

- Min Width is 25% of

* OR FILTER BAG

THE TOP OF THE
STANDPIPE
SHOULD EXTEND
AT LEAST
12" TO 18" ABOVE THE
TUP OF THE PIT OR
ABOVE STANDING WATER.

OF M-43 # 57 STONE BEFORE INSTALLING

slits or 1" digmeter hotes.

4

WATER RESOURCES

Description
The work shall consist of inetalling flow diversions for the purpose of

erosion control when construction activities take place within the stream channel such as bank stabilization or bridge abutment construction.

Naterial Specifications

1. Sandbags: Sandbags shall consist of materials which are resistent to

Sheating: Sheeting shall consist of polyethylen- or other material which is impervious and resistant to puncture and tearing.

The diversion structure shall be installed from upstreams to
downstream.
 The height of the diversion structure shall be one hall the distance
from stream bed to stream bank plus one foot, as indicated on the
cross-section view.
 All excavated materials shall be disposed of in a SCD approved
disposel area outside the 100-year floodplain unless otherwise
approved on the plans by the WRA.
 All dewatering of the construction erea shall be pumped to a
dewatering basimprior to re-entering the stream.
 Sheating shall be overlapped such that the upstream portion covers
the downstream portion with at least an 18-inch overlap.
 Sediment control devices are to remain in place until all disturbed
areas are stallized in accordance with an approved sediment and
erosion control plan and the inspecting authority approves their
removal.

BE USED AS FLOW BARRIER-SEE WPD 5.1 Chief, Weterway Permi

DETAIL 20B - SUMP PIT

CROSS SECTION

1. Pit dimensions are variable, with the minimum diameter being 2 times the

should be riosed in the pit to a depth of 12". After installing the standpipe, the pit surrounding the standpipe should then be backfilled with

4. The atomorphe should extend 12" to 18" above the lip of the pit or the

riser creat elevation (basin dewatering only) and the filter material

should extend 3" minimum above the anticipated standing water elevation-

2. The standpipe should be constructed by perforating a 12" to 24"

3. A base of filter material consisting of clean gravet or #57 stone

diameter corrugated or PVC pipe. Then wrapping with $^12''$ hardware cloth and Geotextile Class E. The perforations shall be $^12''$ x 5''

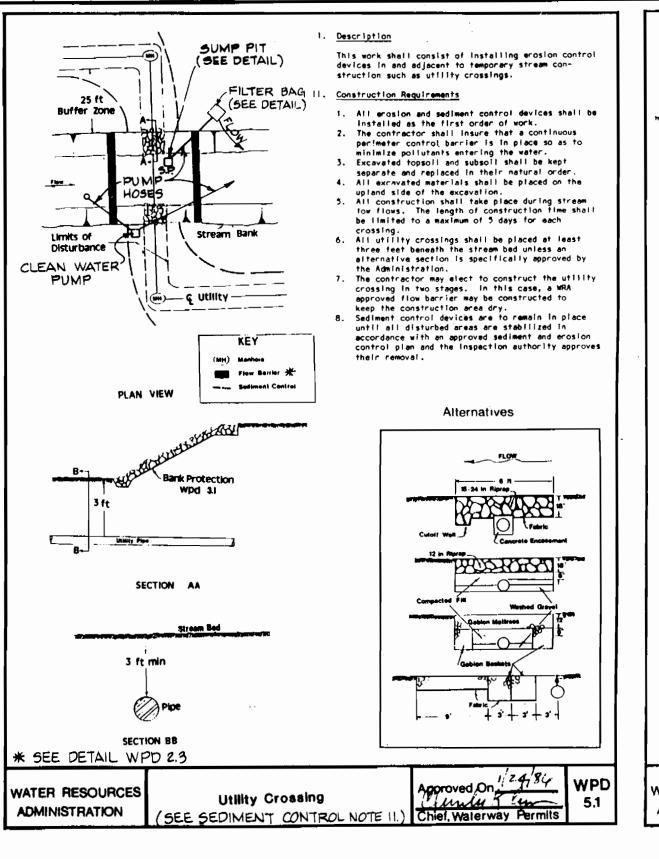
Stone: Stone shall be washed and have a minimum diameter of Clinches.

Construction Requirements

1. All erosion and sediment control devices shall be installed as the

2. The diversion structure shall be installed from upstream to

uitra-violet radiation, taaring and puncture and woven tightly enough to prevent teakage of 111 material (i.e., sand, fine grevel,



RESTORATION SCHEDULE

5 =

LENGTH

1843 LE

96LF

300 L.F

253 L.F.

158 L.F.

15 L.F

360 L.F.

172 1.4

100 L.F

100 L F

40 L.F.

40 L.F.

25 L.F.

~0 L.F.

5 L.F.

5 L.F.

5 L.F.

5 L.F.

10 L.F.

13 L.F.

10 L.F.

12 L.F.

8.0 L.F.

172 L.F.

13 L.F

20 L.F

LOCATION

· ---

y a contA

STA 0100 TO STA 0+93

TA S+77,70 - 5.H.C.

STA 0100 TO STA 3100

MIL-5 TO MII-6 (THRU MH 5-A) 295 L.F

-TA 0+00 TO STA 2+40 240L.F.

2+40 TO ("A 2+53 13 L.F.

MH-2 TO MH - 2A

514.01 0 MH-3

V-3 TO WH-4

STA 2+15 - S.H.C.

STA 0160 - S.H.C

STA 1+40 - S.H.C.

MH HA TO MH-7

MH-7 TO MII-8

STA 0+00 TO STA 1+50

STA 0+00 TO STA 3+60

STA 0+60 - S.H.C.

STA 2+00 - S.H.C

STA 2+95 - S.H.C

STA 0100 TO 1172

STA 0100 TO 1100

STA 0+45 - S.H.C.

STA 1+00 - S.H.C.

EAST OF SCOTT'S LANDING ROAD -

WEST OF SCOTTS LANDING ROAD -

8' WATER MAIN -

STA 0+43 TO 1+70

STA 1+30 - 3/4" W.H.C.

STA 1+65-3/4" W.H.C.

STA 0+40 TO STA 1+10

STA 1410 TO STA 6450

STA 1+25 - 3/4" W.H.C

STA 2+25 - 3/4" W.H.C.

STA 3+75 - 3/4" W.H.C

STA 4+70 - 3/4" W.H.C.

STA 5+50 - 3/4" W.H.C

STA 8+80 - FIRE HYD.

STA 9-35 - 4" W.H.C.

STA 10+20 - 3/4" W.H.C.

STA 11190 - 3/4" W.H.C.

STA 14+45 - FIRE HYD.

STA 14+60 - 3/4" W.H.C.

MA 2HW-FIFE HY D

STA 6+50 TO STA 14+70

MH-9 TO MH-10

MIL-10 TO MIL-11

STA 1+ 15 S.H.C.

MIT-8 TO MIT-9

MII-4 TO MH-5

N. 15 - 10 WHINE 105 TALE

1. 1. 1. 1. 1. 10 TO STA. 0+27 27 L.F

STA. J+27 TO STA/0+05 69 L.F

- らこぶ ロナ**タラTO STA** HO3.68 - ヨナレビ

TYPE

. - 1112-14

SEED & MULCH

SEED & MULCH

SEED & MULCH

DEEDE MULLIN

PAVING

PAVING

8' PAVING:

PAVING

8' PAVING;

12' PAVING;

PAVING

PAVING

PAVING

PAVING

181 PAVING:

3 PAVING:

PAVING

5' PAVING:

5' PAVING:

PAVING

20' SEED & MULCH

.5' SEED & MULCH

SEED & MULCH

SEED & MULCH

SEED & MULCI

SEED & MULCH

SEEDEN JUITH

I SEED & MULCH, 10 - F. PAVING

700 L.F. SEED & MULCH. 951 F PAVING, 251 FET ME

ツ' SEED & MULCH

5' SEED & MULCH

8' PAVING:

5' SEED & MULCH

5' SEED & MULCH

5' SEED & MULCH

10' PAVING;

5' SEED & MULCH

7 ' SEED & MULCH

15' SEED & MULCH

28' SEĘD & MUCLII

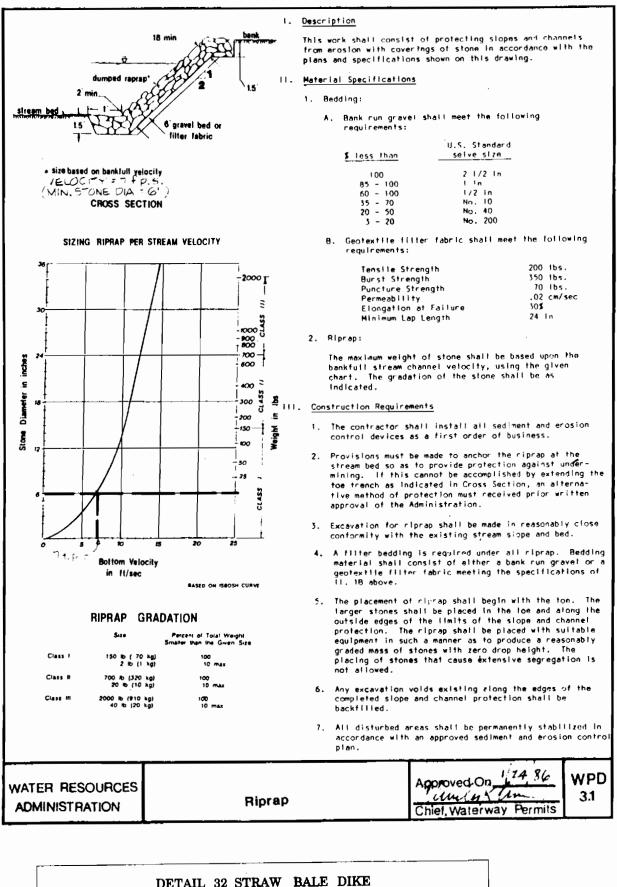
PAVING

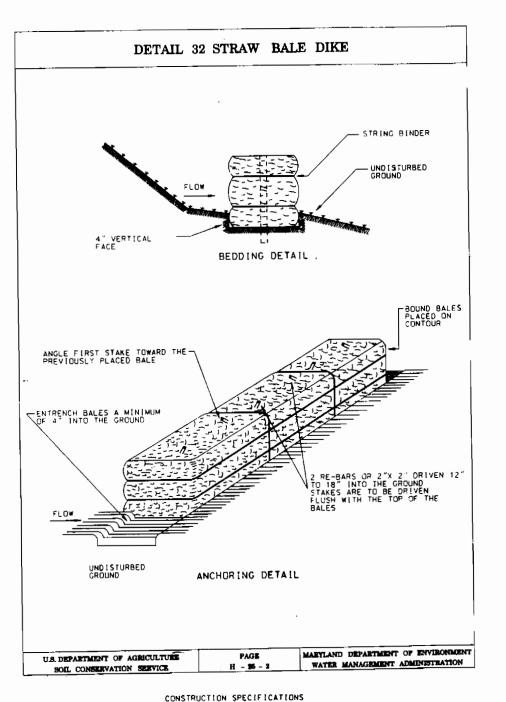
SEID & MULCH

RIPRAP STR. X-ING

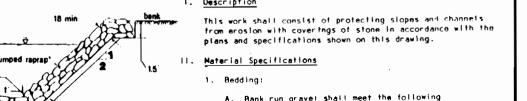
170 SEED & WULCH, 10 PAVING

SEED & MULL H, 10 PAN WA





OIL CONSERVATION SERVICE	H - 25 - 2	WATER MANAGEMENT ADMINISTRATION
OIL COMBERVATION GERVICE		
CONSTRU	CTION SPECIFICATIONS	S
1. Bales shall be pla	ced at the toe of a	slope, on the
contour, and in a row	with the ends of e	och bale tightly
abutting the adjacent	bales.	
Each bale shall be		
inches and placed so	the bindings are ho	rizontal.
3. Bales shall be sec		
		e 12 to 18 inches into
the ground. The firs		
		gle to force the bales
together, Stakes sha	iii be driven tiush i	erin the top of the
bale.		
4. Straw bale dikes s	hall be inspected fr	requently and after
each rain event and m		
		-
5. All bales shall be	removed when the s	lte has been
stabilized. The tren	ich where the bales i	were located shall be
graded flush and stab	ilized.	



THE HOWARD COUNTY DPW SEDIMENT CONTROL INSPECTOR. 10) ON ALL SITES WITH DISTURBED AREAS IN EXCESS OF 2 ACRES, APPROVAL OF THE INSPECTION AGENCY SHALL BE REQUESTED UPON COMPLETION OF INSTALLATION OF PERIMETER EROSION AND SEDIMENT CONTROLS, BUT BEFORE PROCEEDING WITH ANY OTHER EARTH DISTURBANCE OR GRADING. OTHER BUILDING OR GRADING INSPECTION APPROVALS MAY NOT BE AUTHORIZED UNTIL THIS INITIAL APPROVAL BY THE INSPECTION AGENCY IS MADE.

9) ADDITIONAL SEDIMENT CONTROLS MUST BE PROVIDED, IF DEENED NECESSARY BY

UTILITY NOTES

3) ANY SEDIMENT CONTROLS DISTURBED BY UTILITY CONSTRUCTION ARE TO BE REPAIRED

SEDIMENT CONTROL NOTES

1) A MINIMUM OF 24 HOURS NOTICE MUST BE GIVEN TO THE HOWARD COUNTY OFFICE OF

2) ALL VEGETATIVE AND STRUCTURAL PRACTICES ARE TO BE INSTALLED ACCORDING TO

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT

THE PROVISIONS OF THIS PLAN AND ARE TO BE IN CONFORMANCE WITH THE 1994

TEMPORARY STABILIZATION SHALL BE CONPECTED WITHIN: A) 7 CALENDAR DAYS

FOR ALL PERIMETER SEDIMENT CONTROL STRUCTURES, DIKES, PERIMETER SLOPES

AND ALL SLOPES GREATER THAN 3:1, B) 14 DAYS AS TO ALL OTHER DISTURBED

4) ALL SEDIMENT TRAPS/BASINS SHOWN MUST BE FENCED AND WARNING SIGNS POSTED

5) ALL DISTURBED AREAS MUST BE STABILIZED WITHIN THE TIME PERIOD SPECIFIED

ORARY SEEDING AND MULCHING. TEMPORARY STABILIZATION WITH MULCH ALONE

MAINTAINED IN OPERATIVE CONDITION UNTIL PERMISSION FOR THEIR REMOVAL

HAS BEEN OBTAINED FROM THE HOWARD COUNTY SEDIMENT CONTROL INSPECTOR.

OFFSITE WASTE/BORROW AREA LOCATION-TO BE DETERMINED BY THE CONTRACTOR.

ANY SEDIMENT CONTROL PRACTICE WHICH IS DISTURBED BY GRADING ACTIVITY

FOR PLACEMENT OF UTILITIES HUST BE REPAIRED ON THE SAME DAY OF

NA ACRES

O.BI.ACRES ±

O.Z4 ACRES \$

0.57 ACRES ±

HA CU. YDS.

NACU. YDS.

6) ALL SEDIMENT CONTROL STRUCTURES ARE TO REMAIN IN PLACE AND ARE TO BE

AROUND THEIR PERIMETER IN ACCORDANCE WITH VOL. 1, CHAPTER 12, OF THE

ABOVE IN ACCORDANCE WITH THE 1994 MARYLAND STANDARDS AND SPECIFICATIONS

CAN ONLY BE DONE WHEN RECOMMENDED SEEDING DATES DO NOT ALLOW FOR PROPER

FOR SOIL EROSION AND SEDIMENT CONTROL FOR PERMANENT SEEDINGS, SOD, TEMP-

CONSTRUCTION INSPECTION PRIOR TO THE START OF ANY CONSTRUCTION.

3) FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR

1) OPEN ONLY THAT SECTION OF TRENCH THAT CAN BE BACKFILLED AND STABILIZED

2) PLACE ALL EXCAVATED MATERIAL ON UPHILL SIDE OF TRENCH.

OR GRADED AREAS ON THE PROJECT SITE.

HOWARD COUNTY DESIGN MANUAL, STORM DRAINAGE.

GERMINATION AND ESTABLISHMENT OF GRASSES.

AREA TO BE VEGETATIVELY STABILIZED

IMMEDIATELY.

(313-1855).

CONTROL.

7) SITE ANALYSIS:

TOTAL AREA OF STIE

AREA TO BE ROOFED OR PAVED

AREA DISTURBED

TOTAL CUT

TOTAL FILL

WORK WITHIN 20' OF THE STREAM CENTERLINE SHALL NOT TAKE PLACE PRIOR TO A FIVE-DAY CLEAR WEATHER FORECAST FROM THE NATIONAL WEATHER

SERVICE.	TIME TO
SEQUENCE OF CONSTRUCTION	COMPLETE
 Obtain a grading permit from Howard County Department of Inspections, Licenses, and Permits. 	0.5 WEEK
2. Contact Howard County Bureau of Construction Inspection (313-1880) prior to starting date.	05 WEEKS
 Install erosion and sediment control devices as per Section 219 of the Howard County Design Manual Vol. IV. 	WEEK
 Excavate and Install proposed 8"water main, 8" sewer main and water and sewer house connections. (OBTAIN PERMISSION TO PROCEED BEFORE ENTERING STREAM AREA. ALSO SEE SEDIMENT CONTROL NOTE. II.) FOR RESTRICTIONS.) See "Conditions and Management Practices" for construction of sewer main within wetlands and buffer area. 	5 WEEKS
5. Restore paving and earth trenches to their original condition as per Howard County Standards.	WEEK
6. Upon permission from Howard County Sediment Control Inspector, remove Sediment Control Devices.	O.5 WEEK
7. Fine grade all disturbed areas and stabilize with permanent seeding.	O.5 WEEK

STAKEOUT DATA

8" WATER MAIN EAST OF SCOTTS LANDING DRIVE Sta. 0+60 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 106.0 L.F. 8.0 L.F. Sta. 0+75 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 117.0 L.F. 3.5 L.F. Sta. 1+70 - 8" Plug H.E.C. #1006 to H.E.C. #121 213.0 L.F. 6.5 L.F. WEST OF SCOTTS LANDING ROAD Sta. 0+40 - A.R. MH H.E.C. #1006 to H.E.C. #121 10.5 L.F. 28.5 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #120 62.5 L.F. 24.5 L.F.	
HR-2	
MH-3 H.E.C. #102 to H.E.C. #101 Z-7. L.F. MH-4 H.E.C. #102 to H.E.C. #101 312.5 L.F. 25.5 L.F. MH-5 MH-6 H.E.C. #100 to H.E.C. #100 94.0 L.F. MH-7 H.E.C. #100 to H.E.C. #101 16.0 L.F. MH-7 H.E.C. #102 to H.E.C. #101 16.0 L.F. MH-8 H.E.C. #102 to H.E.C. #101 16.0 L.F. MH-9 H.E.C. #102 to H.E.C. #101 102.0 L.F. MH-10 H.E.C. #102 to H.E.C. #120 102.0 L.F. MH-11 H.E.C. #103 to H.E.C. #120 102.0 L.F. MH-11 H.E.C. #103 to H.E.C. #121 117.0 L.F. MH-11 H.E.C. #103 to H.E.C. #121 117.0 L.F. MH-14 MH-15 MH-16 H.E.C. #107 to H.E.C. #102 260 L.F. MH-17 MH-18 MH-19 H.E.C. #107 to H.E.C. #102 260 L.F. MH-10 MH-10 MH-10 H.E.C. #106 to H.E.C. #121 106.0 L.F. MH-11 H.E.C. #107 to H.E.C. #102 260 L.F. MH-10 MH-10 MH-10 H.E.C. #1006 to H.E.C. #121 106.0 L.F. MH-10 MH-10 MH-10 H.E.C. #1006 to H.E.C. #121 117.0 L.F. MH-11 H.E.C. #1006 to H.E.C. #121 117.0 L.F. MH-10 MH-10 MH-10 MH-10 H.E.C. #1006 to H.E.C. #121 117.0 L.F. MH-11 MH-10	(LT)
MH-4 MH-5 MH-5 MH-6 MH-7 MH-7 MH-8 H.E.C. #102 to H.E.C. #101 MH-10 MH-10 MH-11 MH-1A MH	(UT)
MH-5 MH-6 MH-6 H.E.C. #101 to H.E.C. #100 MH-7 H.E.C. #102 to H.E.C. #101 MH-7 H.E.C. #102 to H.E.C. #101 MH-8 H.E.C. #102 to H.E.C. #101 MH-8 H.E.C. #102 to H.E.C. #102 MH-9 H.E.C. #102 to H.E.C. #102 MH-10 H.E.C. #102 to H.E.C. #1006 MH-10 H.E.C. #1006 to H.E.C. #101 MH-11 H.E.C. #1006 to H.E.C. #121 MH-12 MH-14 H.E.C. #1006 to H.E.C. #121 MH-15 MH-16 MH-17 MH-18 MH-18 MH-19 MH-19 H.E.C. #1006 to H.E.C. #102 MH-10 H.E.C. #1006 to H.E.C. #102 MH-11 H.E.C. #1006 to H.E.C. #102 MH-12 MH-14 MH-15 MH-16 MH-17 MH-18 H.E.C. #1006 to H.E.C. #121 MH-18 MH-19 MATER MAIN EAST OF SCOTTS LANDING DRIVE Sta. 0+60 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 MH-10 MH-10 MH-10 MH-10 H.E.C. #1006 to H.E.C. #121 MH-10 MH-11 H.E.C. #1006 to H.E.C. #121 MH-10 MH-	(LT)
MH-6-A MH-6-A H.E.C. #100 to H.E.C. #101 16.0 L.F. MH-7 H.E.C. #102 to H.E.C. #101 55.4 L.F. MH-8 H.E.C. #102 to H.E.C. #120 102.0 L.F. MH-9 H.E.C. #120 to H.E.C. #120 102.0 L.F. MH-10 H.E.C. #120 to H.E.C. #120 102.0 L.F. MH-11 H.E.C. #1006 to H.E.C. #121 117.0 L.F. MH-12 MH-13 H.E.C. #1006 to H.E.C. #121 219.0 L.F. MH-14 MH-15 H.E.C. #107 to H.E.C. #102 260 L.F. MH-16 B" WATER MAIN EAST OF SCOTTS LANDING DRIVE Sta. 0+60 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 106.0 L.F. Sta. 0+75 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 117.0 L.F. Sta. 1+70 - 8" Plug H.E.C. #1006 to H.E.C. #121 213.0 L.F. 6.5 L.F. EEST OF SCOTTS LANDING ROAD Sta. 0+40 - A.R. MH H.E.C. #1006 to H.E.C. #121 213.0 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #121 62.5 L.F. 28.5 L.F.	(LT)
MH-8 H.E.C. #102 to H.E.C. #120 102.0 L.F. MH-9 H.E.C. #120 to H.E.C. #1006 20.5 L.F. 10.0 L.F. MH-10 H.E.C. #1006 to H.E.C. #121 117.0 L.F. MH-11 H.E.C. #1006 to H.E.C. #121 219.0 L.F. MH-1A H.E.C. #107 to H.E.C. #102 360 L.F. MH-2A B" WATER MAIN EAST OF SCOTTS LANDING DRIVE Sta. 0+60 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 106.0 L.F. Sta. 0+75 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 117.0 L.F. Sta. 1+70 - 8" Plug H.E.C. #1006 to H.E.C. #121 213.0 L.F. EEST OF SCOTTS LANDING ROAD Sta. 0+40 - A.R. MH H.E.C. #1006 to H.E.C. #121 10.5 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #121 62.5 L.F. 28.5 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #121 62.5 L.F. 28.5 L.F.	
MH-8 MH-9 H.E.C. #120 to H.E.C. #1006 20.5 L.F. MH-10 H.E.C. #1006 to H.E.C. #121 117.0 L.F. MH-11 H.E.C. #1006 to H.E.C. #121 219.0 L.F. MH-1A MH-1A H.E.C. #107 to H.E.C. #102 366 L.F. MH-1C Sta. 0+60 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 106.0 L.F. Sta. 0+75 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 117.0 L.F. Sta. 1+70 - 8" Plug H.E.C. #1006 to H.E.C. #121 107.0 L.F. #EST OF SCOTTS LANDING ROAD Sta. 0+40 - A.R. MH H.E.C. #1006 to H.E.C. #121 213.0 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #121 10.5 L.F. 28.5 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #121 10.5 L.F. 28.5 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #120 62.5 L.F. 24.5 L.F.	(RT)
MH-10	
MH-11 MH-1A MH-1A MH-2A B" WATER MAIN EAST OF SCOTTS LANDING DRIVE Sta. 0+60 - 1/8 H.B. Sta. 0+75 - 1/8 H.B. Sta. 1+70 - 8" Plug H.E.C. \$1006 to H.E.C. \$121	(LT)
MH-IA MH-ZA MH-ZA B" WATER MAIN EAST OF SCOTTS LANDING DRIVE Sta. 0+60 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 106.0 L.F. 8.0 L.F. Sta. 0+75 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 117.0 L.F. 3.5 L.F. Sta. 1+70 - 8" Plug H.E.C. #1006 to H.E.C. #121 213.0 L.F. 6.5 L.F. EST OF SCOTTS LANDING ROAD Sta. 0+40 - A.R. MH H.E.C. #1006 to H.E.C. #121 10.5 L.F. 28.5 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #120 62.5 L.F. 24.5 L.F.	(RT)
8" WATER MAIN EAST OF SCOTTS LANDING DRIVE Sta. 0+60 - 1/8 H.B. H.E.C. \$1006 to H.E.C. \$121 106.0 L.F. 8.0 L.F. Sta. 0+75 - 1/8 H.B. H.E.C. \$1006 to H.E.C. \$121 117.0 L.F. 3.5 L.F. Sta. 1+70 - 8" Plug H.E.C. \$1006 to H.E.C. \$121 213.0 L.F. 6.5 L.F. EST OF SCOTTS LANDING ROAD Sta. 0+40 - A.R. MH H.E.C. \$1006 to H.E.C. \$121 10.5 L.F. 28.5 L.F. Sta. 1+00 - 8" W. H.E.C. \$1006 to H.E.C. \$120 62.5 L.F. 24.5 L.F.	(RT)
8" WATER MAIN EAST OF SCOTTS LANDING DRIVE Sta. 0+60 - 1/8 H.B.	(₹ ₹.)
Sta. 0+60 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 106.0 L.F. 8.0 L.F. Sta. 0+75 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 117.0 L.F. 3.5 L.F. Sta. 1+70 - 8" Plug H.E.C. #1006 to H.E.C. #121 213.0 L.F. 6.5 L.F. EST OF SCOTTS LANDING ROAD Sta. 0+40 - A.R. MH H.E.C. #1006 to H.E.C. #121 10.5 L.F. 28.5 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #120 62.5 L.F. 24.5 L.F.	(₹7)
Sta. 0+75 - 1/8 H.B. H.E.C. #1006 to H.E.C. #121 117.0 L.F. 3.5 L.F. Sta. 1+70 - 8" Plug H.E.C. #1006 to H.E.C. #121 213.0 L.F. 6.5 L.F. #EST OF SCOTTS LANDING ROAD Sta. 0+40 - A.R. MH H.E.C. #1006 to H.E.C. #121 10.5 L.F. 28.5 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #120 62.5 L.F. 24.5 L.F.	
Sta. 1+70 - 8" Plug H.E.C. #1006 to H.E.C. #121 213.0 L.F. 6.5 L.F. EST OF SCOTTS LANDING ROAD Sta. 0+40 - A.R. MH H.E.C. #1006 to H.E.C. #121 10.5 L.F. 28.5 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #120 62.5 L.F. 24.5 L.F.	(LT)
EST OF SCOTTS LANDING ROAD Sta. 0+40 - A.R. MH	(RT)
Sta. 0+40 - A.R. MH H.E.C. #1006 to H.E.C. #121 10.5 L.F. 28.5 L.F. Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #120 62.5 L.F. 24.5 L.F.	(RT)
Sta. 1+00 - 8" W. H.E.C. #1006 to H.E.C. #120 62.5 L.F. 24.5 L.F.	
24.5 [(LT)
01- 0100 t 0: 0:00 T : 0:00 T	(RT)
Sta. 2+00 to Sta. 6+00 Install 2.0 L.F. off Ed. Paving	
Sta. 2+80 - 8"x6" Tee H.E.C. #120 to H.E.C. #102 165.0 L.F. 22.5 L.F.	RT)
Sta. 6+00 to Sta. 14+70 Install 2.0 L.F. off Ed. Paving.	
Sta. 8+80 - 8"x6" Tee H.E.C. #102 to H.E.C. #101 321.0 L.F. 8.0 L.F.	(LT)
Sta. 14+45 - 8"x6" Tee H.E.C. #100 to H.E.C. #101 35.5 L.F. 23.0 L.F.	(LT)

* PERMANENT SEEDING NOTES

APPLY TO GRADED OR CLEARED AREAS NOT SUBJECT TO IMMEDIATE FURTHER DISTURBANCE

SEEDBED PREPARATION: LOOSEN UPPER THREE INCHES OF SOIL BY RAKING, DISCING OR OTHER ACCEPTABLE MEANS BEFORE SEEDING.

SOIL AMENDMENTS: IN LIEU OF SOIL TEST RECOMMENDATIONS, USE ONE OF THE FOLLOWING SCHEDULES:

1) PREFERRED - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SQUARE FT.) AND 600 LBS PER ACRE 10-10-10 FERTILIZER (14 LBS/1000 SO.FT.) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL. AT TIME OF SEEDING, APPLY 400 LBS PER ACRE 30-0-0 UREAFORM FERTILIZER (9 LBS/1000 SO FT).

2) ACCEPTABLE - APPLY 2 TONS PER ACRE DOLOMITIC LIMESTONE (92 LBS/1000 SO FT) AND 1000 LBS PER ACRE 10-10-10 FERTILIZER (23 LBS/1000 SO FT) BEFORE SEEDING. HARROW OR DISC INTO UPPER THREE INCHES OF SOIL.

SEEDING - FOR THE PERIODS MARCH 1 thru APRIL 30, AND AUGUST 1 THRU OCTOBER 15, SEED WITH 60 LBS PER ACRE (1.4 LBS/1000 SQ FT) OF KENTUCKY 31 TALL FESCUE. FOR THE PERIOD MAY 1 THRU JULY 31. SEED WITH 60 LBS KENTUCKY 31 TALL FESCUE PER ACRE (.05 LBS/1000 SQ FT) OF WEEPING LOVEGRASS. DURING THE PERIOD OF OCTOBER 16 THRU FEBRUARY 28, PROTECT SITE BY: OPTION (1) 2 TONS PER ACRE OF WELL ANCHORED STRAW MULCH AND SEED AS SOON AS POSSIBLE IN THE SPRING. OPTION (2) USE SOD. OPTION (3) SEED WITH 60 LBS/ACRE KENTUCKY 31 TALL FESCUE AND MULCH WITH 2 TONS/ACRE WELL ANCHORED STRAW.

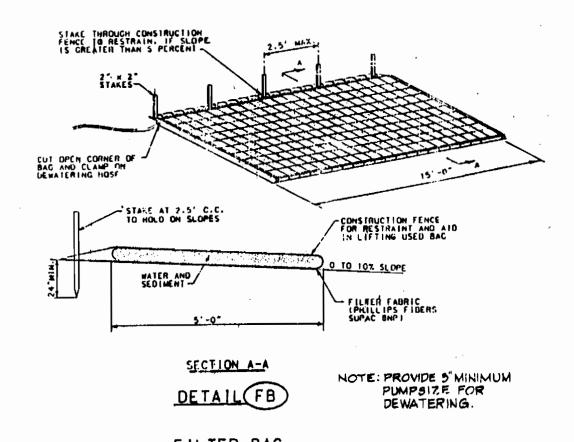
MULCHING - APPLY 11 TO 2 TONS PER ACRE (70 TO 90 LBS/1000 SQ FT) OF UNROTTED SMALL GRAIN STRAW IMMEDIATELY AFTER SEEDING. ANCHOR MULCH IMMEDIATELY AFTER APPLICATION USING MULCH ANCHORING TOOL OR 218 GALLONS PER ACRE (5 GAL/1000 SQ FT) OF EMULSIFIED ASPHALT ON FLAT AREAS. ON SLOPES 8 FEET OR HIGHER, USE 348 GALLONS PER ACRE (8 GAL/1000 SQ FT) FOR ANCHORING.

MAINTENANCE - INSPECT ALL SEEDED AREAS AND MAKE NEEDED REPAIRS. REPLACEMENTS AND RESEEDINGS.

* SEE CONDITIONS, (CONDITIONS AND MANAGEMENT PRACTICES FOR WORKING IN NON-TIDAL WETLANDS), FOR SEEDING WITHIN THE WETLANDS & BUFFER AREAS.

WORKING IN NONTIDAL WETLANDS"

- 1) No materials or equipment may be stored or stockpiled within nondtidal wetlands, 25-foot wetlands buffer or 100-year floodplain.
- 2) Stockpile and maintain separately the top 6"-12" of topsoil material excavated from nontidal wetlands, to be replaced as the top layer of the backfilled material;
- 3) Remove excess fill or construction material or debris to an unpland disposal area;
- 4) Place materials in a location and manner which does not adversely impact surface or subsurface water flow into or out of the nontidal wetland:
- 5) Place heavy equipment on mats or suitably operate the equipment to prevent damage to the nontidal wetlands;
- 6) Use previously evcavated materials as backfill, unless it contians waste metal products, unsightly debris, toxic material or any other deleterious substance. Use clean borrow material when excavated material is not suitable for use as backfill;
- 7) All stabilization in the wetland and buffer shall be of the following species: Annual Ryegrass (Lolium multiflorum), Millet (Setaria italica), Barley (Horedum sp.), Oats (Uniola sp.) and or Rye (Secale cereale). These species allow for the stabilization of the site while also allowing for the voluntary revegetation of natural wetland species. Other ...onpersistent vegetation may be acceptable, but must be approved by the Division. Kentucky 31 fescue shall not be utilized in the wetland or buffer areas. The area should be seeded and mulched to reduce erosion after construction activities have been completed.
- 8) After installation has been completed, make post construction grades and elevation of nontidal wetlands the same as the original grades and elevation;
- 9) To protect important aguatic species, in-stream work is prohibited as determined by the classification of the stream as
 - Use I Waters. In-stream work may not be conducted during the period March I through June 15, inclusive, during any
- * THESE CONDITIONS ALSO APPLY FOR WORK THAT WILL RESULT IN IMPACTS TO THE 25-FOOT WETLAND BUFFER, FEM. A. MAPPED 100 YEAR FLOOD F'LAIN, AND REGULATED WATERVIAYS.



FILTER BAG TEMPORARY EROSION CONTROL MEASURE

1. FILTER BAG SHALL BE PLACED ON A SLOPING OR LEVEL. WELL-VEGETATED SITE SUCH THAT WATER WILL FLOW AWAY FROM STRUCTURE AND WORK AREAS. 2. THE FILTER BAG MUST BE STAKED IN PLACE AND SECURED TO THE PUMP DISCHARGE LINE.

3. FILTER BAG SHALL NOT BE USED FOR DISCHARGE FLOWS GREATER THAN 300 CPM.

4. DEVICE SHALL BE REMOVED AND DISPOSED OF AFTER BAG IS FILLED WITH SEDIMENT, SEDIMENT EROM HAG SHALL BE SPREAD IN AN UPLAND AREA.

DEPARTMENT OF PUBLIC WORKS HOWARD COUNTY, MARYLAND

PAGE MARYLAND DEPARTMENT OF ENVIRONGENT D - 15 - 2 WATER MAKAGEMENT ADMINISTRATION

- WATERTIGHT CAP OF

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CHIEF BUREAU OF UTILITIES PO DATE

J&J WHITE MARSH, MD.

HICKS ENGINEERING CO.,INC. ENGINEERS · SURVEYORS · PLANNER\$ 200 E. JOPPA ROAD · SUITE 402/ TOWSON MARYLAND 21286



	Dr. 1/11/00	BY	NQ.	REVISION	DATE	600 SCALE MAP NO. W-1015 40 BLOCK NO. 101110411	
	DATE: 7/17/96				2475	600' SCALE MAP NO. W-46.5-46 BLOCK NO. 10.11, 16417	
l	CHK: D.E.H.			•		UTILITY LINE BACKFILL AND BEDDING	
						NATIONWIDE PERMIT#12	
	DRN: F.W.					(88 GWQC-001R)	
	I DES: K.W. F	F.W.	2	ADD MH#5-A	2/07	WATER QUALITY CERTIFICATION	
		K.W.	1	REVISED SEWER ALIAN, MH. 2 TO MH 3	1/0/	WATER CHALLTY CERTIFICATION	

HARDING ROAD WATER & SEWER MAINS 6 TH ELECTION DISTRICT HOWARD COUNTY, MARYLAND CAPITAL PROJECT S-6192 CONTRACT NO. 24-3540

SHOWN