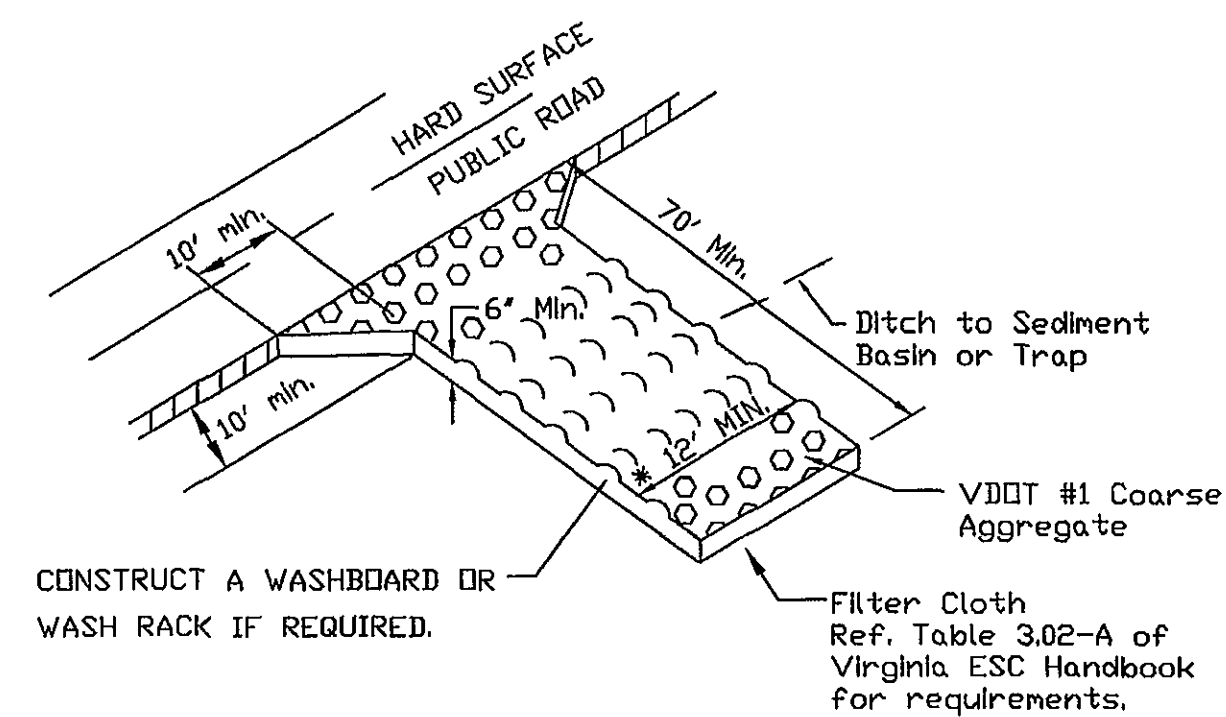
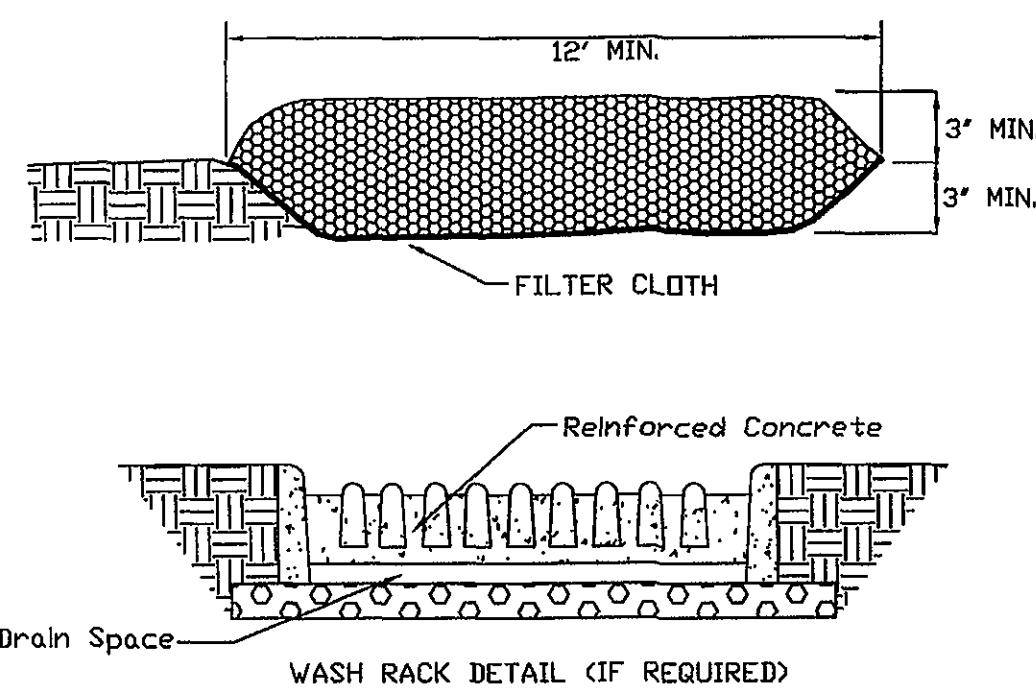


CE TEMPORARY GRAVEL CONSTRUCTION ENTRANCE



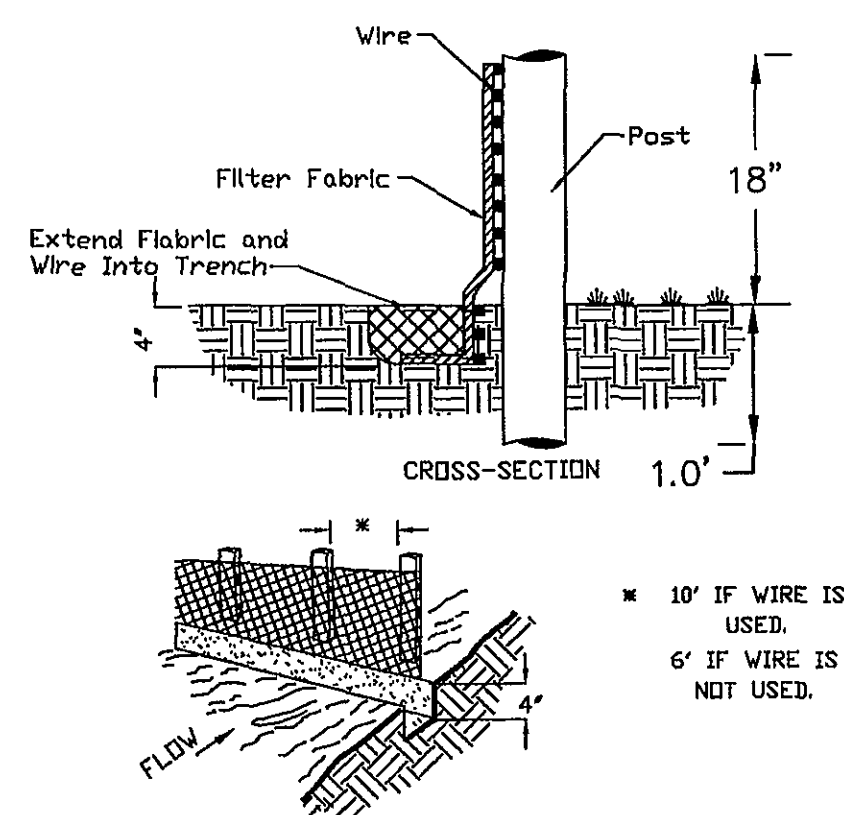
* MUST EXTEND FULL WIDTH OF INGRESS & EGRESS OPERATION.



CE CONSTRUCTION ROAD STABILIZATION

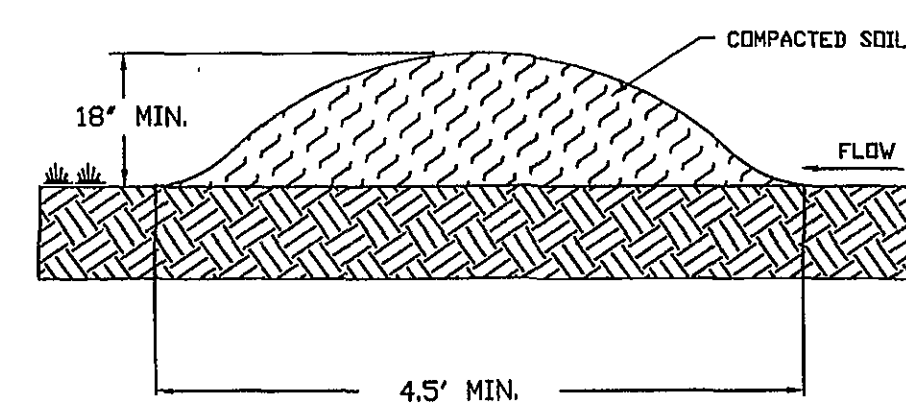
NO APPLICABLE DETAILS APPLY. REFER TO SPECIFICATION 3.03 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION FOR SPECIFIC REQUIREMENTS.

SF SILT FENCE

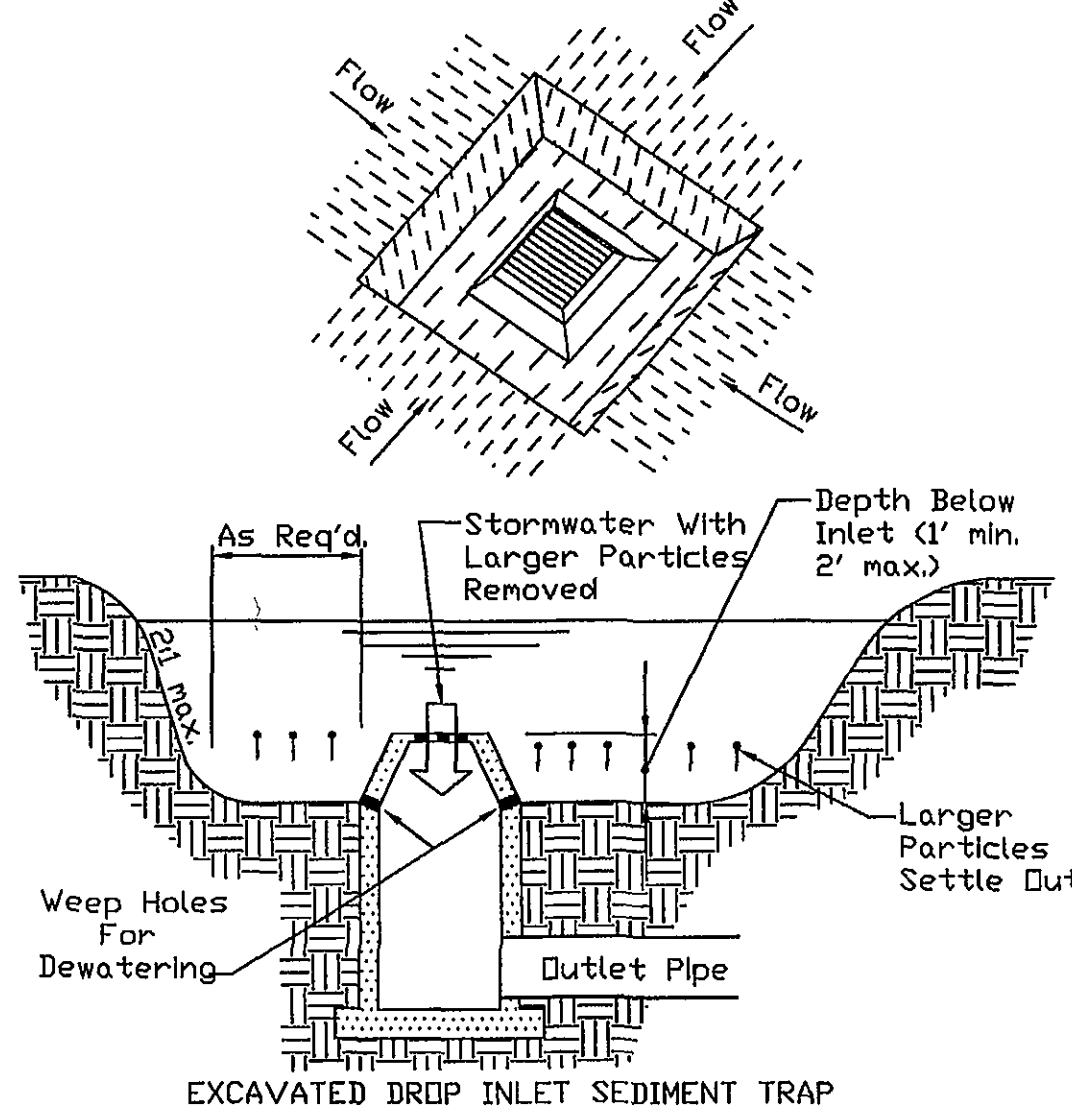
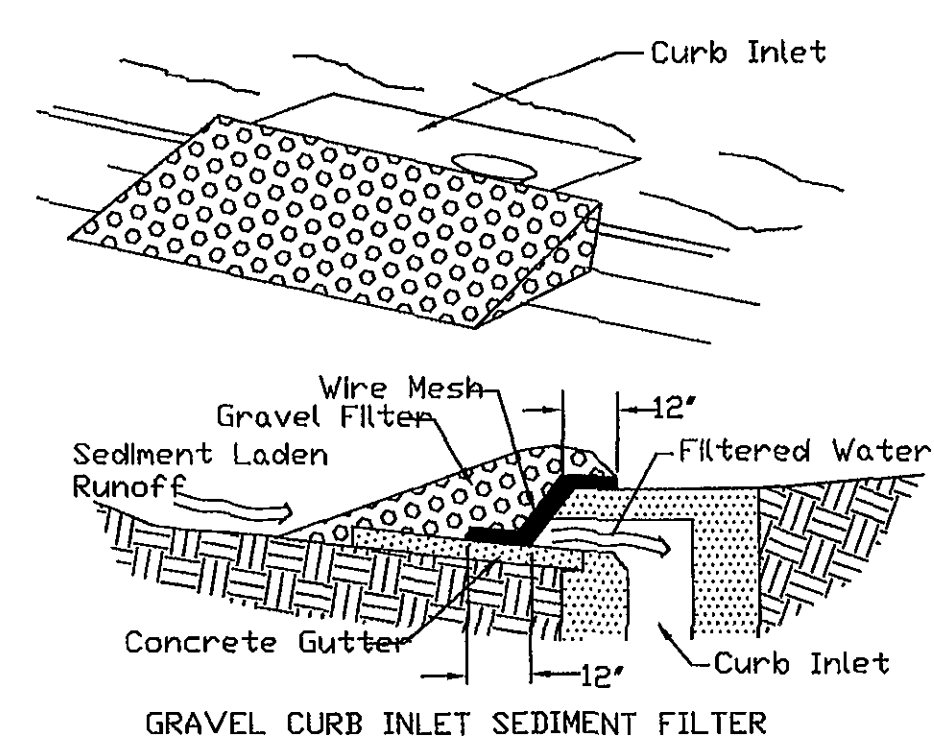
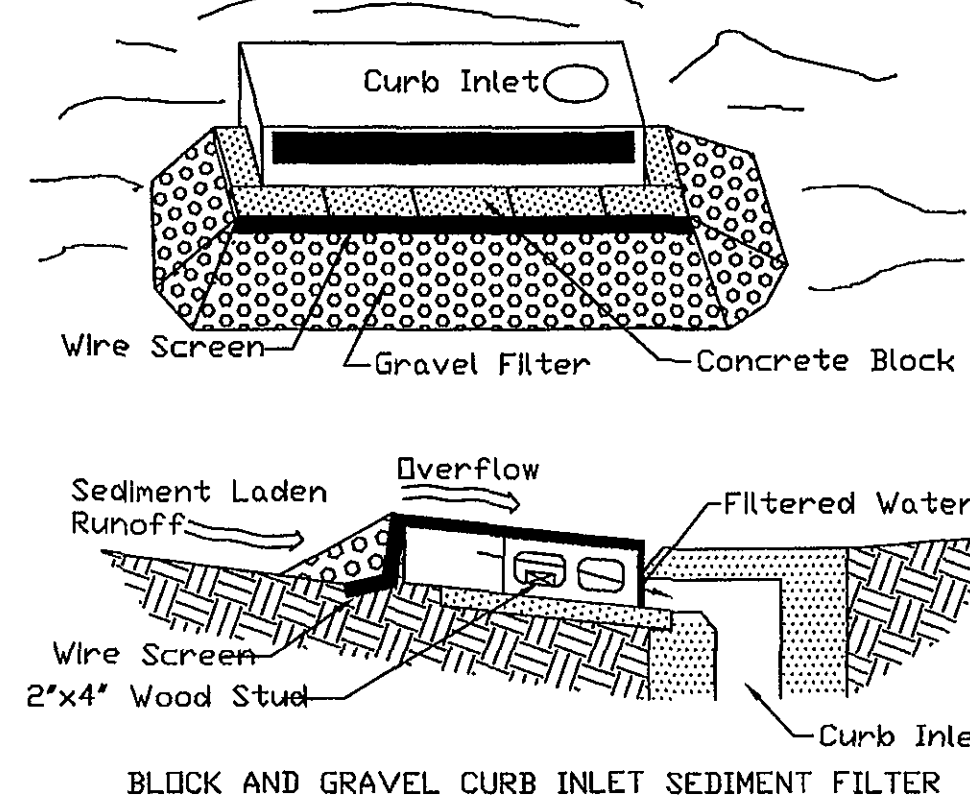
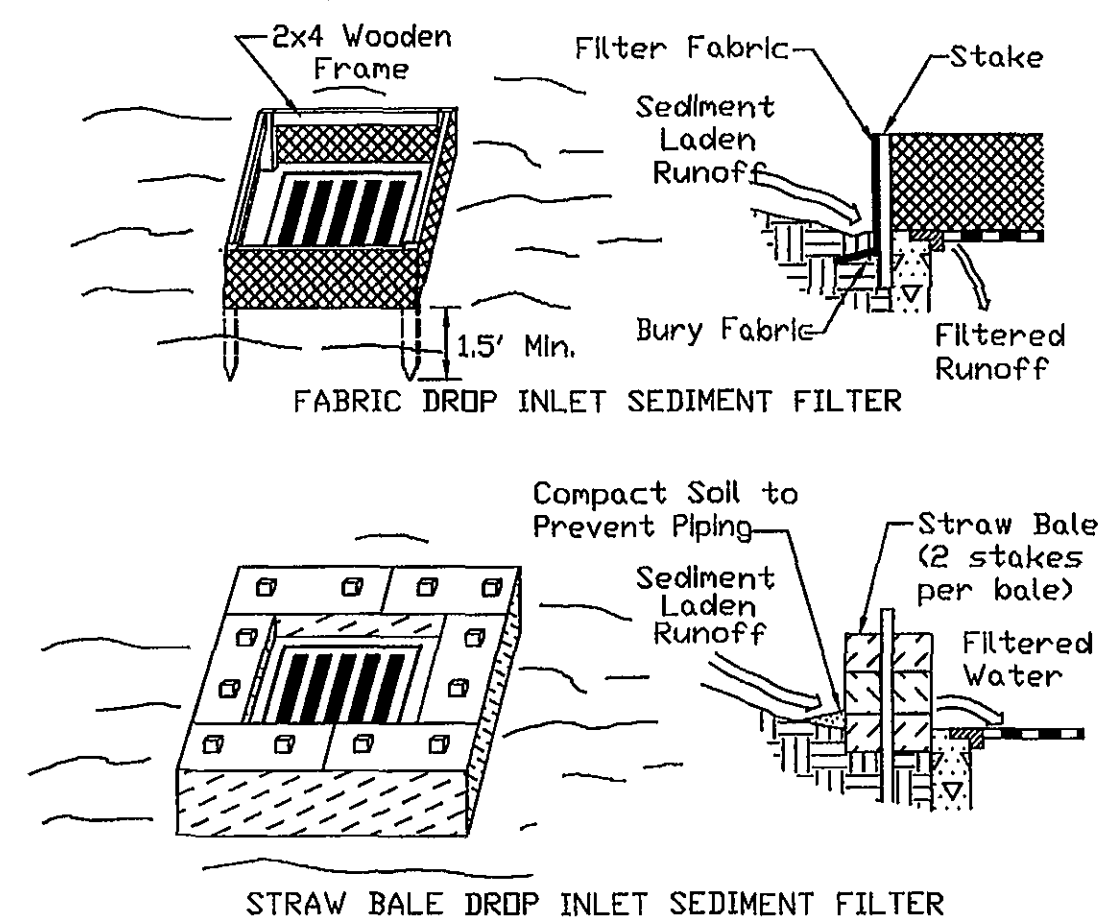


FD TEMPORARY FILL DIVERSION

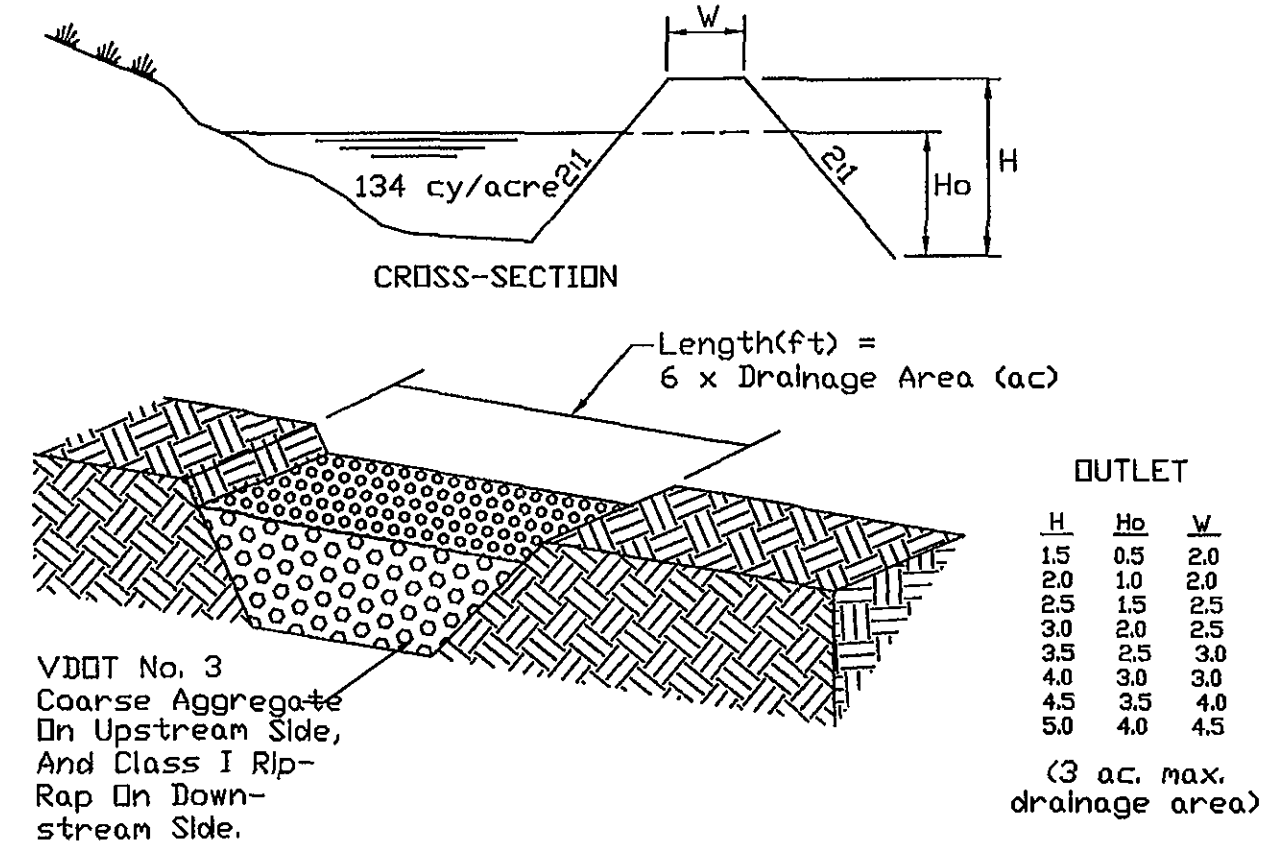
RWD TEMPORARY RIGHT-OF-WAY DIVERSION



IP INLET PROTECTION



ST SEDIMENT TRAP



TS TEMPORARY SEEDING

DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 30 DAYS SHALL BE STABILIZED WITH TEMPORARY SEEDING MEASURES AS SHOWN HEREON, AND AS FURTHER DETAILED AS "STANDARD AND SPECIFICATION 3.31 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK", LATEST EDITION. IN ADDITION TO AREAS OF GENERAL GRADING THAT WILL NOT BE FINE-GRADED FOR GREATER THAN 30 DAYS, THE FOLLOWING SPECIFIC E&S MEASURES SHALL BE STABILIZED WITH TEMPORARY SEEDING IMMEDIATELY UPON COMPLETION OF CONSTRUCTION OF THE TEMPORARY MEASURE:

- SOIL STOCKPILES
- DIKES, DAMS, AND SIDES OF SEDIMENT BASINS
- TEMPORARY ROADWAY EMBANKMENTS

PRIOR TO SEEDING, INSTALL NECESSARY EROSION CONTROL PRACTICES SUCH AS DIKES, WATERWAYS, AND BASINS. PROVIDE PLANTS AS SPECIFIED HEREIN, OR ENGINEER-APPROVED EQUAL.

SEEDBED PREPARATION: LIME SHALL BE APPLIED IF DISTURBED AREAS WILL REMAIN DORMANT BETWEEN 30 DAYS AND 120 DAYS. IF REQUIRED, LIME SHALL BE APPLIED AS SHOWN, BASED ON SOIL ACIDITY.

APPLICATION OF AGRICULTURAL LIMESTONE

pH	3 TONS PER ACRE	2 TONS PER ACRE	1 TON PER ACRE	LIME NOT REQUIRED
BELOW 4.2				
4.2 TO 5.2				
5.2 TO 6.0				
ABOVE 6.0				

FERTILIZER SHALL BE APPLIED AS 600 LBS/ACRE OF 10-20-10 OR EQUIVALENT NUTRIENTS. LIME (AS APPLICABLE) AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2 TO 4 INCHES OF SOIL, IF POSSIBLE.

SURFACE ROUGHENING SHALL BE REQUIRED WHERE AREAS TO BE SEEDING HAVE BEEN COMPACTED, CRUSTED, OR HARDENED BY CONSTRUCTION TRAFFIC. AS REQUIRED, SEEDBEDS SHALL BE ROUGHENED IN ACCORDANCE WITH STANDARD AND SPECIFICATION 3.29 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK. (TRACKING WITH BULLDOZER CLEATS SHALL BE USED IN SANDY SOILS)

SEEDING: SEED SHALL BE EVENLY APPLIED WITH THE SAME MEANS SPECIFIED HEREIN FOR PERMANENT SEEDING. SMALL GRAINS SHALL BE PLANTED NO MORE THAN ONE INCH DEEP. GRASSES AND LEGUMES SHALL BE PLANTED WITH NO LESS THAN 1/4" OF SOIL COVER.

MULCHING: SEEDINGS MADE IN FALL FOR WINTER COVER AND DURING HOT AND DRY SUMMER MONTHS SHALL BE MULCHED. ACCORDING TO STANDARD AND SPECIFICATION 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, EXCEPT THAT FIBER MULCH MAY NOT BE USED. STRAW MULCH SHALL BE USED DURING THESE PERIODS.

TEMPORARY SEEDINGS MADE UNDER FAVORABLE SOIL AND SITE CONDITIONS DURING OPTIMUM SPRING AND FALL SEEDING DATES MAY NOT REQUIRE MULCH.

RE-SEEDING: AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT RILL EROSION SHALL BE RE-SEEDING AS SOON AS SUCH AREAS ARE IDENTIFIED.

ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS BY RANGE OF PLANTING DATES:

Planting Dates	Annual Ryegrass @ 50 LB / ACRE	Winter Rye @ 50 LB / ACRE	Annual Ryegrass @ 100 LB / ACRE	German Millet @ 50 LB / ACRE
08/01 TO 02/15				
02/16 TO 04/30				
05/01 TO 08/31				

PS PERMANENT SEEDING

DISTURBED AREAS SHALL BE PERMANENTLY SEEDING WITHIN SEVEN (7) DAYS OF ACHIEVING FINAL GRADE, OR ON DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE WITHIN ONE YEAR.

TYPE A

Planting Dates	Annual Ryegrass @ 20 LB / ACRE	Red Top @ 2 LB / ACRE	Tall Fescue @ 150 LB / ACRE
03/15 TO 05/15 OR 08/16 TO 10/31			
05/16 TO 08/15			
11/01 TO 02/28			

TYPE B (SLOPES 3:1 OR STEEPER)

Planting Dates	Crown Vetch @ 20 LB / ACRE	Annual Ryegrass @ 20 LB / ACRE	Red Top @ 20 LB / ACRE	KY 31 Fescue @ 108 LB / ACRE
03/15 TO 05/15 OR 08/16 TO 10/31				
05/16 TO 08/15				
11/01 TO 02/28				

LIME: 4,000 LB / ACRE PULVERIZED AGRICULTURAL LIMESTONE

FERTILIZER: 10-20-10 @ 1,000 LB / ACRE

MULCH: SHALL BE USED OVER ALL SEEDING AREAS AND SHALL BE APPLIED IN STRICT ACCORDANCE WITH STANDARD AND SPECIFICATION 3.35 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 CITY ENGINEER.

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

TO TOPSOILING

NO APPLICABLE DETAILS APPLY. REFER TO SPECIFICATION 3.30 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION FOR SPECIFIC REQUIREMENTS.

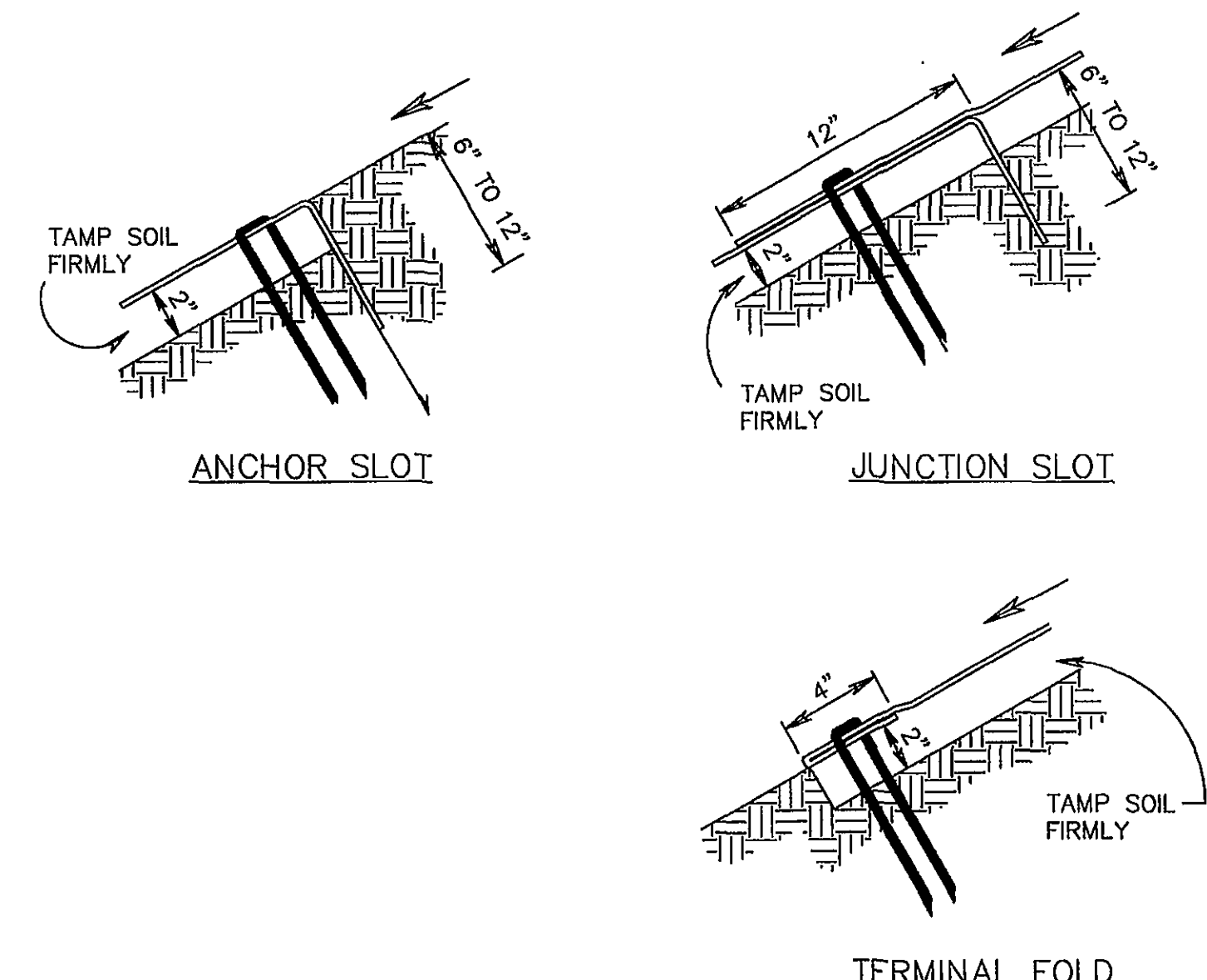
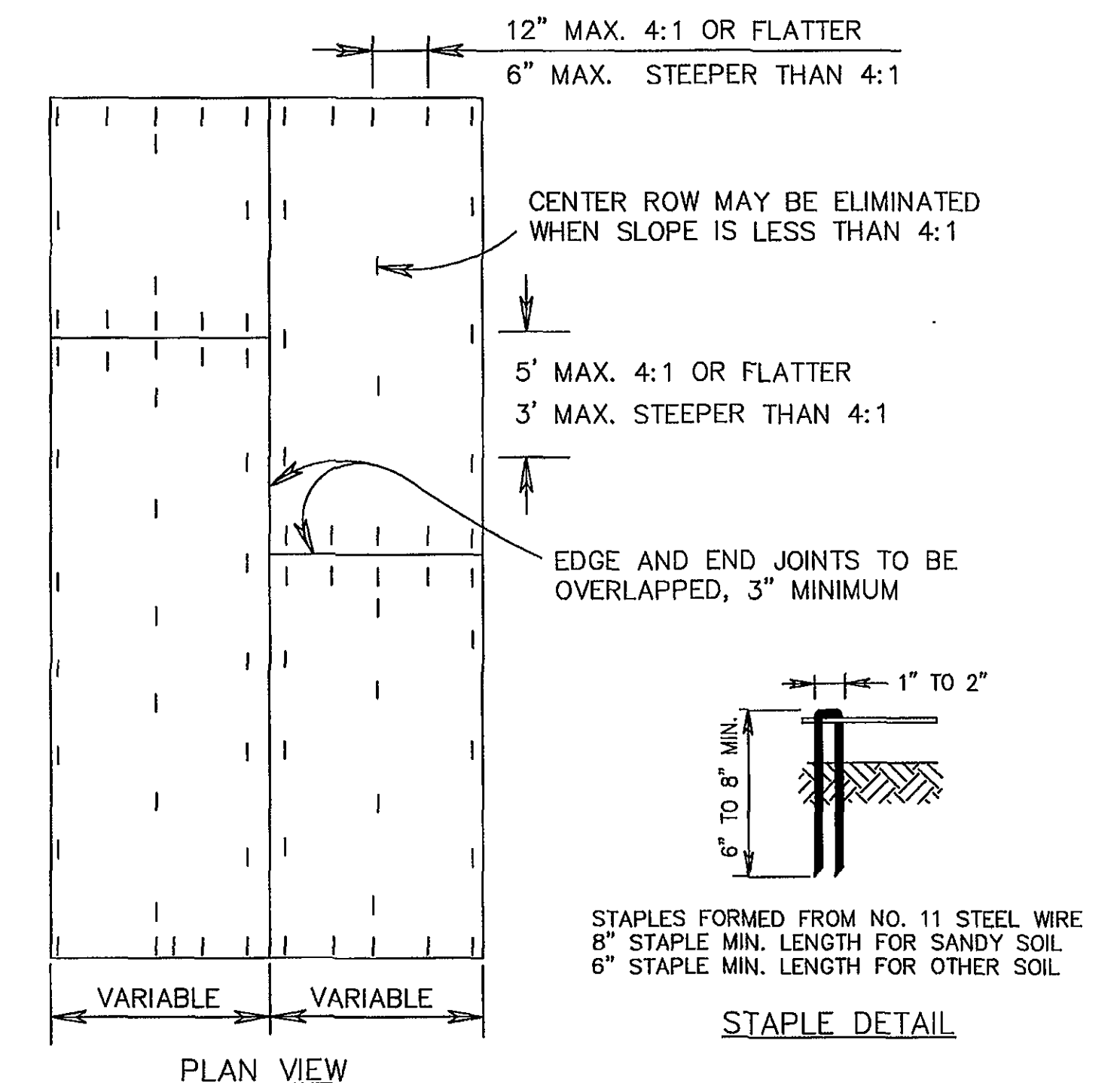
MU MULCHING

NO APPLICABLE DETAILS APPLY. REFER TO SPECIFICATION 3.35 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION FOR SPECIFIC REQUIREMENTS.

DC DUST CONTROL

NO APPLICABLE DETAILS APPLY. REFER TO SPECIFICATION 3.39 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION FOR SPECIFIC REQUIREMENTS.

B SOIL STABILIZATION BLANKET



COUNTY OF
ROANOKE

REVISIONS			
No.	Date	Remarks	By

THE VILLAS AT RIVER OAKS

Designed: J.V.J.
Checked: J.V.J.
Date: March 20, 2005
Scale: No Scale
W.O. #: 01-0090

EROSION & SEDIMENT
CONTROL PLAN

SHEET
12
OF
14