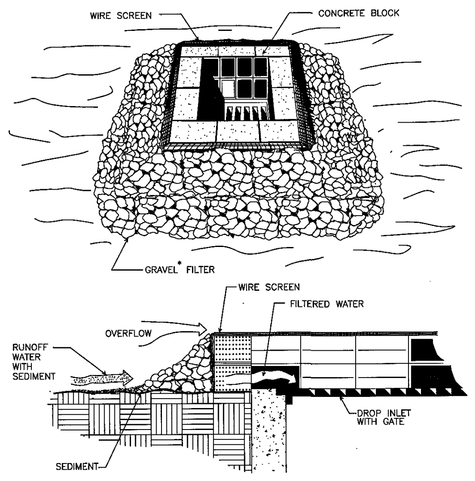
BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER



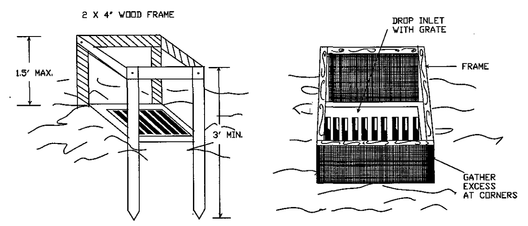
SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

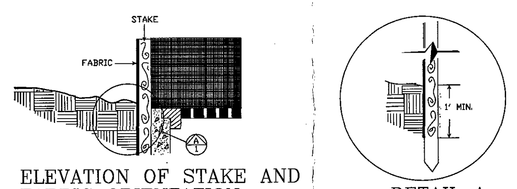
* GRAVEL SHALL BE VDOT #3, #357 OR #5 COARSE AGGREGATE.

SOURCE: VA. DSWC PLATE. 3.07-3

SILT FENCE DROP INLET PROTECTION



PERSPECTIVE VIEWS



ELEVATION OF STAKE AND FABRIC ORIENTATION

DETAIL A

SPECIFIC APPLICATION

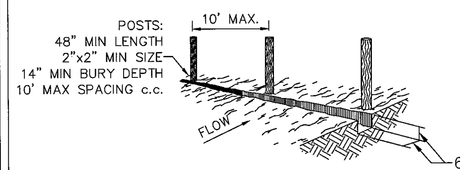
THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPE NO GREATER THAN 5%) WHERE THE INLET SHEET OR OVERLAND FLOWS (NOT EXCEEDING 1 C.F.S.) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

SOURCE: N.C. Erosion and Sediment Control Planning and Design Manual, 1988 PLATE 3.07-1

NOTE: ALTERNATE INLET PROTECTION SUCH AS "SILTSACK" FROM ACF ENVIRONMENTAL, O.A.E. SHOULD BE CONSIDERED BY CONTRACTOR.

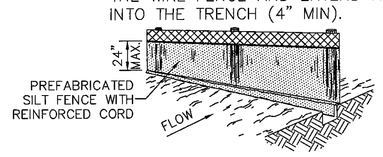
INLET PROTECTION
NO SCALE VAESC STD. & SPEC. 3.07

1. SET POSTS AND EXCAVATE A 6"x6" TRENCH UPSLOPE ALONG THE LINE OF POSTS.

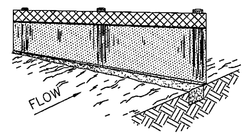


2. ATTACH WIRE FENCING TO THE POSTS WITH WIRE TIES OR STAPLES.

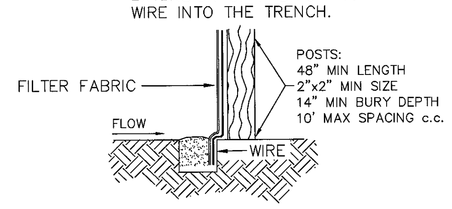
3. ATTACH THE FILTER FABRIC TO THE WIRE FENCE AND EXTEND IT INTO THE TRENCH (4" MIN).



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



EXTENSION OF FABRIC AND WIRE INTO THE TRENCH.

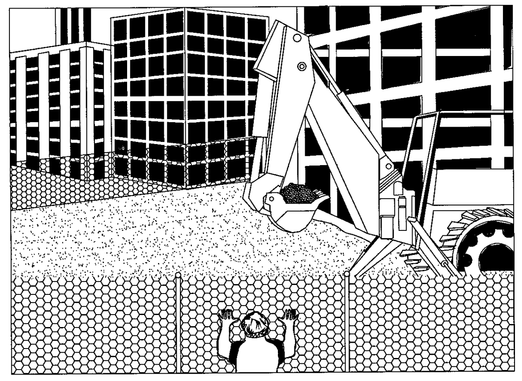


'SUPER SILT FENCE' NOTES:

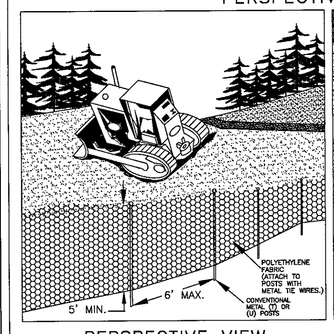
1. WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
2. FILTER CLOTH TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY SIX INCHES AND FOLDED.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND MATERIAL REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.
5. POSTS SHALL BE CONSTRUCTED OF STEEL EITHER ROUND, "I" OR "U" TYPE, OR 2" HARDWOOD.
6. FENCE SHALL BE 9 AWG CHAIN LINK.
7. FILTER CLOTH SHALL BE "FILTER X", MIRAFI 100X", "LINQ" GTF 180" OR APPROVED EQUAL.
8. APPROVED PREFABRICATED UNITS INCLUDE ACF ENVIRONMENTAL "SUPER SILT FENCE" OR APPROVED EQUAL.

SUPER SILT FENCE
NO SCALE VAESC STD. & SPEC. 3.05 (MODIFIED)

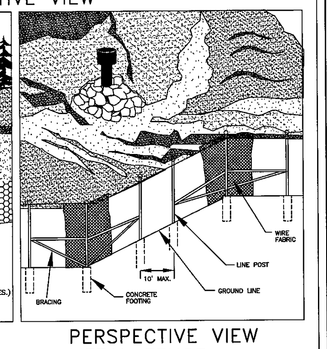
SAFETY FENCE



PERSPECTIVE VIEW



PERSPECTIVE VIEW
PLASTIC FENCE



PERSPECTIVE VIEW
METAL FENCE

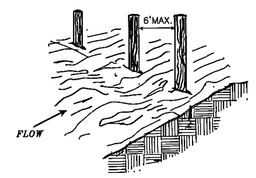
SOURCE: CONWED PLASTICS
VDOT ROAD AND BRIDGE STANDARDS
VA. DSWC PLATE. 3.1-1

SAFETY FENCE SHALL BE 6' CHAIN LINK FENCE UNLESS OTHERWISE NOTED.

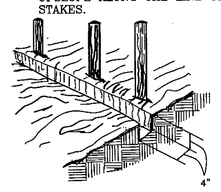
SAFETY FENCE
NO SCALE VAESC STD. & SPEC. 3.01

CONSTRUCTION OF A SILT FENCE (WITHOUT WIRE SUPPORT)

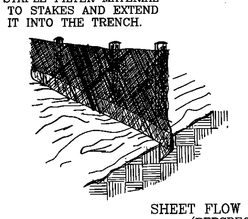
1. SET THE STAKES.



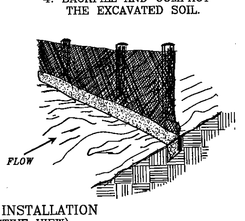
2. EXCAVATE A 4"X 4" TRENCH UPSLOPE ALONG THE LINE OF STAKES.



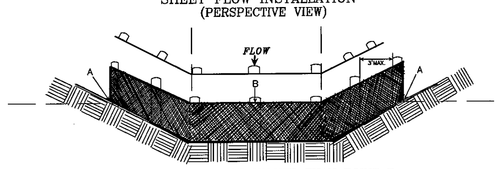
3. STAPLE FILTER MATERIAL TO STAKES AND EXTEND IT INTO THE TRENCH.



4. BACKFILL AND COMPACT THE EXCAVATED SOIL.



SHEET FLOW INSTALLATION
(PERSPECTIVE VIEW)

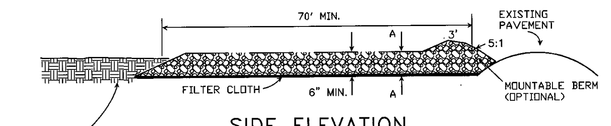


DRAINAGEWAY INSTALLATION
(FRONT ELEVATION)

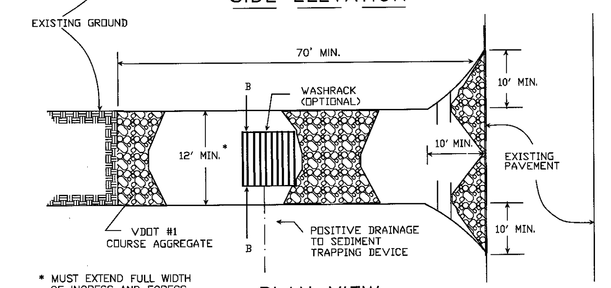
SOURCE: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, VA. DSWC Sherwood and Wyant PLATE. 3.05-2

SILT FENCE
NO SCALE VAESC STD. & SPEC. 3.05

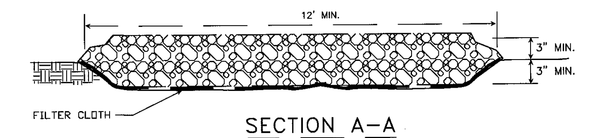
STONE CONSTRUCTION ENTRANCE



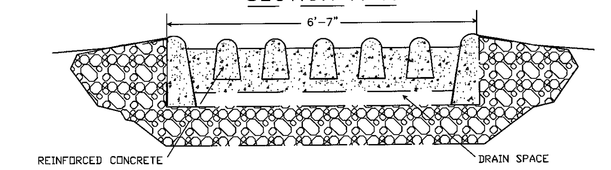
SIDE ELEVATION



PLAN VIEW



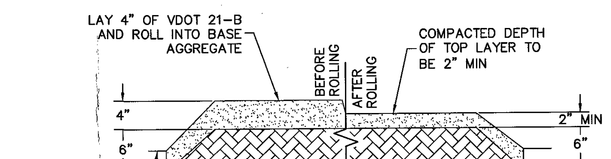
SECTION A-A



SECTION B-B

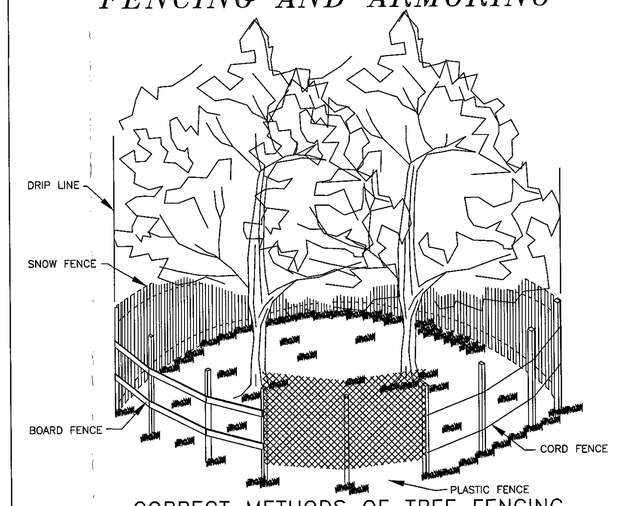
SOURCE: ADAPTED from 1983 Maryland Standards for Soil erosion and Sediment Control, and Va. DSWC Plate 3.02-1

CONSTRUCTION ENTRANCE
NO SCALE VAESC STD. & SPEC. 3.02

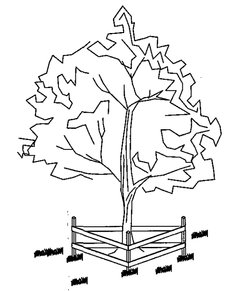


CONSTRUCTION ROAD STABILIZATION
NO SCALE VAESC STD. & SPEC. 3.03

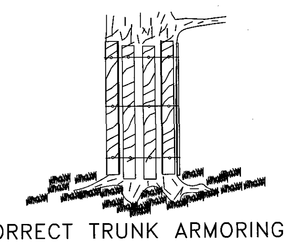
FENCING AND ARMORING



CORRECT METHODS OF TREE FENCING



TRIANGULAR BOARD FENCE



CORRECT TRUNK ARMORING

Source: Va. DSCW Plate 3.38-2

TREE PROTECTION
NO SCALE VAESC STD. & SPEC. 3.38

WILLIAM A. SHELTON
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8/22/14
PROFESSIONAL ENGINEER
COMMONWEALTH OF VIRGINIA

OWPR
ARCHITECTS AND ENGINEERS

#	DESCRIPTION	DATE
4	90% DOCUMENTS FOR FINAL REVIEW	08/15/2014

Addition & Renovation
CITY OF ROANOKE

RALEIGH COURT BRANCH
2112 GRANDIN ROAD SW, VIRGINIA 24015

PROJECT NO: 14001
SCALE: AS INDICATED

EROSION & SEDIMENT CONTROL DETAILS

C4.4

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