

Stormwater Detention and Infiltration Design Data Sheet

SDI-Design Data v2.00, Released January 2020

Stormwater Facility Name: **Clear View Industrial Park, Filing 2A** ← 2B

Facility Location & Jurisdiction: **El Paso County**

User Input: Watershed Characteristics

Extended Detention Basin (EDB) ▼ =	EDB	
Watershed Area =	2.77	acres
Watershed Length =	500	ft
Watershed Length to Centroid =	100	ft
Watershed Slope =	0.010	ft/ft
Watershed Imperviousness =	60.0%	percent
Percentage Hydrologic Soil Group A =	0.0%	percent
Percentage Hydrologic Soil Group B =	100.0%	percent
Percentage Hydrologic Soil Groups C/D =	0.0%	percent
Target WQCV Drain Time =	40.0	hours
Location for 1-hr Rainfall Depths (use 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'.

Double check these User Defined Discharges because the Time to Drain numbers are way different than on the UD-Detention Worksheet in the FDR. Revise discharges on this SDI form so that drain times are closer to UD-Detention ones.

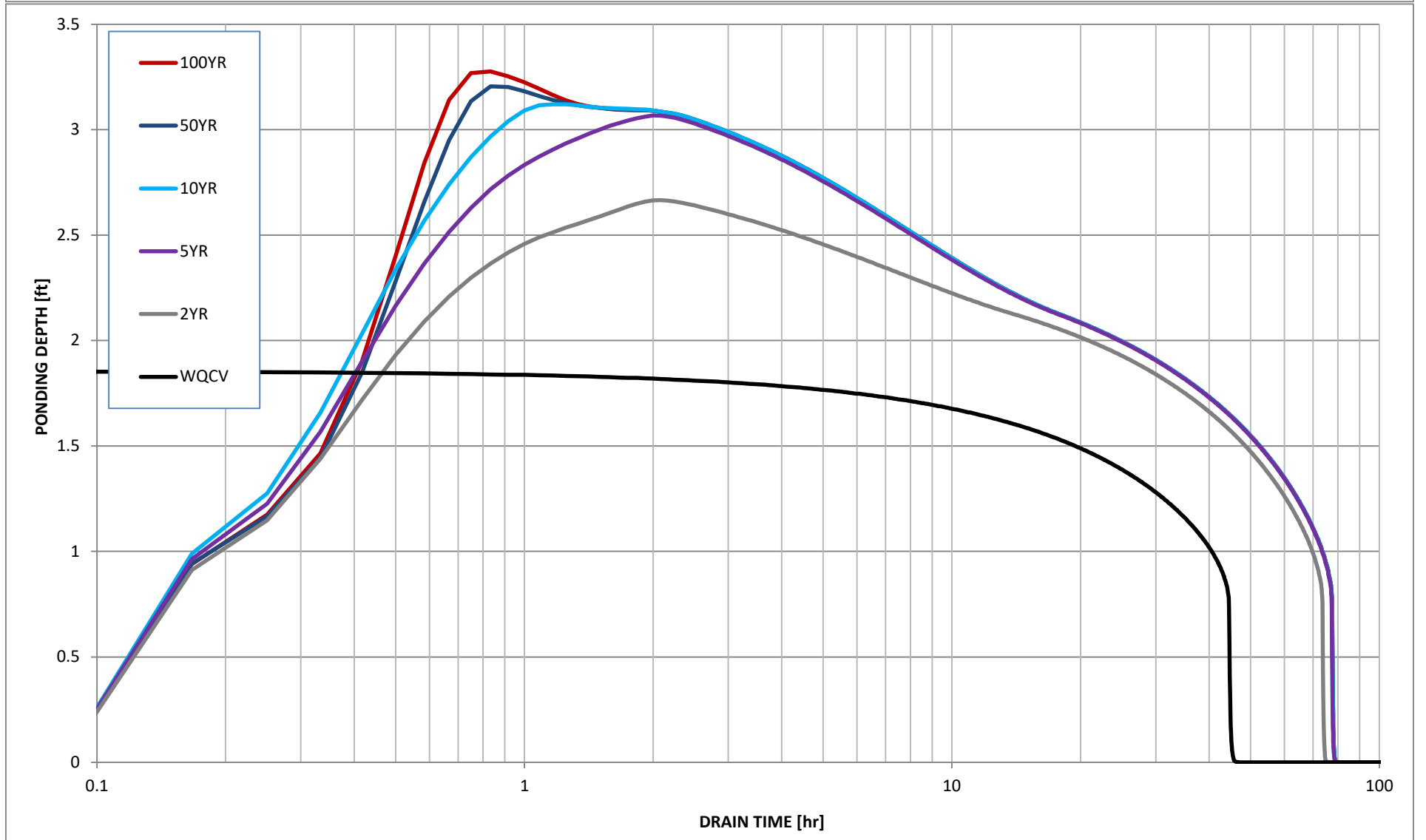
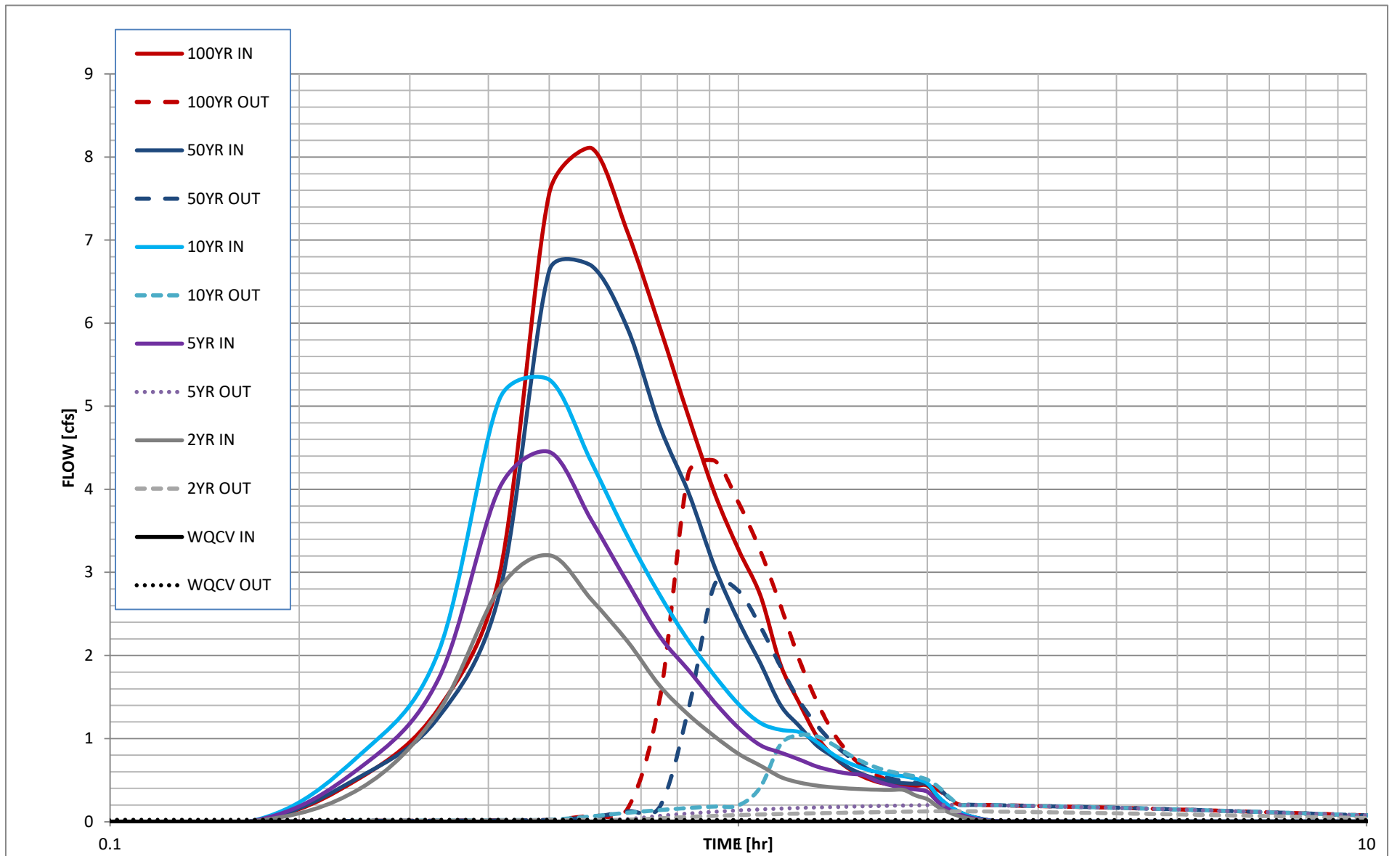
User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	10	0.00	0.00
0.75	10	1.06	0.01
1.75	3,884	2.12	0.02
1.97	4,541	3.08	0.20
2.75	5,198	3.90	17.57
3.08	5,916		
3.75	6,634		
3.90	6,852		

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	2.00	2.25	in
CUHP Runoff Volume =	0.055	0.157	0.217	0.269	0.334	0.397	acre-ft
Inflow Hydrograph Volume =	N/A	0.157	0.217	0.269	0.334	0.397	acre-ft
Time to Drain 97% of Inflow Volume =	42.3	67.6	69.3	67.8	65.8	63.9	hours
Time to Drain 99% of Inflow Volume =	43.9	71.7	74.6	74.1	73.3	72.4	hours
Maximum Ponding Depth =	1.86	2.67	3.07	3.12	3.21	3.28	ft
Maximum Ponded Area =	0.10	0.12	0.13	0.14	0.14	0.14	acres
Maximum Volume Stored =	0.055	0.143	0.193	0.200	0.212	0.222	acre-ft

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Jonathan Moore

From: mailer@digitaldataservices.com
Sent: Tuesday, August 18, 2020 12:07 PM
To: jonathan.moore@ctrengineering.com
Subject: Stormwater Detention and Infiltration Facility - Extended Detention Basin

Thank you for submitting to the Colorado Stormwater Detention and Infiltration database. Your facility has been recorded and the local jurisdiction has been notified.

Facility ID: [SWDF-20200818110720](#)
Name: Extended Detention Basin
Division: Arkansas
Jurisdiction: ElPasoCo
Design Storm: Full Spectrum
Water Surface Acres: 2.77
Edit Key: e44682dc059fcd1c41991db3fb253b6c

If you wish to edit the facility in the future, you will need the Edit Key listed above. If you lose the key, you will not be able to edit the facility information in the future.