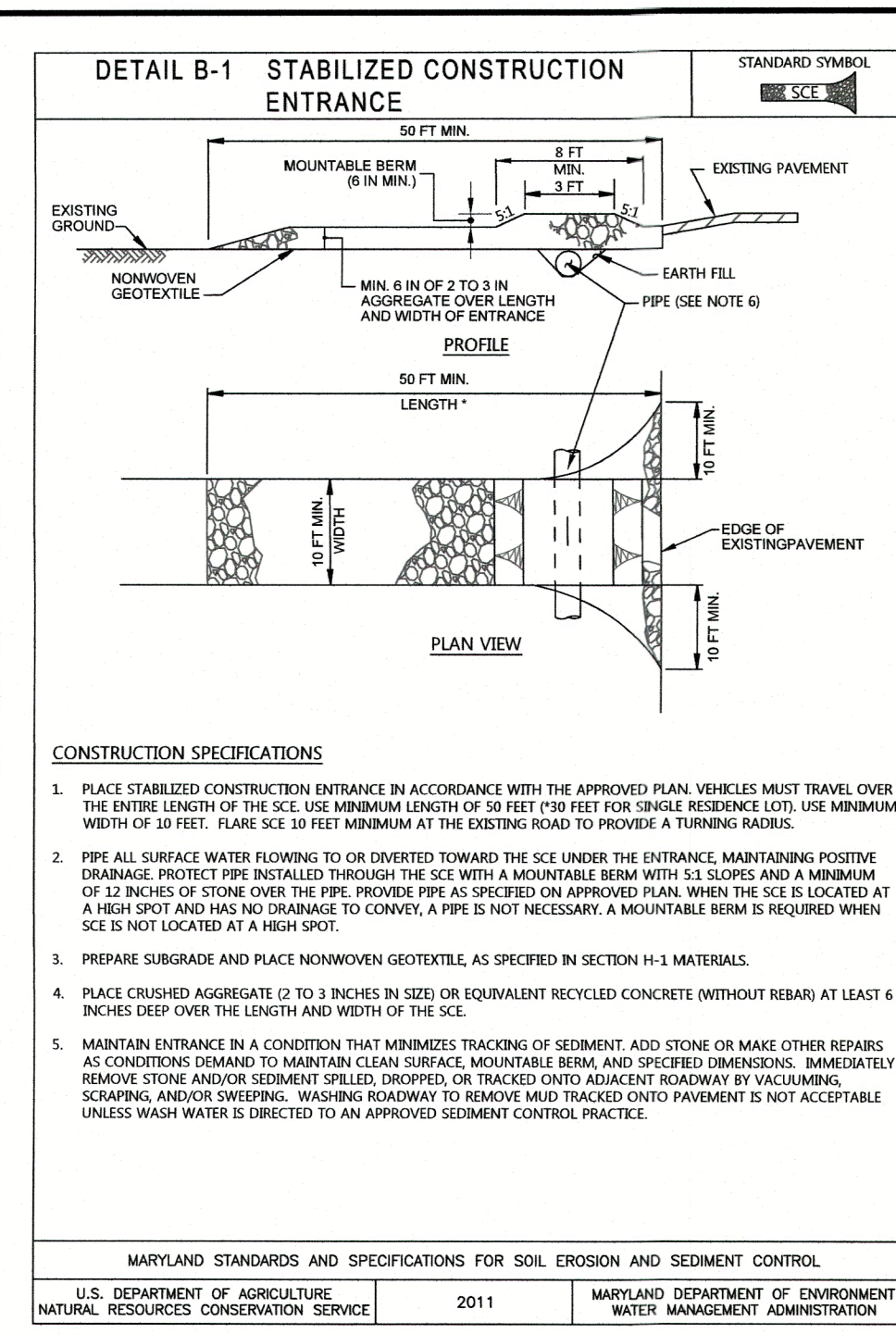
FREDERICK COUNTY SOIL CONSERVATION DISTRICT
 Erosion and Sediment Control Plan Approval

BY: *[Signature]*
 District Manager or Designee

DATE: 9/6/2025
 Plan is valid for 2 years from date of approval

SCD approval for sediment and erosion control is in accordance with the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control and is contingent upon issuance of all applicable regulatory permits.

REVIEWED IN ACCORDANCE WITH LOCAL COUNTY REQUIREMENTS. FREDERICK COUNTY ASSUMES NO LIABILITY FOR DESIGN AND/OR CONSTRUCTION. APPROVAL IS VALID FOR TWO (2) YEARS AFTER THE LAST DATE SHOWN ABOVE. THE PROJECT MUST BE UNDER CONSTRUCTION BEFORE THE APPROVAL EXPIRES TO BE CONSIDERED ACTIVE. OTHERWISE, RESUBMITTAL OF PLANS, INCLUDING APPLICABLE FEES, MUST BE MADE TO DEVELOPING REVIEW FOR REAPPROVAL. FEES FOR RESUBMITTAL CANNOT BE WAIVED.



SEDIMENT CONTROL/STORMWATER MANAGEMENT REQUIRED INSPECTIONS

YOU MUST NOTIFY THE FREDERICK COUNTY SEDIMENT CONTROL INSPECTOR AT 301-696-9040 BEFORE 9:00 AM 24 HOURS PRIOR TO THE REQUIRED INSPECTION. FAILURE TO NOTIFY THIS OFFICE WILL RESULT IN A STOP WORK ORDER OR OTHER PENALTIES AS OUTLINED IN FREDERICK COUNTY CODES.

***** NOTICE *****

THIS LIST IS FOR SEQUENCE OF CONSTRUCTION ONLY. THIS OFFICE ASSUMES NO RESPONSIBILITY OF LIABILITY FOR IMPROPER INSTALLATION OR ANY ITEMS ON THIS CHECKLIST. THIS OFFICE RECOMMENDS THAT A PROFESSIONAL ENGINEER BE PRESENT FOR EACH OF THE REQUIRED INSPECTIONS.

TYPE OF INSPECTIONS:	COMMENTS/INITIALS
1) PRE-CONSTRUCTION MEETING	
2) COMPLETION OF SEDIMENT CONTROL INSTALLATION (IF USING A BASIN SEE #6 BELOW)	
3) PRIOR TO MODIFICATION OR REMOVAL OF SED. CONTROL	
4) INFILTRATION SYSTEMS	
5) OPEN CHANNEL FLOW ATTENUATION	
A. SITE READINESS PER SEQUENCE OF CONSTRUCTION	
B. INFILTRATION AREA PROTECTION FROM SEDIMENTATION	
C. DIMENSIONS (PRIOR TO INSTALLATION)	
D. FILTERING MATERIAL (TYPE/DEPTH)	
E. PLACEMENT OF FILLER MATERIAL	
F. SIZE, PLACEMENT, TYPE OF PIPING (IF APPLICABLE)	
G. OBSERVATION WELL	
H. COVER/STABILIZATION	
A. SITE READINESS PER SEQUENCE OF CONSTRUCTION	
B. CROSS SECTION CONFORMANCE	
C. LINER MATERIAL (TYPE/SIZE)	
D. STABILIZATION	

GENERAL SEDIMENT CONTROL NOTES

- THE PERMITTEE SHALL NOTIFY THE LOCAL SOIL CONSERVATION SERVICE (SCS) AND FREDERICK COUNTY ENVIRONMENTAL COMPLIANCE SECTION (ECS) AND/OR MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) FORTY-EIGHT (48) HOURS PRIOR TO COMMENCING ANY LAND DISTURBING ACTIVITY UNLESS WAIVED BY SCS. SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN THEMSELVES, AND/OR THEIR ASSIGNS/REPRESENTATIVES, AND AN AUTHORIZED REPRESENTATIVE OF SCS (I.E. CITY, COUNTY OR STATE SEDIMENT CONTROL INSPECTOR) AS OUTLINED IN THE APPROVED SPECIFIC OF CONSTRUCTION.
- THE PERMITTEE SHALL OBTAIN INSPECTION AND APPROVAL FROM SCS/DPW AT THE FOLLOWING POINTS:
 - AT THE REQUIRED PRE-CONSTRUCTION MEETING.
 - FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRIOR TO ANY OTHER LAND DISTURBING ACTIVITY.
 - DURING THE INSTALLATION OF A SEDIMENT BASIN OR STORMWATER MANAGEMENT STRUCTURE AT THE REQUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION IS MANDATORY.
 - PRIOR TO THE REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURES.
- THE PERMITTEE SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE. SHALL HAVE THEM INSPECTED AND APPROVED BY THE DPW PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCE. SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURES WITHOUT PRIOR PERMISSION FROM THE DPW.
- THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVELLED PUBLIC THOROUGHFARES. ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARES SHALL BE REMOVED IMMEDIATELY.
- THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINUOUSLY, IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED WITH THE PRIOR PERMISSION OF THE DPW.
- PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE PERMITTEE SHALL STABILIZE ALL CONTRIBUTORY DISTURBED AREAS USING SOD OR AN APPROVED PERMANENT SEED MIXTURE WITH MULCH AND AMENDMENTS AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHERE THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE.
- THE SITE PERMIT, WORK, MATERIALS, APPROVED SC2M PLANS AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF FREDERICK COUNTY.
- SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO LOWER THE WATER DOWNSLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED. AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. MECHANICAL DEVICES MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.
- PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITH SOD OR SEED WITH APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILIZATION MEASURES.
- TEMPORARY SEDIMENT CONTROL DEVICES SHALL BE REMOVED WITH THE PERMISSION OF THE DPW, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.
- NO PERMANENT CUT OR FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS. A SLOPE GRADIENT OF UP TO 3:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GRASS COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENTS STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.
- THE PERMITTEE SHALL INSTALL A SPLASH-BLOCK AT THE BOTTOM OF EACH DOWNSPOUT UNLESS THE DOWNSPOUT IS CONNECTED WITH A DRAIN LINE TO AN ACCEPTABLE OUTLET.
- FOR FINISHED GRADING, THE PERMITTEE SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO: (1) PREVENT WATER FROM STANDING ON THE SURFACE OF LAWNS MORE THAN TWENTY (20) HOURS AFTER THE END OF A RAINFALL, EXCEPT IN DESIGNATED DRAINAGE COURSES AND SWALE FLOW AREAS WHICH MAY DRAIN AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL, AND (2) PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDING FOUNDATIONS OR OPENINGS.
- SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A BUILDING THAT EXISTS OR IS UNDER CONSTRUCTION. NO BUILDING MAY BE CONSTRUCTED WITHIN 20 FEET OF A SEDIMENT TRAP OR BASIN.
- ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHMENT.
- THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, IF DEEMED NECESSARY.
- ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND.
- VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. REFER TO SECTION F FOR THE FOLLOWING WHEN APPLYING: TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SODDING, AND GROUND COVERS.
- TEMPORARY SEDIMENT TRAPS SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO A POINT ONE-HALF (1/2) THE DEPTH BETWEEN OUTLET CREST AND THE BOTTOM OF THE TRAP, OR AS DIRECTED BY THE INSPECTOR.
- SEDIMENT REMOVED FROM TRAPS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A FLOODPLAIN.
- ALL SEDIMENT BASINS AND TRAPS MUST BE SURROUNDED WITH A WELDED WIRE OR APPROVED EQUAL SAFETY FENCE. THE FENCE MUST BE AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FURTHER APART THAN EIGHT (8) FEET, HAVE MESH OPENINGS NO GREATER THAN 2 INCHES IN WIDTH AND 4 INCHES IN HEIGHT WITH A MINIMUM OF 14 GAUGE WIRE OR EQUAL. SAFETY FENCE MUST BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.
- NO EXCAVATION IN THE AREA OF EXISTING UTILITIES IS PERMITTED UNLESS THEIR LOCATION HAS BEEN DETERMINED. CALL "MISS UTILITY" AT 1-800-257-7777 FORTY-EIGHT (48) HOURS PRIOR TO THE START OF WORK.
- OFF SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL FROM SCS.

TEMPORARY STABILIZATION NOTES

- STANDARDS:** TEMPORARY STABILIZATION SHALL CONFORM TO ALL REQUIREMENTS OF THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- DEFINITION:** TO STABILIZE DISTURBED SOILS WITH VEGETATION FOR UP TO 6 MONTHS.
- PURPOSE:** TO USE FAST GROWING VEGETATION THAT PROVIDES COVER ON DISTURBED SOILS.
- CRITERIA**
- SELECT ONE OR MORE OF THE SPECIES OR SEED MIXTURES LISTED IN TABLE B.1 (THIS SHEET) FOR THE APPROPRIATE PLANT HARDINESS ZONE (FROM FIGURE B.3). USE A FERTILIZER RATE (10-20-20) OF 10 LB/1000 SF AND A LIME RATE OF 90 LB/1000 SF.
 - FOR SITES HAVING SOIL TESTS PERFORMED, USE AND SHOW THE RECOMMENDED RATES BY THE TESTING AGENCY. SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING.
 - WHEN STABILIZATION IS REQUIRED OUTSIDE OF A SEEDING SEASON, APPLY SEED AND MULCH OR STRAW MULCH ALONE AS DESCRIBED IN SECTION B-4-3A.1.B AND MAINTAIN UNTIL THE NEXT SEEDING SEASON.
 - SOIL PREPARATION:
 - SEEDBED PREPARATION CONSISTS OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. AFTER THE SOIL IS LOOSENED, IT MUST NOT BE ROLLED OR DRAGGED SMOOTH BUT LEFT IN THE ROUGHENED CONDITION. SLOPES 3:1 OR FLATTER ARE TO BE TRACKED WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
 - APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
 - INCORPORATE LIME AND FERTILIZER INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
 - SEEDING:
 - ALL SEED MUST MEET THE REQUIREMENTS OF THE MARYLAND STATE SEED LAW. ALL SEED MUST BE SUBJECT TO RE-TESTING BY A RECOGNIZED SEED LABORATORY. ALL SEED USED MUST HAVE BEEN TESTED WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON ANY PROJECT. REFER TO TABLE B.4 REGARDING THE QUALITY OF SEED. SEED TAGS MUST BE AVAILABLE UPON REQUEST TO THE INSPECTOR TO VERIFY TYPE OF SEED AND SEEDING RATE.
 - MULCH ALONE MAY BE APPLIED BETWEEN THE FALL AND SPRING SEEDING DATES ONLY IF THE GROUND IS FROZEN. THE APPROPRIATE SEEDING MIXTURE MUST BE APPLIED WHEN THE GROUND THAWS.
 - 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. INOCULANTS MUST NOT BE USED LATER THAN THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANTS AS DIRECTED ON THE PACKAGE. USE FOUR TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING. NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL USED. TEMPERATURES ABOVE 75 TO 80 DEGREES FAHRENHEIT CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.
 - SOD OR SEED MUST NOT BE PLACED ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR CHEMICALS USED FOR WEED CONTROL UNTIL SUFFICIENT TIME HAS ELAPSED (14 DAYS MIN.) TO PERMIT DISSIPATION OF PHYTO-TOXIC MATERIALS.
 - MULCHING:
 - APPLY MULCH TO ALL SEEDING AREAS IMMEDIATELY AFTER SEEDING.
 - WHEN STRAW MULCH IS USED, SPREAD IT OVER ALL SEEDING AREAS AT THE RATE OF 2 TONS PER ACRE TO A UNIFORM LOOSE DEPTH OF 1 TO 2 INCHES. APPLY MULCH TO ACHIEVE A UNIFORM DISTRIBUTION AND DEPTH SO THAT THE SOIL SURFACE IS NOT EXPOSED. WHEN USING A MULCH ANCHORING TOOL, INCREASE THE APPLICATION RATE TO 2.5 TONS PER ACRE.
 - WOOD CELLULOSE FIBER USED AS MULCH MUST BE APPLIED AT A NET DRY WEIGHT OF 1500 POUNDS PER ACRE. MIX THE WOOD CELLULOSE FIBER WITH WATER TO ATTAIN A MIXTURE WITH A MAXIMUM OF 50 POUNDS OF WOOD CELLULOSE FIBER PER 100 GALLONS OF WATER.

- FOR UTILITY WORK ONLY OR FOR OFF-SITE UTILITY WORK**
- CAN NOT EXCEED 5,000 SQUARE FEET.
 - PLACE ALL EXCAVATED MATERIAL ON THE HIGH SIDE OF THE TRENCH.
 - ONLY DO AS MUCH WORK AS CAN BE COMPLETED IN ONE DAY SO BACKFILLING, FINAL GRADING, SEEDING AND MULCHING CAN OCCUR AT THE SAME PACE AS CONSTRUCTION.
 - ANY SEDIMENT CONTROL MEASURES DISTURBED BY CONSTRUCTION WILL BE REPAIRED THE SAME DAY.

- FOR SECONDARY UTILITY WORK**
- ALL DISTURBANCES FROM SECONDARY UTILITIES SUCH AS PHONE CABLE, ELECTRIC CABLE, TV, CABLE, ETC. WILL BE SUBCONTRACTOR'S RESPONSIBILITY TO BRING WORK AREA BACK TO GRADE LEVEL THAT WAS EXISTING AND SEED AND MULCH ANY DISTURBANCE FROM INSTALLATION OF LINES AND CONDUIT.
 - SUB CONTRACTORS WILL BE RESPONSIBLE FOR RE-INSTALLING OR REPAIRING ANY SILT FENCE OR SEDIMENT CONTROLS THAT WERE EXISTING TO MAINTAIN PROPER SEDIMENT CONTROL THAT MIGHT HAVE BEEN DAMAGED.

- STOCKPILE NOTES**
- ACCESS THE STOCKPILE AREA FROM THE UPGRADE SIDE.
 - 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.
 - 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.
 - ALL CONSTRUCTION DEBRIS SHALL BE DISPOSED OF AT AN APPROVED SITE.

- STANDARD STABILIZATION NOTE**
- FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
- THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
 - SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON PROJECT SITE NOT UNDER ACTIVE CONSTRUCTION.

PERMANENT STABILIZATION NOTES

- STANDARDS:** PERMANENT STABILIZATION SHALL CONFORM TO ALL REQUIREMENTS OF THE MOST CURRENT MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.
- 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.
- CRITERIA**
- SOIL PREPARATION:
 - A SOIL TEST IS REQUIRED FOR ANY EARTH DISTURBANCE OF 5 ACRES OR MORE. THE MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT ARE:
 - SOIL PH BETWEEN 6.0 AND 7.0.
 - SOLUBLE SALTS LESS THAN 500 PARTS PER MILLION (PPM).
 - SOIL CONTAINS LESS THAN 40 PERCENT CLAY BUT ENOUGH FINE GRAINED MATERIAL (GREATER THAN 30 PERCENT SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AN EXCEPTION: IF LOVEGRASS WILL BE PLANTED, THEN A SANDY SOIL (LESS THAN 30 PERCENT SILT PLUS CLAY) WOULD BE ACCEPTABLE.
 - SOIL CONTAINS 1.5 PERCENT MINIMUM ORGANIC MATTER BY WEIGHT.
 - SOIL CONTAINS SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
 - APPLICATION OF AMENDMENTS OR TOPSOIL IS REQUIRED IF ON-SITE SOILS DO NOT MEET THE ABOVE CONDITIONS.
 - GRADED AREAS MUST BE MAINTAINED IN A TRUE AND EVEN GRADE AS SPECIFIED ON THE APPROVED PLAN, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES.
 - APPLY SOIL AMENDMENTS AS SPECIFIED ON THE APPROVED PLAN OR AS INDICATED BY THE RESULTS OF A SOIL TEST.
 - MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS. MAKE LAWN AREAS TO SMOOTH THE SURFACE. REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. LOOSEN SURFACE SOIL BY DRAGGING WITH A HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION. TRACK SLOPES 3:1 OR FLATTER WITH TRACKED EQUIPMENT LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. LEAVE THE TOP 1 TO 3 INCHES OF SOIL LOOSE AND FRAGILE. SEEDBED LOOSENING MAY BE UNNECESSARY ON NEWLY DISTURBED AREAS.
 - SOD:
 - CLASS OF TURFGRASS SOD MUST BE MARYLAND STATE CERTIFIED. SOD LABELS MUST BE MADE AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
 - SOD MUST BE MACHINE CUT TO A UNIFORM SOIL THICKNESS OF 1/4 INCH. PLUS OR MINUS 1/4 INCH. AT THE TIME OF CUTTING, MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. BROKEN PADS AND TORN OR UNEVEN EDGES WILL NOT BE ACCEPTABLE.
 - STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10 PERCENT OF THE SECTION.
 - SOD MUST NOT BE HARVESTED OR TRANSPLANTED WHEN MOISTURE CONTENT (EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
 - SOD MUST BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.

CALL "MISS UTILITY" AT 1-800-257-7777 FOR UTILITY LOCATIONS AT LEAST 5 DAYS PRIOR TO BEGINNING CONSTRUCTION.

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. 42-229, EXPIRATION DATE: 06-06-2026

LINGG PROPERTY CONSULTING

2506 West Patrick Street, Suite 2A
Frederick, Maryland 21701
www.linggpropertyconsulting.com

Land Use Consulting
Subdivision Planning

Land Planning & Design
Zoning Enforcement Consultancy
Civil Engineering & Land Surveying Management

LinggPC@comcast.net
(301) 664-2121
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DMW

DAFT MCCUNE WALKER INC

8 EAST SECOND STREET, SUITE 201, FREDERICK, MD 21701
P: 301 696 9040 F: 301 696 9041 WWW.DMW.COM

SEDIMENT & EROSION CONTROL NOTES & DETAILS

IMPROVEMENT PLANS for ENCLAVE AT CLOVER HILL

SITUATED ON RUNNYMEADE DRIVE
TUSCARORA ELECTION DISTRICT NO. 21
FREDERICK COUNTY, MD

OWNER/DEVELOPER:
BETTER WORLD BUILDERS, LLC
2077 SOMERVILLE ROAD, SUITE 206 ANNAPOLIS, MD 21401
410-266-5100
ATTN: TIM HOGAN

DATE	BY	REVISIONS
06/11/2025	DSM	PER. COUNTY # 5CD COMMENTS
08/01/2025	DSM	PER. COUNTY # 5CD COMMENTS
08/27/2025	DSM	PER. COUNTY COMMENTS

SEAL

STATE OF MARYLAND
FREDERICK COUNTY
TIM HOGAN
Professional Engineer
No. 42-229
Exp. 06-06-2026

INITIAL SUB: 03/01/2025
SCALE: AS SHOWN
DRAWN: JNS
DESIGNED: DSM
CHECKED BY: MSC
PROJECT NO: 13709
DRAWING: 8 of 8

FREDERICK COUNTY SOIL CONSERVATION DISTRICT
Erosion and Sediment Control Plan Approval

BY:

District Manager or Designer

DATE: 9/5/2025
Plan is valid for 2 years from date of approval

SCD approval for sediment and erosion control is in accordance with the 2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control and is contingent upon issuance of all applicable regulatory permits.