Drop Pipe Inlet Design Information Sheet

Imperial Units

This worksheet is a supplement to Publication 832: Agricultural Erosion Control Structures: A Design and Construction Manual.

Section 1: Watershed and Pipe Design Parameters

No.	Description	Input Value
1	Watershed area	_____ ac
2	Average grade of watershed	_____ %
3	Runoff curve number from Table 2.2 – 2.4	_____
4	Peak flow from watershed for a 10-year storm from Table 2.5-I to 2.11-I	_____ ft^3/s
5	Drop pipe fall (top elevation – bottom elevation)	_____ ft
6	Horizontal distance to complete fall	_____ ft
7	Type of drop pipe inlet (See Section 4.3.2 of Publication 832).	Fill out applicable section below (**A**/**B**/**C**)

Section 2: A. Drop pipe structure

Description	Input Value
Number of units	_____
Head of water over horizontal pipe	_____ ft
Horizontal pipe diameter – Table 4.15-I	_____ in
Vertical pipe diameter – Table 4.16-I	_____ in
Berm height (min. 18 in. + freeboard of 12 in)	_____ in

Section 2: B. Sloped pipe structure

Description	Input Value
Number of units	_____
Slope of pipe (>2.5%)	(_____ ft fall ÷ _____ ft length) x 100 = _____ %
Diameter of sloped pipe – Table 4.17-I	_____ in
Berm height (pipe diameter + freeboard of 12 in)	_____ in

Section 2: C. Small capacity riser pipe

Description	Input Value
Number of units	_____
Slope of horizontal pipe	_____ %
Diameter of horizontal pipe – Table 4.18-I	_____ in
Riser pipe diameter — Table 4.19-I to 4.20-I	_____ in
Orifice plate required? – Table 4.21-I to 4.22-I (**check one**)	☐ Yes ☐ No
Diameter	_____ in
Berm height: (depth of water + freeboard (minimum 6 in.)):	_____ in

Section 3: Anti-Seepage Collar Specifications

8. Anti-seepage collars required? – Section 4.3.2: (**check one**) ☐ Yes ☐ No

Number of collars: _____

Diameter required: _____ in

Distance from drop pipe:

1st collar: _____ ft

2nd collar: _____ ft

Section 4: Drop Pipe Specifications

No.	Description	Input Value
9	Inlet grate – spacing of bars (refer to Section 4.3.2 of Publication 832)	_____ in
10	Horizontal or sloped pipe – length	_____ ft

Tables and figures referenced in this document are found in *Publication 832: Agricultural Erosion Control Structures: A Design and Construction Manual*

Agricultural Information Contact Centre
1-877-424-1300
1-855-696-2811 (TTY)
Email: ag.info.omafa@ontario.ca
ontario.ca/omafa