GRADING PERMIT # 2025-0765

U.S. DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION ASSISTANCE NOTES

ND-CPA-6
11-97

LAND USER	ADDRESS	ACREAGE	LOCATION OF UNIT
GC MAINTENANCE BUILDING GC COMMISSIONERS	FRANCIS SANDERS DRIVE		

CURRENT CONSERVATION OBJECTIVES

DATE	ASSISTED BY (initials)	NOTES
10/21/2025	ILO	Reviewed plans, SWM for this site was designed under GP 2008-0139 & remains in sediment
		control until the park is built out. See Tri-347 for original calcs/plans.
11/7/2025	ILO	Finished review, ok for E&S review/approval
11/12/2025	JF	E&S Review fee letter sent to Jason King and Highland Engineering
11/22/2025	JF	Fee has not been paid. Contacted Highland. County should have paid. Highland to contact County.
11/27/2025	JF	Sent email to Tracy Kelley to follow up about E&S payment.
2/4/2026	JF	E&S Review fee paid in office by Garrett County Government
5,6 Feb 26	RS	Reviewed plan, major grading, stormwater structures and convanace system was done under a
		previous Grading Permit. It is noted that the SW structures 2 and 3 are still in sediment phase. Plan
		is ok for E&S approval
2/6/2026	SM	The erosion and sediment control plan is approved by the Garrett SCD

Garrett County Government
Permits and Inspections

Grading Permit Application

garrettcounty.org/permits

I hereby certify that I am

O the owner or contract vendee of the property

◉ the authorized agent of the owner of the property

on which the construction activity will be located and that:

a. the information given herein, including attachments, is correct and true to the best of my knowledge and;

b. I further certify that the construction activity herein authorized shall comply with all applicable Garrett County Codes.

Signature — Date: 10-15-2025

Owner must also sign permit if project is on leased land
I acknowledge and consent to the application for this building permit.

Signature — Date

Project Number
2025-0765

Applicant
Garrett County Facilities & Maintenance
Role

Jason King
Name

313 E Alder Strett, Room 105
Address

Oakland, MD 21550
City, State Zip

301-334-1928
Phone

jking@garrettcounty.org
Email

Project Location
Francis Sanders Drive
Address

Mountain Lake Park, MD 21550
City, State Zip

Type of Project
Grading and building

Present Use
fallow/grasses

Acreage
117.2

Total Cubic Yards Disturbed (cu yds)
1200

Area of Earth Disturbed (sq ft)

Total Impervious Area (sq ft)
39,659

Stormwater Management Required
no

Excavator

Name/Company

Phone

Email

Engineer/Surveyor
John Sanders/Highland Engineering
Name/Company

301-334-6185
Phone

johnsanders@highland-engineering.com
Email

Comments
This park is served by existing regional stormwater management basins.

203 South Fourth Street, Room 208, Oakland, MD 21550 — garrettcounty.org
permits@garrettcounty.org — Phone 301.334.7470 — Fax 301.334.7469

Garrett County Government
Permits and Inspections

Grading Permit Application

garrettcounty.org/permits

I hereby certify that I am

☐ the owner or contract vendee of the property
☑ the authorized agent of the owner of the property
on which the grading activity will be located and that:

1. the information given herein, including attachments, is correct and true to the best of my knowledge and;
2. I further certify that the construction activity herein authorized shall comply with all applicable Garrett County Codes.

see above

Signature Date

Project Number
2025-0765

Status
Application

Application Date
11/5/2025

Applicant
Board of Garrett County Commissioners
203 South Fourth Street
Oakland, MD 21550
Owner

Location
Francis Sanders Drive
Oakland, MD 21550

Project Property
Tax Parcel 1216014184
Map 0078, Parcel 0007, Grid 0012

Subdivision
-

Type of Project
Industrial

Present Use
Commercial

Acreage
117.21acres

Total Cubic Yards Disturbed
2400cu yds

Area of Earth Disturbed
42689sq ft

Total Impervious Area
39640sq ft

Stormwater Management Required
Yes

Impacted Watersheds
Headwaters Youghiogheny River Watershed

Permit Fees
$100.00

Excavator
Self

Engineer/Surveyor
Highland Engineering & Surveying
Work +1 301-334-6185

Building Contractor
-

For Internal Use

Permit Approvals

Erosion and Sediment Control Plan

Signature — Date: 2/6/2026

Stormwater Management Plan

Signature — Date: 2/13/2026

This Grading Permit expires two (2) years from the approval date. All active grading projects must have a current Grading Permit on project site. To renew the grading permit, apply two (2) months before expiration date to maintain current approval.

Approval of this permit does not relieve you from any other federal, state, or local government requirements.

203 South Fourth Street, Room 208, Oakland, MD 21550 — garrettcountymd.gov
permits@garrettcountymd.gov — Phone 301.334.7470 — Fax 301.334.7469

Grading Permit Status

garrettcounty.org/permits

Project Number
2025-0765

Type of Project
Industrial

Present Use
Commercial

Stormwater Management Bond Required
No

Project Location
Francis Sanders Drive
Oakland, MD 21550

Project Property
Tax Parcel 1216014184
Map 0078, Parcel 0007, Grid 0012

Subdivision
-

Declaration and Easement Required
No

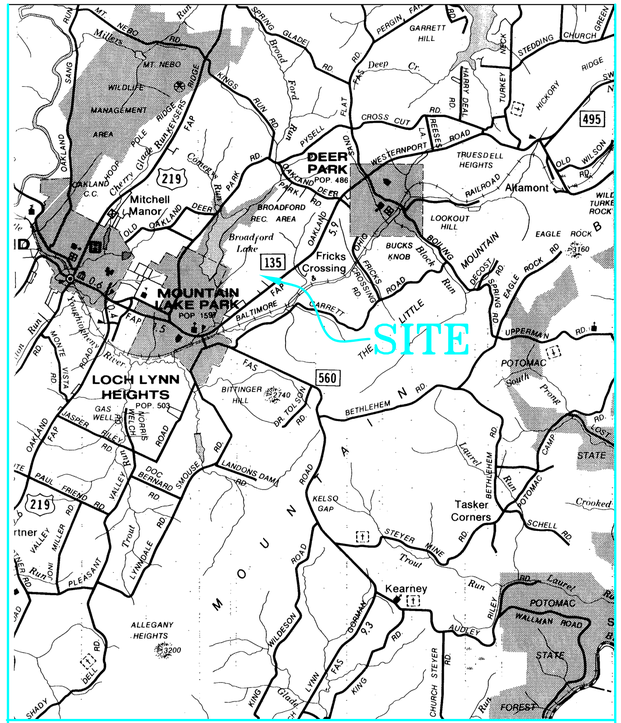
Applicant
Board of Garrett County Commissioners
203 South Fourth Street
Oakland, MD 21550

Permit Approvals	Status	Date	Notes
Erosion and Sediment Control Plan	Approved	February 6, 2026 03:32pm	
Stormwater Management Plan	Approved	February 13, 2026 03:33pm	SWM for this site was designed under GP 2008-0139 & remains in sediment control until the park is built out. See Tri-347 for original calcs/plans. - Ivy Opel at 2/13/2026

Final Inspection	Status	Date	Notes
Final Stabilization	Created/Required		

203 South Fourth Street, Room 208, Oakland, MD 21550 — garrettcountymd.gov
permits@garrettcountymd.gov — Phone 301.334.7470 — Fax 301.334.7469

SITE WORK PLANS
MAINTENANCE BUILDING
PUBLIC WORKS PARK



LOCATION MAP

SCALE: 1" = 1 MILE

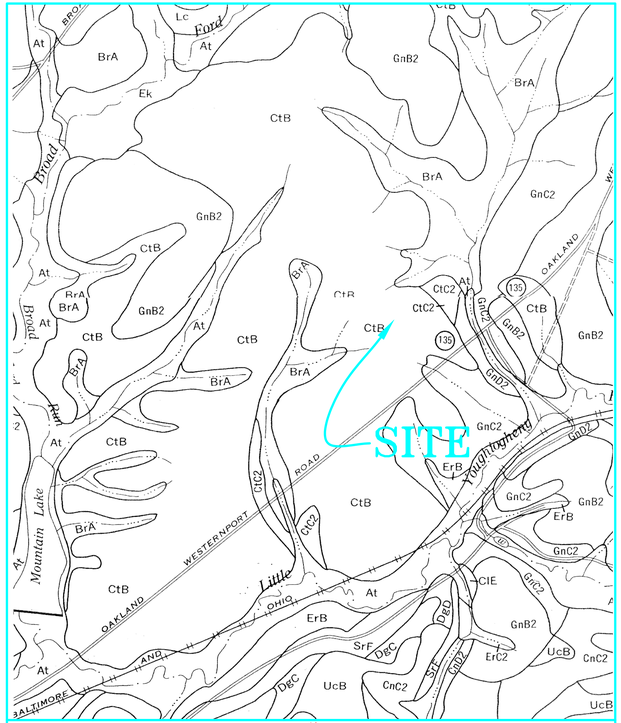
0 MILES 1 MILE 2 MILES 3 MILES

SHEET INDEX

SHEET NO.	DESCRIPTION
G-1	GENERAL MATTERS – COVER SHEET
G-2	GENERAL MATTERS – PROJECT AREA MAP AND LEGEND
G-3	GENERAL MATTERS – PROPOSED SITE PLAN
ESC	EROSION AND SEDIMENT CONTROL
US	UTILITIES AND SITE

UTILITY CONSTRUCTION
SEDIMENT CONTROL PRACTICES

1. EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON UPSLOPE SIDE OF TRENCH.
2. IMMEDIATELY FOLLOWING PIPE INSTALLATION, THE TRENCH SHALL BE BACKFILLED, COMPACTED AND IMMEDIATELY STABILIZED (MULCHED OR GRAVELED) AT THE END OF EACH WORK DAY.
3. ANY TRENCHING DONE WITHIN EXISTING DITCHES MAY REQUIRE A DITCH DESIGN, INCLUDING APPROPRIATE LINING, MATTING, RIPRAP, ETC.
4. SILT FENCE SHALL BE PLACED IMMEDIATELY DOWN SLOPE OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED LONGER THAN ONE (1) WORKING DAY. (INSTALL SILT FENCE PER DETAIL E-1).
5. THE CONTRACTOR SHALL DISTURB AND OPEN ONLY THE TRENCH REQUIRED TO ACCOMPLISH THE WORK DESIGNATED FOR EACH DAY.
6. ALL SEDIMENT AND EROSION CONTROL PRACTICES AND VEGETATIVE STABILIZATION SHALL BE IN ACCORDANCE WITH THE "2011 STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL."



SOILS MAP

SCALE: 1" = 1000'

0' 1000' 2000' 3000'

EROSION AND SEDIMENT CONTROL NOTES

1. THE CONTRACTOR SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO PUBLIC ROADS. ALL MATERIALS DEPOSITED ONTO PUBLIC ROADS SHALL BE REMOVED IMMEDIATELY.
2. THE CONTRACTOR SHALL INSPECT DAILY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS PERMANENT STABILIZATION OF EXPOSED SOIL OCCURS.
3. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, TEMPORARY SEED AND ANCHORED STRAW MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE APPLIED BY APRIL 15 OR EARLIER IF GROUND AND WEATHER CONDITIONS ALLOW.
4. THE SITE'S APPROVED EROSION AND SEDIMENT CONTROL PLANS SHALL BE AVAILABLE AT THE SITE.
5. THE APPLICANT IS RESPONSIBLE FOR OBTAINING ANY OTHER FEDERAL, STATE, OR LOCAL AUTHORIZATIONS WHICH MAY BE REQUIRED.
6. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND SEVEN (7) DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.
7. THE APPROVAL OF THIS PLAN MAKES NO REPRESENTATION AS TO THE EXISTENCE OR NONEXISTENCE OF ANY UTILITIES AT THIS SITE. IT IS THE RESPONSIBILITY OF THE LANDOWNERS OR OPERATORS AND CONTRACTORS TO ASSURE THAT NO HAZARD EXISTS OR DAMAGE WILL OCCUR TO UTILITIES. IT IS SUGGESTED THAT MISS UTILITY BE CONTACTED AT: PHONE 1-800-257-7777 EVERY EIGHT (8) BUSINESS DAYS TO COMPLY DURING THE EXCAVATION PERIOD.

SEEDING SPECIFICATIONS

TEMPORARY SEEDING SUMMARY:

Hardiness Zone : 5b and 6a				Fertilizer Rate (10-20-20)	Lime Rate
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths		
Annual Ryegrass or	40	Mar15 to May 31	0.5 in.	436 lb/ac (10 lb/1000 sf)	2 tons/ac (90 lb/1000 sf)
Foxtail Millet or	30	June 1 to July 31	0.5 in.		
Annual Ryegrass	40	Aug. 1 to Sept. 30	0.5 in.		

PERMANENT SEEDING SUMMARY:

Hardiness Zone : 5b and 6a Seed Mixture : 6				Fertilizer Rate (10-20-20)			Lime Rate
Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P_2O_5	K_2O	
Tall Fescue (Low Endophyte)	40	Mar 15 to May 31	¼ to ½ in.	45 lb/acre (1.0 lb/ 1000 sf)	90 lb/acre (2.0 lb/ 1000 sf)	90 lb/acre (2.0 lb/ 1000 sf)	2 tons/ac (90 lb/1000 sf)
Birdsfoot Trefoil (Inoculated)	8	or	¼ to ½ in.				
Perennial Ryegrass	25	Aug. 1 to Sept. 30	¼ to ½ in.				

1. Loosen upper three inches of soil by raking, discing, or etc.
2. Apply lime and fertilizer.
3. Harrow, disc, or rake into the upper three inches of soil.
4. Seed.
5. Mulch with hay or straw at 2 tons/acre.
6. Anchor mulch by tracking up and down slopes with a tractor so that cleat marks run across the slope. Cleats should penetrate the soil a minimum of 1½ inches.

NOTE: LAWN GRASS MIXTURES WITH MULCH AND LANDSCAPE PLANTINGS WITH MULCH MAY BE SUBSTITUTED FOR THE MIXTURES SPECIFIED PROVIDED THERE IS 95% GROUND COVER.

APPROVAL FOR SEDIMENT CONTROL
GARRETT SOIL CONSERVATION DISTRICT

SIGNATURE

District Manager — 2/6/2026
TITLE — DATE

POND APPROVAL: ☐ YES ☐ NO ☒ NA

APPROVAL FOR STORMWATER MANAGEMENT
GARRETT COUNTY STORMWATER MANAGEMENT

GARRETT COUNTY STORMWATER MANAGEMENT — 2/13/2026
DATE

POND APPROVAL: ☐ YES ☐ NO ☒ NA

GP NO. 2025-0765

DESIGN CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN OF EROSION & SEDIMENT CONTROL AND/OR POND DESIGN IS/ARE IN ACCORDANCE WITH THE 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL AND ANY OTHER LOCAL OR STATE REQUIREMENTS. ANY STORMWATER STRUCTURES ARE DESIGNED IN ACCORDANCE WITH THE GARRETT COUNTY STORMWATER MANAGEMENT ORDINANCE AND ACCEPTED STANDARDS OF ENGINEERING PRACTICE.

10/07/2025 (DATE) — (301) 334-6185 (PHONE NUMBER) — JOHN N. SANDERS, MD PE NO. 17654

OWNER'S/DEVELOPER'S CERTIFICATION

"I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATION OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I HEREBY AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT, COMPLIANCE INSPECTORS."

DATE — 301-334-1928 (PHONE NO.) — OWNER/DEVELOPER SIGNATURE

313 EAST ALDER STREET, RM 105, OAKLAND, MD 21550 (ADDRESS) — JASON KING, DIVISION CHIEF, DEPT OF PUBLIC WORKS - FACILITIES DIV. (PRINTED NAME & TITLE)

SEQUENCE OF CONSTRUCTION

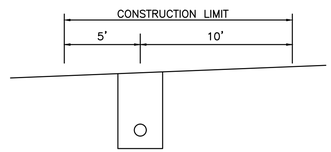
THIS SITE IS SERVED BY EXISTING REGIONAL STORMWATER MANAGEMENT PONDS AND AN EXISTING STORMWATER COLLECTION AND CONVEYANCE SYSTEM.

PRIOR TO THE START OF CONSTRUCTION, CONTACT THE MARYLAND DEPARTMENT OF THE ENVIRONMENT (MDE) AT 301-689-1480 TO SCHEDULE A PRECONSTRUCTION MEETING. INFORM THE GARRETT COUNTY OFFICE OF PERMIT AND INSPECTION SERVICES AT 301-334-7470 PRIOR TO THE START OF CONSTRUCTION. MDE SHALL BE CONTACTED WHEN E & S CONTROLS ARE IN PLACE, BUT BEFORE STARTING WORK. MDE SHALL BE CONTACTED WHEN THE SITE IS STABILIZED, BUT BEFORE REMOVING E & S CONTROLS.

1. INSTALL STABILIZED CONSTRUCTION ENTRANCE (DAY 1).
2. INSTALL SILT FENCE (DAY 2).
3. GRADE PARKING LOT AND BUILDING PAD AND ADD GRAVEL SURFACING (DAY 3 THROUGH DAY 14).
4. CONSTRUCT BUILDING (DAY 10 THROUGH DAY 45).
5. STABILIZE DISTURBANCE PER THE THREE AND SEVEN DAY SCHEDULES OUTLINED ON THIS SHEET.
6. AFTER ALL DISTURBANCE IS STABILIZED AND UPON AUTHORIZATION OF MDE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS.

NOTES:

1. TOTAL TRACT AREA IS 117.21 ACRES.
2. THE PROPOSED AREA OF DISTURBANCE IS 0.98 ACRE.
3. THE CONTRACTOR WILL BE RESPONSIBLE FOR HAVING THE LOCATIONS OF ALL EXISTING UTILITIES IDENTIFIED IN THE FIELD PRIOR TO CONSTRUCTION.
4. THE CONTRACTOR SHALL BE COMPLETELY AND SOLELY RESPONSIBLE AND LIABLE FOR ANY AND ALL UTILITY DAMAGES, PROPERTY DAMAGES, BODILY INJURIES, FINANCIAL LOSES AND INTERRUPTIONS OF SERVICE THAT RESULT FROM OR ARE ATTRIBUTABLE TO HIS CONSTRUCTION ACTIVITIES.
5. WORK IN THE VICINITY OF PUBLIC WATER AND SEWER LINES SHALL BE COORDINATED WITH THE TOWN OF OAKLAND (301-334-2691).
6. NO CONSTRUCTION IS PROPOSED WITHIN NONTIDAL WETLAND OR NONTIDAL WETLAND BUFFER.
7. NO CONSTRUCTION IS PROPOSED WITHIN ANY FEMA DESIGNATED 100 YEAR FLOOD PLAIN (FIRM MAP NO. 24023C0286D).
8. TOTAL EXCAVATION IS ESTIMATED TO BE 1200 CUBIC YARDS AND TOTAL FILL IS ESTIMATED TO BE 1200 CUBIC YARDS.
9. OFF-SITE DISPOSAL SHALL BE AT APPROVED LOCATIONS.
10. MATERIAL STOCKPILING WILL BE WITHIN THE CONSTRUCTION LIMITS.
11. THE PROPOSED CONSTRUCTION WILL INCREASE THE IMPERVIOUS AREA BY 0.91 ACRES.



TYPICAL CONSTRUCTION LIMIT FOR UTILITY WORK

Revisions

No.	Description	Date
1		
2		
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HIGHLAND ENGINEERING & SURVEYING, INC.
1426 Memorial Drive
Oakland, Maryland 21550
Telephone 301-334-6185
Facsimile 301-334-8317
Website: http://www.highland-engineering.com/

PROFESSIONAL CERTIFICATION

I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND, LICENSE NO. 17654, EXPIRATION DATE JANUARY 10, 2026.

STATE OF MARYLAND — JOHN NICHOLSON SANDERS — NO. 17654 — REGISTERED PROFESSIONAL ENGINEER

Signature:
Date: 10/07/2025

Client:
GARRETT COUNTY FACILITIES AND MAINTENANCE
313 EAST ALDER STREET
ROOM 105
OAKLAND, MARYLAND 21550
PHONE: 301-334-1928
FACSIMILE: 301-334-1985

Title: SITE WORK PLANS FOR MAINTENANCE BUILDING SHADY ACRES PUBLIC WORKS PARK

Location: EAST SIDE OF FRANCIS SANDERS DRIVE MOUNTAIN LAKE PARK GARRETT COUNTY MARYLAND

Description: GENERAL MATTERS COVER SHEET

Sheet No.: G - 1

Dwg. No.: E25036

Date: 10/07/2025

Scale: AS SHOWN

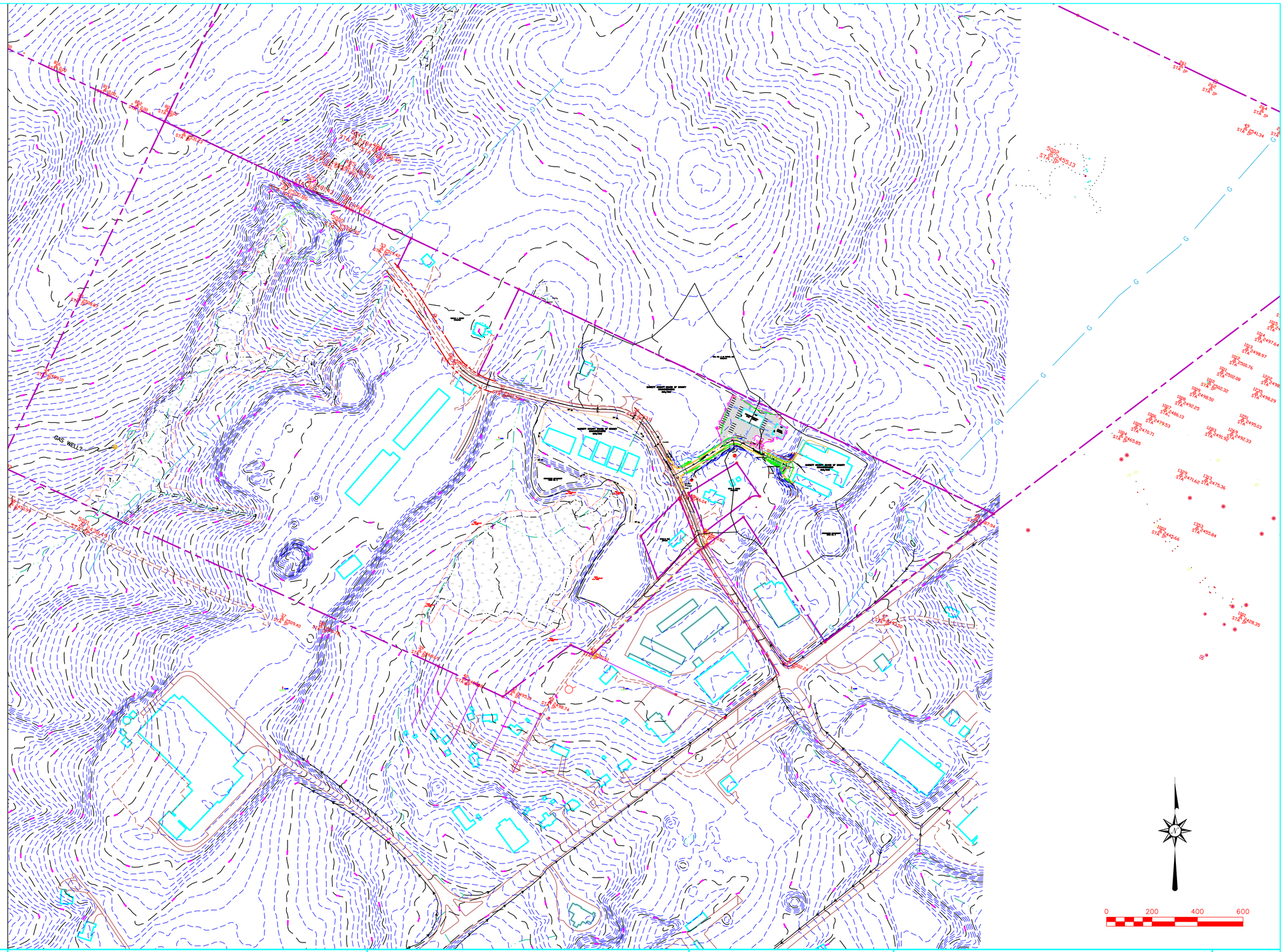
LEGEND

EXISTING

- TRACT BOUNDARY
- STORMDRAIN
- CONTOUR
- INDEX CONTOUR — 2460
- FENCE
- RIVER/STREAM
- OVERHEAD UTILITY — OH
- ROW
- CONTROL POINT
- UTILITY POLE
- GRAVITY SEWER LINE — SS
- PRESSURE SEWER — PM
- WATERLINE — W
- GAS LINE — G

PROPOSED

- STORMDRAIN
- CONTOUR — 2460
- CONSTRUCTION LIMITS — C
- SILT FENCE — SF
- SUPER SILT FENCE — SSF
- PERMANENT EROSION CONTROL MATTING
- TEMPORARY EROSION CONTROL MATTING
- STABILIZED CONSTRUCTION ENTRANCE — SCE
- PAVEMENT
- CONCRETE
- STRUCTURE NO. — 4
- GRAVITY SEWER LINE — GS
- WATERLINE — W
- LIGHT



Revisions

No.	Description	Date
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4		
5		
6		

HIGHLAND ENGINEERING & SURVEYING, INC.

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STATE OF MARYLAND — JOHN NELSON SHERWOOD — NO. 17654 — REGISTERED PROFESSIONAL ENGINEER

Signature:
Date: 10/07/2025

Client:
GARRETT COUNTY FACILITIES AND MAINTENANCE
313 EAST ALDER STREET
ROOM 105
OAKLAND, MARYLAND 21550
PHONE: 301-334-1928
FACSIMILE: 301-334-1985

Title: SITE WORK PLANS FOR MAINTENANCE BUILDING SHADY ACRES PUBLIC WORKS PARK

Location: EAST SIDE OF FRANCIS SANDERS DRIVE MOUNTAIN LAKE PARK GARRETT COUNTY MARYLAND

Description: GENERAL MATTERS PROJECT AREA MAP

Sheet No.: G - 2
Dwg. No.: E25036
Date: 10/07/2025
Scale: AS SHOWN

No.	Revisions Description	Date
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HES
HIGHLAND ENGINEERING & SURVEYING, INC.
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STATE OF MARYLAND JOHN NELSON SANDERS NO. 17654 REGISTERED PROFESSIONAL ENGINEER

Signature:
Date: 10/07/2025

Client:
GARRETT COUNTY FACILITIES AND MAINTENANCE
313 EAST ALDER STREET
ROOM 105
OAKLAND, MARYLAND 21550
PHONE: 301-334-1928
FACSIMILE: 301-334-1985

Title: SITE WORK PLANS FOR MAINTENANCE BUILDING SHADY ACRES PUBLIC WORKS PARK

Location: EAST SIDE OF FRANCIS SANDERS DRIVE
MOUNTAIN LAKE PARK GARRETT COUNTY MARYLAND

Description: GENERAL MATTERS
PROPOSED SITE PLAN

Sheet No.: G - 3

Dwg. No.: E25036

Date: 10/07/2025

Scale: AS SHOWN

Revisions		
No.	Description	Date
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HES

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STATE OF MARYLAND
JOHN NELSON SANDERS
No. 17654
REGISTERED PROFESSIONAL ENGINEER

Signature:
Date: 10/07/2025

Client:
GARRETT COUNTY FACILITIES
AND MAINTENANCE
313 EAST ALDER STREET
ROOM 105
OAKLAND, MARYLAND 21550
PHONE: 301–334–1928
FACSIMILE: 301–334–1985

Title:
SITE WORK PLANS FOR MAINTENANCE BUILDING
SHADY ACRES PUBLIC WORKS PARK

Location:
EAST SIDE OF FRANCIS SANDERS DRIVE
MOUNTAIN LAKE PARK GARRETT COUNTY MARYLAND

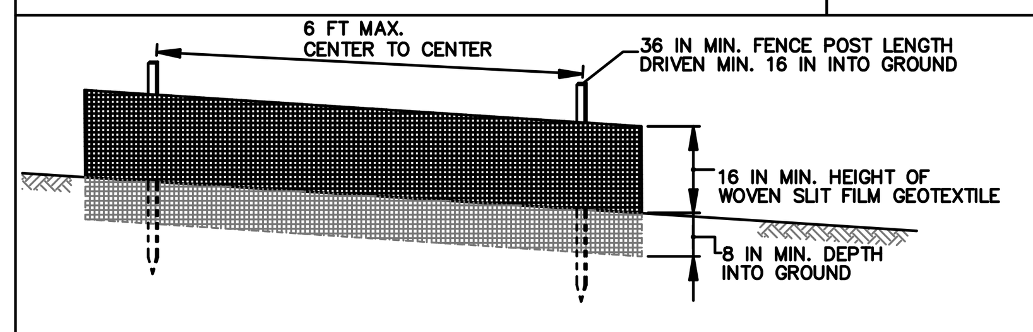
Description:
EROSION AND SEDIMENT CONTROL
PROPOSED E & S PLAN

Sheet No.: ESC – 1
Dwg. No.: E25036
Date: 10/07/2025
Scale: AS SHOWN

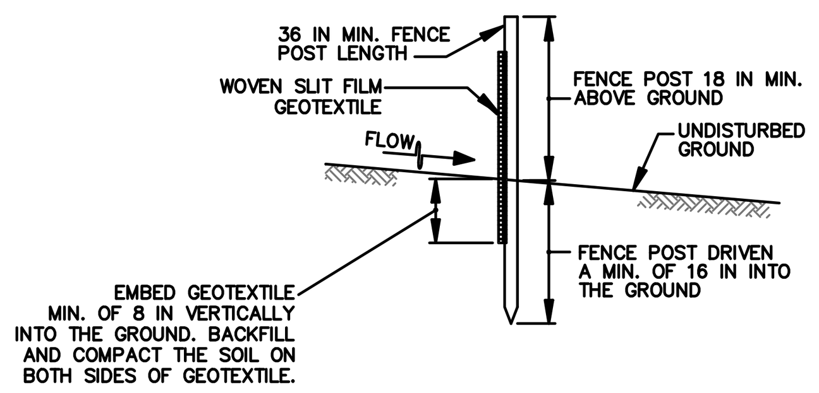
DETAIL E-1 SILT FENCE

STANDARD SYMBOL

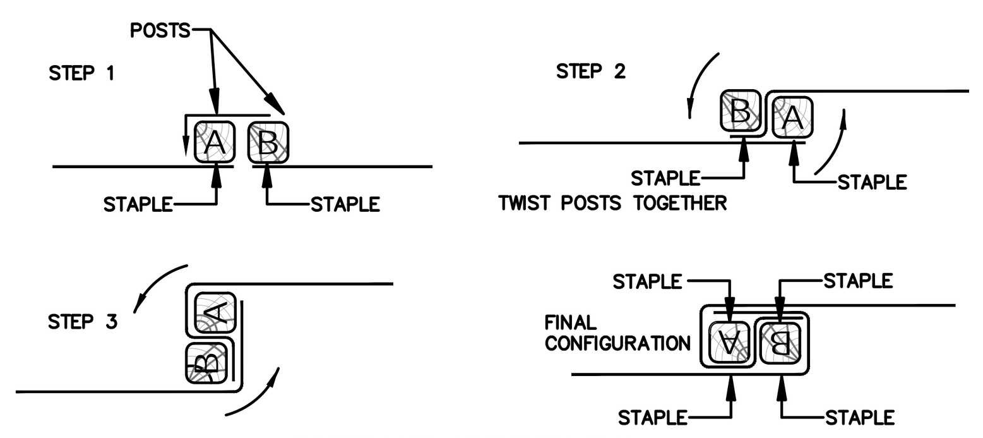
—SF—



ELEVATION



CROSS SECTION



JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW)

1 OF 2

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

DETAIL E-1 SILT FENCE

STANDARD SYMBOL

—SF—

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ X 1¾ ± 1/16 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H-1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

2 OF 2

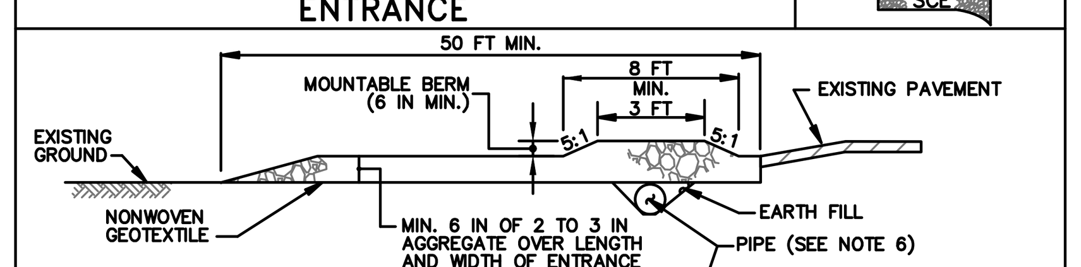
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

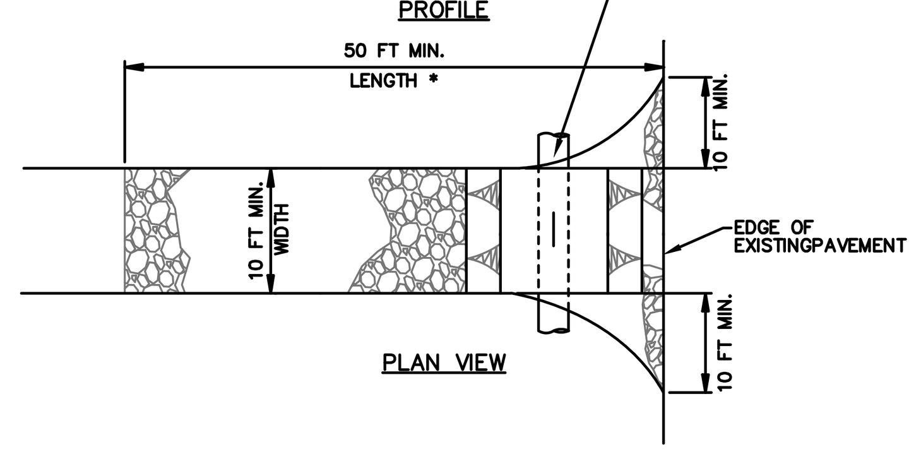
DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL

SCE



PROFILE



PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

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

Table H.2: Stone Size

TYPE	SIZE RANGE	d_{50}	d_{100}	AASHTO	MIDSIZE WEIGHT[3]
NUMBER 57[1]	3/8 to 1 ½ inch	½ in	1 ½ in	M-43	N/A
NUMBER 1	2 to 3 inch	2 ½ in	3 in	M-43	N/A
RIPRAP[2] (CLASS 0)	4 to 7 inch	5 ½ in	7 in	N/A	N/A
CLASS I	N/A	9 ½ in	15 in	N/A	40 lb
CLASS II	N/A	16 in	24 in	N/A	200 lb
CLASS III	N/A	23 in	34 in	N/A	600 lb

[1] This classification is to be used on the upstream face of stone outlets and check dams.

[2] This classification is to be used for gabions.

[3] Optimum gradation is 50 percent of the stone being above and 50 percent below the midsize.

Stone must be composed of a well graded mixture of stone sized so that fifty (50) percent of the pieces by weight are larger than the size determined by using the charts. A well graded mixture, as used herein, is defined as a mixture composed primarily of larger stone sizes but with a sufficient mixture of other sizes to fill the smaller voids between the stones. The diameter of the largest stone in such a mixture must not exceed the respective d_{100} selected from Table H.2. The d_{50} refers to the median diameter of the stone. This is the size for which 50 percent, by weight, will be smaller and 50 percent will be larger.

Note: Recycled concrete equivalent may be substituted for all stone classifications for temporary control measures only. Concrete broken into the sizes meeting the appropriate classification, containing no steel reinforcement, and having a minimum density of 150 pounds per cubic foot may be used as an equivalent.

Table D.2: Riprap Sizes and Thickness

Class	d_{50}	d_{100}	Thickness (T)
Class I	9.5 inches	15 inches	19 inches
Class II	16 inches	24 inches	32 inches
Class III	23 inches	34 inches	46 inches

H-1 STANDARDS AND SPECIFICATIONS

FOR

MATERIALS

Table H.1: Geotextile Fabrics

		WOVEN SLIT FILM GEOTEXTILE		WOVEN MONOFILAMENT GEOTEXTILE		NONWOVEN GEOTEXTILE	
		MINIMUM AVERAGE ROLL VALUE[1]					
PROPERTY	TEST METHOD	MD	CD	MD	CD	MD	CD
Grab Tensile Strength	ASTM D-4632	200 lb	200 lb	370 lb	250 lb	200 lb	200 lb
Grab Tensile Elongation	ASTM D-4632	15%	10%	15%	15%	50%	50%
Trapezoidal Tear Strength	ASTM D-4533	75 lb	75 lb	100 lb	60 lb	80 lb	80 lb
Puncture Strength	ASTM D-6241	450 lb		900 lb		450 lb	
Apparent Opening Size[2]	ASTM D-4751	U.S. Sieve 30 (0.59 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}		1.1 sec^{-1}	
Ultraviolet Resistance Retained at 500 hours	ASTM D-4355	70% strength		70% strength		70% strength	

[1] 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.

[2] Values for AOS represent the average maximum opening.

Geotextiles must be evaluated by the National Transportation Product Evaluation Program (NTPEP) 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 mildew 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 taut over the applied surface. Equipment must not run over exposed fabric. When placing riprap on geotextile, do not exceed a one foot drop height.

Revisions

No.	Description	Date
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PROFESSIONAL CERTIFICATION

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STATE OF MARYLAND JOHN NELSON SANDERS No. 17654 REGISTERED PROFESSIONAL ENGINEER

Signature:
Date: 10/07/2025

Client:
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PHONE: 301-334-1928
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Title: SITE WORK PLANS FOR MAINTENANCE BUILDING SHADY ACRES PUBLIC WORKS PARK

Location: EAST SIDE OF FRANCIS SANDERS DRIVE MOUNTAIN LAKE PARK GARRETT COUNTY MARYLAND

Description: EROSION AND SEDIMENT CONTROL EROSION AND SEDIMENT CONTROL DETAILS

Sheet No.: ESC - 2

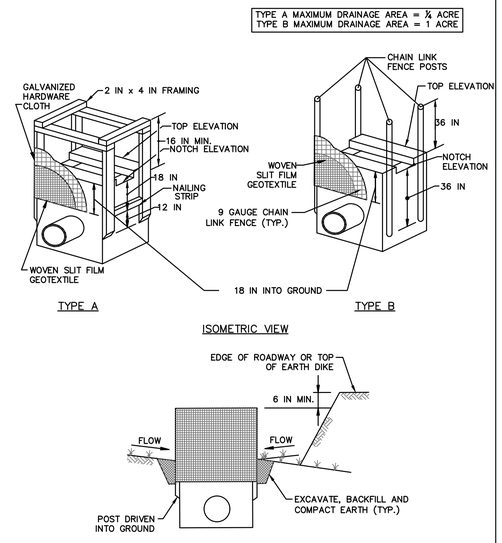
Dwg. No.: E25036

Date: 10/07/2025

Scale: AS SHOWN

DETAIL E-9-1 STANDARD INLET PROTECTION

STANDARD SYMBOL: SIP



1 OF 2

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

DETAIL E-9-1 STANDARD INLET PROTECTION

STANDARD SYMBOL: SIP

CONSTRUCTION SPECIFICATIONS

1. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
2. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH ELEVATION.
3. FOR TYPE A, USE NOMINAL 2 INCH X 4 INCH CONSTRUCTION GRADE LUMBER POSTS, DRIVEN 1 FOOT INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2X4 FRAME AS SHOWN. STRETCH ½ INCH GALVANIZED HARDWARE CLOTH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. FASTEN GEOTEXTILE SECURELY TO THE HARDWARE CLOTH WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND HARDWARE CLOTH A MINIMUM OF 18 INCHES BELOW THE WEIR CREST. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED TO THE POST.

   FOR TYPE B, USE 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND 6 FOOT LENGTH, DRIVEN A MINIMUM OF 36 INCHES BELOW THE WEIR CREST AT EACH CORNER OF THE STRUCTURE. FASTEN 9 GAUGE OR HEAVIER CHAIN LINK FENCE, 42 INCHES IN HEIGHT, SECURELY TO THE FENCE POSTS WITH WIRE TIES. FASTEN GEOTEXTILE SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 18 INCHES BELOW THE WEIR CREST.
4. BACKFILL AROUND THE INLET IN LOOSE 4 INCH LIFTS AND COMPACT UNTIL SOIL IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
5. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

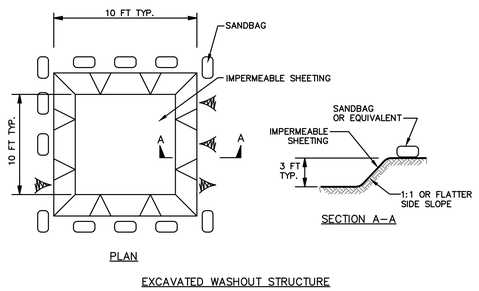
2 OF 2

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

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL: CWS



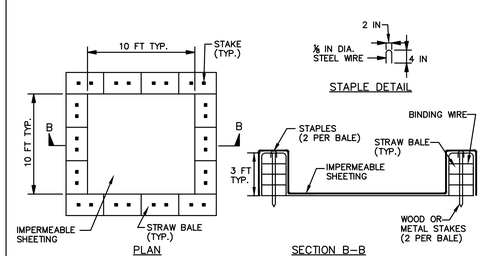
1 OF 2

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

DETAIL H-6 ONSITE CONCRETE WASHOUT STRUCTURE

STANDARD SYMBOL: CWS



NOTE: CAN BE TWO STACKED BALES OR PARTIALLY EXCAVATED TO REACH 3 FT DEPTH

WASHOUT STRUCTURE WITH STRAW BALES

CONSTRUCTION SPECIFICATIONS

1. LOCATE WASHOUT STRUCTURE A MINIMUM OF 50 FEET AWAY FROM OPEN CHANNELS, STORM DRAIN INLETS, SENSITIVE AREAS, WETLANDS, BUFFERS AND WATER COURSES AND AWAY FROM CONSTRUCTION TRAFFIC.
2. SIZE WASHOUT STRUCTURE FOR VOLUME NECESSARY TO CONTAIN WASH WATER AND SOLIDS AND MAINTAIN AT LEAST 4 INCHES OF FREEBOARD. TYPICAL DIMENSIONS ARE 10 FEET X 10 FEET X 3 FEET DEEP.
3. PREPARE SOIL BASE FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE LINER. FOR LINER, USE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING, FREE OF HOLES AND TEARS OR OTHER DEFECTS THAT COMPROMISE IMPERMEABILITY OF THE MATERIAL.
4. PROVIDE A SIGN FOR THE WASHOUT IN CLOSE PROXIMITY TO THE FACILITY.
5. KEEP CONCRETE WASHOUT STRUCTURE WATER TIGHT. REPLACE IMPERMEABLE LINER IF DAMAGED (E.G., RIPPED OR PUNCTURED). EMPTY OR REPLACE WASHOUT STRUCTURE THAT IS 75 PERCENT FULL, AND DISPOSE OF ACCUMULATED MATERIAL PROPERLY. DO NOT REUSE PLASTIC LINER. WET-VACUUM STORED LIQUIDS THAT HAVE NOT EVAPORATED AND DISPOSE OF IN AN APPROVED MANNER. PRIOR TO FORECASTED RAINSTORMS, REMOVE LIQUIDS OR COVER STRUCTURE TO PREVENT OVERFLOWS. REMOVE HARDENED SOLIDS, WHOLE OR BROKEN UP, FOR DISPOSAL OR RECYCLING. MAINTAIN RUNOFF DIVERSION AROUND EXCAVATED WASHOUT STRUCTURE UNTIL STRUCTURE IS REMOVED.

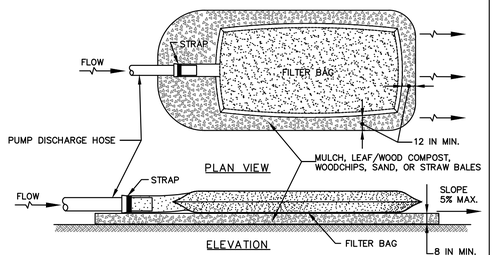
2 OF 2

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

DETAIL F-4 FILTER BAG

STANDARD SYMBOL: ☒FB



CONSTRUCTION SPECIFICATIONS

1. TIGHTLY SEAL SLEEVE AROUND THE PUMP DISCHARGE HOSE WITH A STRAP OR SIMILAR DEVICE.
2. PLACE FILTER BAG ON SUITABLE BASE (E.G., MULCH, LEAF/WOOD COMPOST, WOODCHIPS, SAND, OR STRAW BALES) LOCATED ON A LEVEL OR 5% MAXIMUM SLOPING SURFACE. DISCHARGE TO A STABILIZED AREA. EXTEND BASE A MINIMUM OF 12 INCHES FROM EDGES OF BAG.
3. CONTROL PUMPING RATE TO PREVENT EXCESSIVE PRESSURE WITHIN THE FILTER BAG IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS. AS THE BAG FILLS WITH SEDIMENT, REDUCE PUMPING RATE.
4. REMOVE AND PROPERLY DISPOSE OF FILTER BAG UPON COMPLETION OF PUMPING OPERATIONS OR AFTER BAG HAS REACHED CAPACITY, WHICHEVER OCCURS FIRST. SPREAD THE DEWATERED SEDIMENT FROM THE BAG IN AN APPROVED UPLAND AREA AND STABILIZE WITH SEED AND MULCH BY THE END OF THE WORK DAY. RESTORE THE SURFACE AREA BENEATH THE BAG TO ORIGINAL CONDITION UPON REMOVAL OF THE DEVICE.
5. USE NONWOVEN GEOTEXTILE WITH DOUBLE STITCHED SEAMS USING HIGH STRENGTH THREAD. SIZE SLEEVE TO ACCOMMODATE A MAXIMUM 4 INCH DIAMETER PUMP DISCHARGE HOSE. THE BAG MUST BE MANUFACTURED FROM A NONWOVEN GEOTEXTILE THAT MEETS OR EXCEEDS MINIMUM AVERAGE ROLL VALUES (MARV) FOR THE FOLLOWING:

GRAB TENSILE	250 LB	ASTM D-4632
PUNCTURE	150 LB	ASTM D-4833
FLOW RATE	70 GAL/MIN/FT²	ASTM D-4491
PERMITTIVITY (SEC^{-1})	1.2 SEC^{-1}	ASTM D-4491
UV RESISTANCE	70% STRENGTH @ 500 HOURS	ASTM D-4355
APPARENT OPENING SIZE (AOS)	0.15-0.18 MM	ASTM D-4751
SEAM STRENGTH	90%	ASTM D-4632

6. REPLACE FILTER BAG IF BAG CLOGS OR HAS RIPS, TEARS, OR PUNCTURES. DURING OPERATION KEEP CONNECTION BETWEEN PUMP HOSE AND FILTER BAG WATER TIGHT. REPLACE BEDDING IF IT BECOMES DISPLACED.

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

Revisions

No.	Description	Date
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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, LICENSE NO. 17654, EXPIRATION DATE JANUARY 10, 2026.

STATE OF MARYLAND · BRIAN NELSON SANDERS · NO. 17654 · REGISTERED PROFESSIONAL ENGINEER

Signature: _____
Date: 10/07/2025

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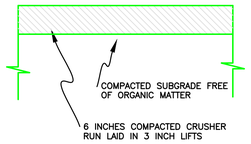
313 EAST ALDER STREET
ROOM 105
OAKLAND, MARYLAND 21550
PHONE: 301-334-1928
FACSIMILE: 301-334-1985

Title: SITE WORK PLANS FOR MAINTENANCE BUILDING SHADY ACRES PUBLIC WORKS PARK

Location: EAST SIDE OF FRANCIS SANDERS DRIVE MOUNTAIN LAKE PARK GARRETT COUNTY MARYLAND

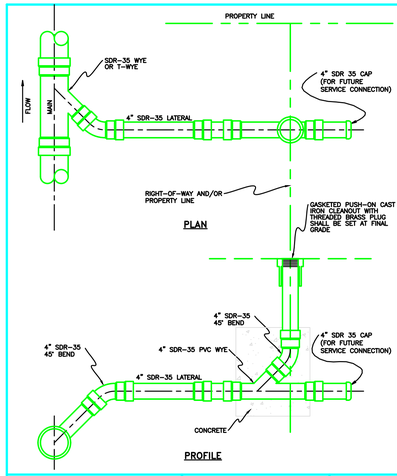
Description: EROSION AND SEDIMENT CONTROL EROSION AND SEDIMENT CONTROL DETAILS

Sheet No.: ESC - 3
Dwg. No.: E25036
Date: 10/07/2025
Scale: AS SHOWN

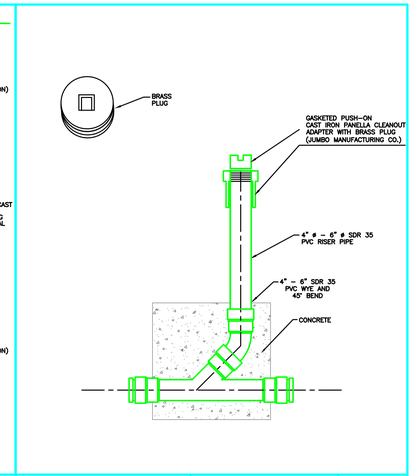


GRAVEL PARKING AREA PAVEMENT DETAIL

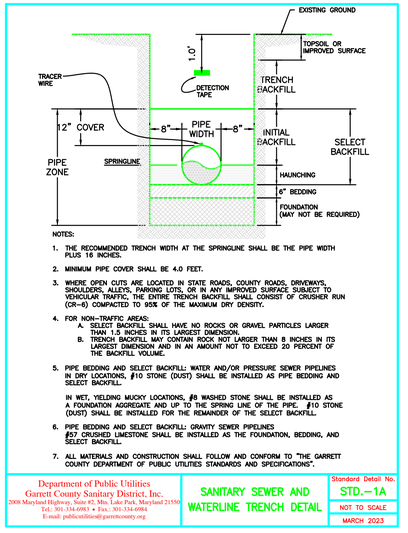
NOT TO SCALE



Department of Public Utilities Garrett County Sanitary District, Inc. 2008 Maryland Highway, Suite #2, Mtn. Lake Park, Maryland 21550 Tel.: 301-334-6983 • Fax.: 301-334-6984 E-mail: publicutilities@garrettcounty.org	CONVENTIONAL GRAVITY SEWER SERVICE LATERAL	Standard Detail No. S-01 NOT TO SCALE SEPTEMBER 2010



Department of Public Utilities Garrett County Sanitary District, Inc. 2008 Maryland Highway, Suite #2, Mtn. Lake Park, Maryland 21550 Tel.: 301-334-6983 • Fax.: 301-334-6984 E-mail: publicutilities@garrettcounty.org	CLEAN-OUT, ADAPTER, AND PLUG	Standard Detail No. S-07 NOT TO SCALE SEPTEMBER 2010

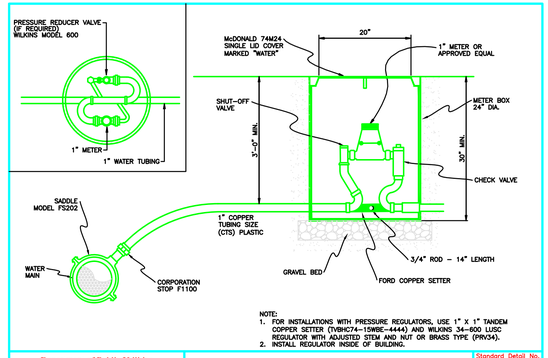


NOTES:

1. THE RECOMMENDED TRENCH WIDTH AT THE SPRINGLINE SHALL BE THE PIPE WIDTH PLUS 16 INCHES.
2. MINIMUM PIPE COVER SHALL BE 4.0 FEET.
3. WHERE OPEN CUTS ARE LOCATED IN STATE ROADS, COUNTY ROADS, DRIVEWAYS, SHOULDERS, ALLEYS, PARKING LOTS, OR IN ANY IMPROVED SURFACE SUBJECT TO VEHICULAR TRAFFIC, THE ENTIRE TRENCH BACKFILL SHALL CONSIST OF CRUSHER RUN (CR-6) COMPACTED TO 95% OF THE MAXIMUM DRY DENSITY.
4. FOR NON-TRAFFIC AREAS:
   A. SELECT BACKFILL SHALL HAVE NO ROCKS OR GRAVEL PARTICLES LARGER THAN 1.5 INCHES IN ITS LARGEST DIMENSION.
   B. TRENCH BACKFILL MAY CONTAIN ROCK NOT LARGER THAN 8 INCHES IN ITS LARGEST DIMENSION AND IN AN AMOUNT NOT TO EXCEED 20 PERCENT OF THE BACKFILL VOLUME.
5. PIPE BEDDING AND SELECT BACKFILL: WATER AND/OR PRESSURE SEWER PIPELINES IN DRY LOCATIONS, #10 STONE (DUST) SHALL BE INSTALLED AS PIPE BEDDING AND SELECT BACKFILL.

   IN WET, YIELDING MUCKY LOCATIONS, #8 WASHED STONE SHALL BE INSTALLED AS A FOUNDATION AGGREGATE AND UP TO THE SPRING LINE OF THE PIPE. #10 STONE (DUST) SHALL BE INSTALLED FOR THE REMAINDER OF THE SELECT BACKFILL.
6. PIPE BEDDING AND SELECT BACKFILL: GRAVITY SEWER PIPELINES #57 CRUSHED LIMESTONE SHALL BE INSTALLED AS THE FOUNDATION, BEDDING, AND SELECT BACKFILL.
7. ALL MATERIALS AND CONSTRUCTION SHALL FOLLOW AND CONFORM TO "THE GARRETT COUNTY DEPARTMENT OF PUBLIC UTILITIES STANDARDS AND SPECIFICATIONS".

Department of Public Utilities Garrett County Sanitary District, Inc. 2008 Maryland Highway, Suite #2, Mtn. Lake Park, Maryland 21550 Tel.: 301-334-6983 • Fax.: 301-334-6984 E-mail: publicutilities@garrettcounty.org	SANITARY SEWER AND WATERLINE TRENCH DETAIL	Standard Detail No. STD.-1A NOT TO SCALE MARCH 2023



NOTE:
1. FOR INSTALLATIONS WITH PRESSURE REGULATORS, USE 1" X 1" TANDEM COPPER SETTER (TVBHC74-15WBE-4444) AND WILKINS 34-600 LUSC REGULATOR WITH ADJUSTED STEM AND NUT OR BRASS TYPE (PRV34).
2. INSTALL REGULATOR INSIDE OF BUILDING.

Department of Public Utilities Garrett County Sanitary District, Inc. 2008 Maryland Highway, Suite #2, Mtn. Lake Park, Maryland 21550 Tel.: 301-334-6983 • Fax.: 301-334-6984 E-mail: publicutilities@garrettcounty.org	1" WATER METER SERVICE CONNECTION	Standard Detail No. W-13B NOT TO SCALE SEPTEMBER 2010

Revisions

No.	Description	Date
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STATE OF MARYLAND — JOHN NELSON JENKINS — NO. 17654 — REGISTERED PROFESSIONAL ENGINEER

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Location: EAST SIDE OF FRANCIS SANDERS DRIVE MOUNTAIN LAKE PARK GARRETT COUNTY MARYLAND

Description: UTILITIES AND SITE DETAILS

Sheet No.: US - 1
Dwg. No.: E25036
Date: 10/07/2025
Scale: AS SHOWN

Garrett County Facilities & Maintenance – Maintenance Building
Final Plan Narrative
October 7, 2025

Garrett County would like to construct a maintenance building at the Shady Acres Public Works Park, northeast of Francis Sanders Drive, near the Department of Public Utilities Warehouse. This area was mass graded during 2006 and regional stormwater management basins, and collection and conveyance features constructed. Stormwater management basins were sized for "industrial" runoff conditions (72% impervious). The site chosen for the new maintenance building sits on the drainage divide of Basins 2 and 3, and will contribute runoff to each basin.

Formerly covered in forest, this site has been covered in grasses since 2006. Prevailing grades are very mild to flat, an outcome of the mass grading. Very minor grading will be necessary to prepare for the new building and surrounding parking lots. Native soils were composed of Cookport channery loam, a Hydrologic Group D soil. Given the current flat slopes, this site will have little potential for erodibility during the construction. Despite the low potential, it is recommended disturbed areas be immediately restored and revegetated. Since prevailing slopes are flat and since the project is on top of the drainage divide, silt fence will be used to protect from siltation and diversion of upslope runoff will serve no benefit.

Stormwater management as-built drawings (completed in 2008) report that sand filters were not installed in the stormwater management basins. Presumably, this was done so that the basins could remain in sediment control configuration until the park is fully built out. Although this construction will increase impervious drainage area for Basins 2 and 3, capacity will be available for future projects, as reported on the attached account.

After development runoff will sheet flow to existing drainage features, for conveyance to the existing stormwater management basins. All drainage features were sized using "industrial" runoff conditions and are judged of sufficient capacity for the expected rate of runoff. Future, adjacent, and/or in-fill development may require additional collection and conveyance to be constructed.

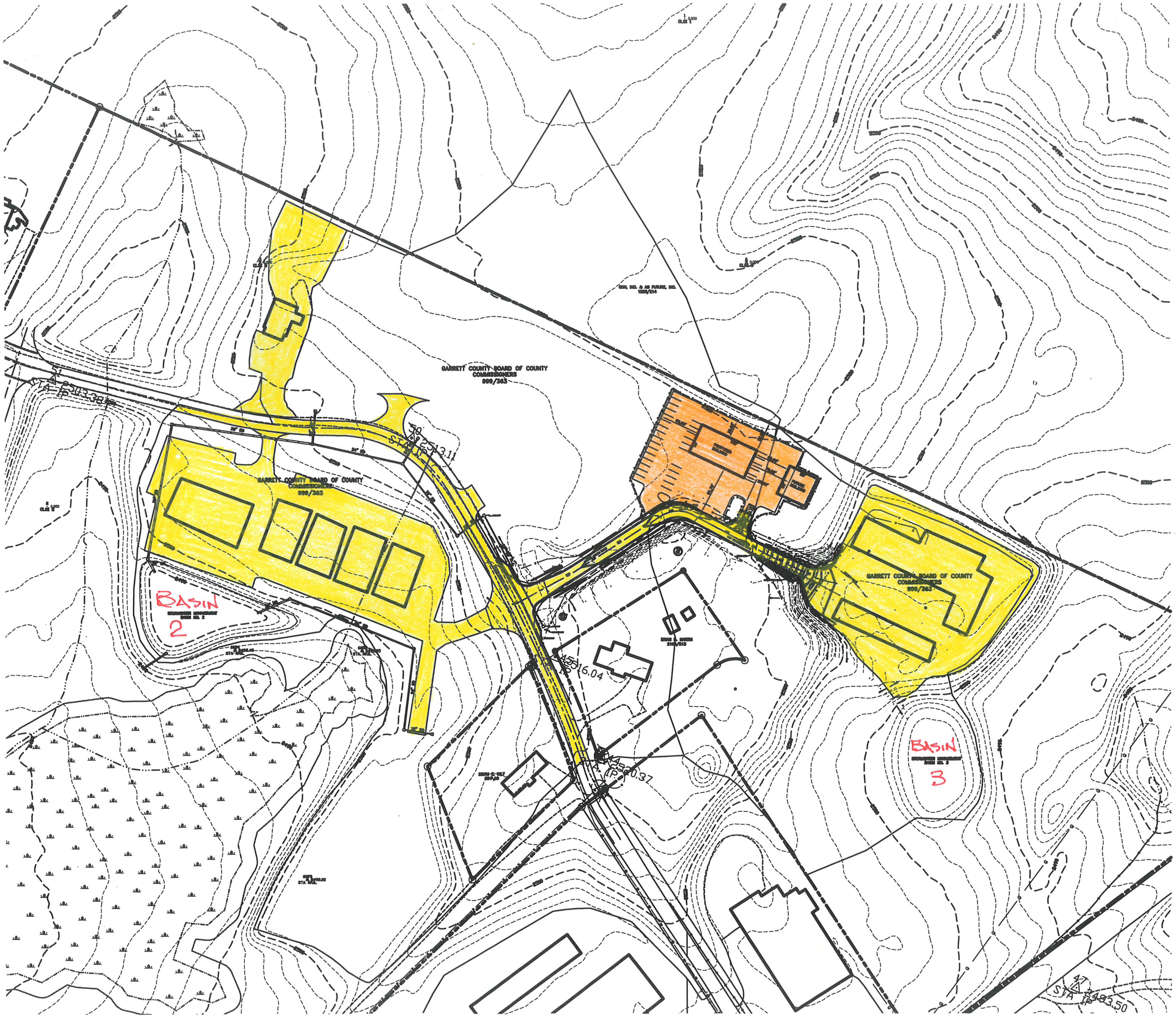
This area is outside of zoning. All utilities are nearby, along the access road to the DPU Warehouse.

SHADY ACRES PUBLIC WORKS PARK	IMPERVIOUS AREA ACCOUNT	JNS 10/7/2025

BASIN	MAX. IMPERV. PER DESIGN	EXIST IMPERV.	PROPOSED IMPERV.	NEW TOTAL
2	10.21 ac	3.82 ac	0.60	4.42 ac
3	3.17 ac	1.87 ac	0.31 ac	2.18 ac.

Reference: CLSI
Garrett County Public Works Complex
Stormwater Management Design
Data

101,517
27,109
37,844
166,470



EXISTING IMPERV.

PROPOSED IMPERV.

IMPERVIOUS ACCOUNT EXHIBIT

X:\WORK\E25036\E25036.dwg, 10/7/2025 7:56:51 AM, 1:155.667

Soil Map—Garrett County, Maryland
(GARRETT COUNTY FACILITIES)

Map Scale: 1:1,470 if printed on A landscape (11" x 8.5") sheet.

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Garrett County, Maryland
Survey Area Data: Version 23, Sep 6, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: May 18, 2023—Jun 3, 2023

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
BrA	Brinkerton and Andover silt loams, 0 to 3 percent slopes	0.0	0.8%
CtB	Cookport channery loam, 3 to 8 percent slopes	5.8	99.2%
Totals for Area of Interest		**5.9**	**100.0%**

Garrett County, Maryland

CtB—Cookport channery loam, 3 to 8 percent slopes

Map Unit Setting

National map unit symbol: 2wshg
Elevation: 1,190 to 3,110 feet
Mean annual precipitation: 38 to 50 inches
Mean annual air temperature: 45 to 49 degrees F
Frost-free period: 126 to 165 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Cookport and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Cookport

Setting

Landform: Ridges
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Interfluve
Down-slope shape: Concave, linear
Across-slope shape: Linear
Parent material: Acid fine-loamy residuum weathered from sandstone

Typical profile

Oi - 0 to 1 inches: slightly decomposed plant material
Oe - 1 to 2 inches: moderately decomposed plant material
A - 2 to 4 inches: channery loam
E - 4 to 8 inches: channery loam
Bt - 8 to 23 inches: channery loam
Btx - 23 to 40 inches: channery sandy clay loam
C - 40 to 46 inches: channery sandy loam
R - 46 to 56 inches: bedrock

Properties and qualities

Slope: 3 to 8 percent
Depth to restrictive feature: 16 to 30 inches to fragipan; 40 to 72 inches to lithic bedrock
Drainage class: Moderately well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.01 to 0.20 in/hr)
Depth to water table: About 15 to 21 inches
Frequency of flooding: None
Frequency of ponding: None
Available water supply, 0 to 60 inches: Low (about 3.0 inches)

Interpretive groups

Land capability classification (irrigated): None specified
Land capability classification (nonirrigated): 2e
Hydrologic Soil Group: D
Ecological site: F127XY013WV - Divergent Uplands
Hydric soil rating: No

Minor Components

Hazleton

Percent of map unit: 10 percent
Landform: Hillslopes
Landform position (two-dimensional): Summit, shoulder
Landform position (three-dimensional): Interfluve
Down-slope shape: Convex
Across-slope shape: Convex, linear, concave
Hydric soil rating: No

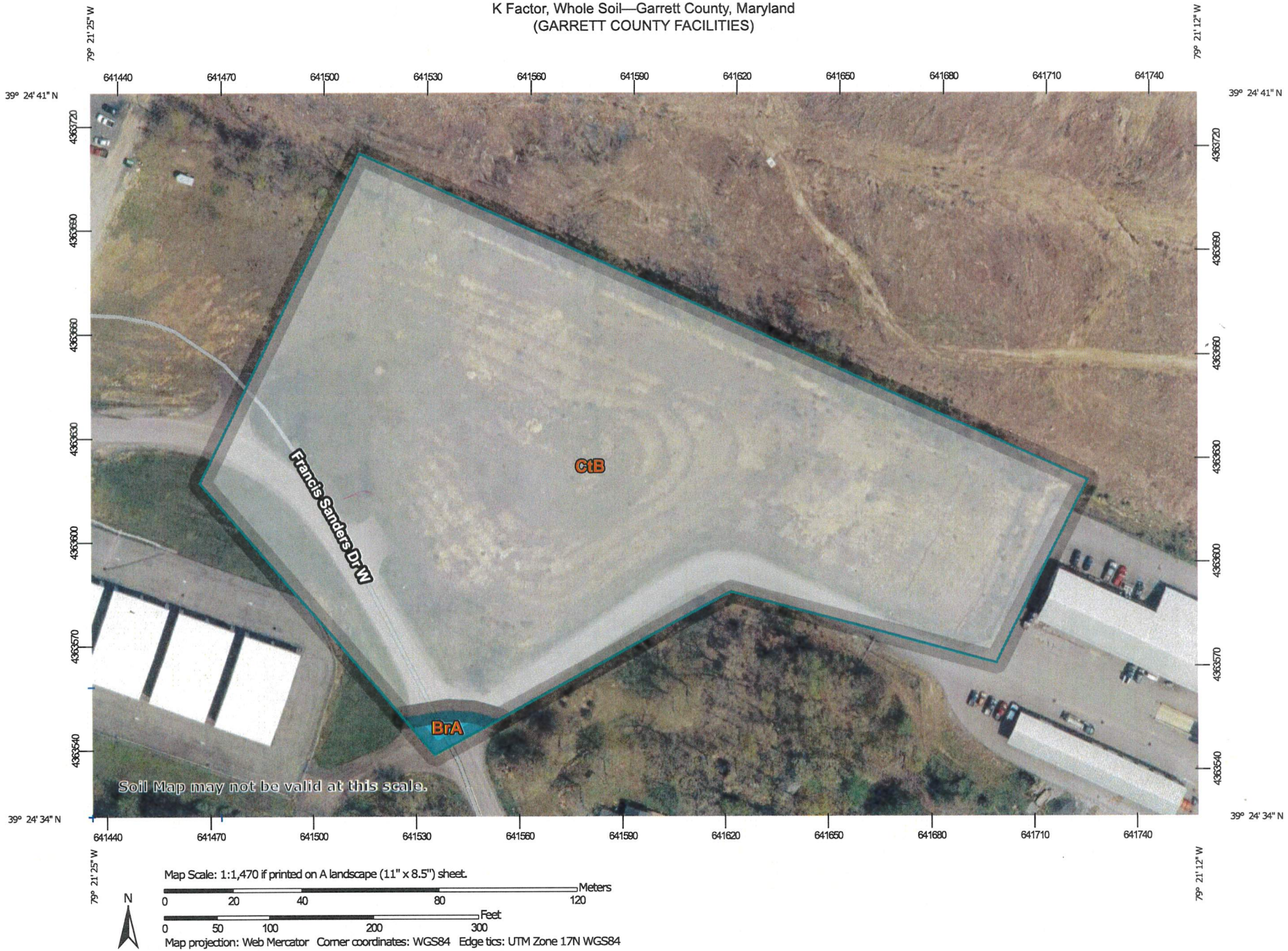
Nolo

Percent of map unit: 5 percent
Landform: Depressions
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Interfluve, head slope
Down-slope shape: Concave
Across-slope shape: Concave
Hydric soil rating: Yes

Data Source Information

Soil Survey Area: Garrett County, Maryland
Survey Area Data: Version 23, Sep 6, 2024

K Factor, Whole Soil—Garrett County, Maryland
(GARRETT COUNTY FACILITIES)



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N

Meters
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Feet
0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- .02
- .05
- .10
- .15
- .17
- .20
- .24
- .28
- .32
- .37
- .43
- .49
- .55
- .64
- Not rated or not available

Soil Rating Lines
- .02
- .05
- .10
- .15
- .17
- .20
- .24
- .28
- .32
- .37
- .43
- .49
- .55
- .64
- Not rated or not available

Soil Rating Points
- .02
- .05
- .10
- .15
- .17
- .20
- .24
- .28
- .32
- .37
- .43
- .49
- .55
- .64
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K Factor, Whole Soil

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
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CtB	Cookport channery loam, 3 to 8 percent slopes		5.8	99.2%
Totals for Area of Interest			**5.9**	**100.0%**

Description

Erosion factor K indicates the susceptibility of a soil to sheet and rill erosion by water. Factor K is one of six factors used in the Universal Soil Loss Equation (USLE) and the Revised Universal Soil Loss Equation (RUSLE) to predict the average annual rate of soil loss by sheet and rill erosion in tons per acre per year. The estimates are based primarily on percentage of silt, sand, and organic matter and on soil structure and saturated hydraulic conductivity (Ksat). Values of K range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

"Erosion factor Kw (whole soil)" indicates the erodibility of the whole soil. The estimates are modified by the presence of rock fragments.

Factor K does not apply to organic horizons and is not reported for those layers.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

Layer Options (Horizon Aggregation Method): Surface Layer (Not applicable)

GARRETT SOIL CONSERVATION DISTRICT EROSION AND SEDIMENT CONTROL PLAN REVIEW CHECKLIST

Project: Garrett County Facilities and Maintenance New Maintenance Building @ Shady Acres Public Works Park

Reviewer: _____ Date _____ GP No. _____

LEGEND FOR CHECKLIST

√ - Accepted **X** - Not Acceptable **N/A** - Not Applicable **R** - Required, Not Submitted **INC** - Incomplete

A. GENERAL DATA

1st	2nd		
√		1.	Vicinity map
√		2.	Drainage area map showing total area draining through or to the site and natural flow patterns.
√		3.	Drainage area map for sediment trapping devices
√		4.	Title block in lower right hand corner containing the following information:
		√ a.	Name of project, location, and name of applicant
		√ b.	Name of company or individual who prepared plan

B. SITE PLAN

1st	2nd		
√		1.	Purpose of plan
√		2.	Legend, scale, north arrow (scale 1" = 50' or less)
√		3.	Erosion and sediment control sheets labeled, numbered, and identified as sheet no. ___ or ___ ESC
√		4.	Limits of disturbance outlined
√		5.	Limit of 100-year flood plain and wetlands outlined (if none, note in site information)
√		6.	Existing and proposed improvements
√		7.	Existing and proposed contours, property lines and adjoining property owners (extend topo no less than 50' from project limits)
√		8.	Stock pile and/or borrow area location (if not, note in site information)
√		9.	Locations and methods of stabilization (riprap, seed, matting, pavement, etc.)
√		10.	Details, specifications and standard symbols for each E & S practice (copied from *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*)
√		11.	Developers and Design Certification (signed)
√		12.	Sequence of construction and time table
√		13.	Details and sizes of existing and proposed drainage control structures (traps, ditches, culverts, etc.)
√		14.	Designs of structures and/or practices, provide calculations
√		15.	Location of sediment control measures
√		16.	Revegetation specifications
		√ a.	Seedbed preparations
		√ b.	Permanent seeding (mix & rate) - include method of application
		√ c.	Temporary seeding (mix & rate) - include method of application
		√ d.	Mulching (include anchoring method)
		√ e.	Matting (type & specification)
		√ f.	Fertilizer and lime (amount & type)
√		17.	Site Information
		√ a.	Total area of site in acres
		√ b.	Area of disturbance in acres
		√ c.	Impervious area in acres

17. Site Information (continued)

✓ d. Total cut in cu. yds.
✓ e. Total fill in cu. yds.
✓ f. Volume of material in cu. yds.
✓ g. Soils type

C. ROAD PROFILES NA

1st	2nd		
___	___	1.	Location and spacing of interceptor dikes and culverts
___	___	2.	Location of diversion dikes
___	___	3.	Inlets for dikes and culverts (types of structure and size)
___	___	4.	Outlets for dikes and culverts (type of structure and size)
___	___	5.	Stream crossings (type of structure and size)
___	___	6.	Typical cross section of roads, extending from toe of fill to top of cut, including ditches

D. SEDIMENT AND EROSION CONTROL

1st	2nd		
NA	___	1.	Dikes (perimeter, diversion, interceptor)
		___ a.	Practice meets purpose and design criteria
		___ b.	Positive drainage is maintained
		___ c.	Flow area of dikes over 5% properly stabilized
		___ d.	Outlet to sediment trapping device or onto stable outlet
		___ e.	Points of vehicular crossing shown and stabilized
NA	___	2.	Traps (pipe, grass, storm inlet, swale, stone and riprap)
		___ a.	Plan view of trap and storage area (top and bottom area drawn to scale)
		___ b.	Bottom dimensions and control elevations (bottom clean-out and discharge)
		___ c.	Contributing drainage area and volume computations
		___ d.	Type and size of outlet structure
		___ e.	Stabilized inlet and outlet
		___ f.	Practice meets purpose and design criteria
NA	___	3.	Temporary Swales (interceptor, perimeter)
		___ a.	Contributing drainage area shown
		___ b.	Required cross section can be installed
		___ c.	Provisions for traffic crossing shown on plan
		___ d.	Channel grade over 5% properly stabilized
		___ e.	Adequate outlet or discharge condition
		___ f.	Practice meets purpose and design criteria
✓	___	4.	Silt Fence
		✓ a.	Drainage area doesn't exceed 2 acre per 100' of fence
		✓ b.	Placed on contours
		✓ c.	Meets maximum allowable slope
		✓ d.	Used for sheet erosion
NA	___	5.	Sediment Basins
		___ a.	Plan view of dam and storage area
		___ b.	Profile along center line of dam
		___ c.	Profile of emergency spillway
		___ d.	Cross section through dam or impoundments at principal spillway
		___ e.	Detail of riser base, anti-vortex device, anti-seep collars and trash rack
		___ f.	Design data sheet properly completed
		___ g.	Outlet protection detail and downstream outfall conditions
		___ h.	Volume and emergency spillway design computations
		___ I.	Provisions for stabilization

E. SEDIMENT BASIN/POND REQUIREMENTS N.A.

BASIN NO. _____

Design Date

___ 1. Drainage Area Map
___ 2. Design data sheet properly completed. (Pages G-26 and G-27, *2011 Maryland Standards and Specifications for Soil Erosion and Sediment Control*)
- ___ a. Storage required
- ___ b. Storage provided
  - ___ 1. Elevation-storage curve and table
  - ___ 2. Storage determined to riser crest elevation
  - ___ 3. Minimum volume of basin before clean-out
- ___ c. Clean-out elevation
- ___ d. Design Q
- ___ e. Barrel size
- ___ f. Riser size
- ___ g. Trash rack size
- ___ h. Emergency spillway size
- ___ I. Anti-seep collar size
- ___ j. Minimum 1' between emergency spillway crest and riser crest.
- ___ k. Required 1' freeboard between design high water and settled top of dam.
- ___ l. Elevations agree with those shown on plan

Plan Drawings

___ 1. Plan view of dam and storage area with approximate bottom dimensions shown
___ 2. Cross section along center line of dam
- ___ a. Top of dam (constructed and settled)
- ___ b. Location of emergency and principal spillway
- ___ c. Existing and proposed ground
- ___ d. Bottom of cut-off trench
- ___ e. Horizontal control

___ 3. Profile through principal spillway
- ___ a. Existing ground
- ___ b. Elevations
  - ___ 1. Settled top of dam
  - ___ 2. Constructed top of dam
  - ___ 3. Emergency spillway crest (dotted line)
  - ___ 4. Riser crest
  - ___ 5. Design high water
  - ___ 6. Inlet and outlet inverts of pipe
  - ___ 7. Clean out
  - ___ 8. Other:
- ___ c. Top width
- ___ d. Side slope

___ e. Cut-off trench
___ 1. 4' minimum bottom width
___ 2. Side slopes 1:1
___ 3. Depth (4' minimum if SWM or permanent pond)
___ f. Anti-seep collar
___ 1. Phreatic line (4:1 slope)
___ 2. Saturated length (dimensioned)
___ 3. 10' minimum from riser
___ 4. Minimum spacing between collars as per NRCS specs
___ g. Barrel
___ 1. Length (dimensioned)
___ 2. Slope
___ 3. Size
___ h. Riser clearly marked at clean-out elevation

___ 4. Profile of emergency spillway
___ a. Existing ground
___ b. Elevation of level control section
___ c. Inlet section and outlet section slopes
___ d. Length of outlet section
___ e. Design Q and velocity (stated on plan)
___ f. Emergency spillway located in cut or channel protection provided (detail required)

___ 5. Riprap outlet protection
___ a. Stone size as per NRCS design criteria
___ b. Medium stone size and minimum depth of riprap section shown on plan
___ c. Riprap placed upon approved filter cloth
___ d. Cross section detail of riprap areas

___ 6. Anti-seep collar detail (dimensioned with construction specifications)
___ 7. Trash rack and anti-vortex device details and construction specifications
___ 8. Downstream outfall conditions
___ 9. Dewatering device detail and construction specifications
___ 10. Baffles (if applicable)
___ 11. Construction specifications (see pages G-24 and G-25 of *2011 Maryland Standards and Specification for Soil Erosion and Sediment Control*
___ 12. Provisions for sediment control during basin construction
___ 13. Fencing note: AIf required by the sediment control inspector, fencing shall be installed to prevent access to the basin by children.@
___ 14. Permits - WRA/Corps Eng/SCD
___ 15. Historical - Archaeological