

El Paso County MS4 Post Construction Detention / Water Quality Facility Documentation Form

This document must be completed and submitted with required attachments to the County for projects requiring a detention and/or a water quality facility. A separate completed form must be submitted for each facility.

Project name: VOLLMER RV STORAGE	
Owner name: SCOTT BELKNAP	
Location Address:	
8815 VOLLMER ROAD, COLORADO SPRINGS, CO 80	0908-4710
Latitude and Longitude:	'
Latitude: 38.963220 Longitude: -104.679480	
Assessor's Parcel #: 5233001001 Section: 34	Township: 12S Range: 65W
Expected Completion date: SPRING 2024	
Project acreage: 6.4 Design Ponding Acres: 0.	
Design Engineer Email Address: RBURNS@JRENGINEERIN	IG. COM
To ensure compliance with C.R.S. 37-92-602(8), the completed Sto Detention and Infiltration Design Data Sheet must be attached . Th https://maperture.digitaldataservices.com/gvh/?viewer=cswdiff (4)	e form can be found here:
List all permanent water quality control measure(s) (EDBs, rain gar	dens, etc):
EXTENDED DETENTION BASIN	
For all projects for which the constrained redevelopment sites star not practicable to meet the full design standards.	ndard is applied, provide an explanation of why it is
The production of the rain design standards	
Attach Operations and Maintenance (O&M) Plan describing the olong-term observation, maintenance, and operation of control memaintenance activities. If multiple, different water quality control & M Plan must be provided for each facility.	asure(s), including routine inspection frequencies and
Attach Private Detention Basin / Stormwater Quality Best Manag	ement Practice Maintenance Agreement and
Easement addressing maintenance of BMPs that shall be binding of	n all subsequent owners of the permanent BMPs.
Attachments:	Review Engineer
Stormwater Detention and Infiltration Design Data Sheet O & M Plan	EPC Project File No. PPR-22-045
Maintenance and Access Agreement	

Stormwater Detention and Infiltration Design Data Sheet

SDI-Design Data v2.00, Released January 2020

Stormwater Facility Name: **Vollmer RV Storage**

Facility Location & Jurisdiction: Pond

User Input: Watershed Characteristics

Extended Detention Basin (EDB)	EDB				
Watershed Area =	6.02	acres			
Watershed Length =	1,200	ft			
Watershed Length to Centroid =	400	ft			
Watershed Slope =	0.021	ft/ft			
Watershed Imperviousness =	71.0%	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'.

User Defined	User Defined	User Defined	User Defined	
Stage [ft]	Area [ft^2]	Stage [ft]	Discharge [cfs]	
0.00	10	0.00	0.00	
0.50	117	0.50	0.01	
1.00	828	1.00	0.02	
1.50	2,724	1.50	0.03	
2.00	4,479	2.00	0.05	
2.50	5,902	2.50	0.06	
3.00	7,135	3.00	0.11	
3.50	7,924	3.50	0.14	
4.00	8,712	4.00	0.17	
4.50	9,495	4.50	0.19	
5.00	10,297	5.00	5.53	
5.50	11,144	5.50	5.80	
6.00	11,993	6.00	39.82	
6.50	12,848	6.50	119.99	

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

acea Tryarograph Resaits							_
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	2.25	2.52	in
CUHP Runoff Volume =	0.140	0.419	0.563	0.685	0.955	1.106	acre-ft
Inflow Hydrograph Volume =	N/A	0.419	0.563	0.685	0.955	1.106	acre-ft
Time to Drain 97% of Inflow Volume =	38.8	61.6	66.3	64.7	61.4	59.8	hours
Time to Drain 99% of Inflow Volume =	41.1	66.3	72.1	71.4	69.9	69.2	hours
Maximum Ponding Depth =	2.60	4.04	4.58	4.69	5.03	5.39	ft
Maximum Ponded Area =	0.14	0.20	0.22	0.22	0.24	0.25	acres
Maximum Volume Stored =	0.141	0.391	0.503	0.529	0.607	0.697	acre-ft



