Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected Worksheet Protected

Stormwater Facility Name: **Mayberry, Colorado Springs - Detention Pond C1**

Facility Location & Jurisdiction: **Mayberry, Colorado Springs - Detention Pond C1, El Paso County, CO**

User Input: Watershed Characteristics

Watershed Slope =	0.010	ft/ft
Watershed Length =	2660	ft
Watershed Area =	42.99	acres
Watershed Imperviousness =	51.7%	percent
Percentage Hydrologic Soil Group A =	100.0%	percent
Percentage Hydrologic Soil Group B =		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
1.50	24,952	1.50	0.24
3.50	30,324	3.50	0.78
5.50	36,200	5.50	10.49
7.50	42,486	7.50	52.00
9.50	49,161	9.50	319.59

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 =	0.755	1.765	2.318	2.851	4.391	5.393	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.755	1.764	2.318	2.850	4.390	5.391	acre-ft
Time to Drain 97% of Inflow Volume =	47.3	63.2	**64.0**	63.0	59.6	57.2	hours
Time to Drain 99% of Inflow Volume =	51.5	69.7	71.4	71.2	69.8	**68.5**	hours
Maximum Ponding Depth =	1.95	3.40	3.94	4.39	5.57	6.03	ft
Maximum Ponded Area =	0.60	0.69	0.73	0.76	0.84	**0.87**	acres
Maximum Volume Stored =	0.689	1.624	2.002	2.339	3.280	3.674	acre-ft

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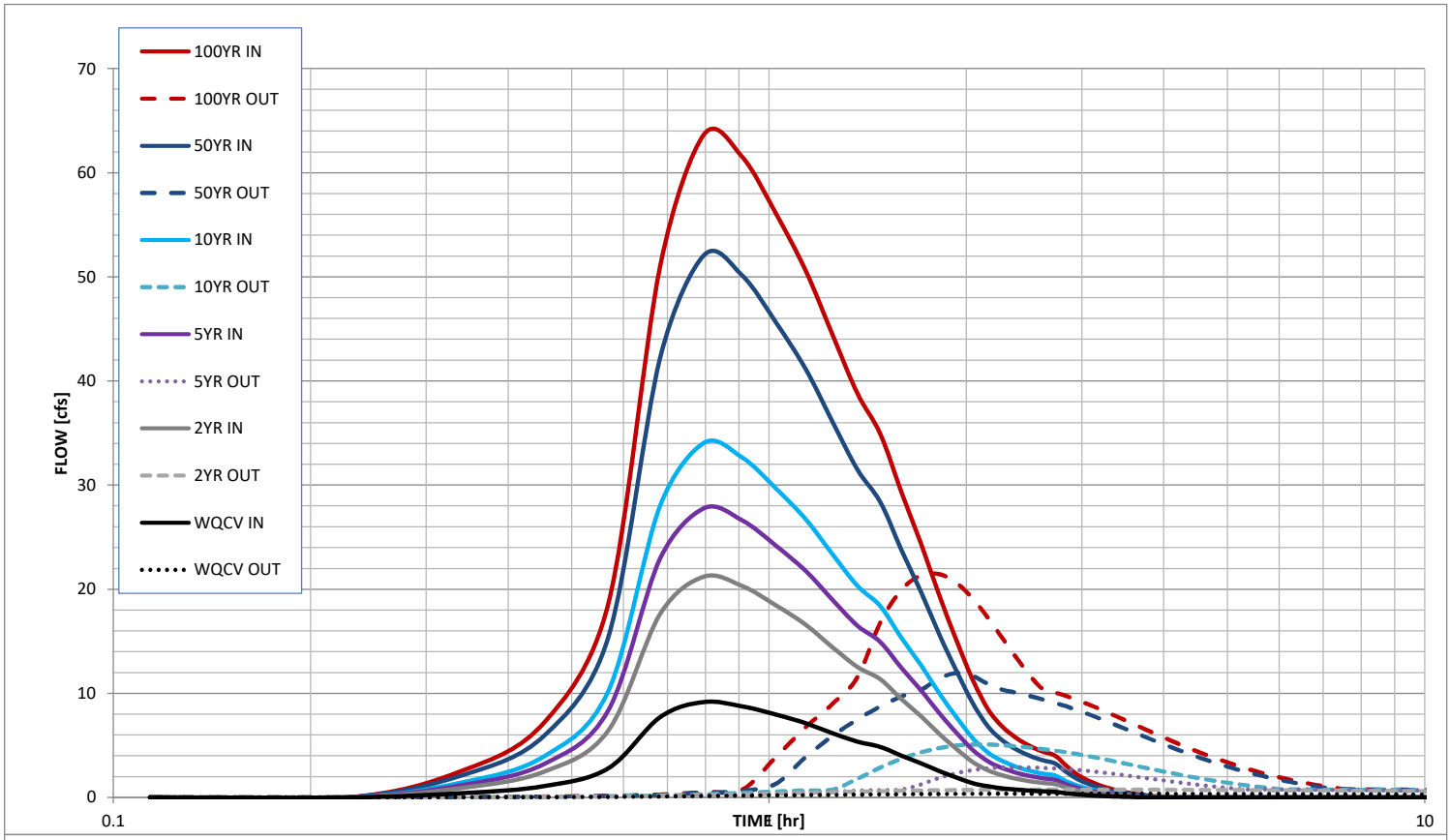

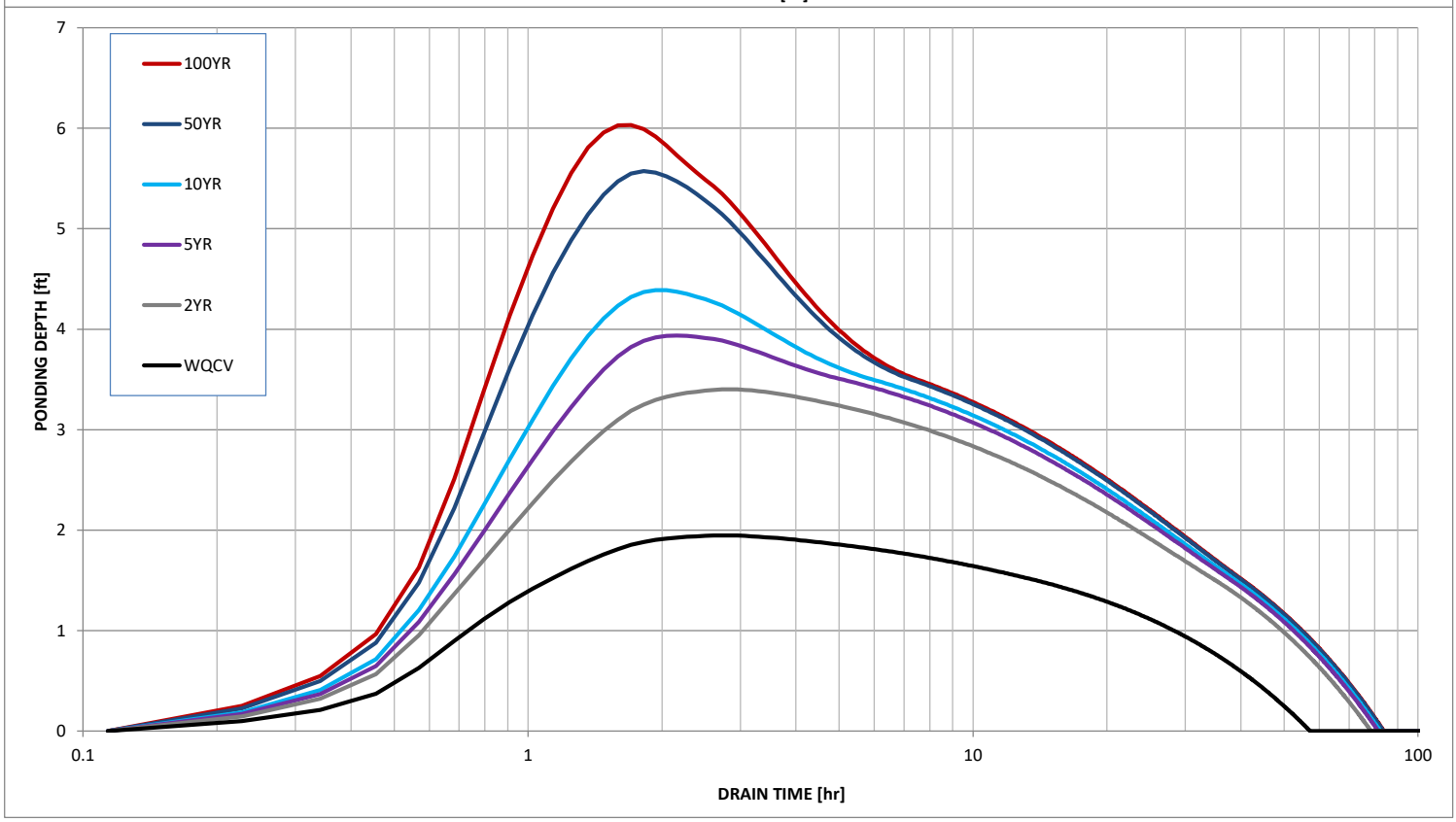

Stormwater Detention and Infiltration Design Data Sheet

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Stormwater Facility Name: **Mayberry, Colorado Springs - Detention Pond C2.8**

Facility Location & Jurisdiction: **Mayberry, Colorado Springs - Detention Pond C2.8, El Paso County, CO**

User Input: Watershed Characteristics

Watershed Slope =	0.015	ft/ft
Watershed Length =	900	ft
Watershed Area =	7.90	acres
Watershed Imperviousness =	19.0%	percent
Percentage Hydrologic Soil Group A =	100.0%	percent
Percentage Hydrologic Soil Group B =		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
1.00	6,699	1.00	0.04
3.00	9,617	3.00	3.38
5.00	12,000	5.00	84.20

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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 =	0.073	0.087	0.117	0.151	0.319	0.490	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.073	0.086	0.117	0.151	0.319	0.489	acre-ft
Time to Drain 97% of Inflow Volume =	37.4	40.3	**40.1**	39.3	35.5	32.3	hours
Time to Drain 99% of Inflow Volume =	40.7	43.8	44.2	44.0	42.3	**40.7**	hours
Maximum Ponding Depth =	0.93	1.01	1.13	1.26	1.81	2.33	ft
Maximum Ponded Area =	0.14	0.15	0.16	0.16	0.18	**0.20**	acres
Maximum Volume Stored =	0.067	0.079	0.097	0.117	0.212	0.310	acre-ft

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