Stormwater Detention and Infiltration Design Data Sheet

SDI-Design Data v2.00, Released January 2020

Stormwater Facility Name: **West Pond**

Facility Location & Jurisdiction: **Lot1, Block 1, Space Village Filing No. 4, El Paso County, CO**

User Input: Watershed Characteristics

Sand Filter (SF) ▼	SF	
Watershed Area =	10.95	acres
Watershed Length =	750	ft
Watershed Length to Centroid =	375	ft
Watershed Slope =	0.026	ft/ft
Watershed Imperviousness =	68.0%	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
Target WQCV Drain Time =	12.0	hours
Location for 1-hr Rainfall Depths (use dropdown):		
User Input ▼		

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	16,337	0.00	2.63
1.00	19,880	1.00	2.93
2.00	23,503	2.00	3.22
3.00	27,208	3.00	3.52

After providing required inputs above including 1-hour rainfall depths, click 'Run CUHP' to generate runoff hydrographs using the embedded Colorado Urban Hydrograph Procedure.

Once CUHP has been run and the Stage-Area-Discharge information has been provided, click 'Process Data' to interpolate the Stage-Area-Volume-Discharge data and generate summary results in the table below. Once this is complete, click 'Print to PDF'.

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

Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	N/A	1.19	1.50	1.75	2.25	2.52	in
CUHP Runoff Volume =	0.194	0.652	0.853	1.014	1.420	1.663	acre-ft
Inflow Hydrograph Volume =	N/A	0.652	0.853	1.014	1.420	1.663	acre-ft
Time to Drain 97% of Inflow Volume =	0.8	2.9	3.7	4.3	5.7	6.5	hours
Time to Drain 99% of Inflow Volume =	0.8	3.0	3.8	4.4	5.8	6.7	hours
Maximum Ponding Depth =	0.49	0.74	1.06	1.33	2.09	2.52	ft
Maximum Ponded Area =	0.42	0.44	0.46	0.48	0.55	0.58	acres
Maximum Volume Stored =	0.195	0.299	0.444	0.570	0.960	1.205	acre-ft

Stormwater Detention and Infiltration Design Data Sheet