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Engineering Review
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Elizabeth Nijkamp, PE
EPC Department of Public Works

Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected Worksheet Protected

Stormwater Facility Name: **Cathedral Rock Commons Commercial - Detention Pond F**

Facility Location & Jurisdiction: **NE corner of Spanish Bit Drive & Struthers Road, El Paso County, CO**

User Input: Watershed Characteristics

Watershed Slope =	0.029	ft/ft
Watershed Length =	700	ft
Watershed Area =	8.23	acres
Watershed Imperviousness =	73.6%	percent
Percentage Hydrologic Soil Group A =		percent
Percentage Hydrologic Soil Group B =	100.0%	percent
Percentage Hydrologic Soil Groups C/D =		percent

Location for 1-hr Rainfall Depths (use dropdown):

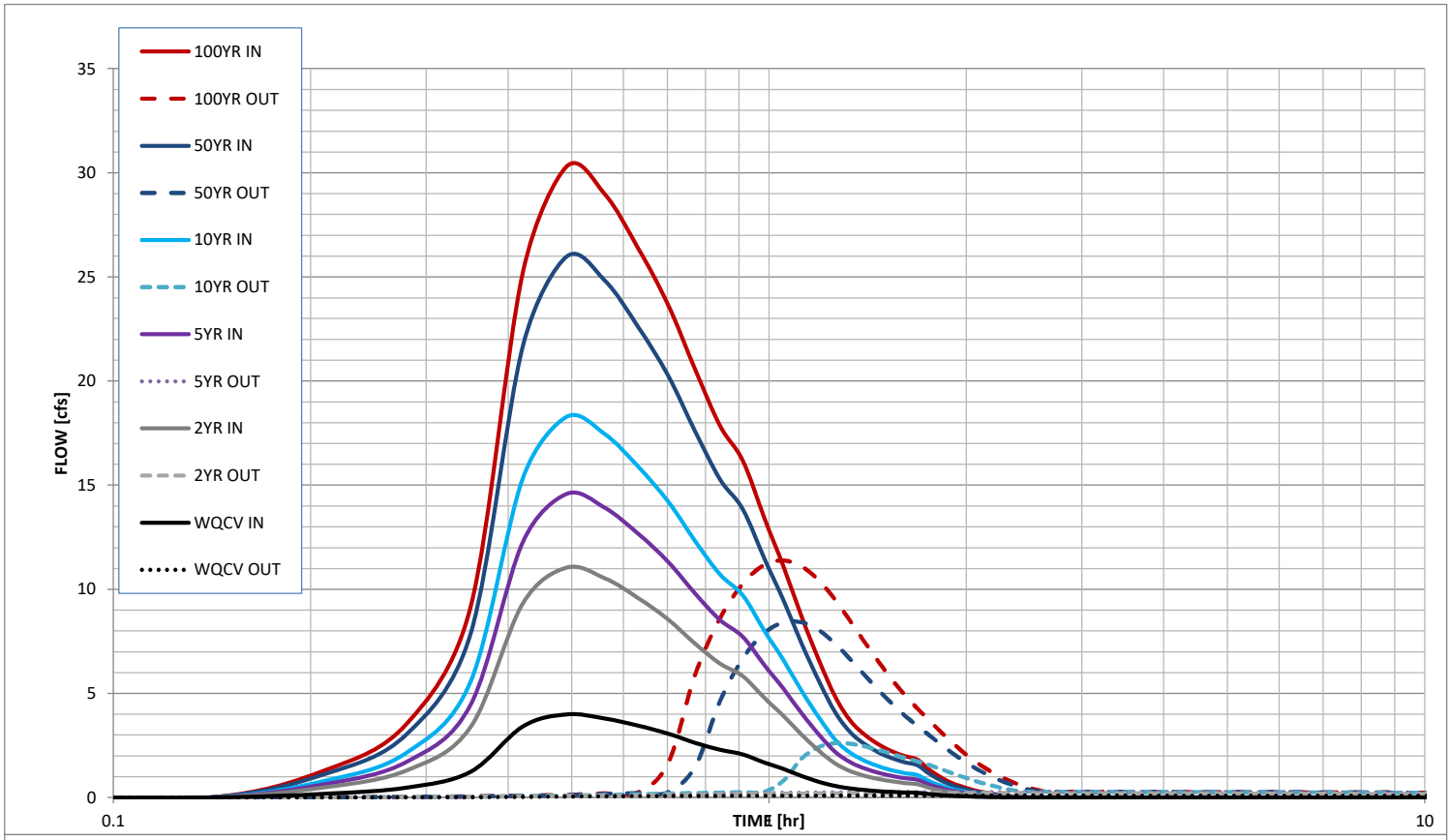
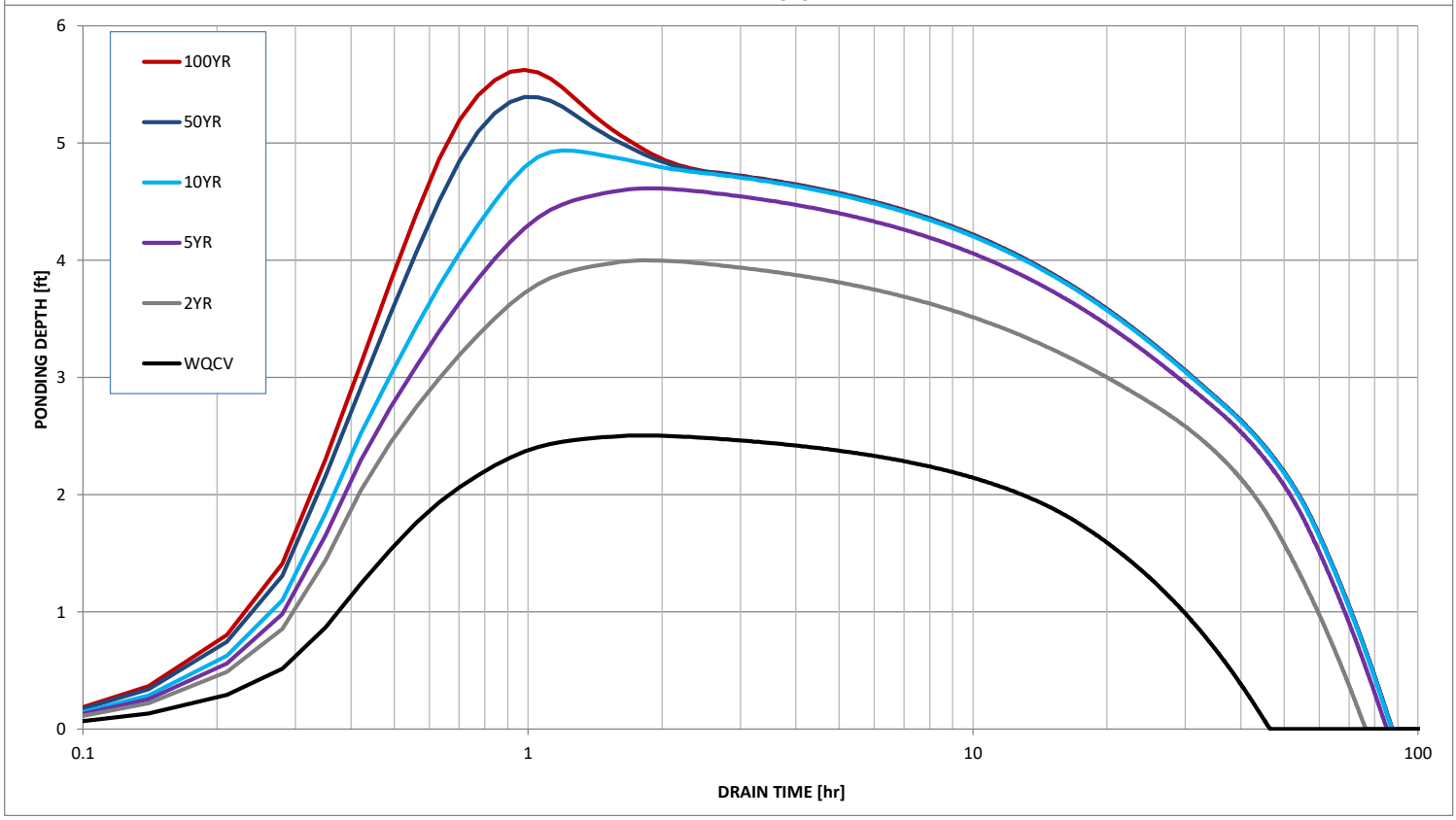
User Input

WQCV Treatment Method = Extended Detention

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	10	0.00	0.00
1.75	4,159	1.75	0.07
2.75	9,070	2.75	0.10
4.75	13,330	4.75	0.28
5.75	15,166	5.75	13.02
7.75	17,000	7.75	268.07

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 =	0.60	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.200	0.560	0.741	0.931	1.329	1.552	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.200	0.559	0.740	0.930	1.328	1.552	acre-ft
Time to Drain 97% of Inflow Volume =	38.7	63.3	**70.2**	70.5	67.4	65.8	hours
Time to Drain 99% of Inflow Volume =	42.0	68.8	76.5	77.6	75.8	**75.0**	hours
Maximum Ponding Depth =	2.51	4.00	4.61	4.94	5.39	5.62	ft
Maximum Ponded Area =	0.18	0.27	0.30	0.31	0.33	**0.34**	acres
Maximum Volume Stored =	0.187	0.532	0.707	0.806	0.953	1.032	acre-ft

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