



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: Sterling Ranch Pond W-4	
Owner name: SR Land LLC	
Location Address:	
9206 Ben Tirran Ct. Colorado Springs, CO 80920	
Latitude and Longitude:	
38.957933, -104.686318	
Assessor's Parcel #: 5232401018 Section: 32	Township: 128 Range: 65W
Expected Completion date: Fall 2021	
Project acreage: 350.74 Design Ponding Acres: 1.0	Design Storm: 100yr
Design Engineer Email Address: mbramlett@jrengineering.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=cswdif# (e form can be found here:
List all permanent water quality control measure(s) (EDBs, rain gar	dens, etc):
extended detention basin, pond W-4	
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
Attach Operations and Maintenance (O&M) Plan describing the o	peration and maintenance procedures that ensure the
long-term observation, maintenance, and operation of control meanintenance activities. If multiple, different water quality control & M Plan must be provided for each facility.	• • •
Attach Private Detention Basin / Stormwater Quality Best Manag	ement Practice Maintenance Agreement and
Easement addressing maintenance of BMPs that shall be binding of	_
Attachments:	Review Engineer CP / JR
Stormwater Detention and Infiltration Design Data Sheet O & M Plan	EPC Project File No. SF2015
Maintenance and Access Agreement	

Stormwater Detention and Infiltration Design Data Sheet

Stormwater Facility Name: Pond W-4

Facility Location & Jurisdiction: Sterling Ranch Sudivision, Vollmer Road, El Paso County / El Paso County

User Input: Watershed Characteristics

0.060 Watershed Slope = ft/ft Watershed Length = 9241 ft Watershed Area = 349.78 acres 9.4% Watershed Imperviousness = percent 40.0% Percentage Hydrologic Soil Group A = percent Percentage Hydrologic Soil Group B = 60.0% 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

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.

User Defined	User Defined	User Defined	User Defined	
Stage [ft]	Area [ft^2]	Stage [ft]	Discharge [cfs]	
0.00	20	0.00	0.00	
0.37	1,795	0.37	0.14	
1.00	5,983	1.00	0.23	
2.00	19,453	2.00	0.45	
3.00	31,989	3.00	0.66	
4.00	37,508	4.00	0.99	
5.00	41,177	5.00	1.22	
6.00	45,017	6.00	1.40	
7.00	48,960	7.00	35.75	
8.00	52,863	8.00	116.69	
9.00	56,926	9.00	231.32	
10.00	61,139	10.00	384.24	
11.00	65,528	11.00	756.84	

	Routed Hydro	ograph 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 =	1.853	1.774	5.207	9.421	25.260	33.645	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	1.853	1.774	5.202	9.419	25.253	33.643	acre-ft
Time to Drain 97% of Inflow Volume =	37.1	36.3	52.8	48.8	37.9	33.2	hours
Time to Drain 99% of Inflow Volume =	39.5	38.5	57.3	55.5	50.0	47.8	hours
Maximum Ponding Depth =	3.96	3.87	6.51	7.61	9.91	10.49	ft
Maximum Ponded Area =	0.85	0.84	1.08	1.18	1.39	1.45	acres
Maximum Volume Stored =	1.697	1.626	4.163	5.402	8.368	9.197	acre-ft

Stormwater Detention and Infiltration Design Data Sheet

