

# Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

**Stormwater Facility Name:** Araco Concrete - Detention Basin A1

**Facility Location & Jurisdiction:** 7470 Southmoor Drive, Fountain, CO (El Paso County)

**User Input: Watershed Characteristics**

Watershed Slope =	0.013	ft/ft
Watershed Length =	300	ft
Watershed Area =	1.46	acres
Watershed Imperviousness =	88.6%	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	2,610	1.00	0.01
3.00	2,958	3.00	0.18
5.00	3,308	5.00	0.38
7.00	3,660	7.00	17.41

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**

	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
Design Storm Return Period =							
One-Hour Rainfall Depth =	0.60	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.047	0.121	0.157	0.189	0.251	0.288	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.047	0.121	0.157	0.188	0.250	0.287	acre-ft
Time to Drain 97% of Inflow Volume =	68.8	71.5	70.7	69.8	67.8	66.5	hours
Time to Drain 99% of Inflow Volume =	75.6	82.3	83.0	83.3	83.3	83.1	hours
Maximum Ponding Depth =	1.22	2.26	2.73	3.14	3.91	4.34	ft
Maximum Ponded Area =	0.06	0.06	0.07	0.07	0.07	0.07	acres
Maximum Volume Stored =	0.044	0.108	0.139	0.167	0.221	0.252	acre-ft

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