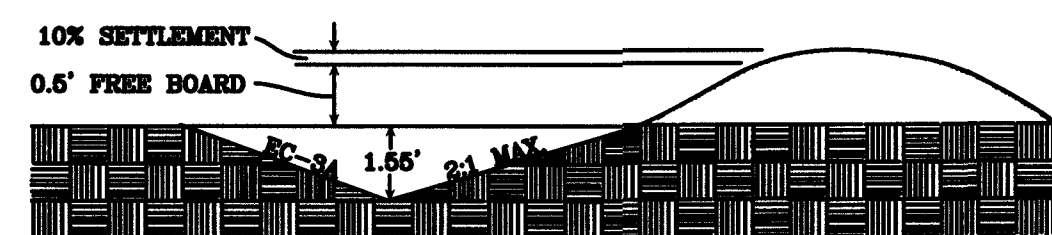
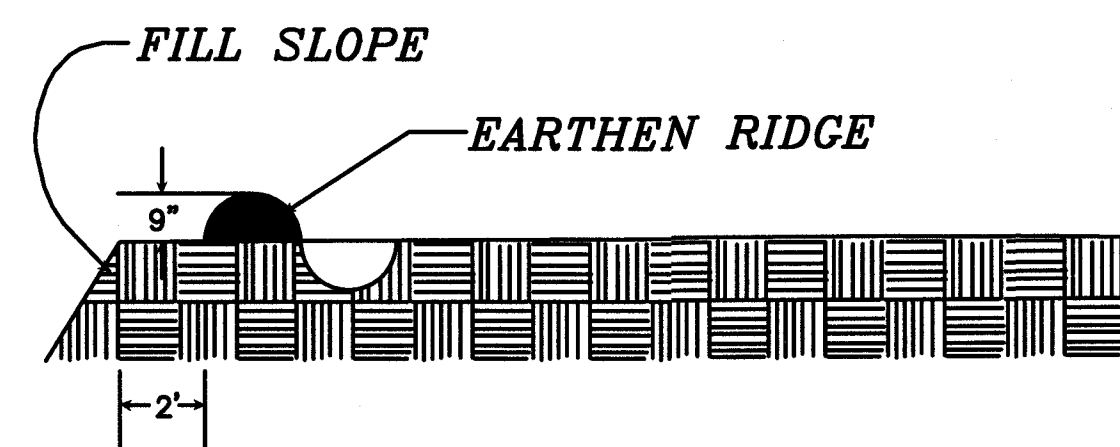


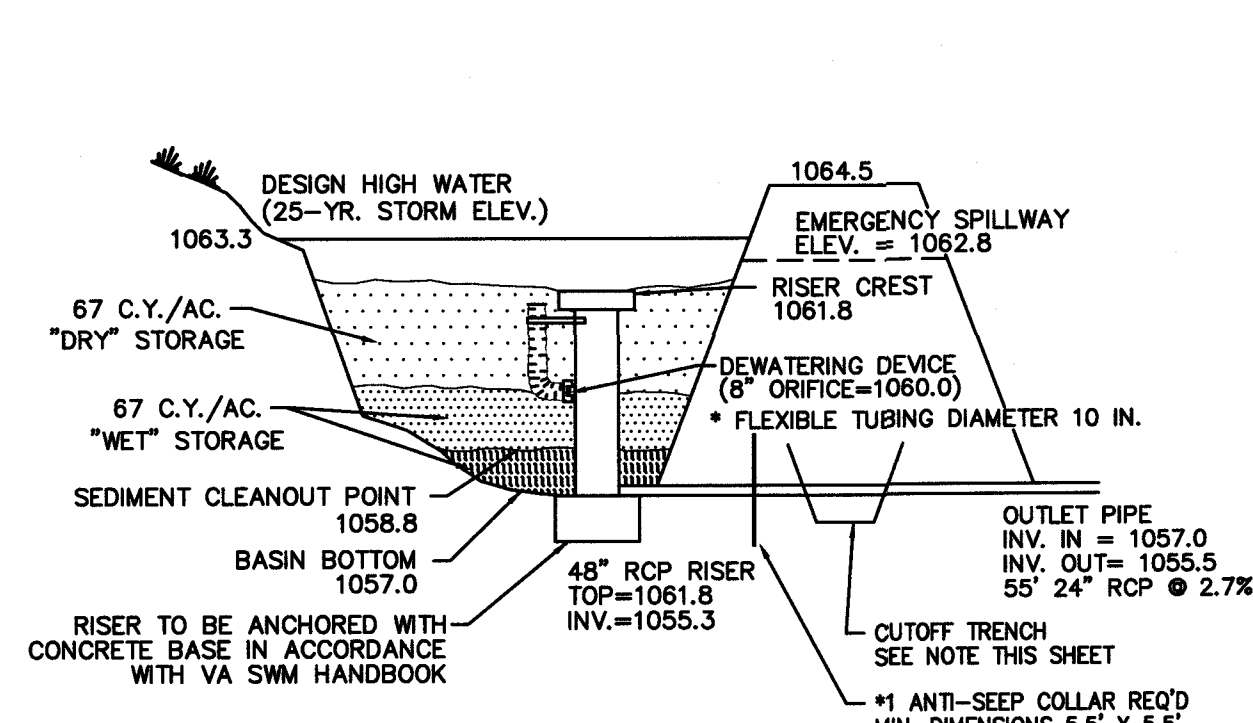
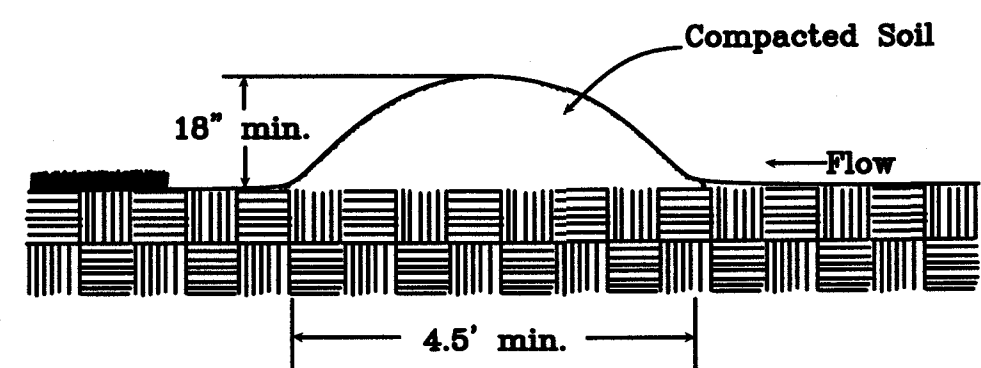
DV TYPICAL VEE-SHAPED DIVERSION



FD TEMPORARY FILL DIVERSION



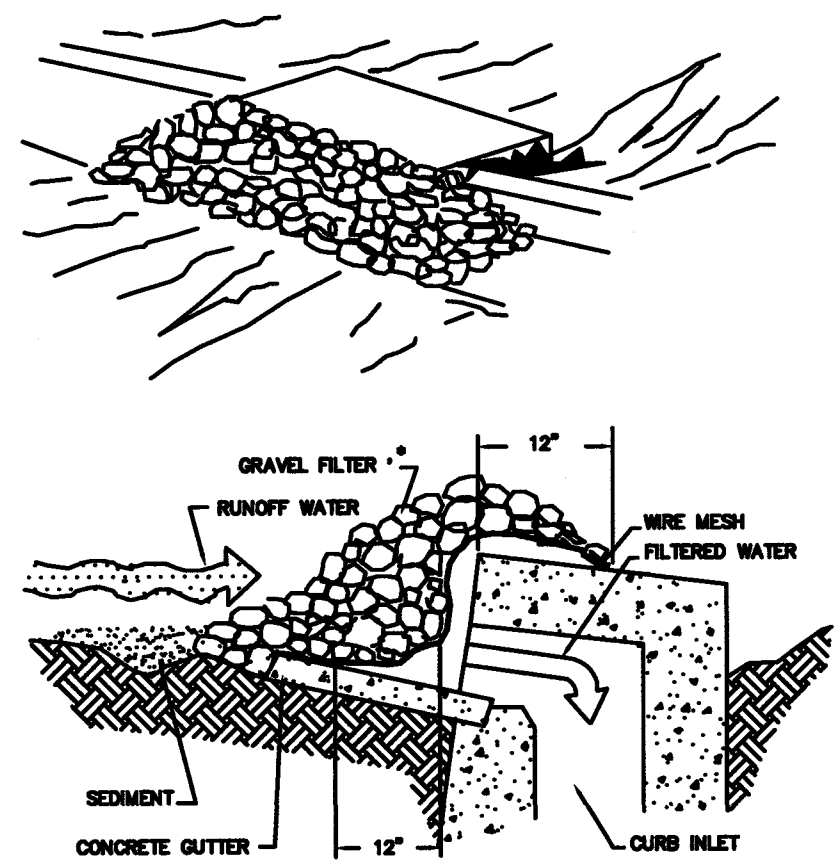
DD TEMPORARY DIVERSION DIKE



DESIGN ELEVATIONS WITH EMERGENCY SPILLWAY (RISER PASSES 2-YR. EVENT)

SEDIMENT BASIN #1

N.T.S.

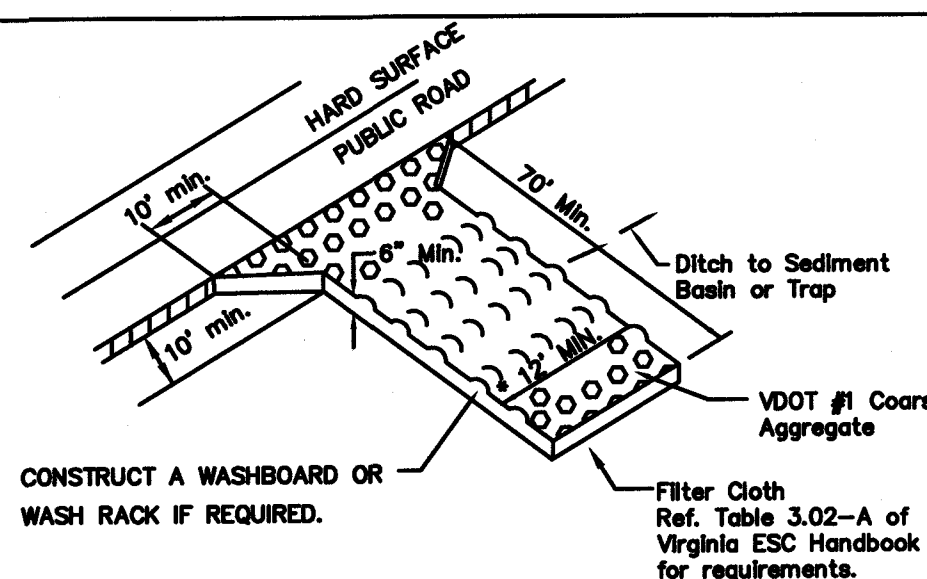


IP GRAVEL CURB INLET SEDIMENT FILTER

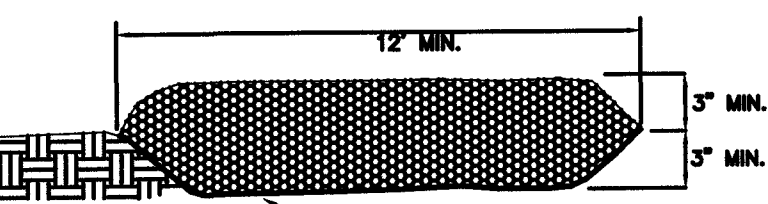
SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE FLOWING IN FRONT OF THE STRUCTURE IS NOT LIKELY TO CAUSE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

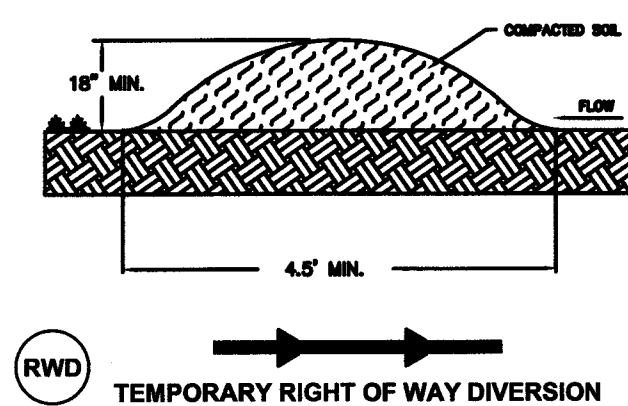
* GRAVEL SHALL BE VDOT #3, #357 or 5 COARSE AGGREGATE.



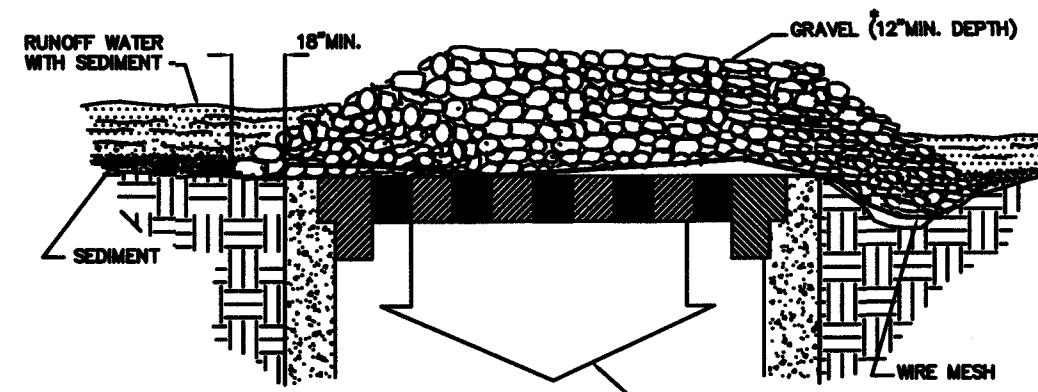
* MUST EXTEND FULL WIDTH OF INGRESS & EGRESS OPERATION.



CE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



TEMPORARY RIGHT OF WAY DIVERSION



SPECIFIC APPLICATION

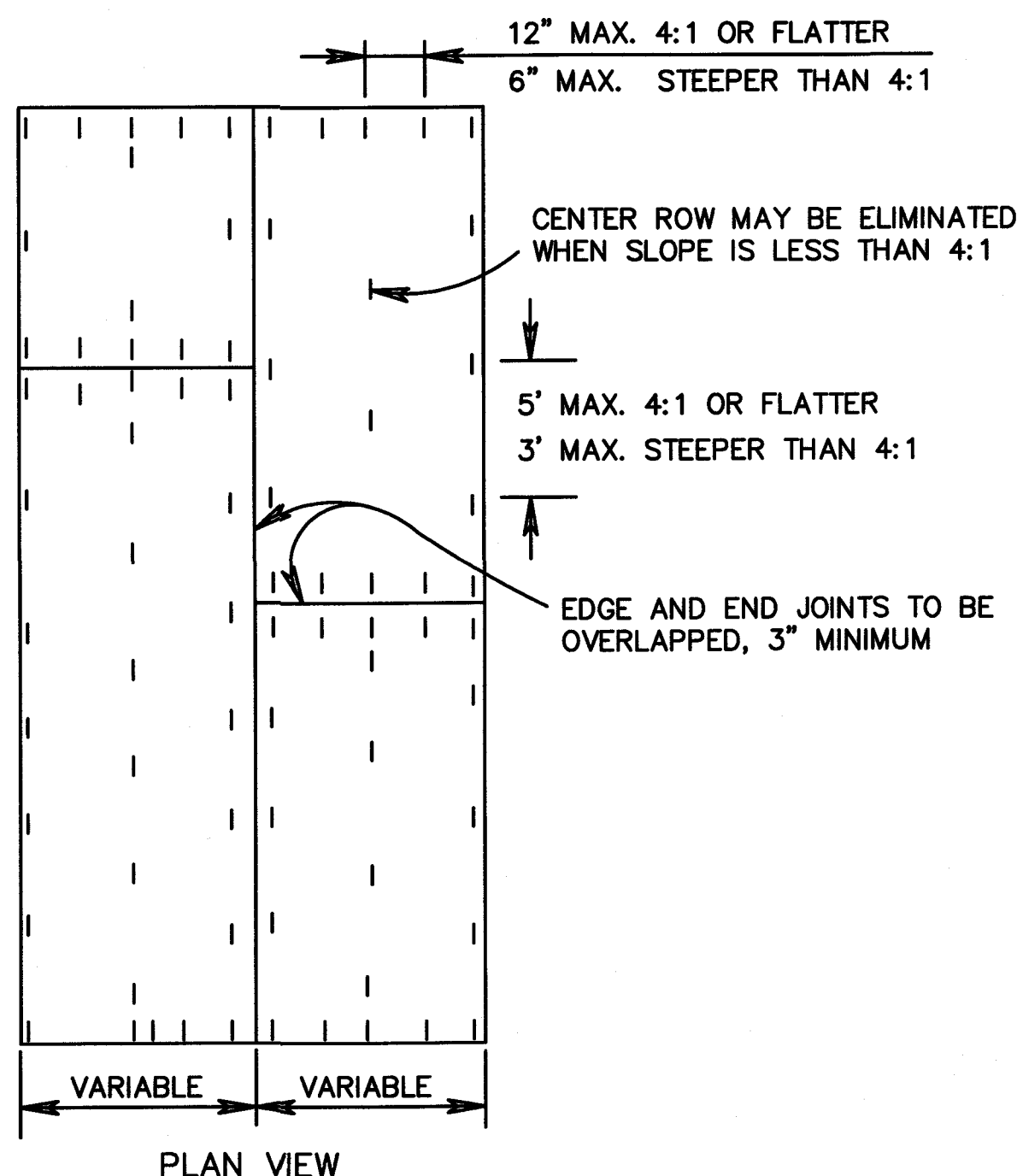
This method of inlet protection is applicable where heavy concentrated flows are expected, but not where ponding around the structure might cause excessive inconvenience or damage to adjacent structures and unprotected areas.

* Gravel shall be VDOT #3, #357 or #5 coarse aggregate.

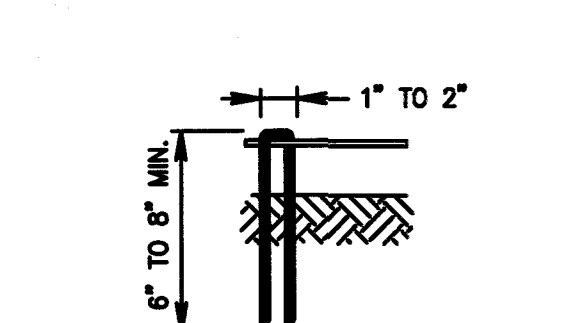
IP GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER

B/M SOIL STABILIZATION BLANKET

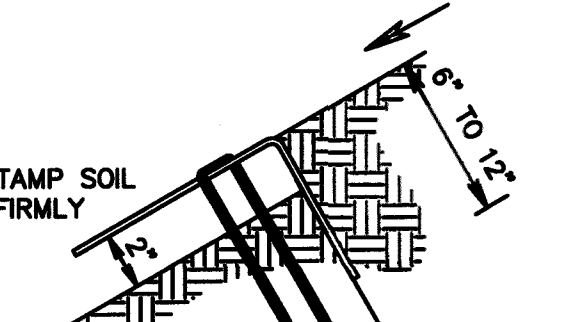
NOTE: BLANKET MATTING (B/M) TO BE USED ON ALL SLOPES 3:1 OR STEEPER.



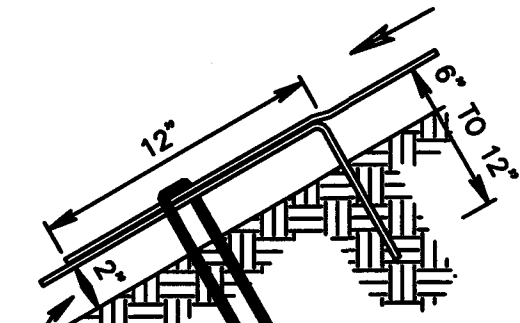
PLAN VIEW



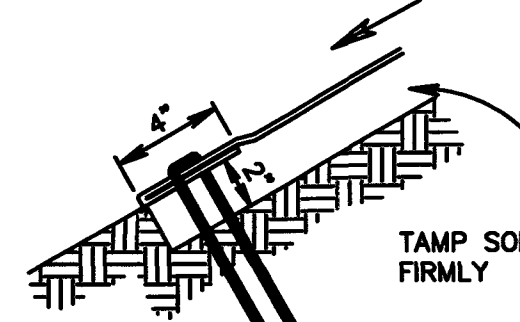
STAPLE DETAIL



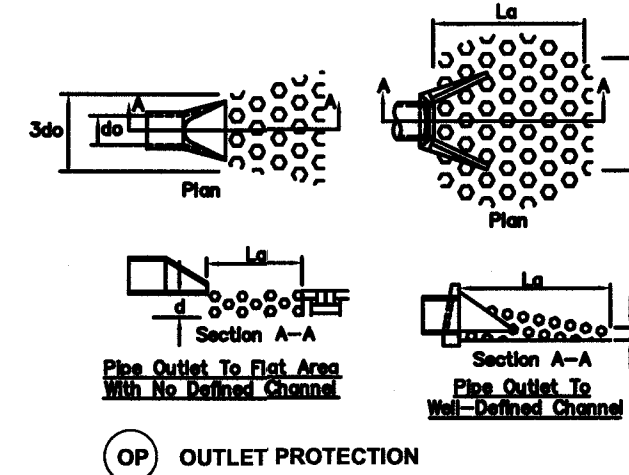
ANCHOR SLOT



JUNCTION SLOT



TERMINAL FOLD



SCC STORMWATER CONVEYANCE CHANNEL

SCC#1 ---SEE DITCH 'G' DETAIL
SCC#2 ---SEE DITCH 'H' DETAIL
SCC#3 ---SEE DITCH 'I' DETAIL

DITCH DETAILS ON SHEET C-18

NOTES

1. Apron lining may be rip-rap, gravel rip-rap, or concrete.
2. L is the length of the rip-rap apron as calculated using photos 1.36d and 1.36e.
3. d = 1.5 times the maximum stone diameter, but not less than 6".

OUTLET PROTECTION DATA:

OUTLET PROTECTION #1- (STR. #13)

Q25=6.65 CFS; V25=5.44 FPS
EC-1 CLASS A1 RIP RAP
DEPTH = 18"
LENGTH OF APRON=13'
WIDTH @ OUTLET=6'
WIDTH @ END=TOP OF BANK
MIN. D50 SIZE=6"

OUTLET PROTECTION #2- (STR. #30)

Q25=30.12 CFS; V25=8.45 FPS
EC-1 CLASS I RIP RAP
DEPTH = 24"
LENGTH OF APRON=17'
WIDTH @ OUTLET=6'
WIDTH @ END=TOP OF BANK
MIN. D50 SIZE=7"

OUTLET PROTECTION #3- (STR. #45)

Q25=33.98 CFS; V25=17.97 FPS
EC-1 CLASS II RIP RAP
DEPTH = 36"
LENGTH OF APRON=19'
WIDTH @ OUTLET=6'
WIDTH @ END=TOP OF BANK
MIN. D50 SIZE=8"

OUTLET PROTECTION #4- (SB)

Q2=16.4 CFS; V2=11.5 FPS
EC-1 CLASS I RIP RAP
DEPTH = 24"
LENGTH OF APRON=10'
WIDTH @ OUTLET=6'
WIDTH @ END=12'
MIN. D50 SIZE=6"

TYPE A

15 OCTOBER TO 1 FEBRUARY
K-31 FESCUE @ 5 LB / 1000 SF
BORZY WINTER RYE @ 1/2 LB / 1000 SF
1 FEBRUARY TO 1 JUNE
K-31 FESCUE @ 5 LB / 1000 SF
ANNUAL RYE @ 1/2 LB / 1000 SF
1 JUNE TO 1 SEPTEMBER
K-31 FESCUE @ 5 LB / 1000 SF
GERMAN MILLET @ 1/2 LB / 1000 SF
1 SEPTEMBER TO 15 OCTOBER
K-31 FESCUE @ 5 LB / 1000 SF
ANNUAL RYE @ 1/2 LB / 1000 SF

LIME: 140 LB / 1000 SF PULVERIZED AGRICULTURAL LIMESTONE

FERTILIZER: 5-20-10 @ 25 LB / 1000 SF
38-0-0 @ 7 LB / 1000 SF

MULCH: IF REQUIRED, SHALL BE USED OVER ALL SEEDING AREAS AND SHALL BE APPLIED IN ACCORDANCE WITH SECTION 1.76 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.

SOIL CONDITIONING: INCORPORATION OF LIME AND FERTILIZER, SELECTION OF CERTIFIED SEED, MULCHING, MAINTENANCE OF NEW SEEDINGS, AND RESEEDING SHALL BE IN ACCORDANCE WITH SPECIFICATIONS CONTAINED WITHIN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. ADDITIONAL SEEDING TO BE PERFORMED AS REQUIRED BY THE INSPECTOR.

SEED APPLICATION: APPLY SEED UNIFORMLY WITH A CYCLOPE SEEDER, DRILL, CULTIPACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRAGILE, SEEDBED. MAXIMUM SEEDING DEPTH SHALL BE 1/4 INCH.

PS

PERMANENT SEEDING MIXTURE

EROSION & SEDIMENT CONTROL BONDING COST ESTIMATE

ALL COSTS GIVEN ARE COMPLETE IN PLACE

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL COST
CONSTRUCTION ENTRANCE	EA	1	\$ 1,200	\$ 1,200
SILT FENCE	LF	1600	3.00	4,800
INLET PROTECTION	EA	20	200	4,000
TEMPORARY FILL DIVERSION/DIVERSION DIKE	LF	2200	3.00	5,850
STORMWATER CONVEYANCE CHANNEL	LF	1000	3.00	3,000
OUTLET PROTECTION	EA	3	200	600
SEDIMENT BASIN	EA	1	2,000	2,000
BLANKET MATTING	S.Y.	4800	1.50	7,200
PERMANENT SEEDING	1000 SF	500	20	10,000
TEMP. SEEDING	1000 SF	500	15	7,500
CHECK DAMS	EA	7	100	700
SUB-TOTAL				\$ 46,850
10% CONTINGENCY				\$ 4,685
TOTAL PROJECT COST				\$ 51,535

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- ALL SOIL EROSION & SEDIMENT CONTROL MEASURES SHALL BE ACCOMPLISHED IN STRICT ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION.
- THE APPROVING AUTHORITY MAY ADD TO, DELETE, RELOCATE, CHANGE, OR OTHERWISE MODIFY CERTAIN EROSION AND SEDIMENT CONTROL MEASURES WHERE FIELD CONDITIONS ARE ENCOUNTERED THAT WARRANT SUCH MODIFICATIONS.
- ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THE PLAN SHALL BE PLACED IN ADVANCE OF THE WORK BEING PERFORMED, AS FAR AS PRACTICAL.
- IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO LEAVE THE SITE ADEQUATELY PROTECTED AGAINST EROSION, SEDIMENTATION, OR ANY DAMAGE TO ANY ADJACENT PROPERTY AT THE END OF EACH DAY'S WORK.
- FOR THE EROSION CONTROL KEY SYMBOLS SHOWN ON THE PLANS, REFER TO THE VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. THESE SYMBOLS AND KEYS ARE TO BE UTILIZED ON ALL EROSION CONTROL PLANS SUBMITTED TO ROANOKE COUNTY.
- THE LOCATION OF ALL OFF-SITE FILL OR BORROW AREAS ASSOCIATED WITH THE CONSTRUCTION PROJECT WILL BE PROVIDED TO ROANOKE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT, AN EROSION CONTROL PLAN OR MEASURES MAY BE REQUIRED FOR THIS AREA.
- THIS SHEET MAY NOT BE MODIFIED EXCEPT FOR TABLES

TOTAL DISTURBED AREA = 12.0 AC. = 523,000 SQ. FT.

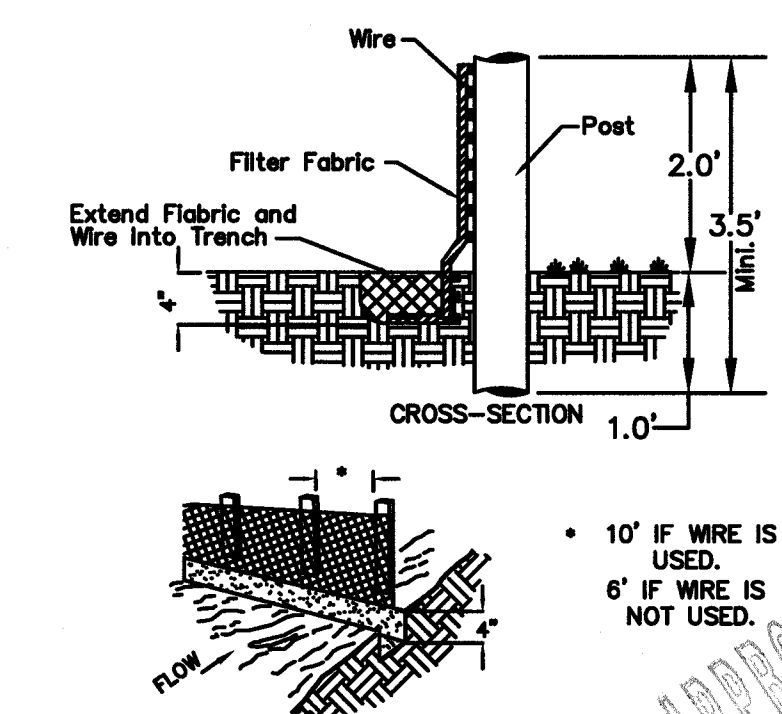
DEFINITION - THE ESTABLISHMENT OF A TEMPORARY VEGETATIVE COVER ON DISTURBED AREAS BY SEEDING WITH APPROPRIATE RAPIDLY GROWING ANNUAL PLANTS.

RECOMMENDED APPLICATION	DEGREE OF AGRICULTURAL LIMESTONE
BELOW 4.2	3 TONS PER ACRE
4.2 TO 5.2	2 TONS PER ACRE
5.2 TO 6	1 TON PER ACRE

ACCEPTABLE TEMPORARY SEEDING PLANT MATERIAL * QUICK REFERENCE FOR ALL REGIONS

PLANTING DATES	SPECIES	RATE (LBS/ACRE)
SEPT. 1 - FEB. 15	50/50 MIX OF ANNUAL RYEGRASS & WINTER RYE	50 - 100
FEB. 16 - APR. 30	ANNUAL RYEGRASS	60 - 100
MAY 1 - AUG. 31	GERMAN MILLET	50

TS TEMPORARY SEEDING



SF CONSTRUCTION OF A SILT FENCE