STANSBURY PARK POND REPAIR PROJECT

DUNDALK, MARYLAND 21222

PREPARED FOR:
BALTIMORE COUNTY DEPARTMENT OF BUDGET AND FINANCE PROPERTY MANAGEMENT DIVISION

100% DESIGN SUBMITTAL

PREPARED BY:

KCI TECHNOLOGIES

Engineers
Planners
Scientists
Construction Managers

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Sparks, Maryland 21152
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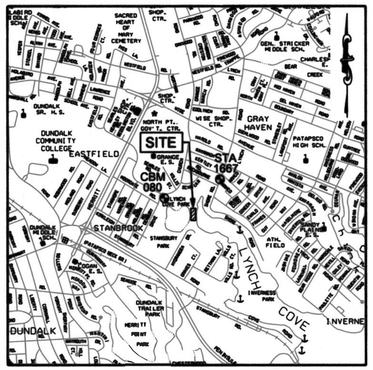


VICINITY MAP
SCALE: 1" = 1000'

SHEET INDEX

SHEET NO.	SHEET DESIGNATION	SHEET TITLE
1	TI-01	TITLE SHEET
2	EC-01	EXISTING CONDITIONS MAP
3	GR-01	GRADING PLAN
4	PR-01	PROFILE AND DETAILS
5	ES-01	EROSION & SEDIMENT CONTROL PLAN
6-10	ES-02 - ES-06	EROSION & SEDIMENT CONTROL DETAILS AND NOTES

LEGEND

- EX. CONTOUR
- EX. STORM DRAIN
- EX. SANITARY SEWER
- EX. MANHOLE
- X. WATER LINE
- EX. SIGN
- SURVEY TRAVERSE POINT (TRAV. PT. 151, FLY R&C)
- EX. WOODS LINE
- PROPERTY LINE
- SOILS LINE (GhB, HbA)
- EX. EDGE OF WATER
- MEAN HIGH WATER
- 25' WETLAND BUFFER (WB)
- EX. 100-YEAR FLOODPLAIN (FP)
- EX. GABION / RIPRAP
- SLOPES > 25%
- CRITICAL AREA
- WATERSHED BOUNDARY
- LOD — LOD — LIMIT OF DISTURBANCE
- PROPOSED RCP

OWNER'S/DEVELOPER'S CERTIFICATION:

I/WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL 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. I/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 INSURE THAT ALL SEDIMENT CONTROL PRACTICES ARE LEFT IN OPERATIONAL CONDITION. I/WE AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT BOARD OF SUPERVISORS OR THEIR AUTHORIZED AGENTS.

SIGNATURE OWNER/DEVELOPER — DATE: 2/21/2024

GREGORY M. DORAN — TITLE: CHIEF CAP CONSTR.
PRINT NAME

CONSULTANT'S CERTIFICATION:

I CERTIFY THAT THIS PLAN OF EROSION AND SEDIMENT CONTROL REPRESENTS A PRACTICAL AND WORKABLE PLAN BASED ON MY PERSONAL KNOWLEDGE OF THE SITE, AND THAT THIS PLAN WAS PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT AND THE CURRENT STATE OF MARYLAND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. I HAVE REVIEWED THIS EROSION AND SEDIMENT CONTROL PLAN WITH THE OWNER/DEVELOPER.

SIGNATURE — DATE: 2/13/2024

JAMES A. TOMLINSON — MD LICENSE NUMBER: 31201
PRINT NAME

OWNER'S/DEVELOPER'S CERTIFICATION - GRADING:

I/WE CERTIFY THAT ALL GRADING ON THIS SITE WILL BE DONE IN ACCORDANCE WITH THE CURRENT GRADING REQUIREMENTS AS SET FORTH BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND WITH THE REQUIREMENTS SPECIFIED IN ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE.

SIGNATURE OWNER/DEVELOPER — TITLE: CHIEF CAPITAL CONSTRUCTION — DATE: 2/21/2024

GREGORY M. DORAN
PRINT NAME

GENERAL NOTES

1. SURVEY CONTROL ESTABLISHED BY NETWORK RTK AND TIED TO KNOWN MONUMENTATION. MARYLAND COORDINATE SYSTEM NAD83 (2011) NAVD 88.

   STATION: 1667
   N 582053.803
   E 1454825.385
   EL 25.16
   CAPPED REBAR (BALT. CNTY CONTROL)

   CBM080
   EL 12.02
   X-CUT (BALT. CNTY BENCHMARK)

2. THE PROPOSED GRADING SHOWN ON THESE PLANS MEETS THE REQUIREMENTS SET FORTH BY BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY AND COMPLIES WITH ARTICLE 33, TITLE 5 OF THE BALTIMORE COUNTY CODE. HOWEVER, DUE TO BUILDING TYPES AND LAYOUT, SOME FIELD ADJUSTMENTS MAY BE REQUIRED. ALL CHANGES MUST COMPLY WITH THE ABOVE MENTIONED REQUIREMENTS.
3. ALL CONSTRUCTION ACTIVITIES SHOULD BE COMPLETED PER THE EFFECTIVE BALTIMORE COUNTY DEPARTMENT OF PUBLIC WORKS STANDARDS AND SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS AND STANDARD DETAILS FOR CONSTRUCTION, AT TIME OF CONSTRUCTION.
4. THERE SHALL BE NO CLEARING, GRADING, CONSTRUCTION OR DISTURBANCE OF VEGETATION IN THE FOREST BUFFER EASEMENT OR OTHER FOREST RETENTION AREAS, EXCEPT AS PERMITTED BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY.
5. STORMWATER MANAGEMENT HAS BEEN ADDRESSED THROUGH A STORMWATER MANAGEMENT VARIANCE DATED FEBRUARY 5, 2024. (EPS TRACKING NUMBER: 07-24-4046)
6. NO KNOWN EXISTING UTILITIES WITHIN THE PROJECT AREA.
7. OVERALL LIMIT OF DISTURBANCE: 0.31 AC. / 13311.0 SF.
8. STANSBURY PARK POND IS DESIGNATED "USE I". LYNCH COVE TO PATAPSCO RIVER MESOHALINE TIDAL WATER BODY IS DESIGNATED "USE 2". ALL IN-STREAM WORK SHALL NOT BE CONDUCTED DURING THE PERIOD MARCH 1 THROUGH JUNE 15, INCLUSIVE OF ANY YEAR.
9. KCI CONDUCTED ALTERNATIVE ANALYSIS FOR BUILD AND NO BUILD ALTERNATIVES (JULY 15, 2022).

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL 2-29-24 (Date)
Jeffrey L. Watts — DISTRICT OFFICIAL
030-4455-24 (Plan No.)
Technical Review for the District by: Dave Bachman
This plan approval will expire three (3) years from the approval date.

STORMWATER MANAGEMENT PERMIT NOT REQUIRED

BALTIMORE COUNTY DEPARTMENT OF RECREATION AND PARKS
APPROVED
3.8.2024 (Date)

BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY
APPROVED FOR GRADING
3/6/24 (Date)

GRADING : SHT 1 OF 2

SEAL	PROFESSIONAL CERTIFICATION	AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE	PROPERTY MANAGEMENT
STATE OF MARYLAND — JAMES ALEXANDER TOMLINSON — No. 31201 — PROFESSIONAL ENGINEER — DATE 2/13/24	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. 31201 EXPIRATION DATE 01/24/2025				R.O.W NO.	ESW	14SE 22 15SE 22	PLAN SCALE: AS SHOWN; PROFILE SCALE: N/A; N/A	APPROVED BY: DIRECTOR; DATE:
	ENGINEER: JAMES A. TOMLINSON — DGN BY: WBD; DWN BY: JMS; CHKD BY: JAT	CONTRACT COMPLETION BOX							
	AS-BUILT PER RECORD PRINT — BY: DATE:	BUREAU OF ENGINEERING AND CONSTRUCTION — REVIEWED BY: — DATE REVIEWED:	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
									APPROVED BY: CHIEF; DATE:

DESIGN & DRAWINGS BASED ON MARYLAND COORDINATE SYSTEM (MCS) HORIZONTAL: NAD 83/91 AND VERTICAL: NAVD 88

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

STANSBURY PARK POND REPAIR PROJECT

TITLE SHEET

SUBDIVISION: STANBROOK

ELECTION DIST. NO.: 12
COUNCILMANIC DIST. NO.: 7

SHEET DESIGNATION	CONTRACT NUMBER
TI-01	000 3206
	JOB ORDER NUMBER: 123010871
	SHEET 1 OF 10
	DRAWING NUMBER: 2023-2362
	FILE NO.:

PLOTTED: "12:21 PM on Tuesday, February 13, 2024"
FILE NAME: 2016\16026210\Drawings\01_PLP\001_Stansbury_Pond.dgn

NOTES

1. NO HIGHLY ERODIBLE SOILS ON THIS SITE.
2. GEOLOGIC FORMATION IS PATAPSCO FORMATION.
3. WATERSHED IS BALTIMORE HARBOR WATERSHED. SUBSHED IS LYNCH COVE SUBSHED.

DESIGN & DRAWINGS BASED ON MARYLAND COORDINATE SYSTEM (MCS) HORIZONTAL: NAD 83/91 AND VERTICAL: NAVD 88

SEAL

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. 31201 , EXPIRATION DATE 01/24/2025 .

ENGINEER: JAMES A. TOMLINSON

AS-BUILT PER RECORD PRINT

BY:
DATE:

DATE: 1/31/2024

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
			R.O.W NO.	ESW	14SE 22 15SE 22
CONTRACT COMPLETION BOX					

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

DRAWING SCALE
PLAN SCALE: 1" = 20'
PROFILE SCALE: N/A
N/A

DGN BY: WBD
DWN BY: JMS
CHKD BY: JAT

PROPERTY MANAGEMENT
APPROVED BY: DIRECTOR
DATE:
APPROVED BY: CHIEF
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

STANSBURY PARK POND REPAIR PROJECT

EXISTING CONDITIONS MAP

SUBDIVISION: STANBROOK

ELECTION DIST. NO.: 12
COUNCILMANIC DIST. NO.: 7

SHEET DESIGNATION	CONTRACT NUMBER
EC-01	000 3206
	JOB ORDER NUMBER
	123010871
	SHEET 2 OF 10
	DRAWING NUMBER
	2023-2363
	FILE NO.:

PLOTTED: 04:19 PM on Thursday, October 05, 2023
FILE:M:\2016\16602620\3\Drawings\02_PEC-P001_Stansbury Pond.dgn

NOTE: AN ALTERNATIVE ANALYSIS WAS APPROVED BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY TO ALLOW THE TEMPORARILY IMPACT OF 5,310 SQUARE FEET OF THE 100-FOOT CRITICAL AREA BUFFER FOR THE REPLACEMENT OF AN EXISTING OUTFALL PIPE WITH A LARGER OUTFALL PIPE TO ADDRESS THE CLOGGING OF THE EXISTING PIPE. CONDITIONS WERE PLACED ON THE APPROVAL TO REDUCE WATER QUALITY IMPACTS INCLUDING RESTORING THE DISTURBED AREA TO EXISTING CONDITIONS.

GRAPHIC SCALE
20 0 10 20 40
(IN FEET)
1 inch = 20ft.

GRADING: SHT 2 OF 2

DESIGN & DRAWINGS BASED ON MARYLAND COORDINATE SYSTEM (MCS) HORIZONTAL: NAD 83/91 AND VERTICAL: NAVD 88

PLOTTED: "03:57 PM on Thursday, November 09, 2023"
FILE:M:\2016\16162620.13\Drawings\03_pGR-P001_Stansbury PondNEW.dgn

SEAL	PROFESSIONAL CERTIFICATION		AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE	PROPERTY MANAGEMENT
STATE OF MARYLAND JAMES A. TOMLINSON No. 31201 PROFESSIONAL ENGINEER	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. 31201, EXPIRATION DATE 01/24/2025.					R.O.W NO.	ESW	14SE 22 15SE 22	PLAN SCALE: 1" = 20' PROFILE SCALE: N/A / N/A	APPROVED BY: ____ DIRECTOR DATE:
			CONTRACT COMPLETION BOX							
	ENGINEER: JAMES A. TOMLINSON	DGN BY: WBD	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
	AS-BUILT PER RECORD PRINT	DWN BY: JMS	REVIEWED BY:							APPROVED BY: ____ CHIEF
DATE: 7/31/2024	BY: DATE:	CHKD BY: JAT	DATE REVIEWED:							DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

STANSBURY PARK POND REPAIR PROJECT

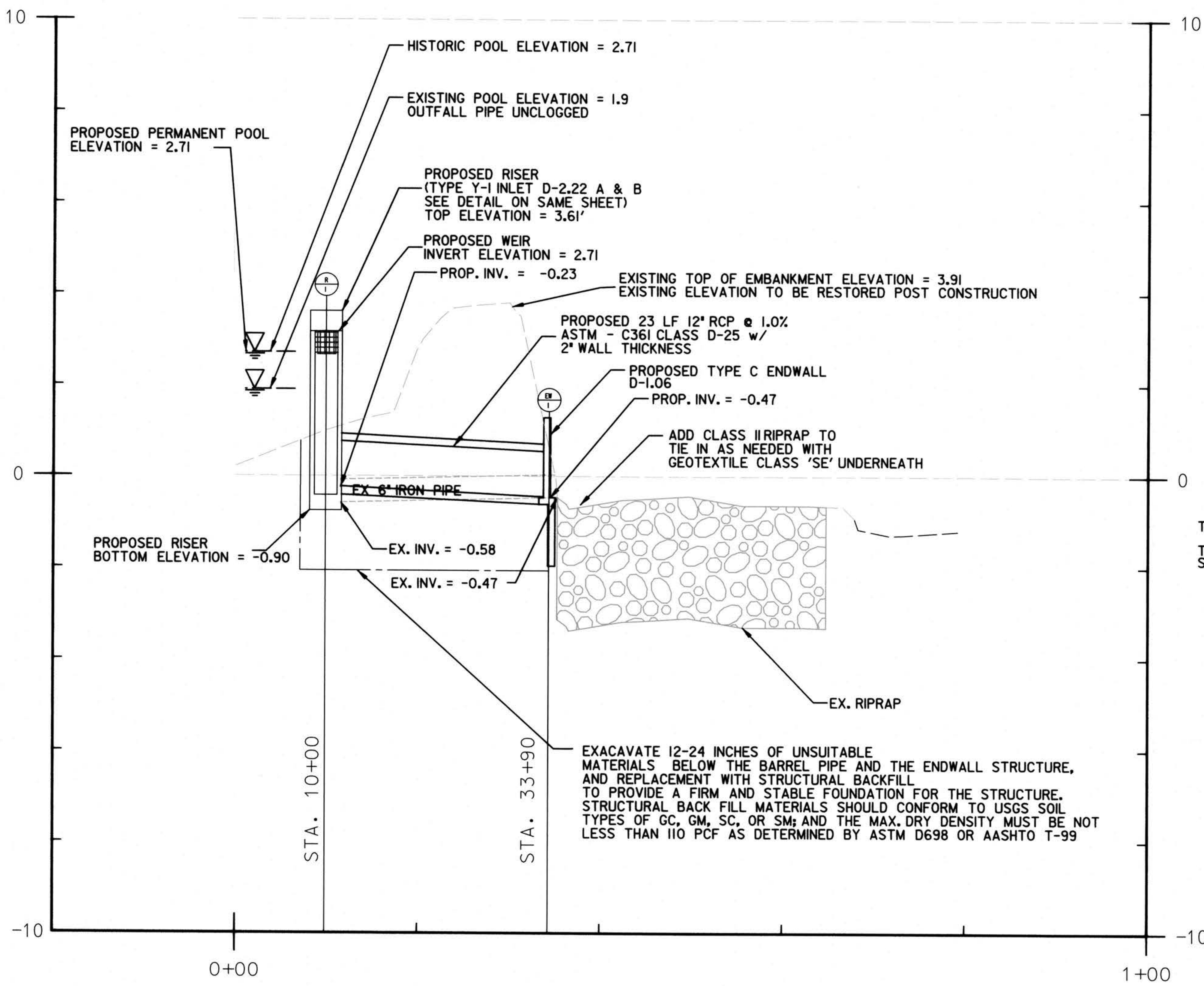
GRADING PLAN

SUBDIVISION: STANBROOK

ELECTION DIST. NO.: 12
COUNCILMANIC DIST. NO.: 7

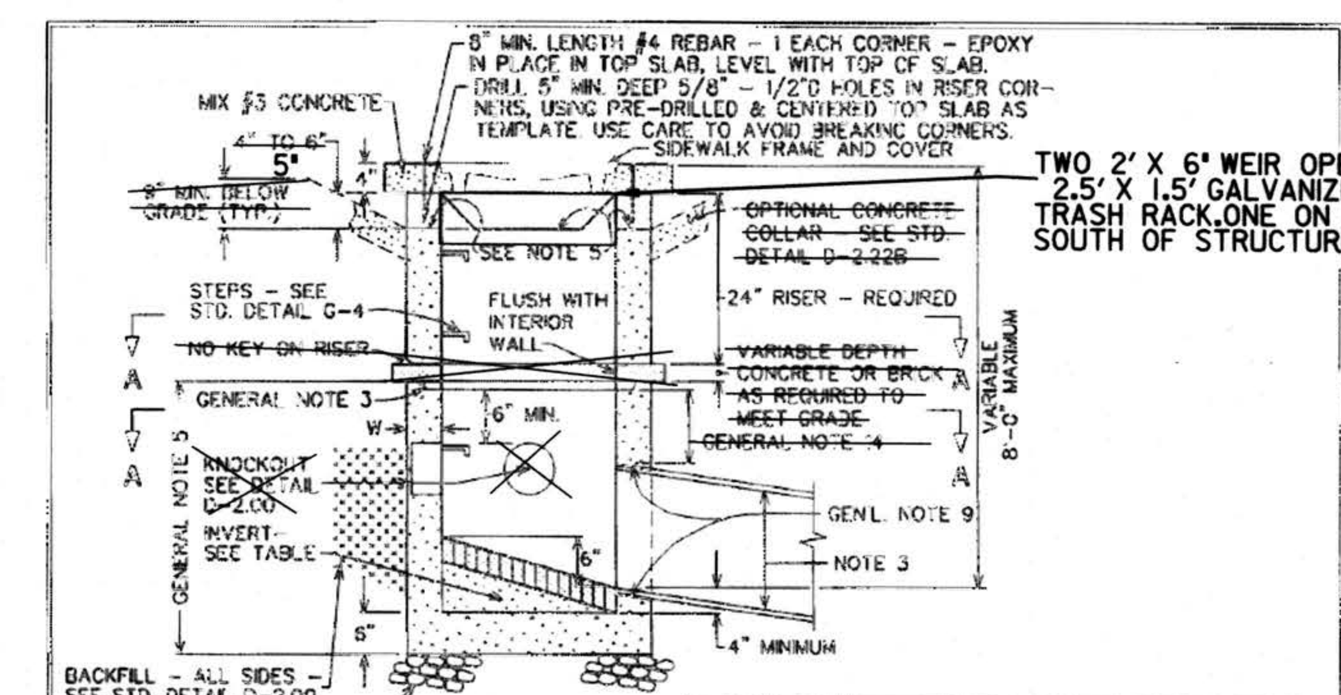
BALTIMORE COUNTY MARYLAND

SHEET DESIGNATION	CONTRACT NUMBER
GR-01	000 3206
	JOB ORDER NUMBER
	123010871
	SHEET 3 OF 10
	DRAWING NUMBER
	2023-2364
	FILE NO.:



PROFILE

SCALE: HOR. 1" = 10'
VERT. 1" = 2'

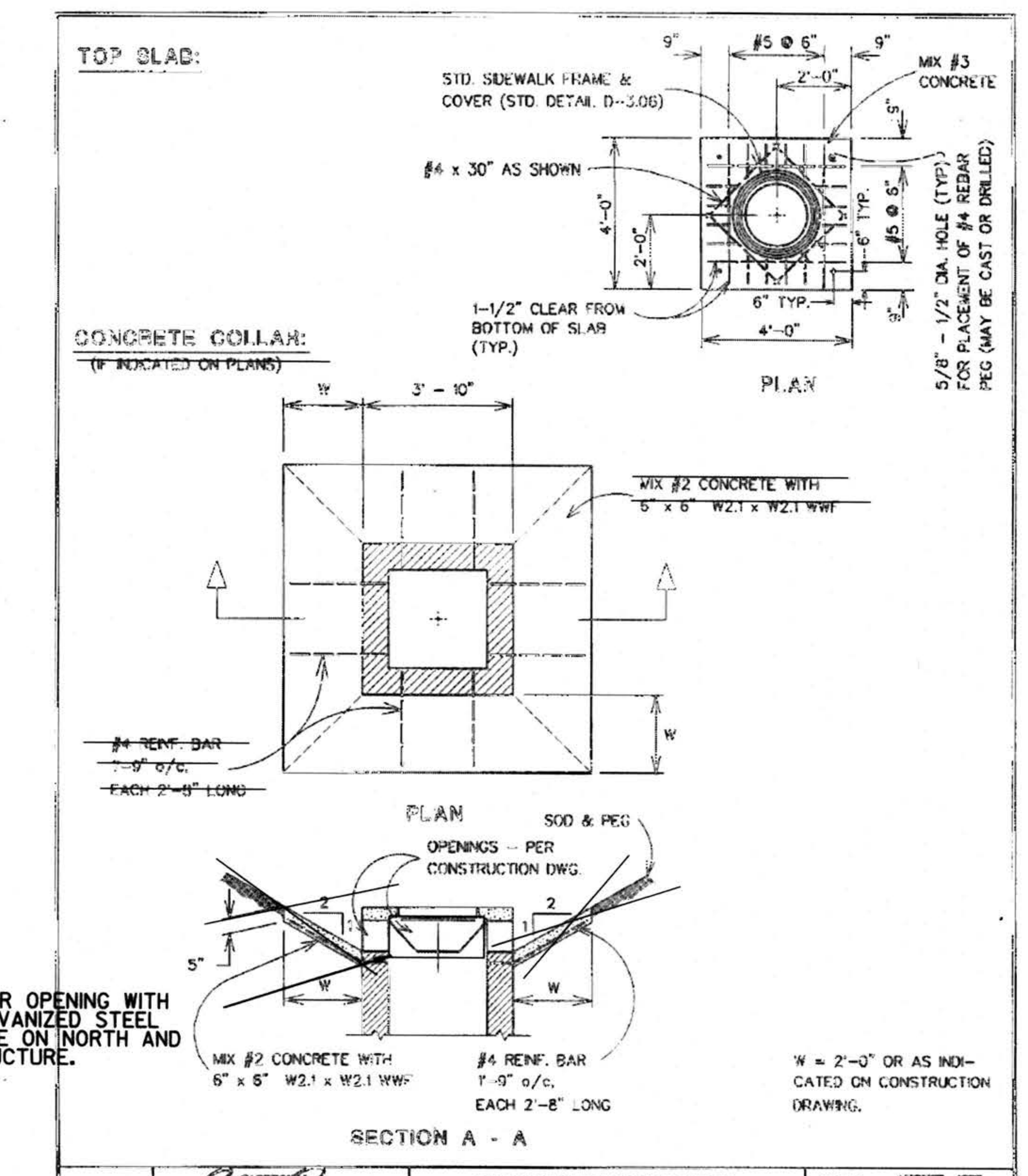


	PRECAST	CAST-IN-PLACE (CIP)
W	8" MINIMUM	8" MINIMUM
REINF.	2 LAYERS- 4x4 W4.0 x W4.0- WWF	#4 @ 9" O/C E.W. IN BOTH FACES; 16" BAR LAPS; CONTINUOUS AT CORNERS
REINF.COVER	1.5 INCH MIN.	1.5 INCH MIN.
INVERT	APPROVED PRECAST, PLAIN MIX #3 CONCRETE OR BRICK	PLAIN MIX #3 CONCRETE OR BRICK
SUBGRADE OPENING	SEE DETAIL D-2.00	4" x 4" OPENINGS OR AS DIRECTED.
CONCRETE	4,500 PSI	MIX NO. 3

NOTES

1. SEE GENERAL NOTES, STANDARD DETAIL D-2.00.
2. SEE DETAIL D-2.22B FOR PRECAST TOP SLAB AND OPTIONAL CONCRETE COLLAR DETAIL.
3. FOR PIPE SIZE, LOCATION AND INVERT ELEVATIONS, REFER TO PLANS. USE 24" MAXIMUM DIAMETER PIPE OUTFALL WITH STRUCTURE SHOWN. CONSTRUCT INLET HEADPIECE OVER TYPE A MANHOLE STRUCTURE WHERE 27" OR LARGER DRAIN PIPES ARE REQUIRED. SHOW HEADPIECE DETAIL ON PLANS IN THIS CASE.
4. THIS INLET SHALL NOT BE USED ADJACENT TO PUBLIC ROADS OR ALLEYS NOR IN ANY LOCATION WHERE VEHICLES COULD ENCOUNTER IT.
5. OPENINGS TO BE PLACED IN ANY OR ALL SIDES AS DIRECTED BY ENGINEER OR ON PLANS. OPENING LIP ELEVATION TO BE SET IN THE FIELD.
6. PRECAST RISER TO BE REPLACED AT CONTRACTOR'S EXPENSE IF TOP SLAB SUPPORTS ARE BROKEN.

APPROVAL — DIRECTOR — BUR. OF ENGINEERING/CONSTRUCTION — 3/18/02 — DATE
DEPARTMENT OF PUBLIC WORKS
STORM DRAINAGE DETAILS
TYPE Y-1 INLET
MODIFIED
ISSUED OCTOBER 1977
REVISED SEPTEMBER 16, 1991
REVISED MARCH 2002
PLATE D-2.22A



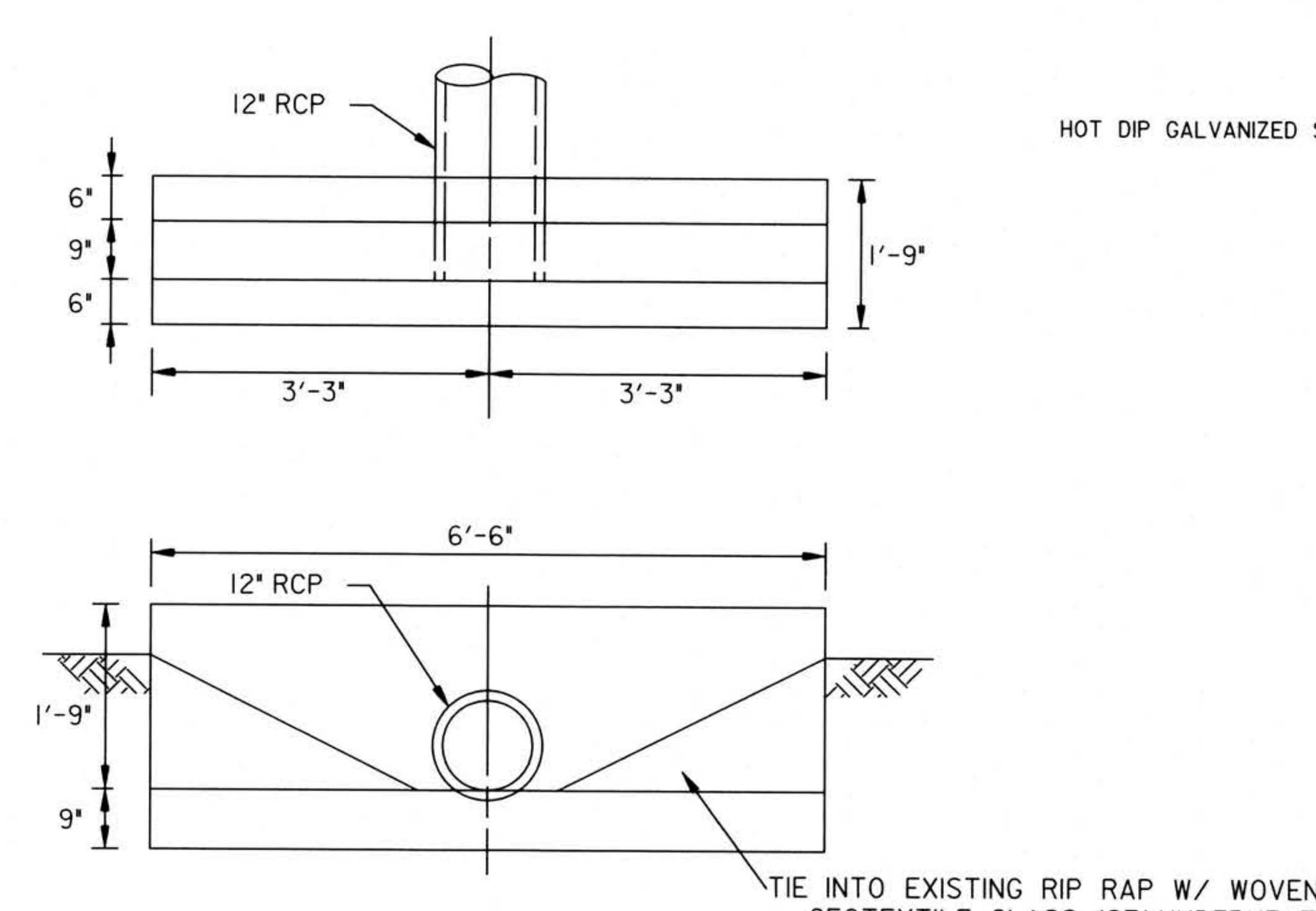
DEPARTMENT OF PUBLIC WORKS
STORM DRAINAGE DETAILS
TYPE Y-1 INLET DETAILS
MODIFIED
ISSUED AUGUST 1997
REVISED MARCH 2002
PLATE D-2.22B

STRUCTURE TABLE

ID	STANDARD	TOP ELEV.	INVERT IN	INVERT OUT
R-1	BA. CO. D-2.22 A&B	4.11	2.71	-0.23
EW-1	BA. CO. D-1.06	1.28	-0.46	-0.47

PIPE SCHEDULE

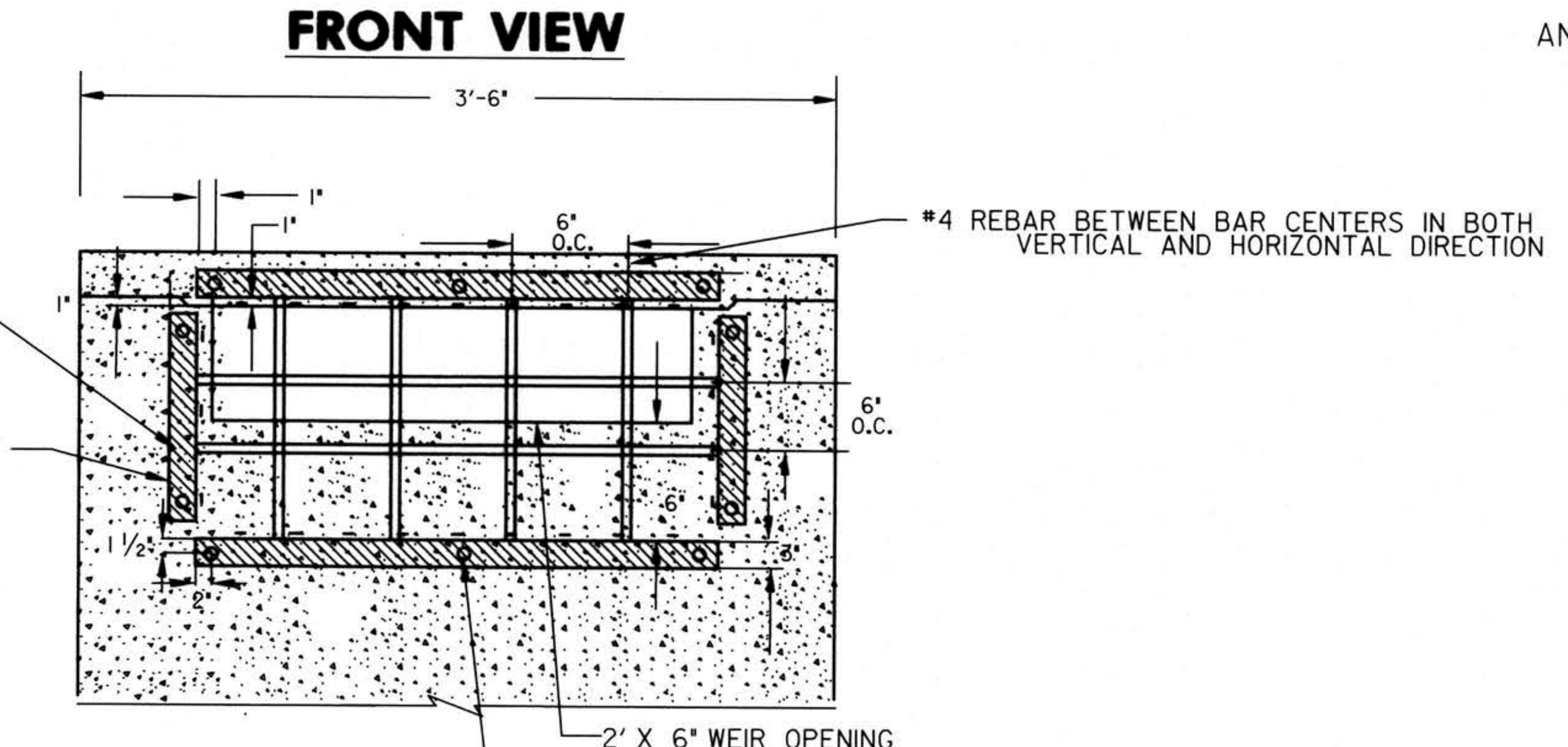
FROM	TO	SIZE	TYPE	INVERT IN	INVERT OUT	LENGTH	SLOPE
R-1	EW- 1	12"	RCP	-0.23	-0.47	23.0'	1.0%



DOWNSTREAM TYPE 'C' ENDWALL DETAIL

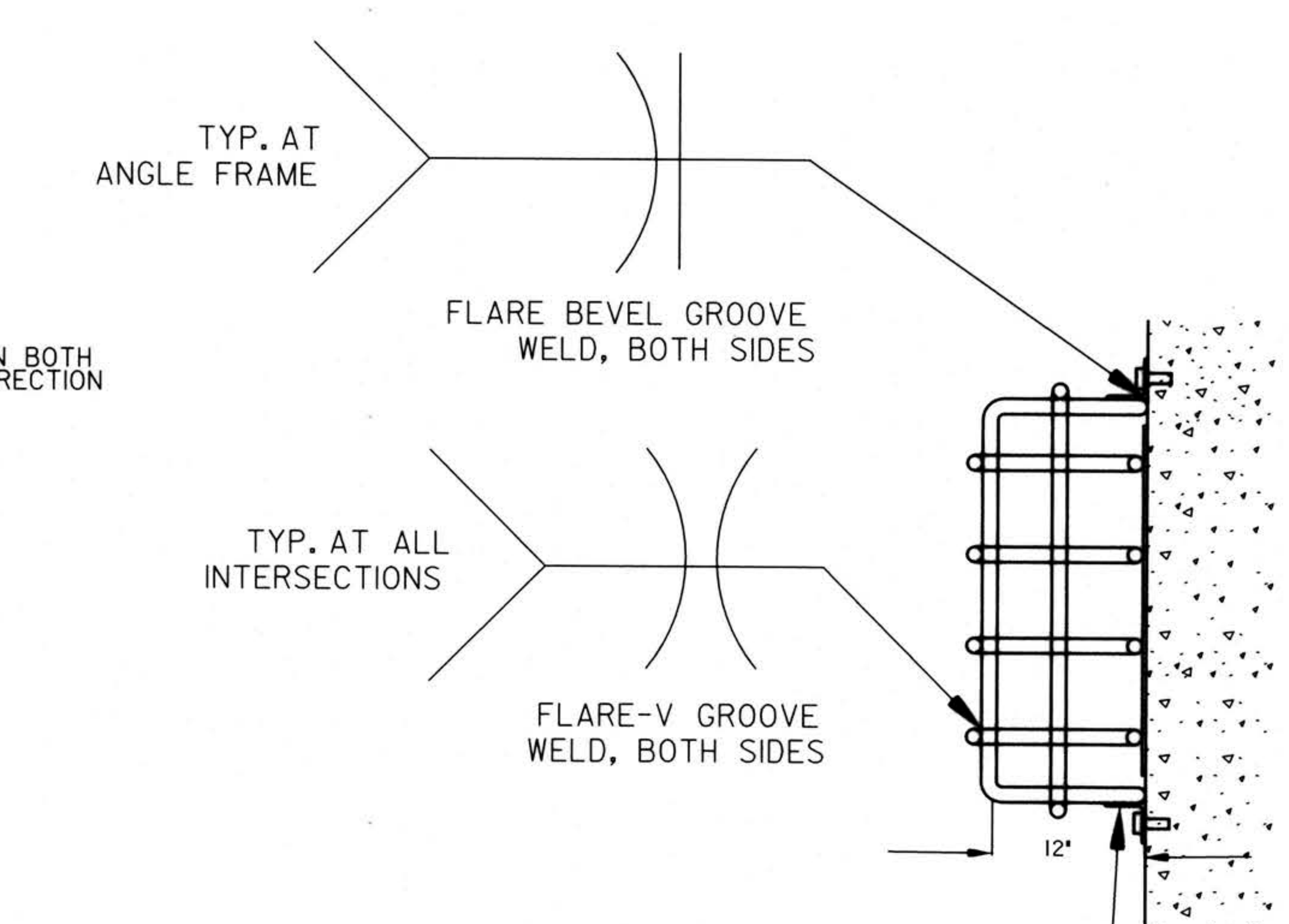
SCALE: NOT TO SCALE

FRONT VIEW



TRASH RACK FRONT VIEW

SCALE: NOT TO SCALE



WELDING DETAIL

SCALE: NOT TO SCALE

#4 HOT DIP GALVANIZED STEEL REBAR@ 6" O.C.VERTICAL AND 6" O.C. HORIZONTAL, TOP AND BOTTOM

PLOTTED: '04:19 PM on Thursday, October 05, 2023'
FILE:M:\2016\16160262013\Drawings\04_pPR-P00_Stansbury Pond.dgn

SEAL	PROFESSIONAL CERTIFICATION		AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE		PROPERTY MANAGEMENT
STATE OF MARYLAND JAMES A. TOMLINSON No. 31201 PROFESSIONAL ENGINEER	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. 31201, EXPIRATION DATE 01/24/2025					R.O.W NO.	ESW	14SE 22 15SE 22	PLAN SCALE:	1" = 10'	APPROVED BY: DIRECTOR DATE:
			CONTRACT COMPLETION BOX						PROFILE SCALE:	HORI. 1" = 10' VERT. 1" = 2'	
	ENGINEER: JAMES A. TOMLINSON	DGN BY: WBD	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER	
	AS-BUILT PER RECORD PRINT	DWN BY: JMS	REVIEWED BY:								APPROVED BY: CHIEF
DATE: 1/31/2024	BY: DATE:	CHKD BY: JAT	DATE REVIEWED:								DATE:

DESIGN & DRAWINGS BASED ON MARYLAND COORDINATE SYSTEM (MCS) HORIZONTAL: NAD 83/91 AND VERTICAL: NAVD 88

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

STANSBURY PARK POND REPAIR PROJECT

GRADING PROFILE AND DETAILS

SUBDIVISION: STANBROOK

ELECTION DIST. NO.: 12
COUNCILMANIC DIST. NO.: 7

SHEET DESIGNATION	CONTRACT NUMBER
PR-01	000 3206
	JOB ORDER NUMBER
	123010871
BALTIMORE COUNTY MARYLAND	SHEET 4 OF 10
	DRAWING NUMBER
	2023-2365
	FILE NO.:


BALTIMORE GAS & ELECTRIC CO
BALTIMORE COUNTY MARYLAND
STANSBURY POND
LYNCH COVE
LYNCH COVE
N 581,100
E 1,453,450
N 580,800
E 1,454,400
INSET DETAIL
SCALE: 1"=20'
MEAN HIGH WATER
MEAN LOW WATER
TRAIL CLOSED SIGN
ORANGE SAFETY FENCE
EXPANDING THE WIDTH OF THE WALKING PATH
SANDBAGS
TOP ELEVATION = 3.0'
SILT FENCE
FILTER BAG
SANDBAGS
REMOVE THE EXISTING RIPRAP AS NECESSARY TO INSTALL THE SANDBAGS DURING LOW TIDE TO MAKE SURE THE BOTTOM IS WATERTIGHT.
TREE PROTECTION
SEE DETAIL ON SHEET 9
NOTE: AN ALTERNATIVE ANALYSIS WAS APPROVED BY THE BALTIMORE COUNTY DEPARTMENT OF ENVIRONMENTAL PROTECTION AND SUSTAINABILITY TO ALLOW THE TEMPORARILY IMPACT OF 5,310 SQUARE FEET OF THE 100-FOOT CRITICAL AREA BUFFER FOR THE REPLACEMENT OF AN EXISTING OUTFALL PIPE WITH A LARGER OUTFALL PIPE TO ADDRESS THE CLOGGING OF THE EXISTING PIPE. CONDITIONS WERE PLACED ON THE APPROVAL TO REDUCE WATER QUALITY IMPACTS INCLUDING RESTORING THE DISTURBED AREA TO EXISTING CONDITIONS.
SILT FENCE FOR DISTURBED WEST HALF OF ACCESS ROAD
AVERAGE SLOPE < 2%, SLOPE LENGTH 6 FT, SF LENGTH 610 FT
SILT FENCE FUNCTIONS AS A BACKUP EROSION AND CONTROL MEASURE FOR THE DAILY STABILIZED ACCESS ROAD
DO NOT IMPACT BENCHES AND TREES
TOTAL LIMIT OF DISTURBANCE: 0.31 AC
13,311 SQ. FT
STAGING & STOCKPILE AREA
SUPER SILT FENCE FOR STOCKPILE AREA LENGTH 132 FT
AVERAGE SLOPE 2:1 SLOPE LENGTH 30 FT
STAGING/STOCKPILE AREA
(MAX HEIGHT = 15'
MAX SLOPE = 2:1)
EX. DOCK
TRAIL CLOSED SIGN
MOUNTABLE BERM
SEE DETAIL C-6 ON SHEET 10
STABILIZED CONSTRUCTION ENTRANCE
EXISTING MAC TRAIL TO BE USED AS ACCESS ROAD. THE ACCESS ROAD SHALL BE STABILIZED BY THE END OF EACH WORK DAY. USE SEED AND MULCH TO STABILIZE THE AREA OUTSIDE OF THE EXISTING PAVEMENT WITHIN LOD.
APPROXIMATE LOCATION OF EXISTING CHROMIUM CAP
LEGEND
EX. CONTOUR
EX. STORM DRAIN
EX. SANITARY SEWER
EX. MANHOLE
X. WATER LINE
EX. SIGN
SURVEY TRAVERSE POINT
EX. WOODS LINE
PROPERTY LINE
SOILS LINE
EX. EDGE OF WATER
MEAN HIGH WATER
25' WETLAND BUFFER
EX. 100-YEAR FLOODPLAIN
EX. GABION / RIPRAP
SLOPES > 25%
CRITICAL AREA
WATERSHED BOUNDARY
LIMIT OF DISTURBANCE
PROPOSED RCP
ORANGE SAFETY FENCE
SILT FENCE
PUMP AROUND AND HOSES
SUMP PIT
FILTER BAG
SANDBAGS
STABILIZED CONSTRUCTION ENTRANCE
SUPER SILT FENCE

SEQUENCE OF CONSRUCTION

1. OBTAIN ALL NECESSARY EASEMENTS AND RIGHT-OF-WAYS BEFORE STARTING WORK.
2. CONTRACTOR WILL CALL "MISS UTILITY" (800-257-7777) AT LEAST 72 HOURS PRIOR TO STARTING WORK.
3. NOTIFY THE MARYLAND DEPARTMENT OF THE ENVIRONMENT, INSPECTION AND COMPLIANCE PROGRAM AT (410) 537-3510 FOR THE REQUIRED CONSTRUCTION MEETING FIVE (5) DAYS PRIOR TO BEGINNING WORK.
4. NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL (410) 887-3226 AT LEAST 48 HOURS PRIOR TO BEGINNING WORK.
5. PERFORM CONSTRUCTION STAKEOUT.
6. TREE PROTECTION FENCE SHALL BE INSTALLED PER THE DETAIL ON PLAN SHEET 09 AND AS DIRECTED. THIS SHALL BE COMPLETED BY AND INSPECTED AT THE PRE-CONSTRUCTION MEETING BY A COUNTY ENVIRONMENTAL PROTECTION AND SUSTAINABILITY INSPECTOR.
7. ORANGE SAFETY FENCE SHALL BE INSTALLED AS SHOWN ON PLAN SHEET 05. THIS SHALL BE COMPLETED BY AND INSPECTED AT THE PRE-CONSTRUCTION MEETING, ALONG WITH THE STAKEOUT. SEE BLAZE ORANGE PLASTIC MESH SAFETY FENCE DETAIL ON SHT. 10.
8. CLEAR AND GRUB FOR SEDIMENT & EROSION CONTROL MEASURE AND DEVICES ONLY.
9. INSTALL STABILIZED CONSTRUCTION ENTRANCE AND THE SILT FENCE/SUPER SILT FENCE AS SHOWN. THE ACCESS ROAD SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
10. INSTALL SANDBAG/STONE CHANNEL DIVERSION AS PER THE PLAN OR AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR INCLUDING SANDBAGS, PUMP AND FILTER BAG. DEWATER THE WORK AREA TO FILTER BAG LOCATION. REMOVE THE EXISTING RIPRAP AS NECESSARY TO INSTALL THE SANDBAGS DURING LOW TIDE TO MAKE SURE THE BOTTOM IS WATERTIGHT.
11. NOTIFY BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL FOLLOWING INSTALLATION OF SEDIMENT CONTROL DEVICES.
12. WITH THE APPROVAL OF BALTIMORE COUNTY DEPARTMENT OF PERMITS, APPROVALS AND INSPECTIONS, SEDIMENT CONTROL AND THE SEDIMENT CONTROL INSPECTOR, PROCEED WITH ANY ADDITIONAL CLEARING OF THE ACTIVE WORK AREA.
13. WITH PERMISSION FROM THE INSPECTOR, AND 72-HOUR CLEAR WEATHER FORCAST, REMOVE EXISTING 6" PIPE, INSTALL RISER, 12" RCP PIPE, AND ENDWALL. BACKFILL EMBANKMENT. REPLACE DAMAGED RIPRAP WITH CLASS II RIPRAP UNDERLINING BY A WOVEN GEOTEXTILE LINER. STABILIZE THE DISTURBED EMBANKMENT AREA WITH PERMANENT SEED AND MATTING.
14. ONCE MAIN WORK AREA IS COMPLETED AND STABILIZED AND WITH THE PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SANDBAG DIVERSIONS AND DEWATERING MEASURES AND STABILIZE THOSE AREAS DISTURBED BY THE PROCESS.
15. REPLACE ANY DAMAGED SECTIONS OF THE MAC TRAIL IN KIND. PERFORM FINAL STABILIZATION OF ACCESS ROAD OUTSIDE OF THE PAVEMENT PER THE DAILY STABILIZATION NOTE.
16. UPON COMPLETION AND STABILIZATION OF SITE WITH ESTABLISHED VEGETATION AND WITH PERMISSION OF THE SEDIMENT CONTROL INSPECTOR, REMOVE SEDIMENT CONTROL MEASURES AND STABILIZE THOSE AREAS DISTURBED BY THIS PROCESS.

NOTE: NO HEAVY EQUIPMENT/DISTURBANCE SUGGESTED FOR CONSTRUCTION DUE TO THE CHROMIUM CAP AREA. IF HEAVY EQUIPMENT HAS TO BE USED, TIMBER CRANE MATS SHALL BE USED TO PROTECT THE CHROMIUM CAP AREA.

GRAPHIC SCALE
40 0 20 40 80
(IN FEET)
1 inch = 40ft.

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey C. West 2-29-24
Date

DESIGN & DRAWINGS BASED ON MARYLAND COORDINATE SYSTEM (MCS) HORIZONTAL: NAD 83/91 AND VERTICAL: NAVD 88

SEAL: STATE OF MARYLAND — JAMES A. TOMLINSON — No. 31201 — PROFESSIONAL ENGINEER
DATE: 1/31/2024

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. 31201, EXPIRATION DATE 01/24/2025.
ENGINEER: JAMES A. TOMLINSON — DGN BY: WBD — DWN BY: JMS — CHKD BY: JAT
AS-BUILT PER RECORD PRINT
BY:
DATE:

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE	
						PLAN SCALE:	1" = 20'
			R.O.W NO.	ESW	14SE 22 15SE 22	PROFILE SCALE:	N/A N/A
CONTRACT COMPLETION BOX							
BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

PROPERTY MANAGEMENT
APPROVED BY: ____ DIRECTOR
DATE: ____
APPROVED BY: ____ CHIEF
DATE: ____

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

STANSBURY PARK POND REPAIR PROJECT
EROSION & SEDIMENT CONTROL PLAN

SUBDIVISION: STANBROOK
ELECTION DIST. NO.: 12
COUNCILMANIC DIST. NO.: 7

SHEET DESIGNATION	CONTRACT NUMBER
ES-01	000 3206
	JOB ORDER NUMBER
	123010871
	SHEET 5 OF 10
	DRAWING NUMBER
	2023-2366
	FILE NO.:

GENERAL EROSION AND SEDIMENT CONTROL NOTES

1. REFER TO "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL" FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN.
2. WITH THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR, MINOR FIELD ADJUSTMENTS CAN AND WILL BE MADE TO INSURE THE CONTROL OF ANY SEDIMENT. CHANGES IN SEDIMENT CONTROL PRACTICES REQUIRE PRIOR APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT.
3. AT THE END OF EACH WORKING DAY, ALL SEDIMENT CONTROL PRACTICES WILL BE INSPECTED AND LEFT IN OPERATIONAL CONDITION.
4. FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN: A.) THREE CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1), AND B.) SEVEN CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
5. ANY CHANGE TO THE GRADING PROPOSED ON THIS PLAN REQUIRES RE-SUBMISSION TO BALTIMORE COUNTY SOIL CONSERVATION DISTRICT FOR APPROVAL.
6. DUST CONTROL WILL BE PROVIDED FOR ALL DISTURBED AREAS. REFER TO "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL", PG. H-22, FOR ACCEPTABLE METHODS AND SPECIFICATIONS FOR DUST CONTROL.
7. ANY VARIATIONS FROM THE SEQUENCE OF OPERATIONS STATED ON THIS PLAN REQUIRES THE APPROVAL OF THE SEDIMENT CONTROL INSPECTOR AND THE BALTIMORE COUNTY SOIL CONSERVATION DISTRICT PRIOR TO THE INITIATION OF THE CHANGE.
8. EXCESS CUT OR BORROW MATERIAL SHALL GO TO, OR COME FROM, RESPECTIVELY, A SITE WITH AN OPEN GRADING PERMIT AND APPROVED SEDIMENT CONTROL PLAN.
9. THE FOLLOWING ITEM MAY BE USED AS APPLICABLE: REFER TO "MARYLAND'S GUIDELINES TO WATERWAY CONSTRUCTION" BY THE WATER MANAGEMENT ADMINISTRATION (WMA) OF THE MARYLAND DEPARTMENT OF THE ENVIRONMENT DATED, NOVEMBER, 2000, FOR STANDARD DETAILS AND DETAILED SPECIFICATIONS OF EACH PRACTICE SPECIFIED HEREIN FOR WATERWAY CONSTRUCTION.
10. PUMPING SEDIMENT LADEN WATER INTO WATERS OF THE STATE IS STRICTLY PROHIBITED. ANY PORTABLE DEWATERING DEVICE MUST BE LOCATED WITHIN THE LIMIT OF DISTURBANCE.
11. UPON INSTALLATION OF THE BASE PAVEMENT AND AT THE DIRECTION OF THE SEDIMENT CONTROL INSPECTOR, RELOCATE THE STABILIZED CONSTRUCTION ENTRANCE AND INSTALL ADDITIONAL CONTROL MEASURES (STABILIZED CONSTRUCTION ENTRANCES, SILT FENCES, SUPER SILT FENCES) AS NEEDED TO CONTROL SEDIMENT RUNOFF FROM DISTURBED AREAS. THE ADDITIONAL CONTROLS MUST NOT ALTER DRAINAGE PATTERNS.

EROSION AND SEDIMENT CONTROL NOTES

A. ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN. REFERENCE MANUALS INCLUDE: 2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL, MARYLAND GUIDELINES FOR WATERWAY CONSTRUCTIONS, DATED 2000, AND , BALTIMORE COUNTY URBAN POLICY AND GUIDELINES MANUAL DATED 2012.
B. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PROPERLY MAINTAINED AND ADEQUATELY FUNCTIONING AT THE END OF EACH WORKDAY. ANY EXISTING MEASURES THAT ARE DAMAGED SHALL BE PROPERLY REPAIRED BY THE END OF EACH WORKDAY.
C. WHEN REQUIRED, EXCAVATED TOPSOIL AND SUBSOIL SHALL BE KEPT SEPARATE AND PROTECTED AS FOLLOWS:
 1. TEMPORARY STOCKPILES SHALL BE LOCATED WITHIN THE LIMIT OF DISTURBANCE
 2. TEMPORARY STOCKPILES SHALL DRAIN TO A FUNCTIONING SEDIMENT CONTROL DEVICE.
 3. TEMPORARY STOCKPILES SHALL BE POSITIONED TO NOT IMPEDE UPON, OR IMPAIR THE FUNCTION OF SAID DEVICE.
 4. TEMPORARY STOCKPILES SHALL BE POSITIONED TO NOT ALTER DRAINAGE DIVIDES.
D. POINT OF CONSTRUCTION INGRESS AND EGRESS SHALL BE PROTECTED TO PREVENT THE TRACKING OF SOIL ONTO PUBLIC WAYS BY USING STABILIZED CONSTRUCTION ENTRANCE AT THE INTERFACES WITH PUBLIC ROADWAYS.
E. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN:
 1. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN THREE HORIZONTAL TO ONE VERTICAL (3:1).
 2. SEVEN (7) CALENDAR DAYS FOR ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.
F. ANY DEWATERING DISCHARGE SHALL BE PLACED INTO AN APPROVED DEWATERING STRUCTURE CONSTRUCTED IN ACCORDANCE WITH THE STANDARD DETAILS.

MAINTENANCE NOTE

CONTRACTOR SHALL INSPECT AND MAINTAIN ALL SEDIMENT CONTROL MEASURES AND DEVICES AFTER EVERY STORM EVENT. MAINTENANCE SHALL INCLUDE, BUT NOT BE LIMITED TO THE REMOVAL OF ALL ACCUMULATED SEDIMENT. GEOTEXTILE FABRIC SHALL BE REPLACED AS NEEDED TO ENSURE PROPER FUNCTION.

DAILY STABILIZATION NOTE

CONTRACTOR SHALL ONLY DISTURB THAT AREA WHICH CAN BE COMPLETED AND STABILIZED BY THE END OF EACH WORKING DAY. STABILIZATION SHALL BE AS FOLLOWS:
1. FOR AREAS TO BE PAVED, THE APPLICATION OF STONE BASE.
2. FOR AREAS TO BE VEGETATIVELY STABILIZED:
 A. PERMANENT SEED AND SOIL STABILIZATION MATTING OR SOD FOR ALL STEEP SLOPES, CHANNELS OR SWALES.
 B. PERMANENT SEED AND MULCH FOR ALL OTHER AREAS.

ANY AREAS WHICH CAN NOT BE STABILIZED BY THE END OF EACH WORKING DAY MUST HAVE SILT FENCE INSTALLED ON THE DOWNSLOPE SIDE.

TEMPORARY STOCKPILE NOTE

TEMPORARY STOCKPILES SHALL BE:
1. LOCATED WITHIN THE LIMIT OF DISTURBANCE
2. DRAIN TO A FUNCTIONING SEDIMENT CONTROL DEVICE.
3. BE POSITIONED TO NOT IMPEDE UPON, OR IMPAIR THE FUNCTION OF SAID DEVICE.
4. POSITIONED TO NOT ALTER DRAINAGE DIVIDES.

ADDITIONAL NOTES:

1. WEST BRANCH OF NORTH FORK WHITE MARSH RUN IS A USE IV STREAM, THEREFORE, IN-STREAM CONSTRUCTION IS PROHIBITED DURING THE PERIOD OF MARCH 1 THROUGH MAY 31, INCLUSIVE OF ANY YEAR. EVERY EFFORT MUST BE TAKEN TO AVOID UNDUE DISTURBANCE TO THE STREAM CHANNEL.
2. THIS PLAN DOES NOT COVER PASSING THE TWO YEAR STORM EVENT. IN THE EVENT OF A STORM, THE CONTRACTOR WILL BE RESPONSIBLE FOR REMOVAL AND PROTECTION AT THE END OF EACH WORK DAY, ANY EQUIPMENT, TOOLS, MATERIALS, OR OTHER ITEMS NEEDED TO COMPLETE THE WORK THAT COULD BE AFFECTED BY THE STORM FLOWS.
3. PUMPING IS NOT PERMITTED BETWEEN THE HOURS OF 7 PM AND 7 AM, MONDAY THROUGH FRIDAY.
4. CONSTRUCTION EQUIPMENT SHALL NOT BE STARTED NOR RUN BETWEEN THE HOURS OF 7 PM AND 7 AM, MONDAY THROUGH FRIDAY.
5. FOR SATURDAY WORK, THE ABOVE HOURS SHALL BE FROM 5 PM AND 9 AM RESPECTIVELY.
6. NO WORK SHALL BE DONE ON SUNDAY.

UTILITY NOTES:

1. CONTRACTOR SHOULD OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED EACH DAY. IF TRENCH MUST REMAIN OPEN LONGER THAN ONE DAY, SILT FENCE SHALL BE PLACED BELOW (DOWNSLOPE OF) THE TRENCH.
2. PLACE ALL EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH.
3. ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED IMMEDIATELY.

STANDARDS AND SPECIFICATIONS FOR MATERIALS

Table H.1: Geotextile Fabrics

		WOVEN SLIT FILM GEOTEXTILE		WOVEN MONOFILAMENT GEOTEXTILE		NONWOVEN GEOTEXTILE	
		MINIMUM AVERAGE ROLL VALUE*					
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**	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	

*All numeric values except apparent opening size (AOS) represent minimum average roll values (MARV). MARV is calculated as the typical minus two standard deviations. MD is machine direction; CD is cross direction.
**Values for AOS represent the average maximum opening.
Geotextiles must be evaluated by the National Transportation Product Evaluation Program (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.

Table H.2: Stone Size

TYPE	SIZE RANGE	d50	d100	AASHTO	MIDSIZE WEIGHT***
NUMBER 57*	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** (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

*This classification is to be used on the upstream face of stone outlets and check dams.
** This classification is to be used for gabions.
*** 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 d100 selected from Table H.2. The d50 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.

SITE INFORMATION

TOTAL AREA OF FACILITY	22.68 ACRES
AREA DISTURBED	0.28 ACRES (12326 SQ FT)
AREA TO BE ROOFED OR PAVED	0 ACRES
TOTAL CUT	41.05 CUBIC YARDS
TOTAL FILL	41.00 CUBIC YARDS
OFF-SITE WASTE /BORROW AREA LOCATION	TBD

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 2-29-24
Date

PLOTTED: "04:08 PM on Thursday, October 05, 2023"
FILE: M:\2016\1602620.13\Drawings\06_ESC-Gnotes-01.dgn

SEAL: STATE OF MARYLAND, JAMES A. TOMLINSON, No. 31201, PROFESSIONAL ENGINEER
DATE:

PROFESSIONAL CERTIFICATION
I HEREBY CERTIFY THAT THESE DOCUMENTS WERE PREPARED OR APPROVED BY ME, AND THAT I AM A DULY LICENSED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MARYLAND.
LICENSE NO. 31201, EXPIRATION DATE 01/24/2025
ENGINEER: JAMES A. TOMLINSON | DGN BY: WBD
AS-BUILT PER RECORD PRINT | DWN BY: JMS
BY: DATE: | CHKD BY: JAT

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE
			R.O.W NO.	ESW	14SE 22 15SE 22	PLAN SCALE: PROFILE SCALE:
CONTRACT COMPLETION BOX						
BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

PROPERTY MANAGEMENT
APPROVED BY: DIRECTOR
DATE:
APPROVED BY: CHIEF
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

STANSBURY PARK POND REPAIR PROJECT
EROSION & SEDIMENT CONTROL
GENERAL NOTES

SUBDIVISION: STANBROOK
ELECTION DIST. NO.: 12
COUNCILMANIC DIST. NO.: 7

BALTIMORE COUNTY MARYLAND

SHEET DESIGNATION: ES-02
CONTRACT NUMBER: 000 3206
JOB ORDER NUMBER: 123010871
SHEET 6 OF 10
DRAWING NUMBER: 2023-2367
FILE NO.:

B-4 STANDARDS AND SPECIFICATIONS

FOR

VEGETATIVE STABILIZATION

Definition

Using vegetation as cover to protect exposed soil from erosion.

Purpose

To promote the establishment of vegetation on exposed soil.

Conditions Where Practice Applies

On all disturbed areas not stabilized by other methods. This specification is divided into sections on incremental stabilization; soil preparation, soil amendments and topsoiling; seeding and mulching; temporary stabilization; and permanent stabilization.

Effects on Water Quality and Quantity

Stabilization practices are used to promote the establishment of vegetation on exposed soil. When soil is stabilized with vegetation, the soil is less likely to erode and more likely to allow infiltration of rainfall, thereby reducing sediment loads and runoff to downstream areas.

Planting vegetation in disturbed areas will have an effect on the water budget, especially on volumes and rates of runoff, infiltration, evaporation, transpiration, percolation, and groundwater recharge. Over time, vegetation will increase organic matter content and improve the water holding capacity of the soil and subsequent plant growth.

Vegetation will help reduce the movement of sediment, nutrients, and other chemicals carried by runoff to receiving waters. Plants will also help protect groundwater supplies by assimilating those substances present within the root zone.

Sediment control practices must remain in place during grading, seedbed preparation, seeding, mulching, and vegetative establishment.

Adequate Vegetative Establishment

Inspect seeded areas for vegetative establishment and make necessary repairs, replacements, and reseedings within the planting season.

1. Adequate vegetative stabilization requires 95 percent groundcover.
2. If an area has less than 40 percent groundcover, restabilize following the original recommendations for lime, fertilizer, seedbed preparation, and seeding.
3. If an area has between 40 and 94 percent groundcover, over-seed and fertilize using half of the rates originally specified.
4. Maintenance fertilizer rates for permanent seeding are shown in Table B.6.

B-4-1 STANDARDS AND SPECIFICATIONS

FOR

INCREMENTAL STABILIZATION

Definition

Establishment of vegetative cover on cut and fill slopes.

Purpose

To provide timely vegetative cover on cut and fill slopes as work progresses.

Conditions Where Practice Applies

Any cut or fill slope greater than 15 feet in height. This practice also applies to stockpiles.

Criteria

A. Incremental Stabilization - Cut Slopes

1. Excavate and stabilize cut slopes in increments not to exceed 15 feet in height. Prepare seedbed and apply seed and mulch on all cut slopes as the work progresses.
2. Construction sequence example (Refer to Figure B.1):
   a. Construct and stabilize all temporary swales or dikes that will be used to convey runoff around the excavation.
   b. Perform Phase 1 excavation, prepare seedbed, and stabilize.
   c. Perform Phase 2 excavation, prepare seedbed, and stabilize. Overseed Phase 1 areas as necessary.
   d. Perform final phase excavation, prepare seedbed, and stabilize. Overseed previously seeded areas as necessary.

Note: Once excavation has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

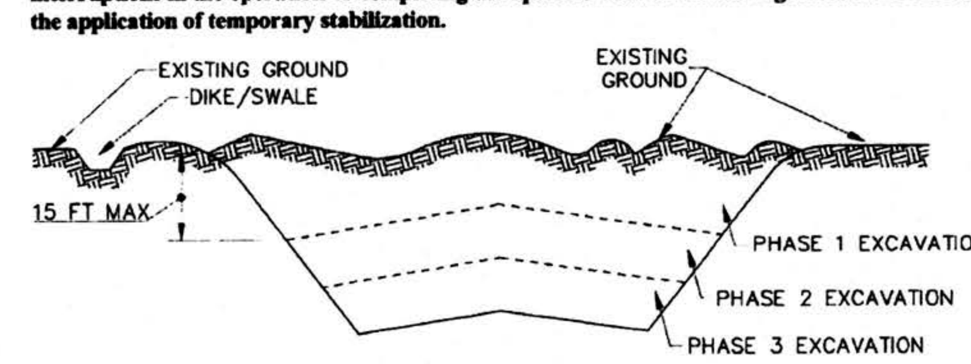


Figure B.1: Incremental Stabilization – Cut

B. Incremental Stabilization - Fill Slopes

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

Note: Once the placement of fill has begun the operation should be continuous from grubbing through the completion of grading and placement of topsoil (if required) and permanent seed and mulch. Any interruptions in the operation or completing the operation out of the seeding season will necessitate the application of temporary stabilization.

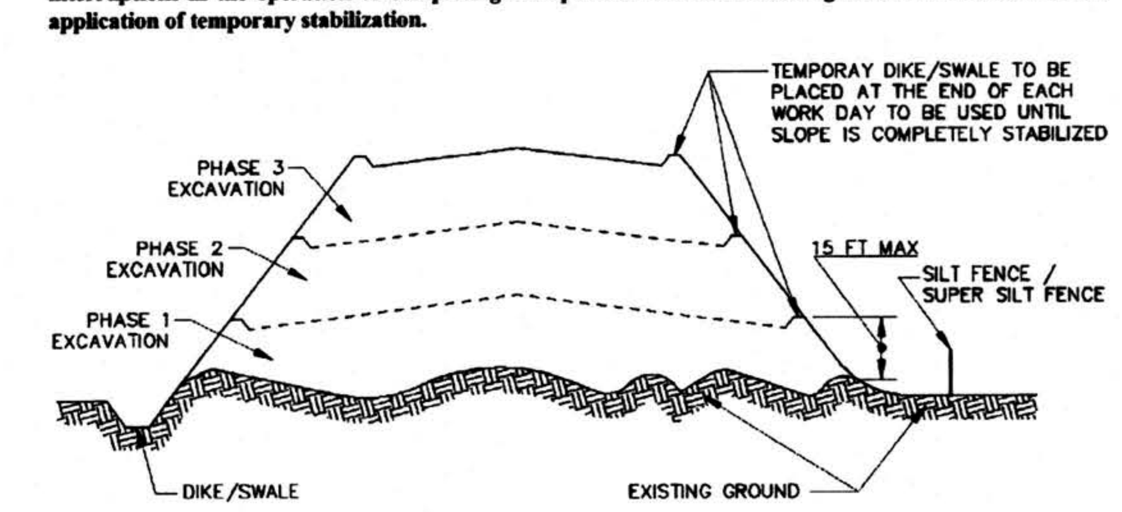


Figure B.2: Incremental Stabilization – Fill

B-4-2 STANDARDS AND SPECIFICATIONS

FOR

SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS

Definition

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

Purpose

To provide a suitable soil medium for vegetative growth.

Conditions Where Practice Applies

Where vegetative stabilization is to be established.

Criteria

A. Soil Preparation

1. Temporary Stabilization
   a. Seedbed preparation consists of loosening soil to a depth of 3 to 5 inches by means of suitable agricultural or construction equipment, 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.
   b. Apply fertilizer and lime as prescribed on the plans.
   c. Incorporate lime and fertilizer into the top 3 to 5 inches of soil by disking or other suitable means.
2. Permanent Stabilization
   a. A soil test is required for any earth disturbance of 5 acres or more. The minimum soil conditions required for permanent vegetative establishment are:
      i. Soil pH between 6.0 and 7.0.
      ii. Soluble salts less than 500 parts per million (ppm).
      iii. 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.
      iv. Soil contains 1.5 percent minimum organic matter by weight.
      v. Soil contains sufficient pore space to permit adequate root penetration.
   b. Application of amendments or topsoil is required if on-site soils do not meet the above conditions.
   c. 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.

   d. Apply soil amendments as specified on the approved plan or as indicated by the results of a soil test.
   e. Mix soil amendments into the top 3 to 5 inches of soil by disking or other suitable means. Rake 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 friable. Seedbed loosening may be unnecessary on newly disturbed areas.

B. Topsoiling

1. Topsoil is placed over prepared subsoil prior to establishment of permanent vegetation. The purpose is to provide a suitable soil medium for vegetative growth. Soils of concern have low moisture content, low nutrient levels, low pH, materials toxic to plants, and/or unacceptable soil gradation.
2. Topsoil salvaged from an existing site may be used provided it meets the standards as set forth in these specifications. Typically, the depth of topsoil to be salvaged for a given soil type can be found in the representative soil profile section in the Soil Survey published by USDA-NRCS.
3. Topsoiling is limited to areas having 2:1 or flatter slopes where:
   a. The texture of the exposed subsoil/parent material is not adequate to produce vegetative growth.
   b. The soil material is so shallow that the rooting zone is not deep enough to support plants or furnish continuing supplies of moisture and plant nutrients.
   c. The original soil to be vegetated contains material toxic to plant growth.
   d. The soil is so acidic that treatment with limestone is not feasible.
4. Areas having slopes steeper than 2:1 require special consideration and design.
5. Topsoil Specifications: Soil to be used as topsoil must meet the following criteria:
   a. Topsoil must be a loam, sandy loam, clay loam, silt loam, sandy clay loam, or loamy sand. Other soils may be used if recommended by an agronomist or soil scientist and approved by the appropriate approval authority. Topsoil must not be a mixture of contrasting textured subsoils and must contain less than 5 percent by volume of cinders, stones, slag, coarse fragments, gravel, sticks, roots, trash, or other materials larger than 1½ inches in diameter.
   b. Topsoil must be free of noxious plants or plant parts such as Bermuda grass, quack grass, Johnson grass, nut sedge, poison ivy, thistle, or others as specified.
   c. Topsoil substitutes or amendments, as recommended by a qualified agronomist or soil scientist and approved by the appropriate approval authority, may be used in lieu of natural topsoil.
6. Topsoil Application
   a. Erosion and sediment control practices must be maintained when applying topsoil.
   b. Uniformly distribute topsoil in a 5 to 8 inch layer and lightly compact to a minimum thickness of 4 inches. Spreading is to be performed in such a manner that sodding or seeding can proceed with a minimum of additional soil preparation and tillage. Any irregularities in the surface resulting from topsoiling or other operations must be corrected in order to prevent the formation of depressions or water pockets.
   c. Topsoil must not be placed if the topsoil or subsoil is in a frozen or muddy condition, when the subsoil is excessively wet or in a condition that may otherwise be detrimental to proper grading

and seedbed preparation.

C. Soil Amendments (Fertilizer and Lime Specifications)

1. Soil tests must be performed to determine the exact ratios and application rates for both lime and fertilizer on sites having disturbed areas of 5 acres or more. Soil analysis may be performed by a recognized private or commercial laboratory. Soil samples taken for engineering purposes may also be used for chemical analyses.
2. Fertilizers must be uniform in composition, free flowing and suitable for accurate application by appropriate equipment. Manure may be substituted for fertilizer with prior approval from the appropriate approval authority. Fertilizers must all be delivered to the site fully labeled according to the applicable laws and must bear the name, trade name or trademark and warranty of the producer.
3. Lime materials must be ground limestone (hydrated or burnt lime may be substituted except when hydroseeding) which contains at least 50 percent total oxides (calcium oxide plus magnesium oxide). Limestone must be ground to such fineness that at least 50 percent will pass through a #100 mesh sieve and 98 to 100 percent will pass through a #20 mesh sieve.
4. Lime and fertilizer are to be evenly distributed and incorporated into the top 3 to 5 inches of soil by disking or other suitable means.
5. Where the subsoil is either highly acidic or composed of heavy clays, spread ground limestone at the rate of 4 to 8 tons/acre (200-400 pounds per 1,000 square feet) prior to the placement of topsoil.

B-4-3 STANDARDS AND SPECIFICATIONS

FOR

SEEDING AND MULCHING

Definition

The application of seed and mulch to establish vegetative cover.

Purpose

To protect disturbed soils from erosion during and at the end of construction.

Conditions Where Practice Applies

To the surface of all perimeter controls, slopes, and any disturbed area not under active grading.

Criteria

A. Seeding

1. Specifications
   a. 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.
   b. 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.
   c. Inoculants: The inoculant for treating legume seed in the seed mixtures must be a pure culture of nitrogen fixing bacteria prepared specifically for the species. 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.
   d. 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.
2. Application
   a. Dry Seeding: This includes use of conventional drop or broadcast spreaders.
      i. Incorporate seed into the subsoil at the rates prescribed on Temporary Seeding Table B.1, Permanent Seeding Table B.3, or site-specific seeding summaries.
      ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction. Roll the seeded area with a weighted roller to provide good seed to soil contact.

   b. Drill or Cultipacker Seeding: Mechanized seeders that apply and cover seed with soil.
      i. Cultipacking seeders are required to bury the seed in such a fashion as to provide at least 1/4 inch of soil covering. Seedbed must be firm after planting.
      ii. Apply seed in two directions, perpendicular to each other. Apply half the seeding rate in each direction.
   c. Hydroseeding: Apply seed uniformly with hydroseeder (slurry includes seed and fertilizer).
      i. If fertilizer is being applied at the time of seeding, the application rates should not exceed the following: nitrogen, 100 pounds per acre total of soluble nitrogen; P_2O_5 (phosphorous), 200 pounds per acre; K_2O (potassium), 200 pounds per acre.
      ii. Lime: Use only ground agricultural limestone (up to 3 tons per acre may be applied by hydroseeding). Normally, not more than 2 tons are applied by hydroseeding at any one time. Do not use burnt or hydrated lime when hydroseeding.
      iii. Mix seed and fertilizer on site and seed immediately and without interruption.
      iv. When hydroseeding do not incorporate seed into the soil.

B. Mulching

1. Mulch Materials (in order of preference)
   a. Straw consisting of thoroughly threshed wheat, rye, oat, or barley and reasonably bright in color. Straw is to be free of noxious weed seeds as specified in the Maryland Seed Law and not musty, moldy, caked, decayed, or excessively dusty. **Note: Use only sterile straw mulch in areas where one species of grass is desired.**
   b. Wood Cellulose Fiber Mulch (WCFM) consisting of specially prepared wood cellulose processed into a uniform fibrous physical state.
      i. WCFM is to be dyed green or contain a green dye in the package that will provide an appropriate color to facilitate visual inspection of the uniformly spread slurry.
      ii. WCFM, including dye, must contain no germination or growth inhibiting factors.
      iii. WCFM materials are to be manufactured and processed in such a manner that the wood cellulose fiber mulch will remain in uniform suspension in water under agitation and will blend with seed, fertilizer and other additives to form a homogeneous slurry. The mulch material must form a blotter-like ground cover, on application, having moisture absorption and percolation properties and must cover and hold grass seed in contact with the soil without inhibiting the growth of the grass seedlings.
      iv. WCFM material must not contain elements or compounds at concentration levels that will be phyto-toxic.
      v. WCFM must conform to the following physical requirements: fiber length of approximately 10 millimeters, diameter approximately 1 millimeter, pH range of 4.0 to 8.5, ash content of 1.6 percent maximum and water holding capacity of 90 percent minimum.

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL

Jeffrey P. West 2-29-24
Date

SEAL	PROFESSIONAL CERTIFICATION	AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE	PROPERTY MANAGEMENT
STATE OF MARYLAND JAMES A. TOMLINSON No. 31201 PROFESSIONAL ENGINEER	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. 31201, EXPIRATION DATE 01/24/2025.				R.O.W NO.	ESW	14SE 22 15SE 22	PLAN SCALE: / PROFILE SCALE:	APPROVED BY: DIRECTOR DATE:
		CONTRACT COMPLETION BOX							
	ENGINEER: JAMES A. TOMLINSON / DGN BY: WBD	BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
	AS-BUILT PER RECORD PRINT / DWN BY: JMS	REVIEWED BY:							APPROVED BY: CHIEF
DATE: 1/31/2024	BY: DATE: / CHKD BY: JAT	DATE REVIEWED:							DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

STANSBURY PARK POND REPAIR PROJECT

EROSION & SEDIMENT CONTROL DETAILS

SUBDIVISION: STANBROOK

ELECTION DIST. NO.: 12
COUNCILMANIC DIST. NO.: 7

BALTIMORE COUNTY MARYLAND

SHEET DESIGNATION	CONTRACT NUMBER
ES-03	000 3206
	JOB ORDER NUMBER: 123010871
	SHEET 7 OF 10
	DRAWING NUMBER: 2023-2368
	FILE NO.:

PLOTTED: "04:08 PM on Thursday, October 05, 2023"
FILE:M:\2016\16160262013\Drawings\07_ESC-Details-01.dgn

2. Application

a. Apply mulch to all seeded areas immediately after seeding.

b. When straw mulch is used, spread it over all seeded areas at the rate of 2 tons per acre to a uniform loose depth of 1 to 2 inches. 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.

c. 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.

3. Anchoring

a. Perform mulch anchoring immediately following application of mulch to minimize loss by wind or water. This may be done by one of the following methods (listed by preference), depending upon the size of the area and erosion hazard:

i. A mulch anchoring tool is a tractor drawn implement designed to punch and anchor mulch into the soil surface a minimum of 2 inches. This practice is most effective on large areas, but is limited to flatter slopes where equipment can operate safely. If used on sloping land, this practice should follow the contour.

ii. Wood cellulose fiber may be used for anchoring straw. Apply the fiber binder at a net dry weight of 750 pounds per acre. Mix the wood cellulose fiber with water at a maximum of 50 pounds of wood cellulose fiber per 100 gallons of water.

iii. Synthetic binders such as Acrylic DLR (Agro-Tack), DCA-70, Petroset, Terra Tax II, Terra Tack AR or other approved equal may be used. Follow application rates as specified by the manufacturer. Application of liquid binders needs to be heavier at the edges where wind catches mulch, such as in valleys and on crests of banks. **Use of asphalt binders is strictly prohibited**.

iv. Lightweight plastic netting may be stapled over the mulch according to manufacturer recommendations. Netting is usually available in rolls 4 to 15 feet wide and 300 to 3,000 feet long.

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B-4-5 STANDARDS AND SPECIFICATIONS

FOR

PERMANENT STABILIZATION

Definition

To stabilize disturbed soils with permanent vegetation.

Purpose

To use long-lived perennial grasses and legumes to establish permanent ground cover on disturbed soils.

Conditions Where Practice Applies

Exposed soils where ground cover is needed for 6 months or more.

Criteria

A. Seed Mixtures

1. General Use

a. Select one or more of the species or mixtures listed in Table B.3 for the appropriate Plant Hardiness Zone (from Figure B.3) and based on the site condition or purpose found on Table B.2. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The Summary is to be placed on the plan.

b. Additional planting specifications for exceptional sites such as shorelines, stream banks, or dunes or for special purposes such as wildlife or aesthetic treatment may be found in USDA-NRCS Technical Field Office Guide, Section 342 - Critical Area Planting.

c. For sites having disturbed area over 5 acres, use and show the rates recommended by the soil testing agency.

d. For areas receiving low maintenance, apply urea form fertilizer (46-0-0) at 3 ½ pounds per 1000 square feet (150 pounds per acre) at the time of seeding in addition to the soil amendments shown in the Permanent Seeding Summary .

2. Turfgrass Mixtures

a. Areas where turfgrass may be desired include lawns, parks, playgrounds, and commercial sites which will receive a medium to high level of maintenance.

b. Select one or more of the species or mixtures listed below based on the site conditions or purpose. Enter selected mixture(s), application rates, and seeding dates in the Permanent Seeding Summary. The summary is to be placed on the plan.

i. Kentucky Bluegrass: Full Sun Mixture: For use in areas that receive intensive management. Irrigation required in the areas of central Maryland and Eastern Shore. Recommended Certified Kentucky Bluegrass Cultivars Seeding Rate: 1.5 to 2.0 pounds per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

ii. Kentucky Bluegrass/Perennial Rye: Full Sun Mixture: For use in full sun areas where

B.21

rapid establishment is necessary and when turf will receive medium to intensive management. Certified Perennial Ryegrass Cultivars/Certified Kentucky Bluegrass Seeding Rate: 2 pounds mixture per 1000 square feet. Choose a minimum of three Kentucky bluegrass cultivars with each ranging from 10 to 35 percent of the total mixture by weight.

iii. Tall Fescue/Kentucky Bluegrass: Full Sun Mixture: For use in drought prone areas and/or for areas receiving low to medium management in full sun to medium shade. Recommended mixture includes; Certified Tall Fescue Cultivars 95 to 100 percent, Certified Kentucky Bluegrass Cultivars 0 to 5 percent. Seeding Rate: 5 to 8 pounds per 1000 square feet. One or more cultivars may be blended.

iv. Kentucky Bluegrass/Fine Fescue: Shade Mixture: For use in areas with shade in Bluegrass lawns. For establishment in high quality, intensively managed turf area. Mixture includes; Certified Kentucky Bluegrass Cultivars 30 to 40 percent and Certified Fine Fescue and 60 to 70 percent. Seeding Rate: 1½ to 3 pounds per 1000 square feet.

Notes:
Select turfgrass varieties from those listed in the most current University of Maryland Publication, Agronomy Memo #77, "Turfgrass Cultivar Recommendations for Maryland"

Choose certified material. Certified material is the best guarantee of cultivar purity. The certification program of the Maryland Department of Agriculture, Turf and Seed Section, provides a reliable means of consumer protection and assures a pure genetic line

c. Ideal Times of Seeding for Turf Grass Mixtures

Western MD: March 15 to June 1, August 1 to October 1 (Hardiness Zones: 5b, 6a)

Central MD: March 1 to May 15, August 15 to October 15 (Hardiness Zone: 6b)

Southern MD, Eastern Shore: March 1 to May 15, August 15 to October 15 (Hardiness Zones: 7a, 7b)

d. Till areas to receive seed by disking or other approved methods to a depth of 2 to 4 inches, level and rake the areas to prepare a proper seedbed. Remove stones and debris over 1½ inches in diameter. The resulting seedbed must be in such condition that future mowing of grasses will pose no difficulty.

e. If soil moisture is deficient, supply new seedings with adequate water for plant growth (½ to 1 inch every 3 to 4 days depending on soil texture) until they are firmly established. This is especially true when seedings are made late in the planting season, in abnormally dry or hot seasons, or on adverse sites.

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PERMANENT SEEDING SUMMARY

Hardiness Zone (from Figure B.3): 7A Seed Mixture (from Table B.3): 1					Fertilizer Rate (10-20-20)			Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P_2O_5	K_2O	
	Switch Grass	10	2/15-4/30 5/1-5/31	1/4-1/2 in	45 pounds per acre (1.0 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	2 tons/ac (90 lb/ 1000 sf)
	Creeping Red Fescue	15	2/15-4/30 5/1-5/31	1/4-1/2 in				
	Partridge Pea	4	2/15-4/30 5/1-5/31	1/4-1/2 in				

Hardiness Zone (from Figure B.3): 7A Seed Mixture (from Table B.3): 6					Fertilizer Rate (10-20-20)			Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates*	Seeding Depths	N	P_2O_5	K_2O	
	Tall Fescue	40	2/15-4/30 8/15-10/31	1/4-1/2 in	45 pounds per acre (1.0 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	90 lb/ac (2 lb/ 1000 sf)	2 tons/ac (90 lb/ 1000 sf)
	Perennial Ryegrass	25	2/15-4/30 8/15-10/31	1/4-1/2 in				
	White Clover	5	2/15-4/30 8/15-10/31	1/4-1/2 in				

*FOR DATES 5/1 TO 8/14 ADD 3.5 LB/AC OF EITHER FOXTAIL MILLET OR PEARL MILLET TO PERMANENT MIX #6 ABOVE.

B. Sod: To provide quick cover on disturbed areas (2:1 grade or flatter).

1. General Specifications

a. Class of turfgrass sod must be Maryland State Certified. Sod labels must be made available to the job foreman and inspector.

b. Sod must be machine cut at a uniform soil thickness of ¾ inch, plus or minus ¼ inch, at the time of cutting. Measurement for thickness must exclude top growth and thatch. Broken pads and torn or uneven ends will not be acceptable.

c. 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.

d. Sod must not be harvested or transplanted when moisture content (excessively dry or wet) may adversely affect its survival.

e. 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.

2. Sod Installation

a. During periods of excessively high temperature or in areas having dry subsoil, lightly irrigate the subsoil immediately prior to laying the sod.

b. Lay the first row of sod in a straight line with subsequent rows placed parallel to it and tightly wedged against each other. Stagger lateral joints to promote more uniform growth and strength. Ensure that sod is not stretched or overlapped and that all joints are butted tight in order to prevent voids which would cause air drying of the roots.

c. Wherever possible, lay sod with the long edges parallel to the contour and with staggering joints. Roll and tamp, peg or otherwise secure the sod to prevent slippage on slopes. Ensure solid contact exists between sod roots and the underlying soil surface.

d. Water the sod immediately following rolling and tamping until the underside of the new sod pad and soil surface below the sod are thoroughly wet. Complete the operations of laying, tamping and irrigating for any piece of sod within eight hours.

3. Sod Maintenance

a. In the absence of adequate rainfall, water daily during the first week or as often and sufficiently as necessary to maintain moist soil to a depth of 4 inches. Water sod during the heat of the day to prevent wilting.

b. After the first week, sod watering is required as necessary to maintain adequate moisture content.

c. Do not mow until the sod is firmly rooted. No more than ⅓ of the grass leaf must be removed by the initial cutting or subsequent cuttings. Maintain a grass height of at least 3 inches unless otherwise specified.

B.24

B-4-4 STANDARDS AND SPECIFICATIONS

FOR

TEMPORARY STABILIZATION

Definition

To stabilize disturbed soils with vegetation for up to 6 months.

Purpose

To use fast growing vegetation that provides cover on disturbed soils.

Conditions Where Practice Applies

Exposed soils where ground cover is needed for a period of 6 months or less. For longer duration of time, permanent stabilization practices are required.

Criteria

1. Select one or more of the species or seed mixtures listed in Table B.1 for the appropriate Plant Hardiness Zone (from Figure B.3), and enter them in the Temporary Seeding Summary below along with application rates, seeding dates and seeding depths. If this Summary is not put on the plan and completed, then Table B.1 plus fertilizer and lime rates must be put on the plan.

2. For sites having soil tests performed, use and show the recommended rates by the testing agency. Soil tests are not required for Temporary Seeding.

3. When stabilization is required outside of a seeding season, apply seed and mulch or straw mulch alone as prescribed in Section B-4-3.A.1.b and maintain until the next seeding season.

Temporary Seeding Summary

Hardiness Zone (from Figure B.3): 7A Seed Mixture (from Table B.1):					Fertilizer Rate (10-20-20)	Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths		
	Annual Ryegrass	40	2/15 - 4/30 8/15 - 11/30	0.5 in	436 lb/ac (10 lb/1000 sf)	2 tons/ac (90 lb/1000 sf)

Hardiness Zone (from Figure B.3): 7A Seed Mixture (from Table B.1):					Fertilizer Rate (10-20-20)	Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths		
	Foxtail Millet	30	5/1 - 8/14	0.5 in	436 lb/ac (10 lb/1000 sf)	2 tons/ac (90 lb/1000 sf)

B.18

B-4-8 STANDARDS AND SPECIFICATIONS

FOR

STOCKPILE AREA

Definition

A mound or pile of soil protected by appropriately designed erosion and sediment control measures.

Purpose

To provide a designated location for the temporary storage of soil that controls the potential for erosion, sedimentation, and changes to drainage patterns.

Conditions Where Practice Applies

Stockpile areas are utilized when it is necessary to salvage and store soil for later use.

Criteria

1. The stockpile location and all related sediment control practices must be clearly indicated on the erosion and sediment control plan.
2. The footprint of the stockpile must be sized to accommodate the anticipated volume of material and based on a side slope ratio no steeper than 2:1. Benching must be provided in accordance with Section B-3 Land Grading.
3. Runoff from the stockpile area must drain to a suitable sediment control practice.
4. Access the stockpile area from the upgrade side.
5. Clear water runoff into the stockpile area must be minimized by use of a diversion device such as an earth dike, temporary swale or diversion fence. Provisions must be made for discharging concentrated flow in a non-erosive manner.
6. Where runoff concentrates along the toe of the stockpile fill, an appropriate erosion/sediment control practice must be used to intercept the discharge.
7. Stockpiles must be stabilized in accordance with the 3/7 day stabilization requirement as well as Standard B-4-1 Incremental Stabilization and Standard B-4-4 Temporary Stabilization.
8. If the stockpile is located on an impervious surface, a liner should be provided below the stockpile to facilitate cleanup. Stockpiles containing contaminated material must be covered with impermeable sheeting.

Maintenance

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

B.43

H-5 STANDARDS AND SPECIFICATIONS

FOR

DUST CONTROL

Definition

Controlling the suspension of dust particles from construction activities.

Purpose

To prevent blowing and movement of dust from exposed soil surfaces to reduce on and off-site damage including health and traffic hazards.

Conditions Where Practice Applies

Areas subject to dust blowing and movement where on and off-site damage is likely without treatment.

Specifications

1. Mulches: See Section B-4-2 Soil Preparation, Topsoiling, and Soil Amendments, Section B-4-3 Seeding and Mulching, and Section B-4-4 Temporary Stabilization. Mulch must be anchored to prevent blowing.
2. Vegetative Cover: See Section B-4-4 Temporary Stabilization.
3. Tillage: Till to roughen surface and bring clods to the surface. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, spring-toothed harrows, and similar plows are examples of equipment that may produce the desired effect.
4. Irrigation: Sprinkle site with water until the surface is moist. Repeat as needed. The site must not be irrigated to the point that runoff occurs.
5. Barriers: Solid board fences, silt fences, snow fences, burlap fences, straw bales, and similar material can be used to control air currents and soil blowing.
6. Chemical Treatment: Use of chemical treatment requires approval by the appropriate plan review authority.

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL

Jeffrey P. West 2-29-24
Date

PLOTTED: 04:08 PM on Thursday, October 05, 2023
FILE: M:\2016\1602620.13\Drawings\08_ESC-Details-02.dgn

SEAL
STATE OF MARYLAND
JAMES A. TOMLINSON
NO. 31201
PROFESSIONAL ENGINEER
DATE: 7/31/2024

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. 31201 , EXPIRATION DATE 01/24/2025
ENGINEER: JAMES A. TOMLINSON
DGN BY: WBD
DWN BY: JMS
CHKD BY: JAT
AS-BUILT PER RECORD PRINT
BY:
DATE:

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE	
			R.O.W NO.	ESW	14SE 22 15SE 22	PLAN SCALE:	
CONTRACT COMPLETION BOX						PROFILE SCALE:	
BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

PROPERTY MANAGEMENT
APPROVED BY: DIRECTOR
DATE:
APPROVED BY: CHIEF
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE - PROPERTY MANAGEMENT

STANSBURY PARK POND REPAIR PROJECT
EROSION & SEDIMENT CONTROL DETAILS

SUBDIVISION: STANBROOK
ELECTION DIST. NO.: 12
COUNCILMANIC DIST. NO.: 7

SHEET DESIGNATION: ES-04
CONTRACT NUMBER: 000 3206
JOB ORDER NUMBER: 123010871
SHEET 8 OF 10
DRAWING NUMBER: 2023-2369
FILE NO.:

MGWC 1.5: Sandbag/Stone Channel Diversion

Temporary measure for dewatering in-channel construction sites

Description

The work should consist of installing sandbag or stone flow diversions for the purpose of erosion control when construction activities occur within the stream channel.

Effective Uses & Limitations

Diversions are used to isolate work areas from flow during the construction of in-stream projects. Diversions which have an insufficient flow capacity can fail and severely erode the disturbed channel section under construction. Therefore, in-channel construction activities should occur only during periods of low rainfall. This temporary measure may not be practical in large channels.

Material Specifications

Materials for sandbag and stone stream diversions should meet the following requirements:

- *Riprap*: Riprap should be washed and have a minimum diameter of 6 inches (0.15 meters).
- *Sandbags*: Sandbags should consist of materials which are resistant to ultra-violet radiation, tearing, and puncture and should be woven tightly enough to prevent leakage of the fill material (i.e., sand, fine gravel, etc.).
- *Sheeting*: Sheeting should consist of polyethylene or other materials which are impervious and resistant to puncture and tearing.

Installation Guidelines

All erosion and sediment control devices, including dewatering basins, should be implemented as the first order of business according to a plan approved by the WMA or local authority. Installation should proceed from upstream to downstream during periods of low flow. If necessary, silt fence or straw bales should be installed around the perimeter of the work area.

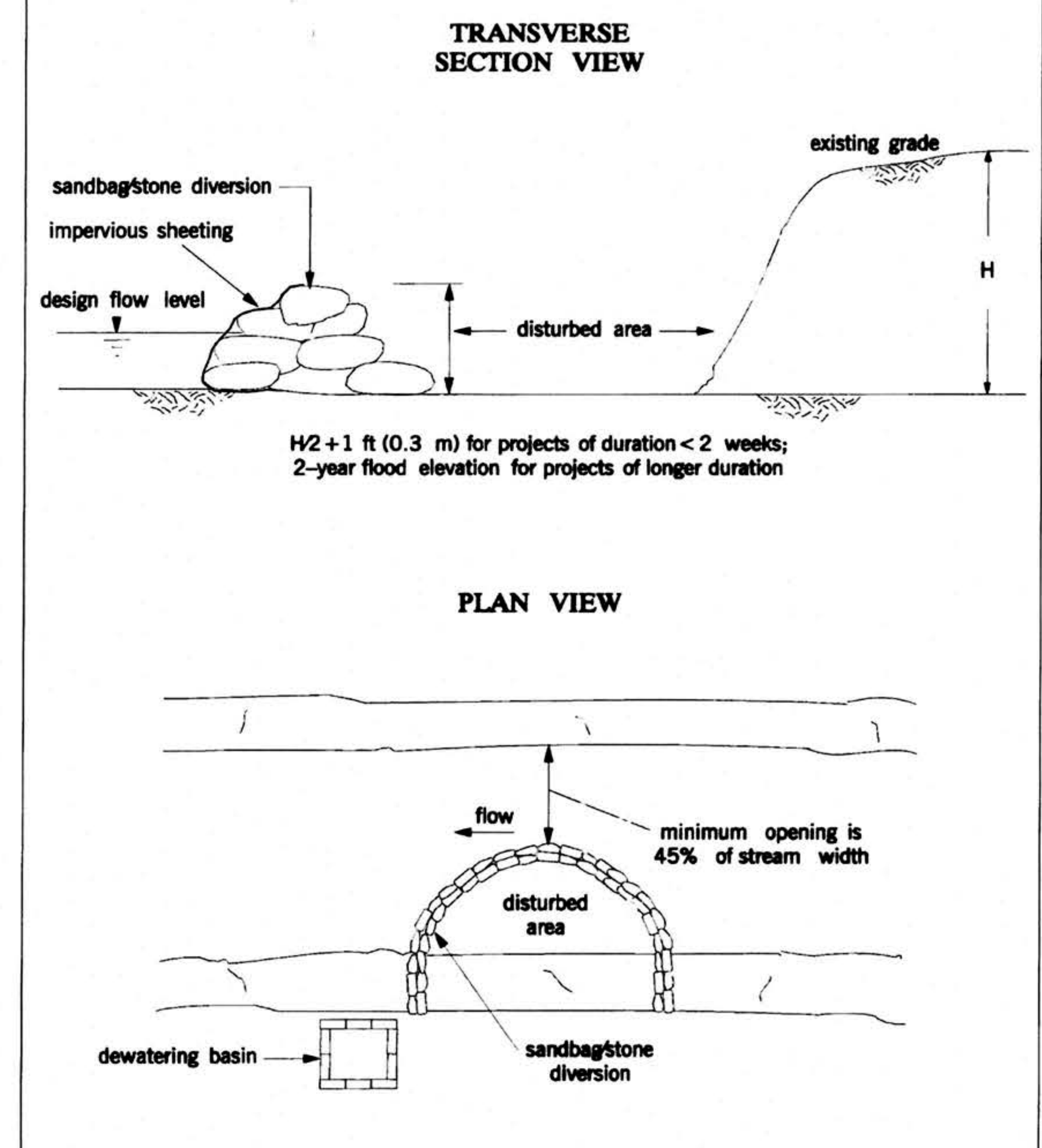
Sandbag/stone diversions can be used independently or as components of other stream diversion techniques. Installation of this measure should proceed as follows (refer to Detail 1.5):

1. The diversion structure should be installed from upstream to downstream.
2. The height of the sandbag/stone diversion should be a function of the duration of the project in the stream reach. For projects with a duration less than 2 weeks, the height of the diversion should be one half the streambank height, measured from the channel bed, plus 1 foot (0.3 meters) or bankfull height, whichever is greater. For projects of longer duration, the top of the sandbag or stone diversion should correspond to bankfull height. For diversion structures utilizing sandbags, the stream bed should be hand prepared prior to placement of the base layer of sandbags in order to ensure a water tight fit. Additionally, it may be necessary to prepare the bank in a similar fashion.
3. All excavated material should be deposited and stabilized in an approved area outside the 100-year floodplain unless otherwise authorized by the WMA.
4. Sediment-laden water from the construction area should be pumped to a dewatering basin.

MGWC 1.5: Sandbag/Stone Channel Diversion

5. Sheeting on the diversion should be positioned such that the upstream portion covers the downstream portion with at least a 18-inch (0.45 meters) overlap.
6. Sandbag or stone diversions should not obstruct more than 45% of the stream width. Additionally, bank stabilization measures should be placed in the constricted section if accelerated erosion and bank scour are observed during the construction time or if project time is expected to last more than 2 weeks.
7. Prior to removal of these temporary structures, any accumulated sediment should be removed, deposited and stabilized in an approved area outside the 100-year floodplain unless authorized by the WMA.
8. Sediment control devices are to remain in place until all disturbed areas are stabilized in accordance with an approved sediment and erosion control plan and the inspecting authority approves their removal.

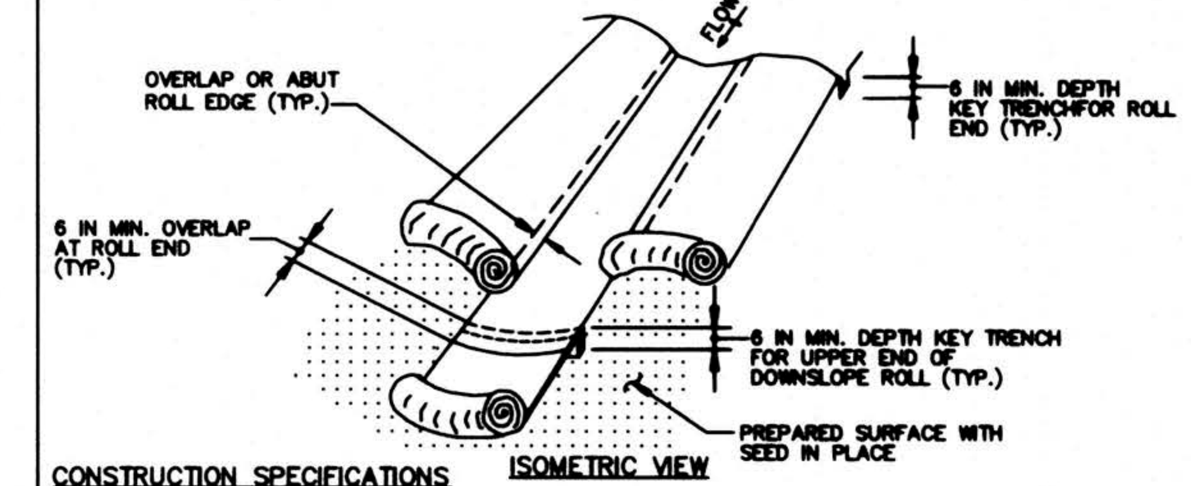
Maryland's Guidelines To Waterway Construction
DETAIL 1.5: SANDBAG/STONE DIVERSION



TEMPORARY INSTREAM CONSTRUCTION MEASURES	REVISED NOVEMBER 2000 PAGE 1.5 - 3	MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL B-4-6-A TEMPORARY SOIL STABILIZATION MATTING CHANNEL APPLICATION

STANDARD SYMBOL
TSSMC – *≥2.25 lb/ft²
(* INCLUDE SHEAR STRESS)



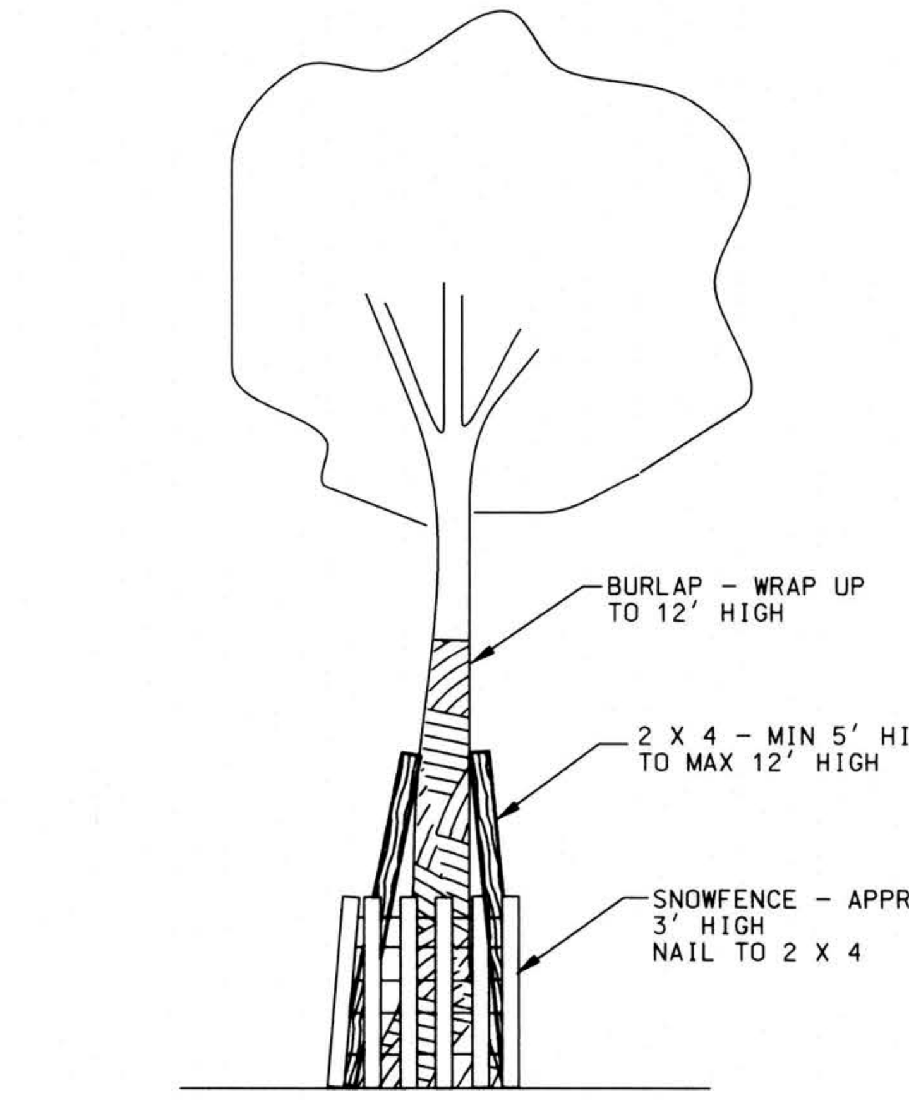
CONSTRUCTION SPECIFICATIONS

1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION AND SEDIMENT CONTROL PLAN.
5. UNROLL MATTING IN DIRECTION OF WATER FLOW, CENTERING THE FIRST ROLL ON THE CHANNEL CENTERLINE. WORK FROM CENTER OF CHANNEL OUTWARD WHEN PLACING ROLLS. LAY MAT SMOOTHLY AND FIRMLY ON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
6. KEY-IN UPSTREAM END OF EACH MAT ROLL BY DIGGING A 6 INCH (MINIMUM) TRENCH AT THE UPSTREAM END OF THE MATTING, PLACING THE ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END.
7. OVERLAP OR ABUT THE ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSTREAM MAT OVERLAPPING ON TOP OF THE NEXT DOWNSTREAM MAT.
8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

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

B.38



TREE PROTECTION PLANKING DETAIL

NOT TO SCALE

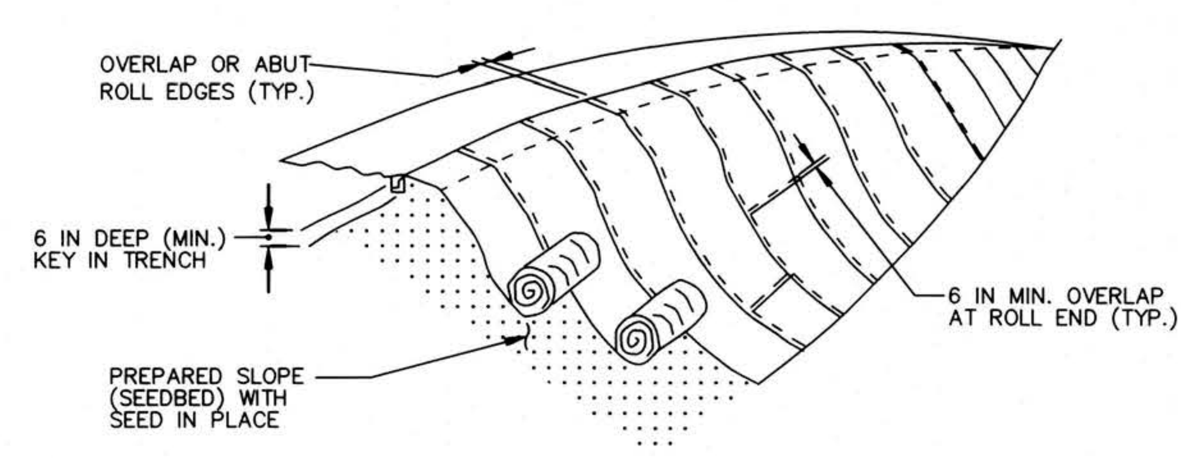
NOTES:

1. 12'x4' PLANKS SHALL BE PLACED NO MORE THAN 6 INCHES APART. LESS FOR TREES WITH 12 INCH DIAMETER OR LESS.
2. THE SNOWFENCE SHOULD COMPLETELY WRAP AROUND THE PLANKING.

NOTE:
TREE PROTECTION SHOULD BE PLACED AROUND ALL TREES ADJACENT TO WORK AREA WITHIN LOD.

DETAIL B-4-6-B TEMPORARY SOIL STABILIZATION MATTING SLOPE APPLICATION

STANDARD SYMBOL
TSSMS – ≥2.25lb/ft²
(* INCLUDE SHEAR STRESS)



CONSTRUCTION SPECIFICATIONS

1. USE MATTING THAT HAS A DESIGN VALUE FOR SHEAR STRESS EQUAL TO OR HIGHER THAN THE SHEAR STRESS DESIGNATED ON APPROVED PLANS.
2. USE TEMPORARY SOIL STABILIZATION MATTING MADE OF DEGRADABLE (LASTS 6 MONTHS MINIMUM) NATURAL OR MAN-MADE FIBERS (MOSTLY ORGANIC). MAT MUST HAVE UNIFORM THICKNESS AND DISTRIBUTION OF FIBERS THROUGHOUT AND BE SMOLDER RESISTANT. CHEMICALS USED IN THE MAT MUST BE NON-LEACHING AND NON-TOXIC TO VEGETATION AND SEED GERMINATION AND NON-INJURIOUS TO THE SKIN. IF PRESENT, NETTING MUST BE EXTRUDED PLASTIC WITH A MAXIMUM MESH OPENING OF 2x2 INCHES AND SUFFICIENTLY BONDED OR SEWN ON 2 INCH CENTERS ALONG LONGITUDINAL AXIS OF THE MATERIAL TO PREVENT SEPARATION OF THE NET FROM THE PARENT MATERIAL.
3. SECURE MATTING USING STEEL STAPLES, WOOD STAKES, OR BIODEGRADABLE EQUIVALENT. STAPLES MUST BE "U" OR "T" SHAPED STEEL WIRE HAVING A MINIMUM GAUGE OF NO. 11 AND NO. 8 RESPECTIVELY. "U" SHAPED STAPLES MUST AVERAGE 1 TO 1½ INCHES WIDE AND BE A MINIMUM OF 6 INCHES LONG. "T" SHAPED STAPLES MUST HAVE A MINIMUM 8 INCH MAIN LEG, A MINIMUM 1 INCH SECONDARY LEG, AND A MINIMUM 4 INCH HEAD. WOOD STAKES MUST BE ROUGH-SAWN HARDWOOD, 12 TO 24 INCHES IN LENGTH, 1x3 INCH IN CROSS SECTION, AND WEDGE SHAPED AT THE BOTTOM.
4. PERFORM FINAL GRADING, TOPSOIL APPLICATION, SEEDBED PREPARATION, AND PERMANENT SEEDING IN ACCORDANCE WITH SPECIFICATIONS. PLACE MATTING WITHIN 48 HOURS OF COMPLETING SEEDING OPERATIONS UNLESS END OF WORKDAY STABILIZATION IS SPECIFIED ON THE APPROVED EROSION & SEDIMENT CONTROL PLAN.
5. UNROLL MATTING DOWNSLOPE. LAY MAT SMOOTHLY AND FIRMLY UPON THE SEEDED SURFACE. AVOID STRETCHING THE MATTING.
6. OVERLAP OR ABUT ROLL EDGES PER MANUFACTURER RECOMMENDATIONS. OVERLAP ROLL ENDS BY 6 INCHES (MINIMUM), WITH THE UPSLOPE MAT OVERLAPPING ON TOP OF THE DOWNSLOPE MAT.
7. KEY IN THE UPSLOPE END OF MAT 6 INCHES (MINIMUM) BY DIGGING A TRENCH, PLACING THE MATTING ROLL END IN THE TRENCH, STAPLING THE MAT IN PLACE, REPLACING THE EXCAVATED MATERIAL, AND TAMPING TO SECURE THE MAT END IN THE KEY.
8. STAPLE/STAKE MAT IN A STAGGERED PATTERN ON 4 FOOT (MAXIMUM) CENTERS THROUGHOUT AND 2 FOOT (MAXIMUM) CENTERS ALONG SEAMS, JOINTS, AND ROLL ENDS.
9. ESTABLISH AND MAINTAIN VEGETATION SO THAT REQUIREMENTS FOR ADEQUATE VEGETATIVE ESTABLISHMENT ARE CONTINUOUSLY MET IN ACCORDANCE WITH SECTION B-4 VEGETATIVE STABILIZATION.

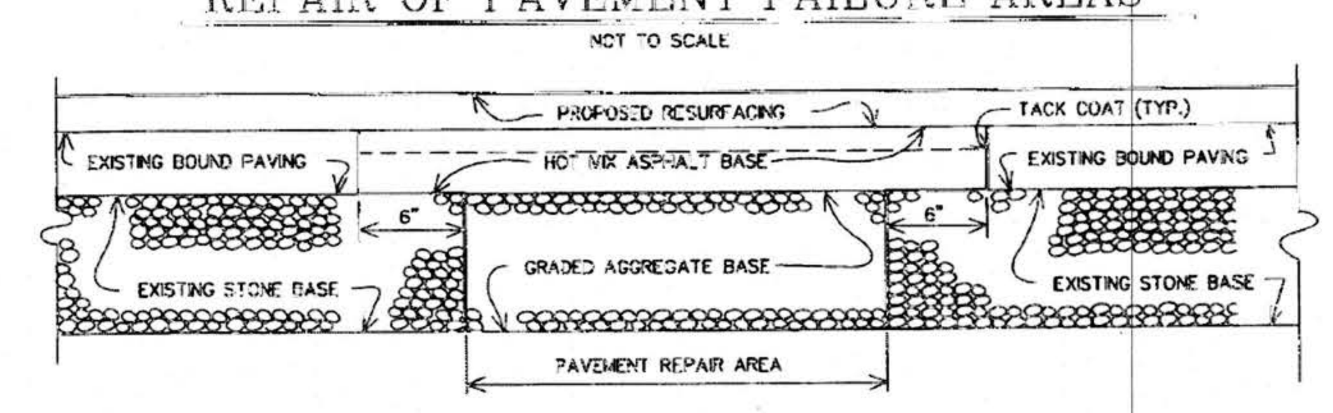
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

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

NOTE: USE THE DETAIL AS A GUIDANCE TO REPAIR THE EXISTING MACADAM AS NEEDED. USE THE SAME ASPHALT DEPTH AS THE EXISTING SECTION.

REPAIR OF PAVEMENT FAILURE AREAS

NOT TO SCALE



GENERAL NOTES

1. CUT OUT REPAIR AREA NEATLY TO SQUARE OFF EDGE IN STRAIGHT LINE. CLEAN THROUGHLY BEFORE PAVING.
2. REPLACE PAVING MATERIALS IN KIND AT SAME RELATIVE ELEVATION.
   a.) PORTLAND CEMENT CONCRETE BASE AND SOIL CEMENT BASE MAY BE REPLACED WITH HOT MIX ASPHALT OF THE SAME DEPTH.
   b.) HOT MIX ASPHALT MAY BE USED IN PLACE OF PENETRATION MACADAM.
   c.) GRADED AGGREGATE BASE MAY BE USED IN PLACE OF WATERBOUND MACADAM.
3. MINIMUM ALLOWABLE PAVING REPAIR SECTION: 3" HOT MIX ASPHALT SURFACE, 8" GRADED AGGREGATE BASE. HOWEVER, IF THE ENGINEER DETERMINES THAT NO FAILURE HAS OCCURRED IN EXISTING STONE BASE ONLY THE BITUMINOUS BOUND SECTION WILL BE REPLACED.
4. HOT MIX ASPHALT BASE TO BE PLACED IN A MINIMUM OF 2 COURSES. THE TOP COURSE IS TO BE NO GREATER THAN 1.5" WITH NO COURSE TO EXCEED 4" THICKNESS.
5. TACK COAT EDGES BETWEEN EXISTING BOUND PAVING AND HOT MIX ASPHALT BASE.

APPROVAL — DIRECTOR, BUR. OF ENGINEERING & CONSTRUCTION — DATE

DEPARTMENT OF PUBLIC WORKS
ROAD AND STREET DETAILS
PAVEMENT FAILURE REPAIRS

ISSUED: AUGUST, 1997
REVISED:
REVISED:
PLATE R-41

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Date: 2-29-24

PLOTTED: "04:09 PM on Thursday, October 05, 2023"
FILE: M:\2016\16I602620.13\Drawings\09_ESC-Details-03.dgn

SEAL — DATE: 1/31/2024

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. 31201, EXPIRATION DATE 01/24/2025.

ENGINEER: JAMES A. TOMLINSON — DGN BY: WBD — DWN BY: JMS — CHKD BY: JAT
AS-BUILT PER RECORD PRINT — BY: — DATE:

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT	DRAWING SCALE	PROPERTY MANAGEMENT
				ESW	14SE 22 15SE 22	PLAN SCALE:	APPROVED BY: DIRECTOR
			R.O.W NO.			PROFILE SCALE:	DATE:
CONTRACT COMPLETION BOX							

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

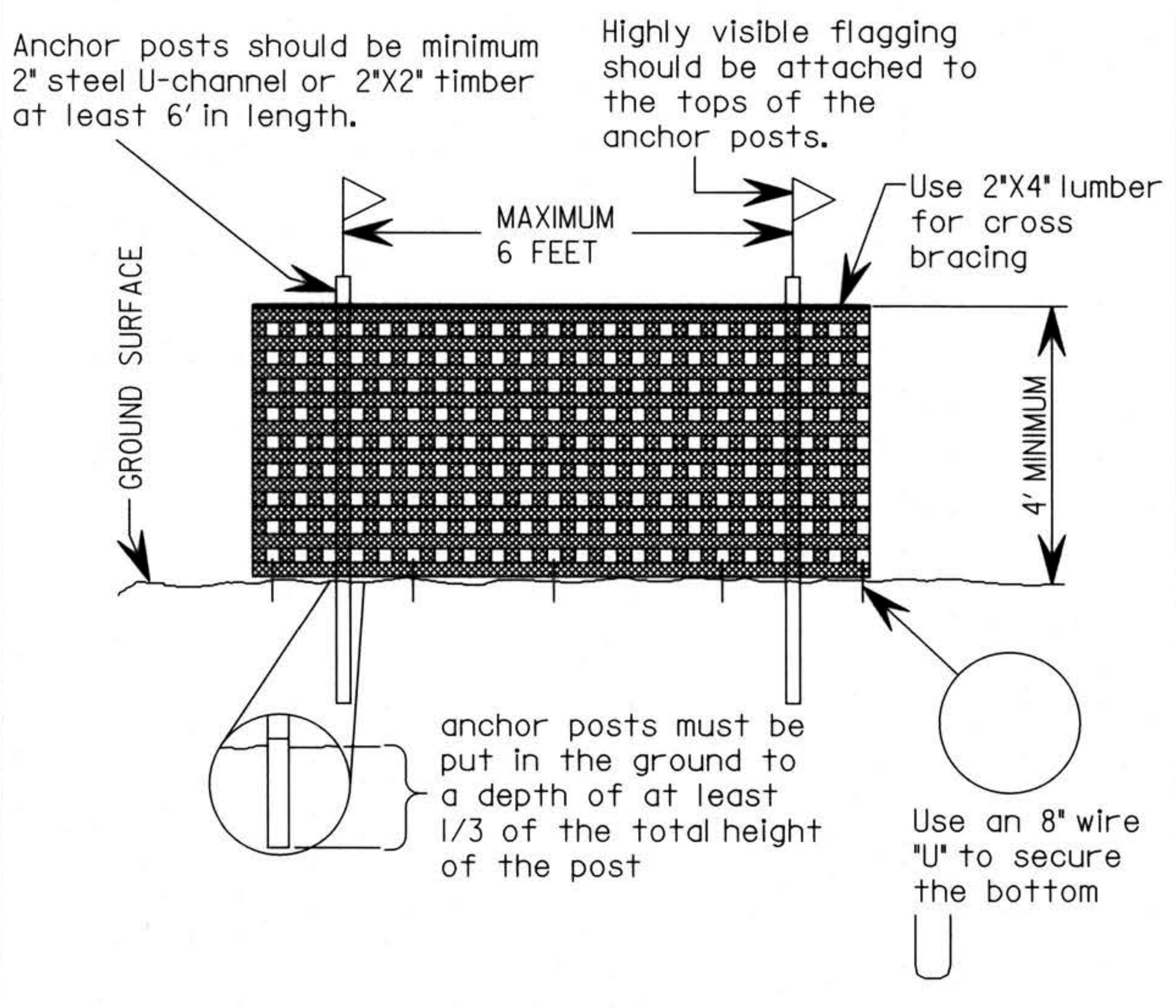
APPROVED BY: CHIEF — DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

STANSBURY PARK POND REPAIR PROJECT
EROSION & SEDIMENT CONTROL DETAILS

SUBDIVISION: STANBROOK
ELECTION DIST. NO.: 12
COUNCILMANIC DIST. NO.: 7

SHEET DESIGNATION	CONTRACT NUMBER
ES-05	000 3206
	JOB ORDER NUMBER: 123010871
	SHEET 9 OF 10
	DRAWING NUMBER: 2023-2370
	FILE NO.:

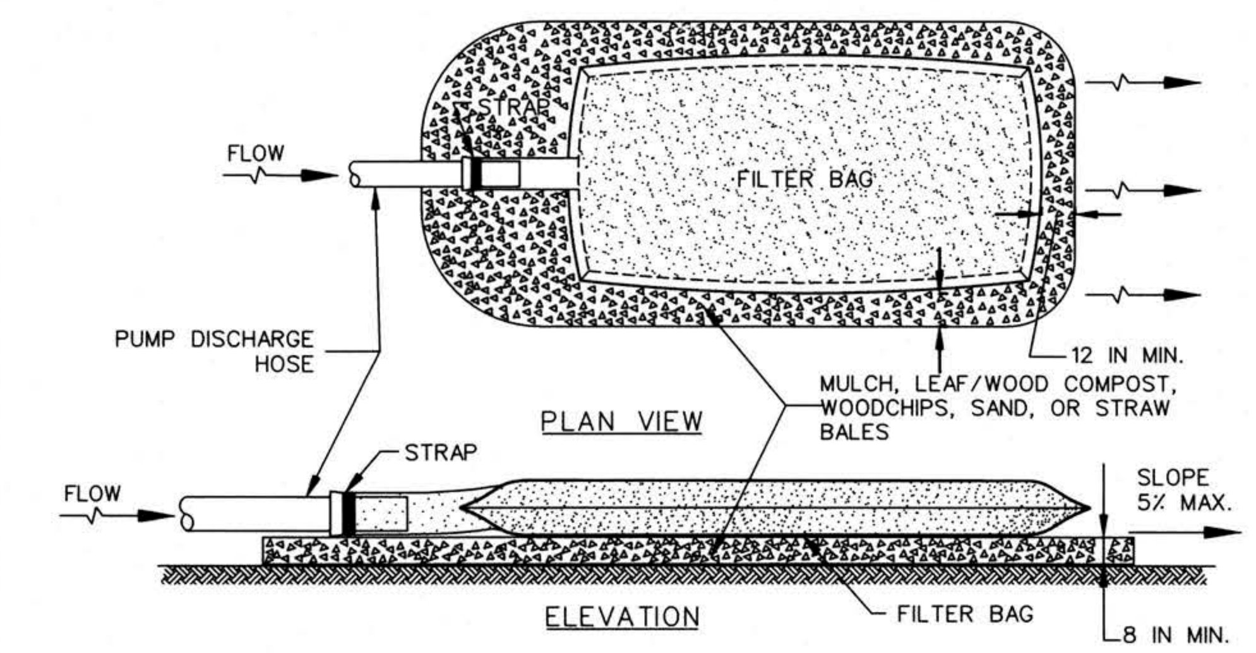


DETAIL FOR
BLAZE ORANGE PLASTIC
MESH SAFETY FENCE
NOT TO SCALE

MATERIAL AND PLACEMENT SHALL CONFORM TO SECTION 104.20 OF THE MARYLAND DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS

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:

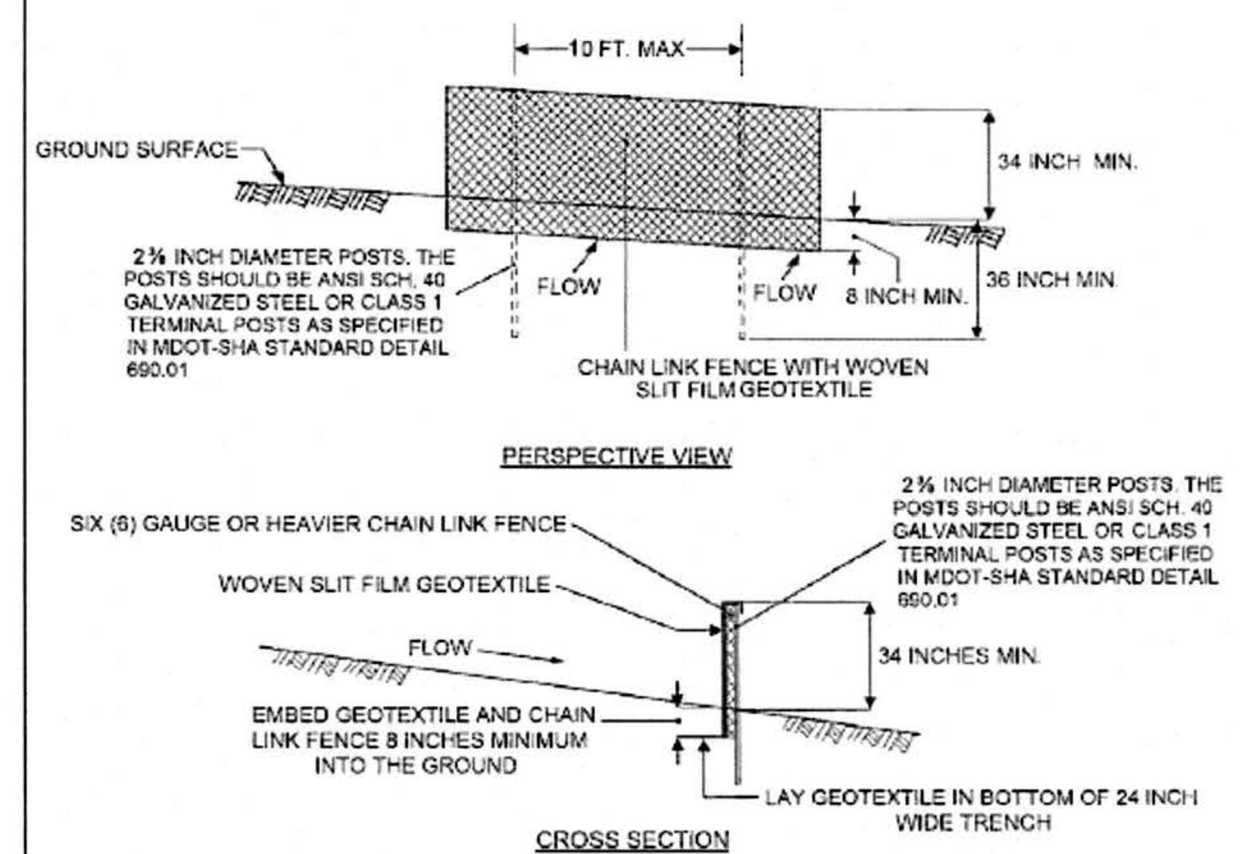
GRAB TENSILE	250 LB	ASTM D–4632
PUNCTURE	150 LB	ASTM D–4833
FLOW RATE	70 GAL/MIN/FT2	ASTM D–4491
PERMITTIVITY (SEC^{-1})	1.2 SEC^{-1}	ASTM D–4491
UV RESISTANCE	70% STRENGTH @ 500 HOURS	ASTM D–4355
APPARENT OPENING SIZE (AOS)	0.15–0.18 MM	ASTM D–4751
SEAM STRENGTH	90%	ASTM D–4632

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

DETAIL E-3 SUPER SILT FENCE

STANDARD SYMBOL SSF



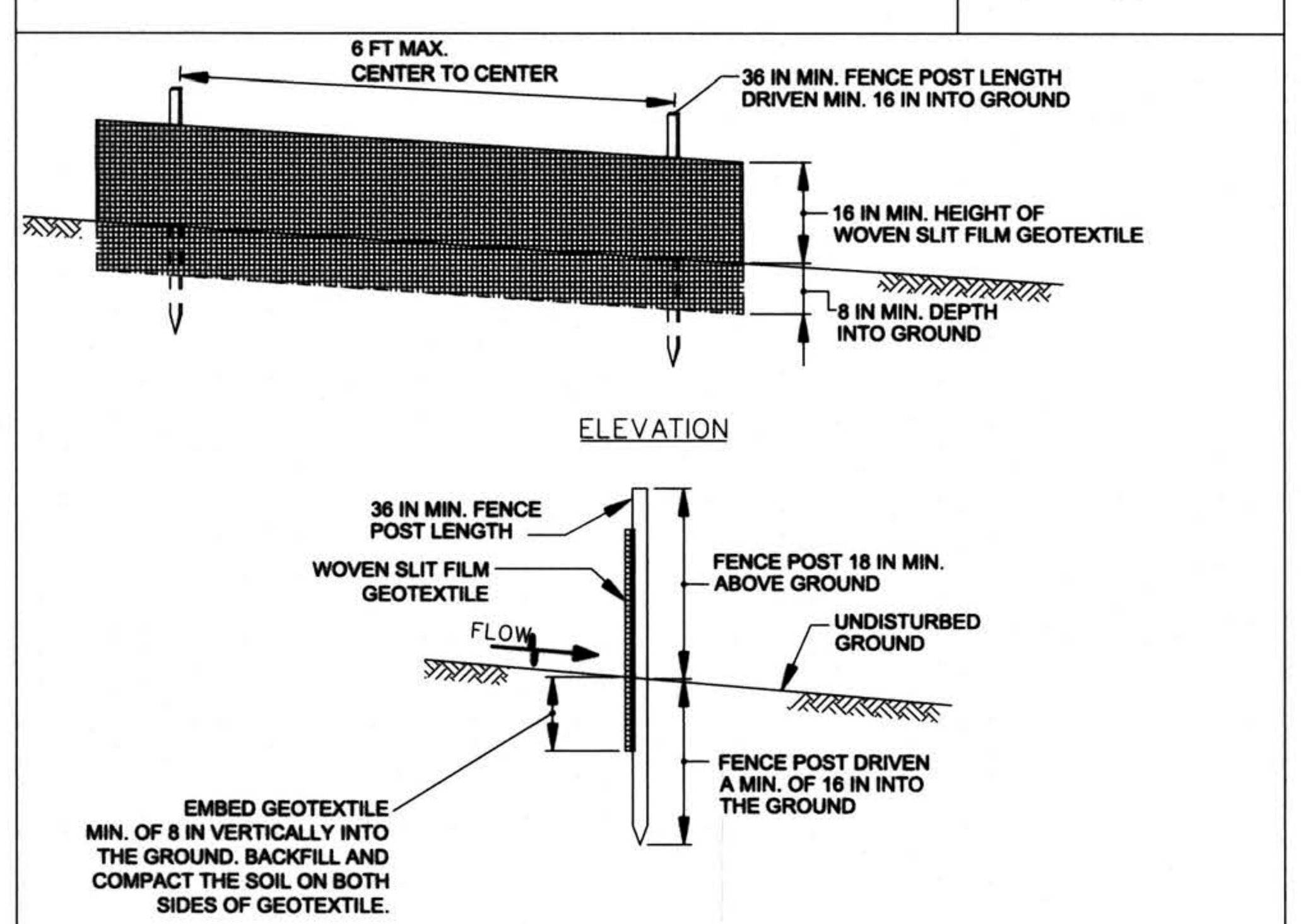
CONSTRUCTION SPECIFICATIONS

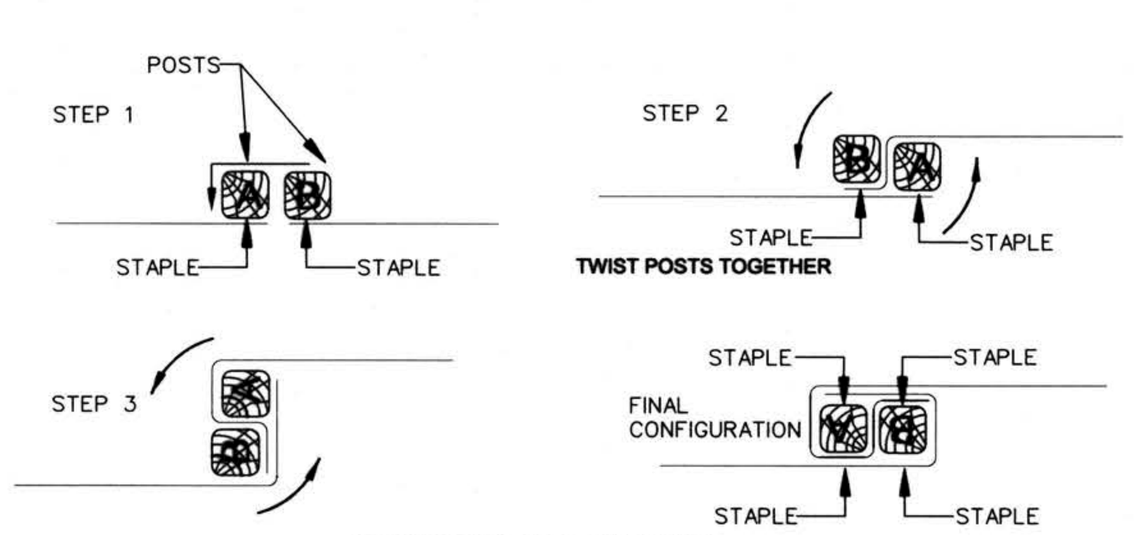
1. INSTALL 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.15 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 6 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2⅜ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H -1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF 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 8 INCHES INTO THE GROUND. LAY THE GEOTEXTILE IN THE BOTTOM OF THE 24 INCH WIDE TRENCH.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BYPASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE UPHILL A MINIMUM OF 3 VERTICAL FEET TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURERS CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H - 1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF THE FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL MODIFIED FOR USE IN BALTIMORE COUNTY		
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	MODIFIED - 2012 REVISED - 5/2023	MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

DETAIL E-1 SILT FENCE

STANDARD SYMBOL SF





JOINING TWO ADJACENT SILT FENCE SECTIONS (TOP VIEW)

1 OF 2

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ X 1¾ ± ⅟₁₆ 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.

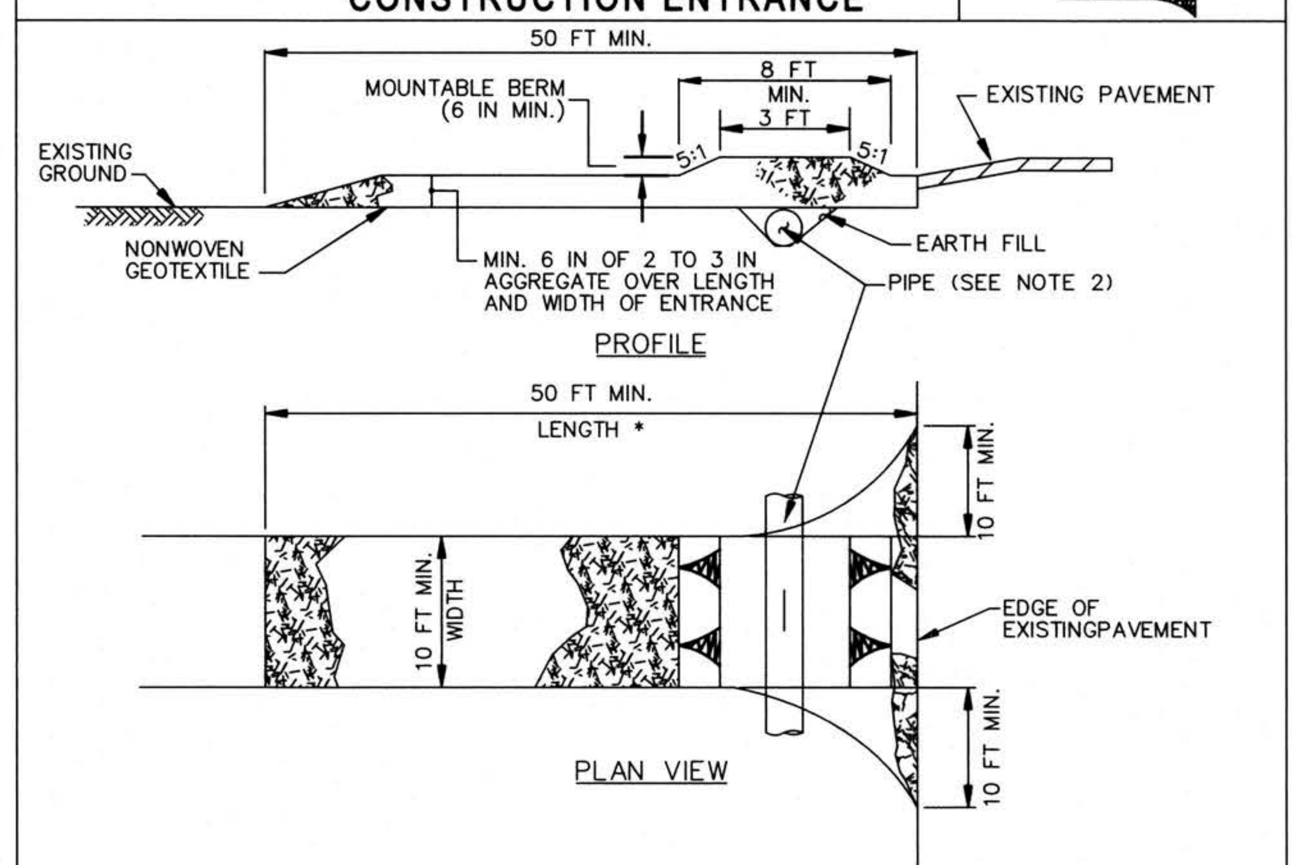
2 OF 2

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

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



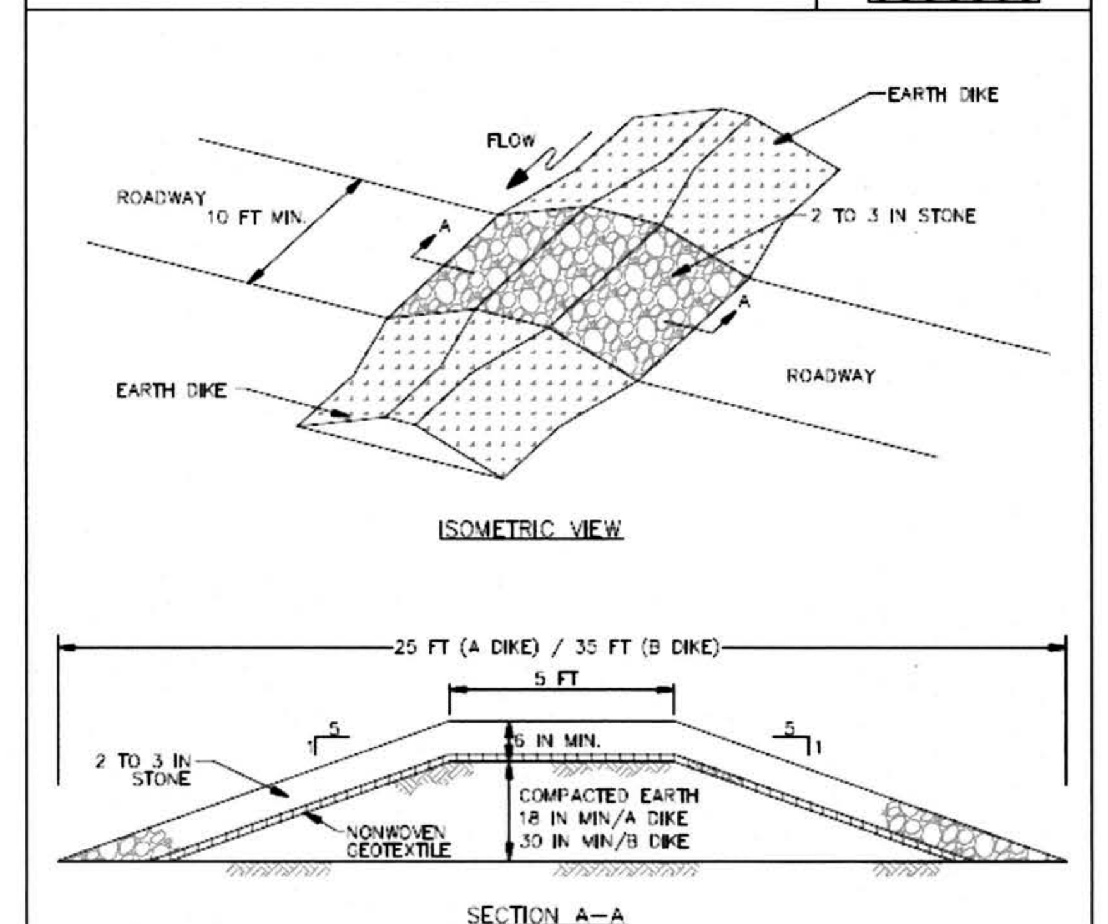
CONSTRUCTION SPECIFICATIONS

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

DETAIL C-8 MOUNTABLE BERM

STANDARD SYMBOL



CONSTRUCTION SPECIFICATIONS

1. USE MINIMUM WIDTH OF 10 FEET TO ALLOW FOR VEHICULAR PASSAGE.
2. PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS, OVER THE EARTH MOUND PRIOR TO PLACING STONE.
3. PLACE 2 TO 3 INCH STONE OR EQUIVALENT RECYCLED CONCRETE AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE MOUNTABLE BERM.
4. MAINTAIN LINE, GRADE, AND CROSS SECTION. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN SPECIFIED DIMENSIONS. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE.

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

C.24

Baltimore County Soil Conservation District
APPROVED FOR SEDIMENT CONTROL
Jeffrey P. West 2-29-24
Date

PLOTTED: "04:09 PM on Thursday, October 05, 2023"
FILE:M:\2016\1602620.13\Drawings\10_ESC-Details-04.dgn

SEAL: STATE OF MARYLAND JAMES A. TOMLINSON NO. 31201 PROFESSIONAL ENGINEER
DATE: 1/31/2024

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. 31201, EXPIRATION DATE 01/24/2025.
ENGINEER: JAMES A. TOMLINSON
AS-BUILT PER RECORD PRINT
BY:
DATE:
DGN BY: WBD
DWN BY: JMS
CHKD BY: JAT

AS-BUILT / REVISION	BY	DATE	P.W.A. NO.	KEY SHEET	POSITION SHT
			R.O.W NO.	ESW	14SE 22 15SE 22
CONTRACT COMPLETION BOX					

DRAWING SCALE
PLAN SCALE:
PROFILE SCALE:

BUREAU OF ENGINEERING AND CONSTRUCTION	TRAFFIC	HIGHWAYS	STRUCTURES	STORM DRAINS	SEWER	WATER	FIELD ENGINEER
REVIEWED BY:							
DATE REVIEWED:							

PROPERTY MANAGEMENT
APPROVED BY: DIRECTOR
DATE:
APPROVED BY: CHIEF
DATE:

BALTIMORE COUNTY OFFICE OF BUDGET AND FINANCE – PROPERTY MANAGEMENT

STANSBURY PARK POND REPAIR PROJECT
EROSION & SEDIMENT CONTROL DETAILS

SUBDIVISION: STANBROOK
ELECTION DIST. NO.: 12
COUNCILMANIC DIST. NO.: 7

SHEET DESIGNATION	CONTRACT NUMBER
ES-06	000 3206
	JOB ORDER NUMBER: 123010871
	SHEET 10 OF 10
	DRAWING NUMBER: 2023-2371
	FILE NO.: