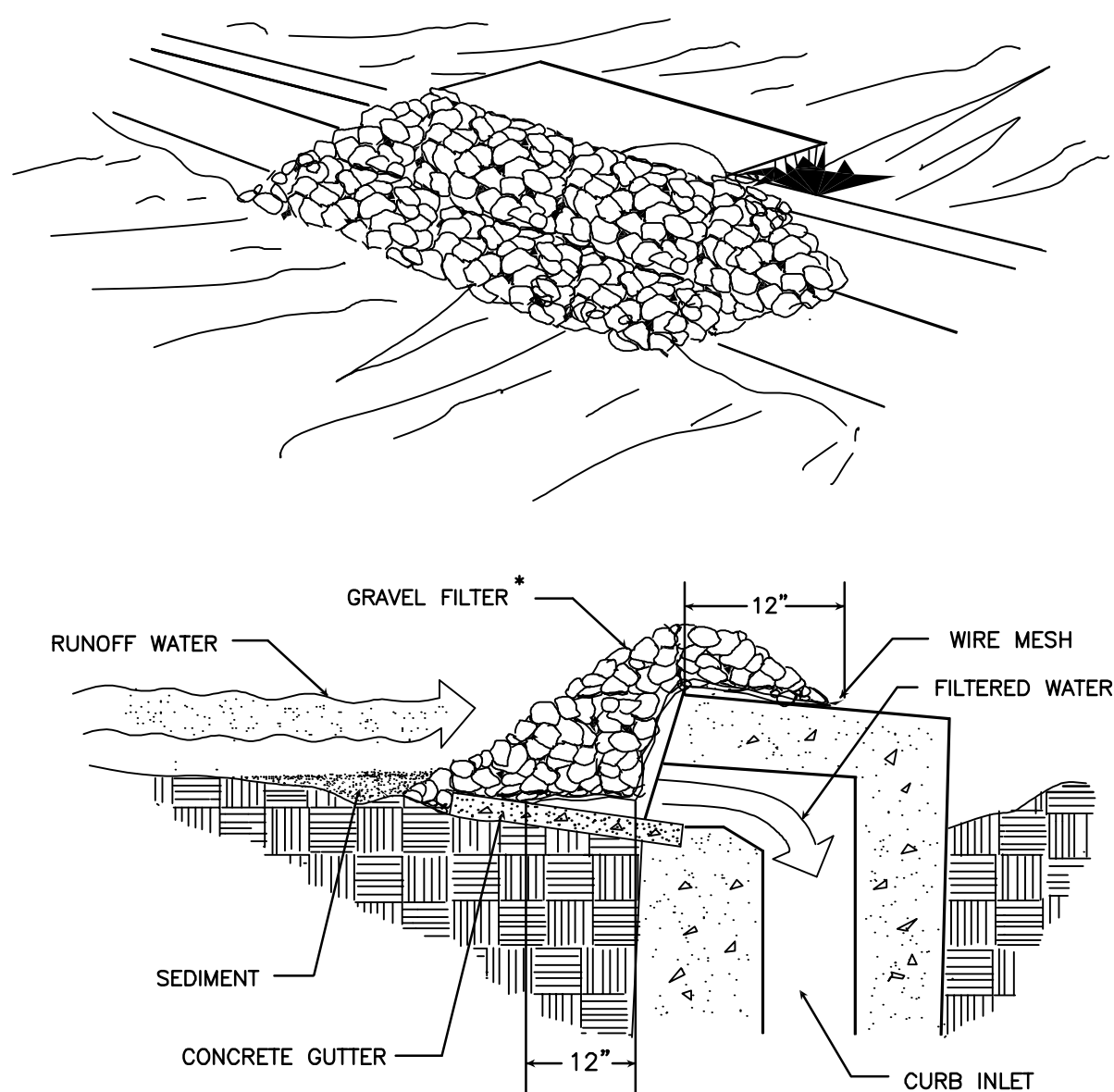


GRAVEL CURB INLET SEDIMENT  
FILTER

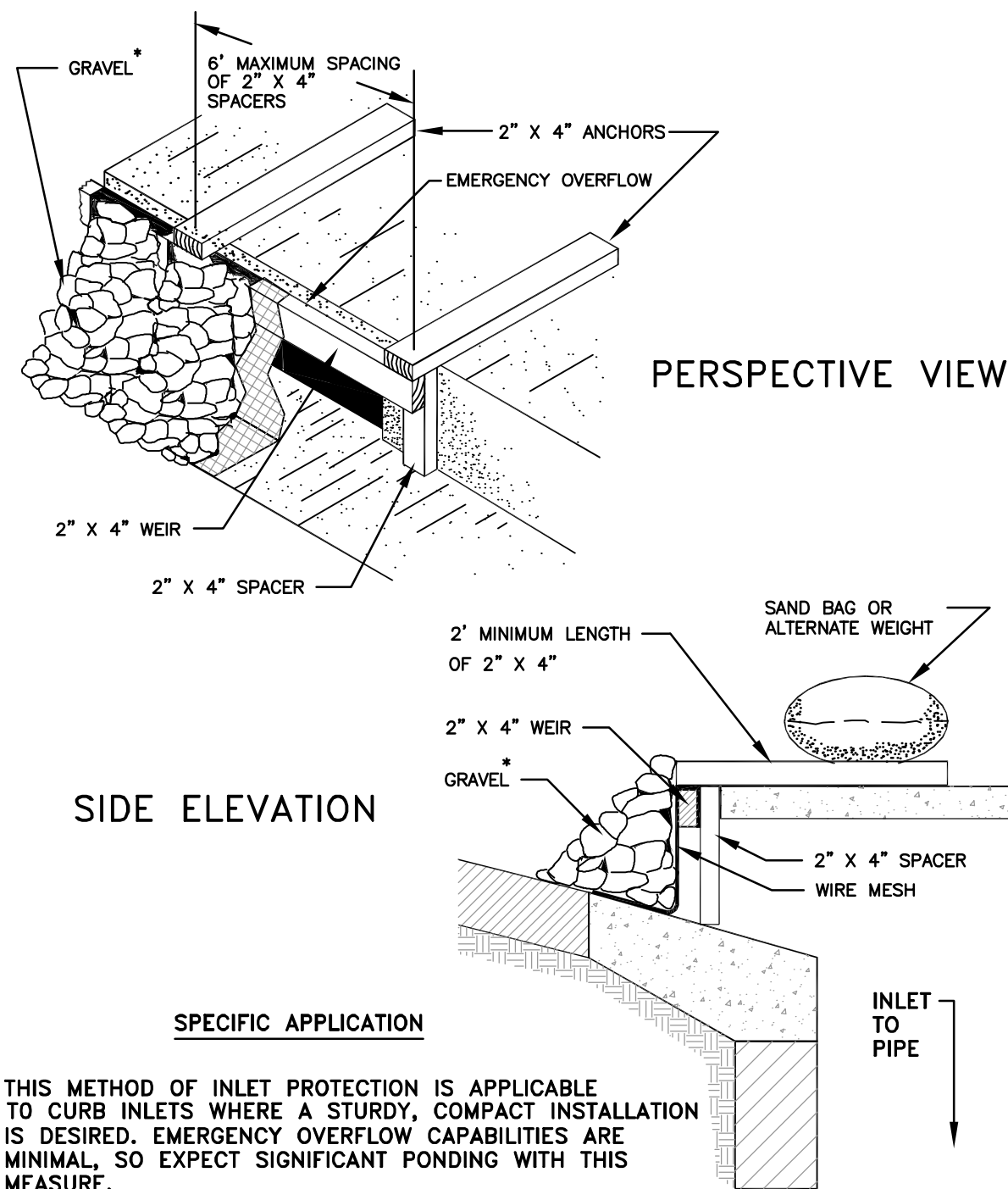


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE PONDING 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.

CURB INLET PROTECTION  
WITH 2-INCH X 4-INCH  
WOODEN WEIR

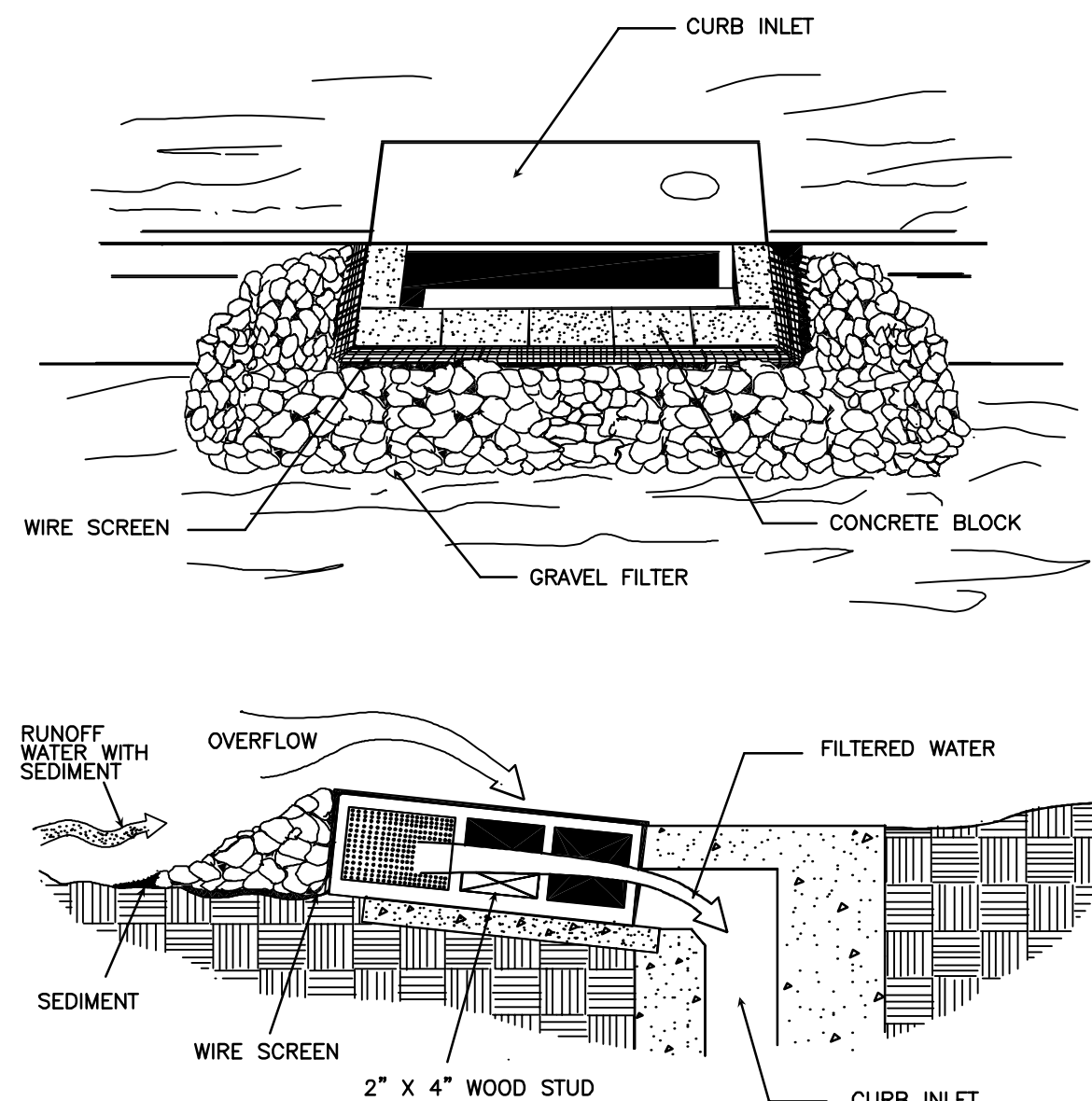


SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE TO CURB INLETS WHERE A STURDY, COMPACT INSTALLATION IS DESIRED. EMERGENCY OVERFLOW CAPABILITIES ARE MINIMAL, SO EXPECT SIGNIFICANT PONDING WITH THIS MEASURE.

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

BLOCK & GRAVEL CURB INLET  
SEDIMENT FILTER



SPECIAL APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE AT CURB INLETS WHERE AN OVERFLOW CAPABILITY IS NECESSARY TO PREVENT EXCESSIVE PONDING IN FRONT OF THE STRUCTURE.

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

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 FIELD CONDITIONS ARE ENCOUNTERED THAT WARRANT SUCH MODIFICATIONS.
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 PRACTICAL.
4. IN NO CASE DURING CONSTRUCTION SHALL WATER RUNOFF BE DIVERTED OR ALLOWED TO FLOW TO LOCATIONS WHERE ADEQUATE PROTECTION HAS NOT BEEN PROVIDED.
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.
7. 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 = 0.76 AC.= 33,200 SQ. FT.

SOURCE: VA. DSWC

PLATE 3.07-6

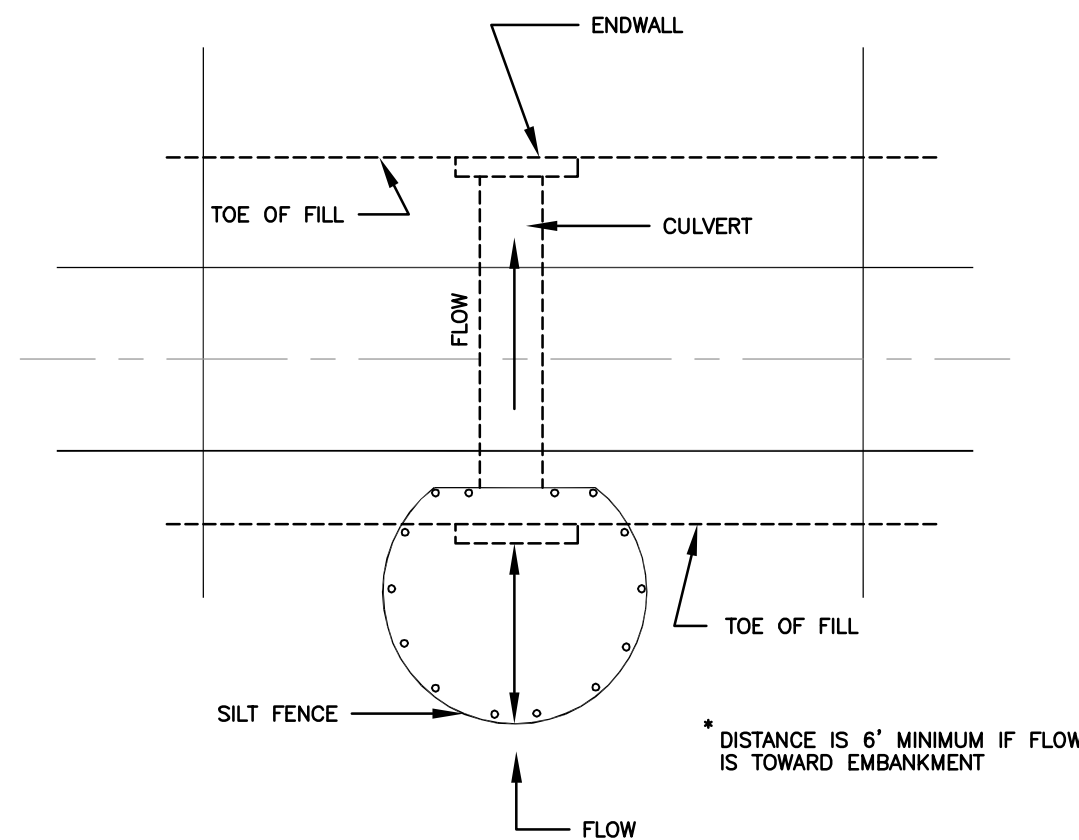
SOURCE: USDA SCS

PLATE 3.07-7

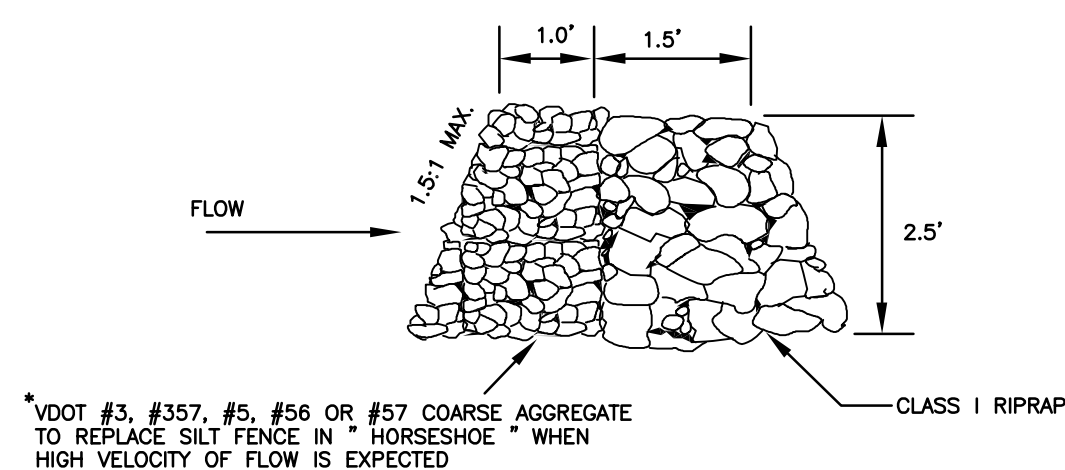
SOURCE: VA. DSWC

PLATE 3.07-8

SILT FENCE CULVERT INLET  
PROTECTION



\* OPTIONAL STONE COMBINATION

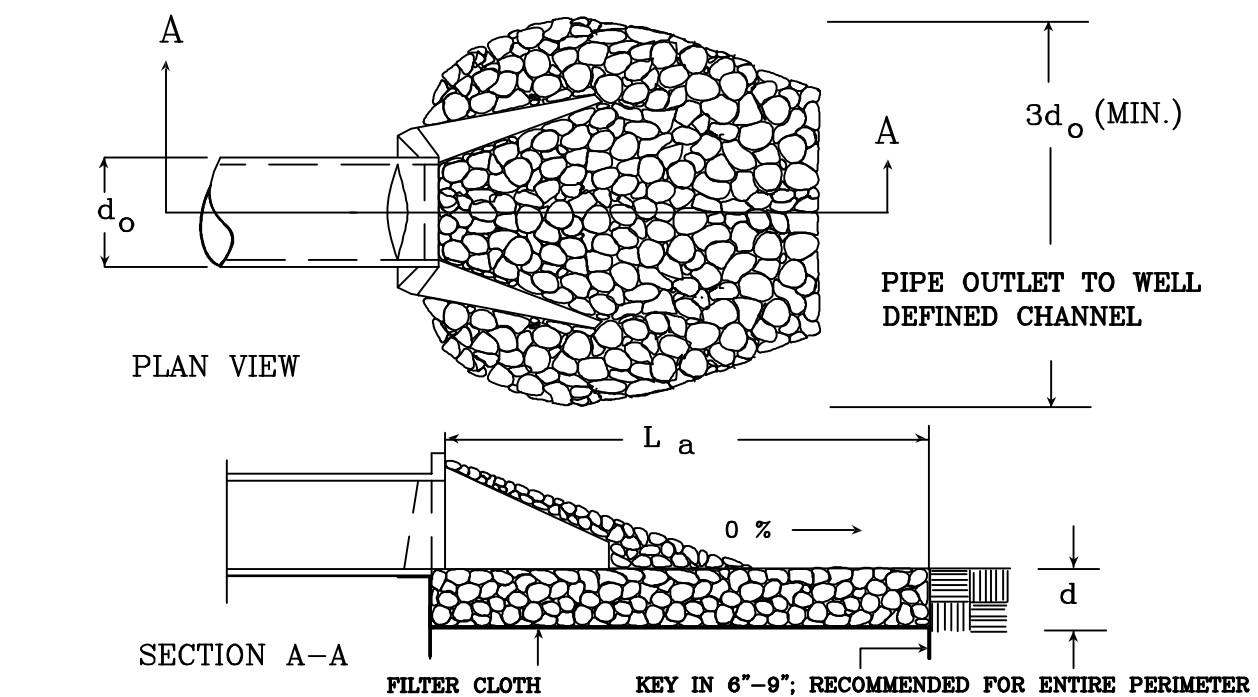
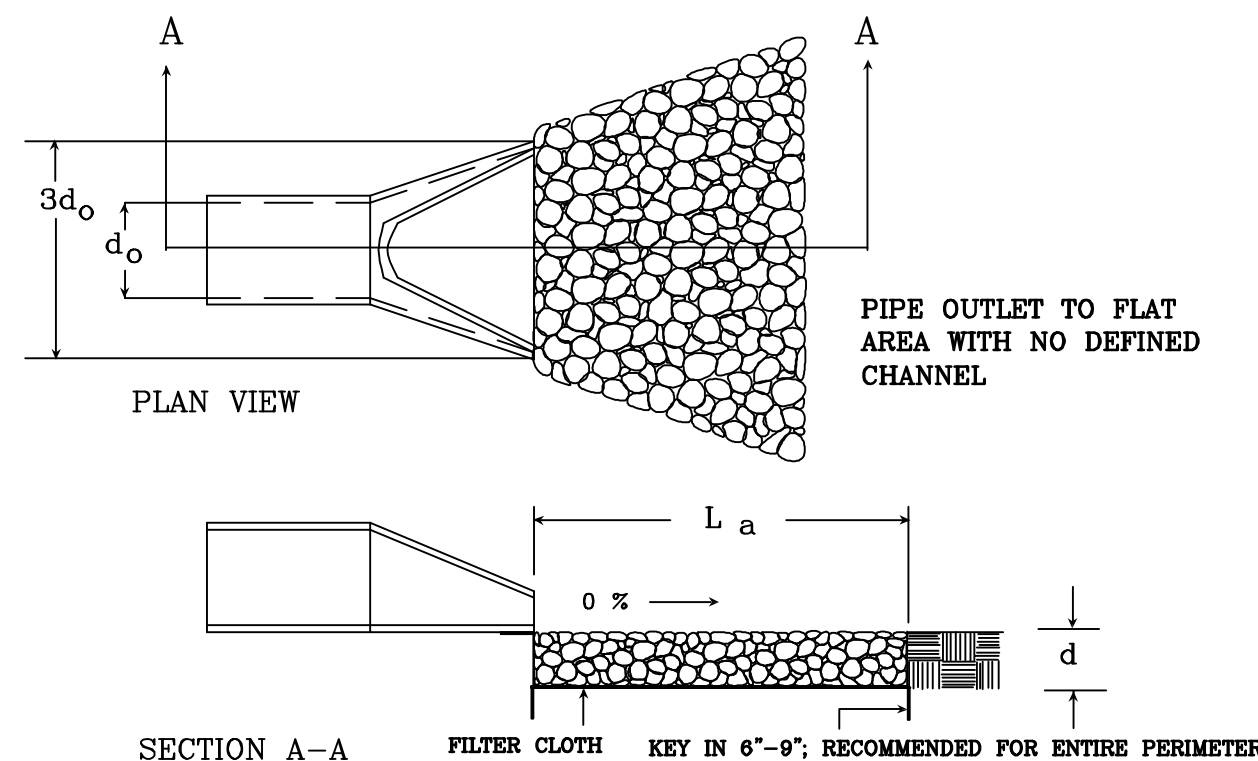


SOURCE: ADAPTED FROM VDOT STANDARD SHEETS AND VA. DSWC

PLATE 3.08-1

SOURCE: VA. DSWC

PIPE OUTLET CONDITIONS

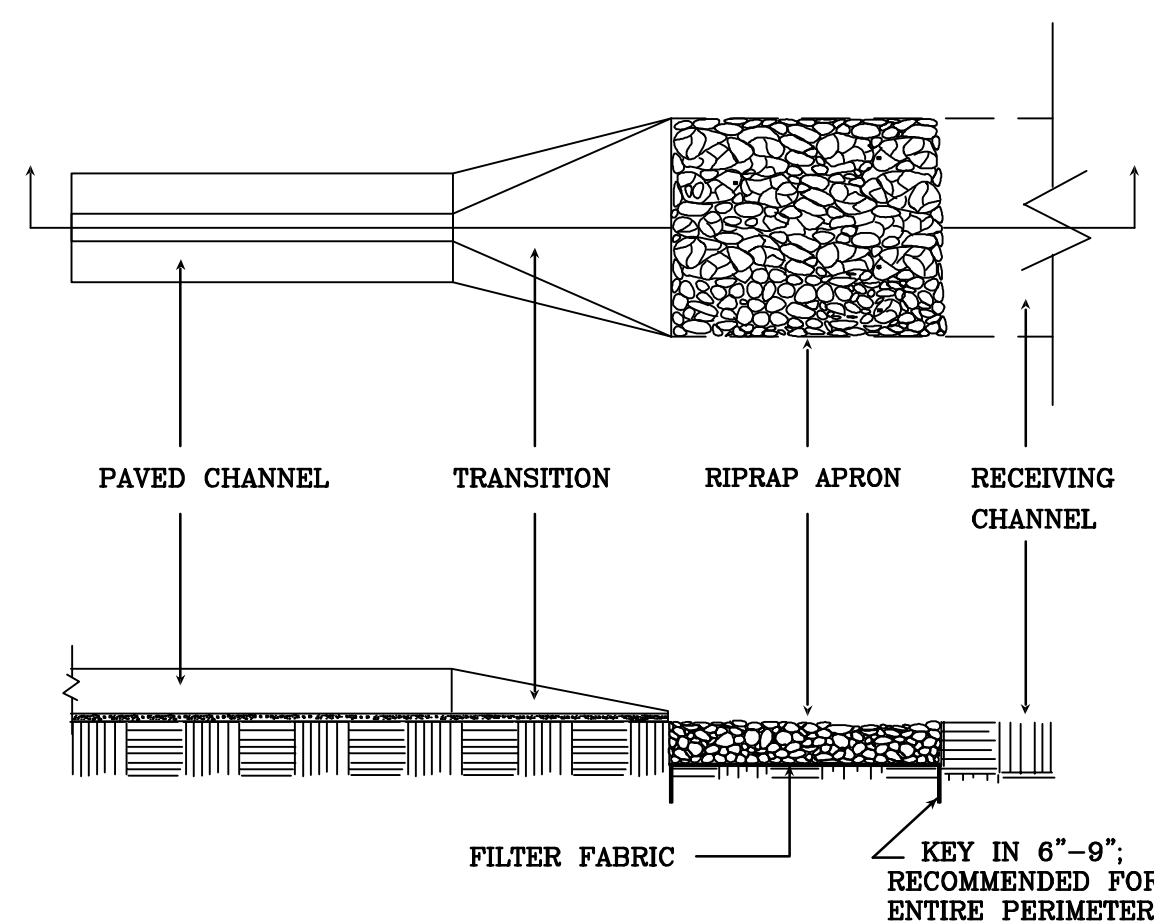


- NOTES:
1. APRON LINING MAY BE RIPRAP, GROUTED RIPRAP, GABION BASKET, OR CONCRETE.
  2. L<sub>a</sub> IS THE LENGTH OF THE RIPRAP APRON AS CALCULATED USING PLATES 3.18-3 AND 3.18-4.
  3. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER, BUT NOT LESS THAN 6 INCHES.

PLATE 3.18-1

SOURCE: VA. DSWC

PAVED CHANNEL OUTLET



NOTES:

1. RIPRAP APRON REDUCES THE FLOW VELOCITY BELOW THE PERMISSIBLE VELOCITY OF THE NATURAL RECEIVING CHANNEL.
2. TRANSITION SIDE DIVERGENCE IS 1 IN 3F, WHERE

$$F = \text{FROUDE NUMBER} = \frac{v}{\sqrt{gd}}, \text{ WHERE}$$

v = VELOCITY AT THE BEGINNING OF THE TRANSITION  
d = DEPTH OF FLOW AT THE BEGINNING OF THE TRANSITION

$$g = 32.2 \text{ ft./sec.}^2$$

PLATE 3.18-2

PLATE 3.18-2

**ANDERSON & ASSOCIATES, INC.**  
Professional Design Services  
www.andassoc.com  
VA - NC - TN - WV

100 Ardmore St.  
Blacksburg, Va. 24060  
540-552-5592

Erosion &  
Sediment  
Control  
Details 2

04-SEP-13  
RECORD

Approval Stamp

South Peak Development  
Phase 1 Water System Improvements

SHEET  
16  
OF  
30