

GRAVEL CURB INLET SEDIMENT

FILTER

SPECIFIC APPLICATION

GRAVEL AND WIRE MESH

GRAVEL\* (12"MIN. DEPTH)

DROP INLET SEDIMENT FILTER

SPECIFIC APPLICATION

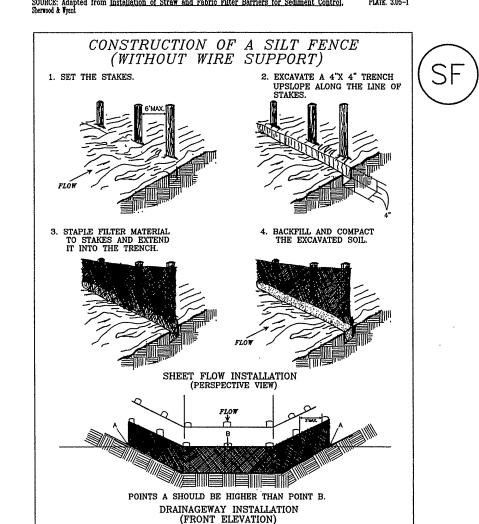
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED,

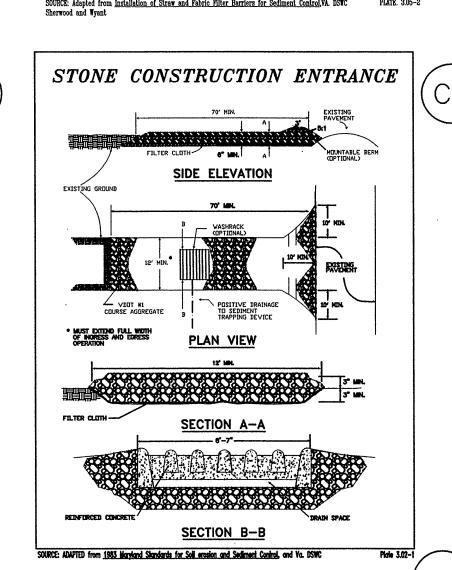
BUT NOT WHERE PONDING AROUND THE STRUCTURE

MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

\* GRAVEL SHALL BE VDOT #3, #357 OR #5 COARSE

SOURCE: N.C. Erosion and Sediment Control Planning and Design Manual, 1988





SILT FENCE CULVERT INLET

TOE OF FILL ---

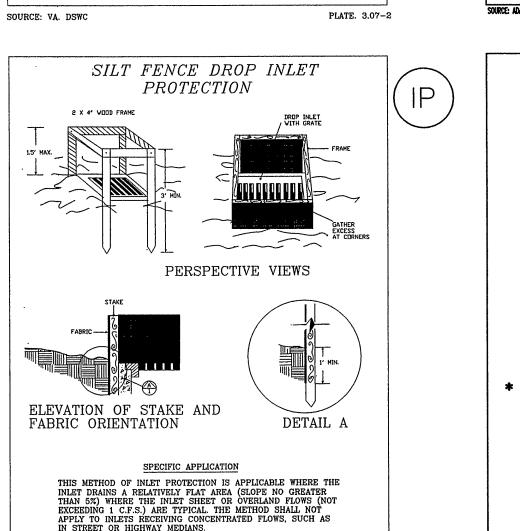
**PROTECTION** 

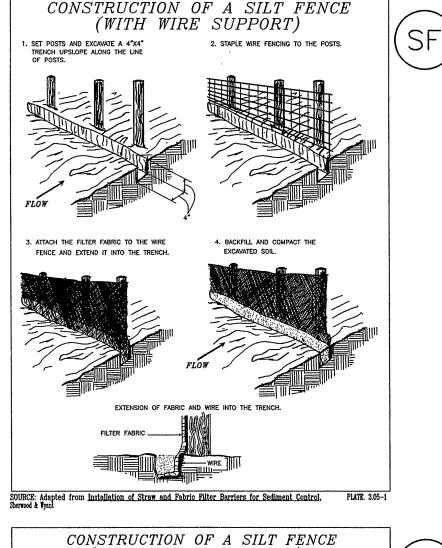
OPTIONAL STONE COMBINATION

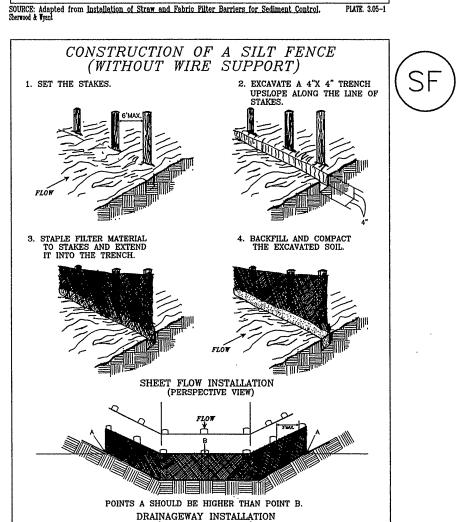
----- CULVERT

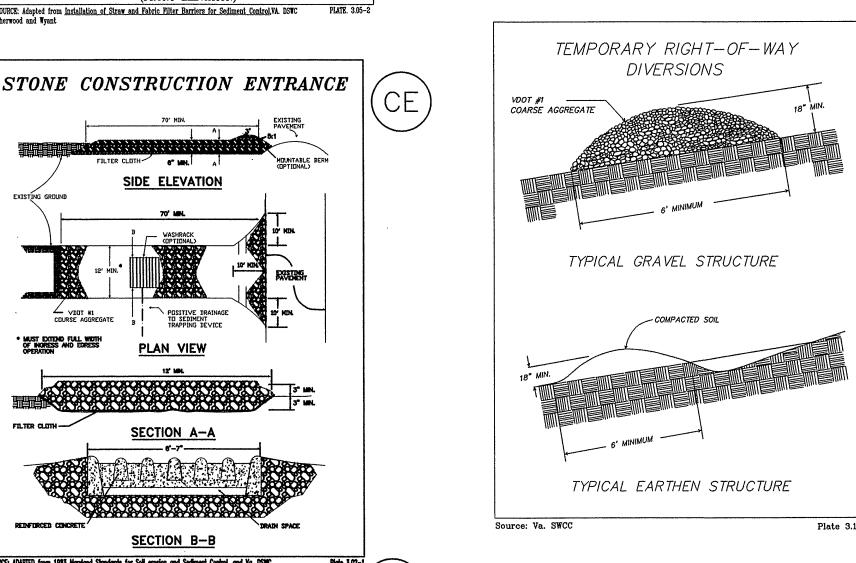
DISTANCE IS 6' MINIMUM IF FLOW IS TOWARD EMBANGMENT

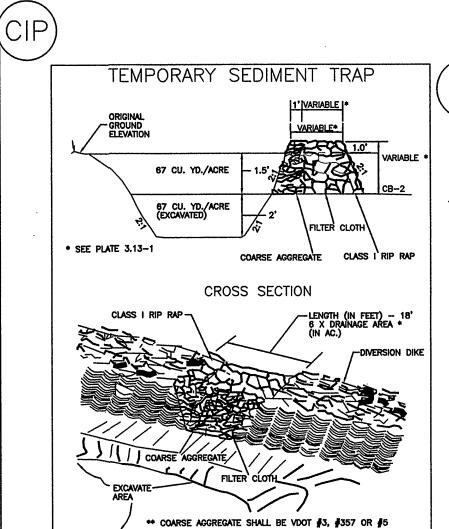
PLATE. 3.08-1











OUTLET PERSPECTIVE VIEW

FENCING AND ARMORING

THE MINIMUM ALLOWABLE HEIGHT MEASURED FROM THE UPSLOPE SIDE OF THE DIKE IS

TEMPORARY DIVERSION DIKE

1 1/2: 1 OR FLATTER, ALONG WITH A MINIMUM BASE WIDTH OF 4.5 FEET (SEE PLATE 3.09-1).

1. THE DIVERTED RUNOFF, IF FREE OF SEDIMENT MUST BE RELEASED THROUGH A STABILIZED OUTLIEF OR CHANNET

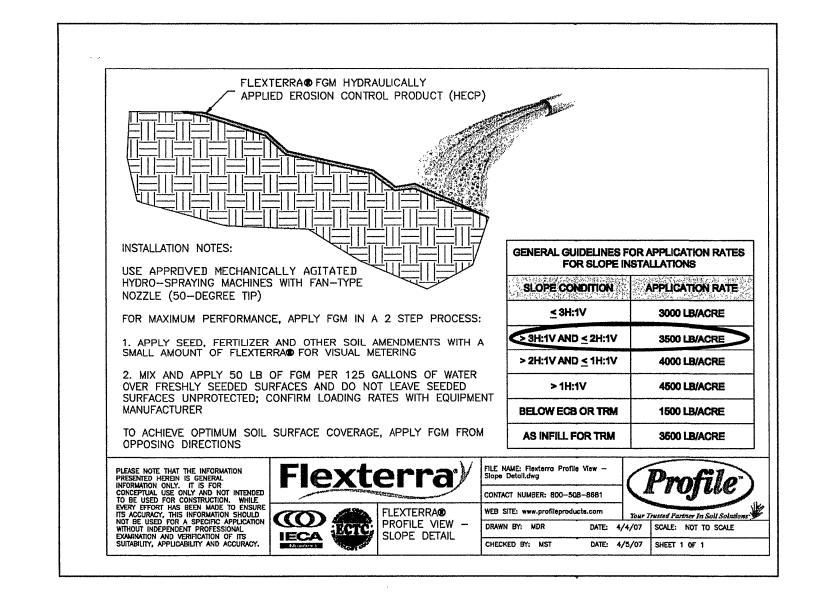
Piole 3.38-2

PLATE 3.09-

TRIANGULAR BOARD FENCE

SOURCE: VA. DSWC

SIDE SLOPES



| (REVISED JUNE 2003) TEMPORARY SEEDING SPECIFICATIONS QUICK REFERENCE FOR ALL REGIONS |   |                   |  |  |  |
|--|---|-------------------|--|--|--|
|  | SEED  |                   |  |  |  |
| APPLICATION DATES  | SPECIES   | APPLICATION RATES |  |  |  |
| SEPT. 1 - FEB. 15  | 50/50 MIX OF ANNUAL RYEGRASS<br>(LOLIUM MULTI-FLORUM) AND CEREAL<br>(WINTER) RYE (SECALE CEREALE) | 50-100 LBS/ACRE   |  |  |  |
| FEB. 16 - APR. 30  | ANNUAL RYEGRASS (LOLIUM<br>MULTI-FLORUM)  | 60-100 LBS/ACRE   |  |  |  |
| MAY 1 - AUG. 31  | GERMAN MILLET   | 50 LBS/ACRE       |  |  |  |

**TABLE 3.31-B** 

FERTILIZER AND LIME

 APPLY 10-10-10 FERTILIZER AT A RATE OF 450 LBS./ACRE (OR 10 LBS./1,000 SQ. FT.) APPLY PULVERIZED AGRICULTURAL LIMESTONE AT A RATE OF 2 TONS/ACRE (OR 90) LBS./1,000 SQ. FT.)

MULCHING STRAW IS TO BE USED IN CONJUNCTION WILL ALL TEMPORARY SEEDING OPERATIONS DURING

1. A SOIL TEST IS NECESSARY TO DETERMINE THE ACTUAL AMOUNT OF LIME REQUIRED TO

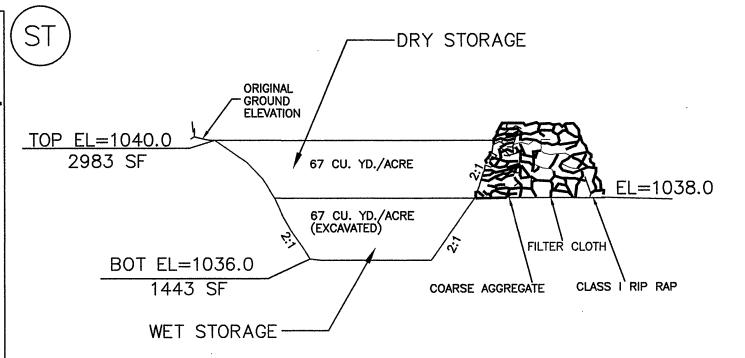
ADJUST THE SOIL PH OF SITE. 2. INCORPORATE THE LIME AND FERTILIZER INTO THE TOP 4-6 INCHES OF THE SOIL BY DISKING

OR BY OTHER MEANS. 3. WHEN APPLYING SLOWLY AVAILABLE NITROGEN, USE RATES AVAILABLE IN EROSION &

SEDIMENT CONTROL TECHNICAL BULLETIN #4. 2003 NUTRIENT MANAGEMENT FOR DEVELOPMENT SITES AT HTTP: //WWW.DCR.STATE.VA.US/SW/E&S.HTM#PUBS

## TEMPORARY SEDIMENT TRAP DESIGN DATA

CONTRIBUTING DRAINAGE AREA (WORST-CASE SCENARIO) = 1.96 ACRES SIDE SLOPES = 2:1 TOP ELEVATION = 1040' **BOTTOM ELEVATION = 1036'** OUTFALL LENGTH = 25' OUTFALL WIDTH = 12' (6' /ACRE MIN.) OUTFALL CREST ELEVATION = 1038.0' WET STORAGE REQUIRED = 131 CY (67 CY/ACRE) WET STORAGE PROVIDED = 133 CY SEDIMENT CLEANOUT ELEVATION = 1037.0' DRY STORAGE REQUIRED = 131 CY (67 CY/ACRE) DRY STORAGE PROVIDED = 133 CY



## **EROSION & SEDIMENT CONTROL COST ESTIMATE**

ALL COSTS GIVEN ARE COMPLETE IN PLACE

| DESCRIPTION                 | UNIT    | QUANTITY | UNIT COST | TOTAL COST |
|-----------------------------|---------|----------|-----------|------------|
| CONSTRUCTION ENTRANCE       | EA      | 1        | \$ 2500   | \$ 2500    |
| SILT FENCE                  | LF      | 420      | 3         | 1260       |
| INLET PROTECTION            | EA      | 9        | 200       | 1800       |
| TEMPORARY<br>DIVERSION DIKE | LF      | 950      | 2         | 1900       |
| TEMPORARY<br>FILL DIVERSION | LF      | N/A      | 2         | 800        |
| SEDIMENT TRAP               | EA      | 1        | 2000      | 2000       |
| CHECK DAM                   | EA      | N/A      | N/A       | N/A        |
| PERMANENT SEEDING           | 1000 SF | 40       | 350       | 14000      |
| OUTLET PROTECTION           | EA      | 4        | 100       | 400        |
| SEDIMENT BASIN              | EA      | N/A      | N/A       | N/A        |
| TEMP. SEEDING               | 1000 SF | 10       | 50        | 1000       |
| ROW DIVERSION               | LF      | 80       | 2         | 160        |
| SUBTOTAL COST               |         |          |           | 25,820     |
| 25% CONTINGENCY             |         |          |           | 6,455      |
| TOTAL PROJECT COST          |         |          |           | \$ 32,275  |

## **GENERAL EROSION AND SEDIMENT CONTROL NOTES**

1. 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.

2. THE APPROVING AUTHORITY MAY ADD TO, DELETE, RELOCATE, CHANGE, OR OTHERWISE MODIFY CERTAIN EROSION AND SEDIMENT CONTROL MEASURES WHERE

3. 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

4. IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR

5. 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.

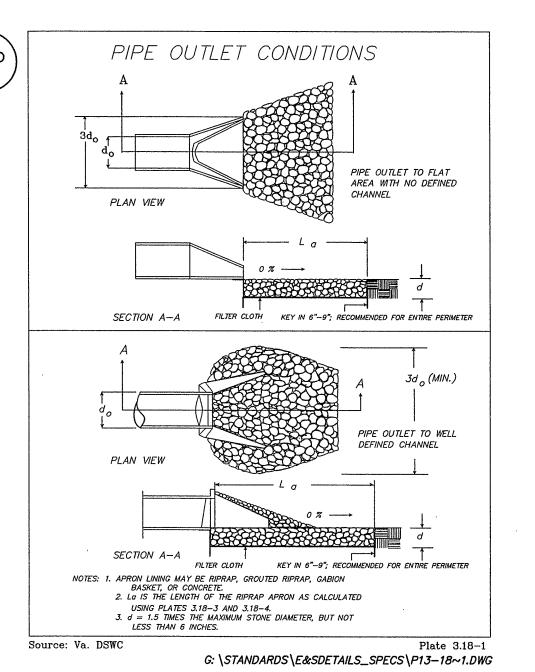
6. FOR THE EROSION CONTROL KEY SYMBOLS SHOWN ON THE PLANS, REFER TO THE VIRGINIA UNIFORM CODING SYSTEM FOR EROSION AND SEDIMENT CONTROL PRACTICES CONTAINED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, LATEST EDITION. THESE SYMBOLS AND KEYS ARE TO BE UTILIZED ON ALL EROSION CONTROL PLANS SUBMITTED TO ROANOKE COUNTY.

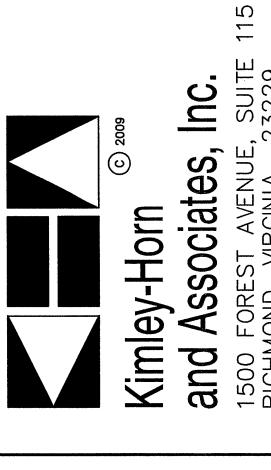
THE LOCATION OF ALL OFF-SITE FILL OR BORROW AREAS ASSOCIATED WITH THE CONSTRUCTION PROJECT WILL BE PROVIDED TO ROANOKE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT, AN EROSION CONTROL PLAN OR MEASURES MAY BE REQUIRED FOR THIS AREA.

8. THIS SHEET MAY NOT BE MODIFIED EXCEPT FOR TABLES

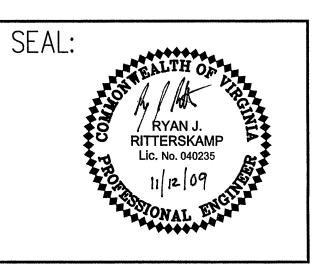
TOTAL DISTURBED AREA = 3.94 AC. = 171,630 SQ. FT.

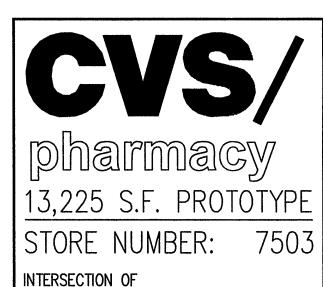






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ROUTE 460 & ROUTE 610

ROANOKE, VIRGINIA

THE REBKEE COMPANY 15871 CITY VIEW DRIVE, SUITE 300 MIDLOTHIAN, VA 23113 PHONE: (804) 419-0740 FAX: (804) 419-0759

**REVISIONS:** RRP LAYOUT COORD: DBE PLANNING MGR. DHL DRAWING BY: 11/12/09 DATE:

**E&S DETAIL PLAN** 

113001106

SHEET NUMBER:

JOB NUMBER:

COMMENTS: