

# Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

**Stormwater Facility Name: Private FSD Pond - Constitution Storage**

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**Facility Location & Jurisdiction: 6855 Constitution Ave; Colorado Springs, CO 80915 Sand Creek Basin - El Paso County**

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**User Input: Watershed Characteristics**

Watershed Slope =	0.020	ft/ft
Watershed Length =	520	ft
Watershed Area =	3.13	acres
Watershed Imperviousness =	70.6%	percent
Percentage Hydrologic Soil Group A =	100.0%	percent
Percentage Hydrologic Soil Group B =	0.0%	percent
Percentage Hydrologic Soil Groups C/D =	0.0%	percent
Location for 1-hr Rainfall Depths (use dropdown):		
	User Input ▼	
WQCV Treatment Method = Sand Filter ▼		

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	2,500	0.00	0.00
0.33	4,476	0.33	0.02
0.86	7,158	0.86	0.12
1.33	8,737	1.33	0.12
1.49	8,781	1.49	0.12
1.72	8,868	1.72	4.51
2.33	9,100	2.33	5.54
3.33	9,302	3.33	6.89
4.33	9,465	4.33	8.02
4.93	9,560	4.93	9.00

After completing and printing this worksheet to a pdf, go to:  
<https://maperture.digitaldataservices.com/gvh/?viewer=cswdif>  
 create a new stormwater facility, and  
 attach the pdf of this worksheet to that record.

**Routed Hydrograph Results**

	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
Design Storm Return Period =							
One-Hour Rainfall Depth =	0.60	0.99	1.27	1.53	2.29	2.67	in
Calculated Runoff Volume =	0.058	0.161	0.213	0.267	0.439	0.538	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.058	0.160	0.213	0.267	0.439	0.538	acre-ft
Time to Drain 97% of Inflow Volume =	46.6	45.2	46.9	46.1	39.3	36.5	hours
Time to Drain 99% of Inflow Volume =	59.4	58.6	60.4	59.9	53.9	51.3	hours
Maximum Ponding Depth =	0.55	1.13	1.39	1.53	1.69	1.81	ft
Maximum Poned Area =	0.13	0.18	0.20	0.20	0.20	0.20	acres
Maximum Volume Stored =	0.051	0.144	0.195	0.223	0.255	0.280	acre-ft

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