

Project Worksheets, Design Tables & Construction Notes – Vegetated Swale with Check Dam

The following guidance has been provided for those regulated activities that qualify as a Minor Land Disturbance. This volume represents the amount of runoff to be permanently removed (managed on-site through reuse, infiltration, evaporation, or transpiration) per the Ephrata Township Storm Water Management Ordinance. The volume does not account for the rate of percolation into the ground.

Variables:

A = Impervious Area in square feet (sq. ft.)

L = Required Length of Swale in feet (ft.)

$$L = 0.05 \times A$$

or;

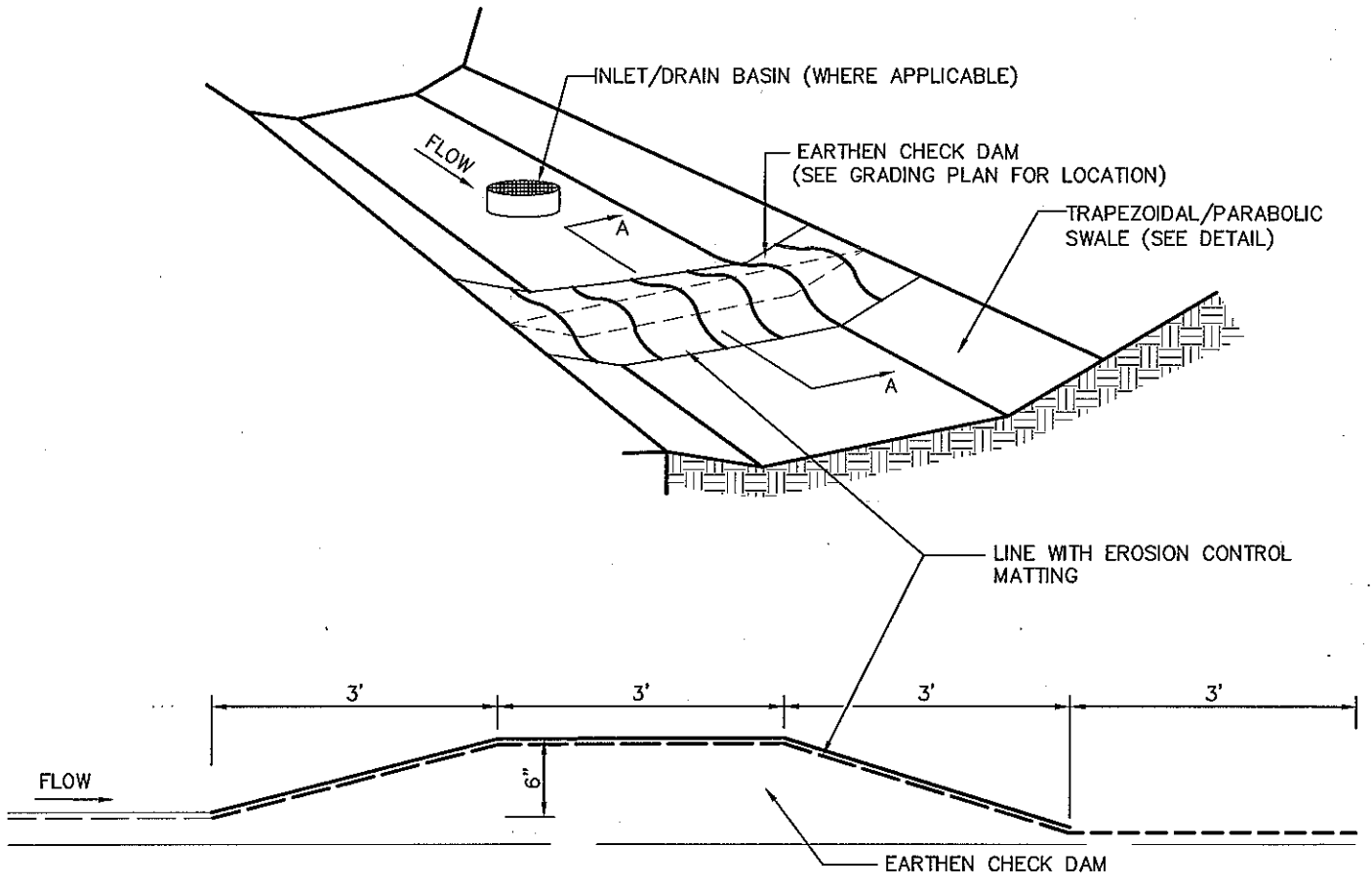
$$L = 0.05 \times \text{_____ (impervious area in sq. ft.)} = \text{_____ (required length of swale in ft.)}.$$

Swale with Check Dam

Storage Provided = (Length) x (Bottom Width) x (Ponding Depth)

Sizing Chart for Swale with Check Dam

Impervious Area (sq. ft.)	Linear Feet of 8' Wide Swale w/ Check Dam (6" ponding depth)
1000	50
1250	62.5
1500	75
1750	87.5
2000	100
2250	112.5
2500	125
2750	137.5
3000	150
3250	162.5
3500	175
3750	187.5
4000	200
4250	212.5
4500	225
4750	237.5
5000	250



SECTION A-A

CHECK DAM

NOT TO SCALE (SEE GRADING PLAN FOR LOCATION)
SD\SD075

EXHIBIT D
TYPICAL SWALE CHECK DAM DETAIL

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DRAWN BY: _____
DATE: 5/6/14
SCALE: NOT TO SCALE
DWG. NO. 011142014