Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected Worksheet Protected

Stormwater Facility Name: **Windermere Subdivision - North Pond**

Facility Location & Jurisdiction: **Marksheffel Rd. & N. Carefree Cir.**

User Input: Watershed Characteristics

Watershed Slope =	0.020	ft/ft
Watershed Length =	4000	ft
Watershed Area =	132.63	acres
Watershed Imperviousness =	45.4%	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

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

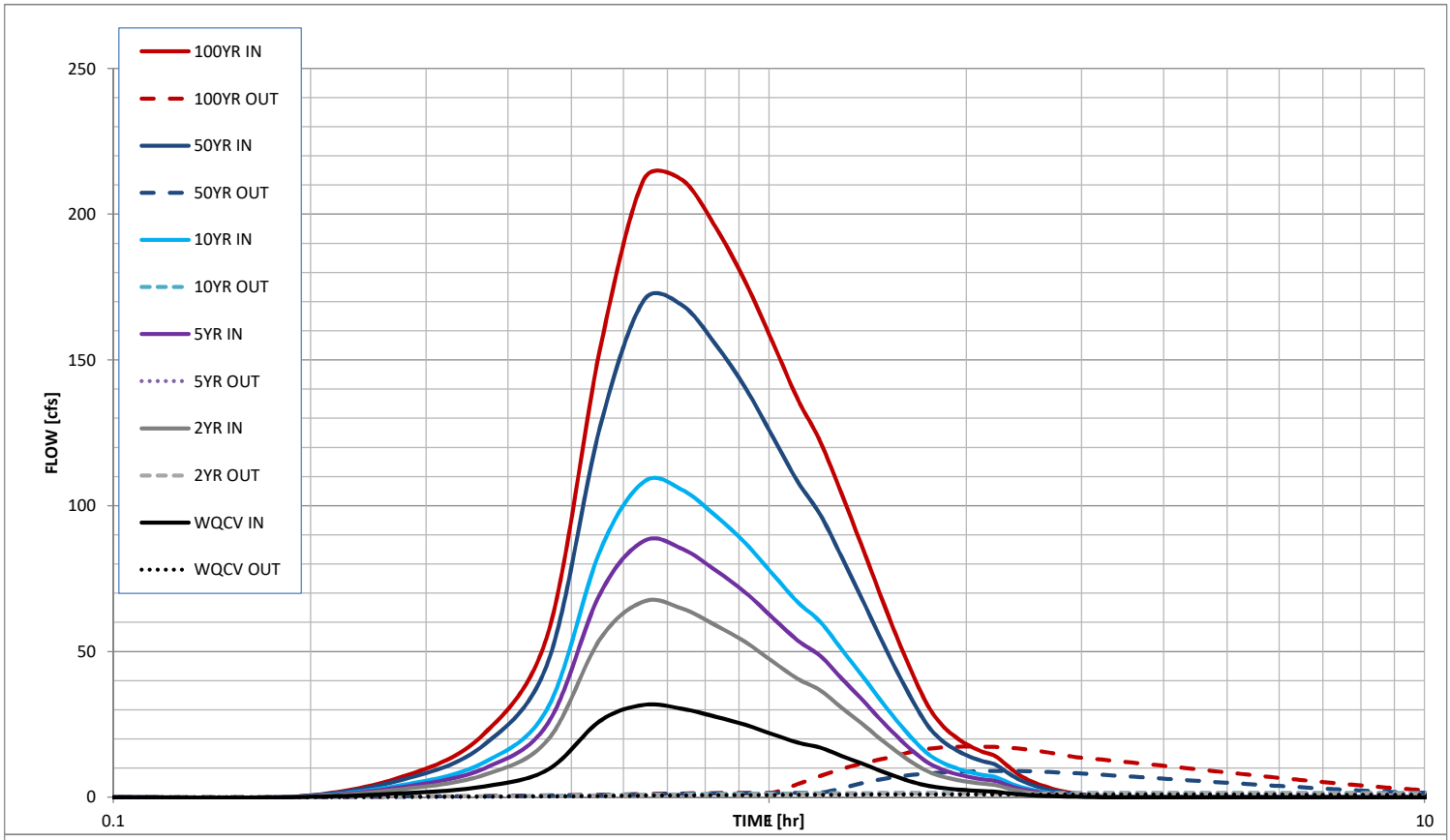
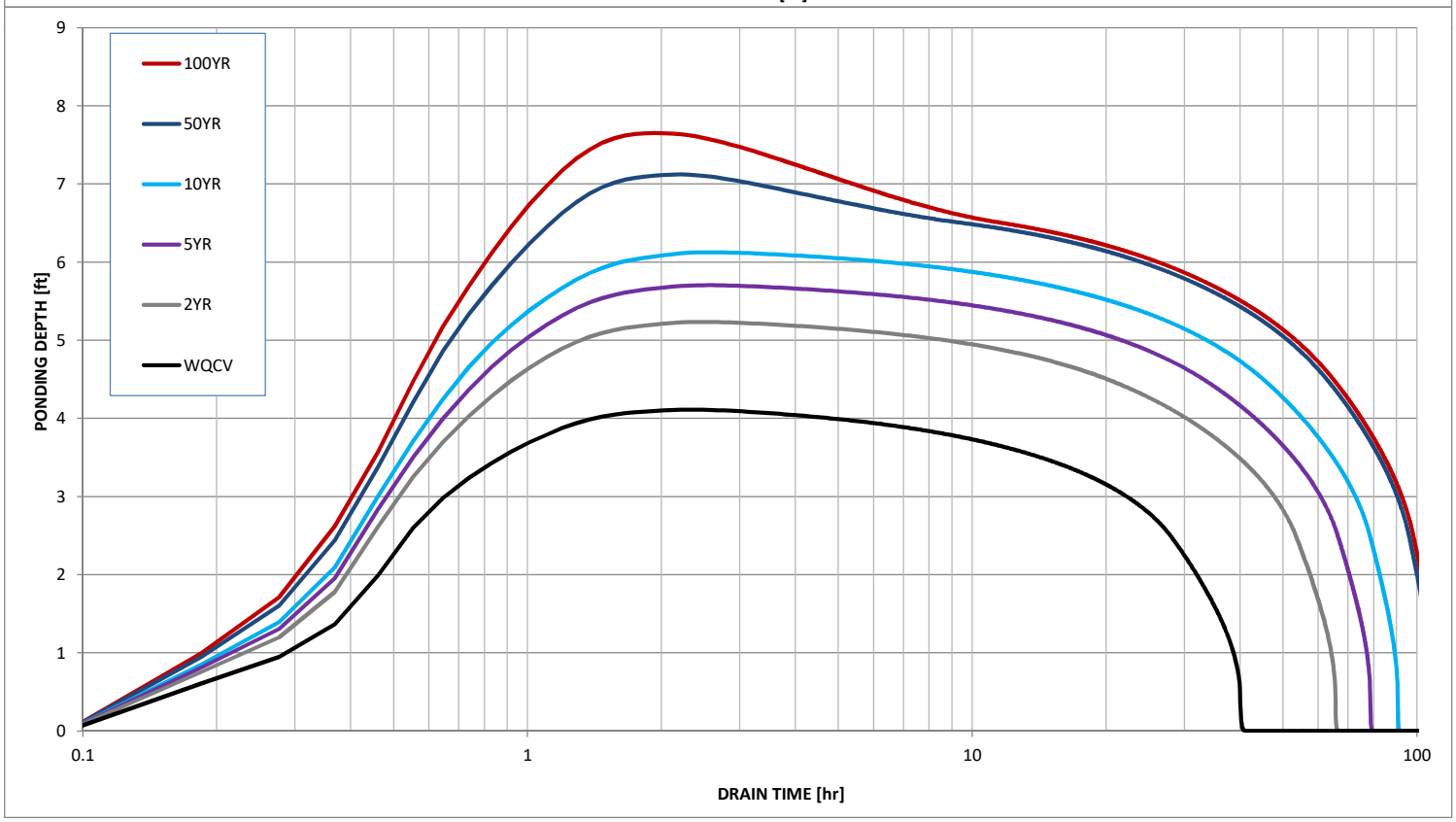
User Input

WQCV Treatment Method = Extended Detention

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	250	0.00	0.00
0.50	250	0.50	0.18
1.50	7,586	1.50	0.30
2.50	17,267	2.50	0.57
3.50	49,754	3.50	0.77
4.50	82,355	4.50	1.09
5.50	135,090	5.50	1.35
6.50	163,617	6.50	1.55
7.50	192,865	7.50	13.65
8.50	208,824	8.50	39.47
9.50	221,127	9.50	273.15
10.50	237,413	10.50	716.33
11.50	251,492	11.50	1323.81

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 =	0.53	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	2.144	4.596	6.058	7.492	11.977	15.026	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	2.144	4.596	6.052	7.491	11.975	15.024	acre-ft
Time to Drain 97% of Inflow Volume =	37.0	59.6	**71.2**	82.0	96.4	96.7	hours
Time to Drain 99% of Inflow Volume =	39.0	63.3	75.7	87.0	102.9	**104.1**	hours
Maximum Ponding Depth =	4.11	5.23	5.70	6.13	7.12	7.65	ft
Maximum Ponded Area =	1.60	2.77	3.23	3.51	4.16	**4.48**	acres
Maximum Volume Stored =	1.982	4.358	5.785	7.206	11.005	13.303	acre-ft

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