# Stormwater Detention and Infiltration Design Data Sheet

SDI-Design Data v2.00, Released January 2020

### Stormwater Facility Name: Waterview East Commercial, Pond 2

# Facility Location & Jurisdiction: SEC of Powers Boulevard and Bradley Rd., Colorado Springs, Colorado

#### User Input: Watershed Characteristics

Extended Detention Basin (EDB)	EDB	
Watershed Area =	7.76	acres
Watershed Length =	800	ft
Watershed Length to Centroid =	400	ft
Watershed Slope =	0.020	ft/ft
Watershed Imperviousness =	79.5%	percent
Percentage Hydrologic Soil Group A =	50.0%	percent
Percentage Hydrologic Soil Group B =	50.0%	percent
Percentage Hydrologic Soil Groups C/D =	0.0%	percent
Target WQCV Drain Time =	40.0	hours
Location for 1-hr Rainfall Depths (u	se dropdown):	-
User Input	•	

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.				

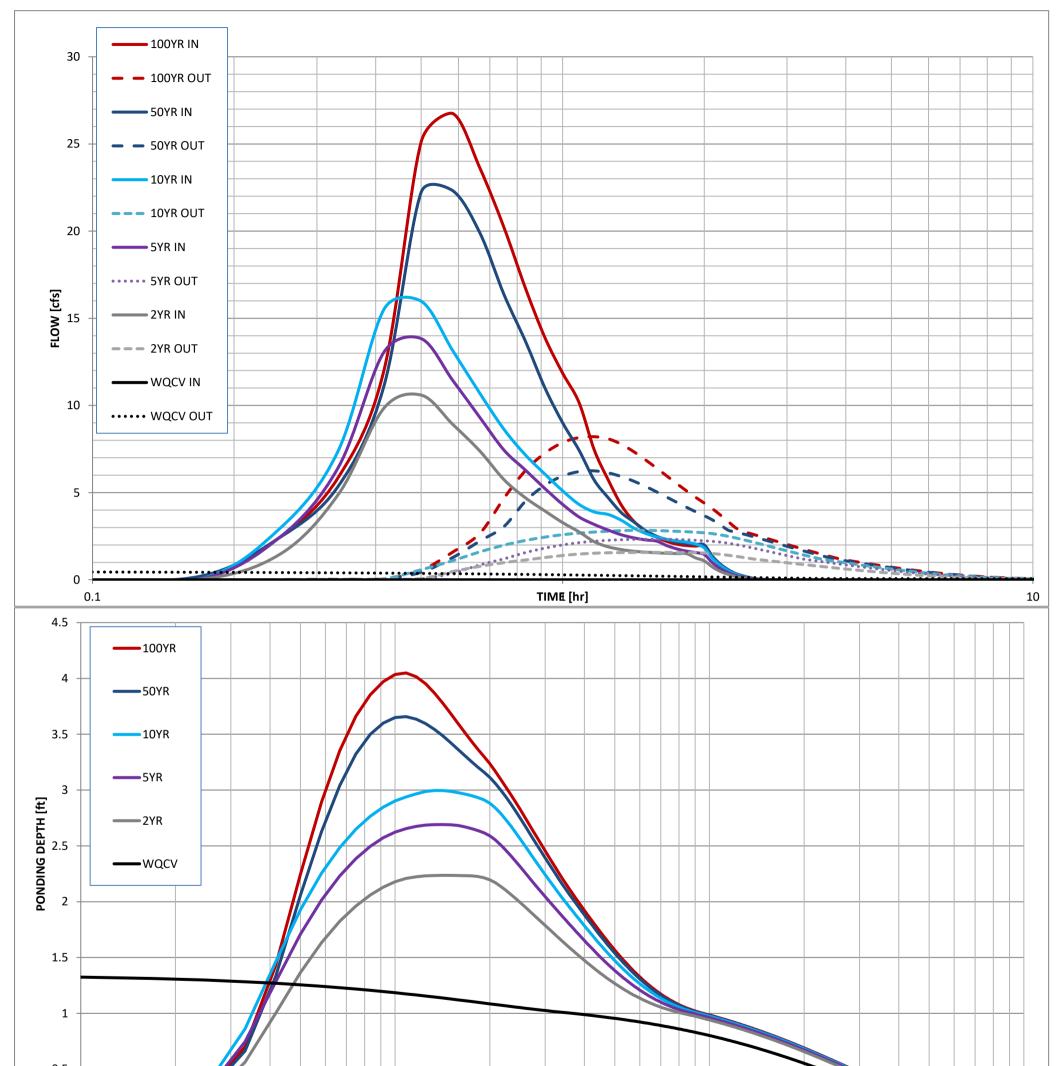
## Routed Hydrograph Results

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Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	N/A	1.19	1.52	1.75	2.25	2.55	in
CUHP Runoff Volume =	0.210	0.571	0.756	0.895	1.226	1.434	acre-ft
Inflow Hydrograph Volume =	N/A	0.571	0.756	0.895	1.226	1.434	acre-ft
Time to Drain 97% of Inflow Volume =	76.3	58.7	53.0	49.6	42.7	39.3	hours
Time to Drain 99% of Inflow Volume =	100.2	82.8	77.3	74.0	67.3	63.9	hours
Maximum Ponding Depth =	1.36	2.24	2.69	3.00	3.66	4.05	ft
Maximum Ponded Area =	0.19	0.23	0.25	0.27	0.30	0.32	acres
Maximum Volume Stored =	0.211	0.392	0.502	0.581	0.768	0.888	acre-ft

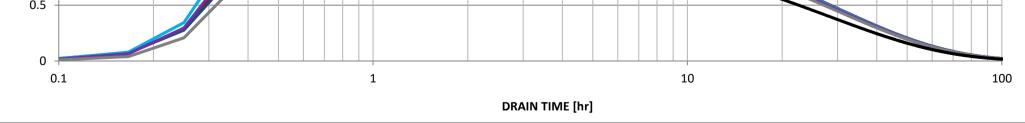
User Defined	User Defined	User Defined	User Defined
Stage [ft]	Area [ft^2]	Stage [ft]	Discharge [cfs]
0.00	5,450	0.00	0.00
1.00	7,402	1.00	0.07
2.00	9,453	2.00	1.18
3.00	11,598	3.00	2.84
4.00	13,836	4.00	8.04
5.00	16,168	5.00	11.68
6.00	18,594	6.00	60.68

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