

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:

Owner name:

Location Address:

Latitude and Longitude:

Assessor's Parcel #: Section: Township: Range:

Expected Completion date:

Project acreage: Design Ponding Acres: Design Storm:

Design Engineer Email Address:

To ensure compliance with C.R.S. 37-92-602(8), the completed Stormwater Detention and Infiltration Design Data Sheet **must be attached**. The form can be found here: <https://maperture.digitaldataservices.com/gvh/?viewer=cswdif#> (click on Download SDI Design Data Sheet)

List all permanent water quality control measure(s) (EDBs, rain gardens, etc):

For all projects for which the constrained redevelopment sites standard is applied, provide an explanation of why it is not practicable to meet the full design standards.

Attach Operations and Maintenance (O&M) Plan describing the operation and maintenance procedures that ensure the long-term observation, maintenance, and operation of control measure(s), including routine inspection frequencies and maintenance activities. If multiple, different water quality control measures are used at the same location, a separate O & M Plan must be provided for each facility.

Attach Private Detention Basin / Stormwater Quality Best Management Practice Maintenance Agreement and Easement addressing maintenance of BMPs that shall be binding on all subsequent owners of the permanent BMPs.

Attachments:

- Stormwater Detention and Infiltration Design Data Sheet
- O & M Plan
- Maintenance and Access Agreement

Review Engineer

EPC Project File No.

Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

Stormwater Facility Name: Retreat at TimberRidge Filing No. 2 - Pond 3

Facility Location & Jurisdiction: Approx. 1700' Northeast of int. of Vollmer Rd. and Poco Rd., El Paso County

User (Input) Watershed Characteristics

- Watershed Slope = ft/ft
 Watershed Length-to-Width Ratio = L:W
 Watershed Area = acres
 Watershed Imperviousness = percent
 Percentage Hydrologic Soil Group A = percent
 Percentage Hydrologic Soil Group B = percent
 Percentage Hydrologic Soil Groups C/D = percent
 Location for 1-hr Rainfall Depths (use dropdown):
 ▼

User Input: Detention Basin Characteristics

WQCV Design Drain Time = hours

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	115	0.00	0.00
1.00	951	1.00	0.04
2.00	2,623	2.00	0.08
3.00	6,974	3.00	0.12
4.00	14,005	4.00	0.18
5.00	18,701	5.00	0.22
6.00	21,062	6.00	23.55
7.00	23,542	7.00	59.09
8.00	26,140	8.00	102.46
9.00	28,818	9.00	287.24

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	25 Year	50 Year	100 Year	
Design Storm Return Period =								
One-Hour Rainfall Depth =	0.53	1.19	1.50	1.75	2.00	2.25	2.52	in
Calculated Runoff Volume =	0.390	0.513	1.461	2.519	4.423	5.795	7.407	acre-ft
OPTIONAL Override Runoff Volume =								acre-ft
Inflow Hydrograph Volume =	0.390	0.512	1.460	2.519	4.422	5.793	7.400	acre-ft
Time to Drain 97% of Inflow Volume =	40	47	59	54	48	44	39	hours
Time to Drain 99% of Inflow Volume =	43	51	65	62	59	57	55	hours
Maximum Ponding Depth =	3.89	4.25	5.49	6.19	7.17	7.77	8.25	ft
Maximum Ponded Area =	0.303	0.348	0.456	0.494	0.550	0.586	0.615	acres
Maximum Volume Stored =	0.368	0.486	0.995	1.327	1.836	2.176	2.467	acre-ft

Stormwater Detention and Infiltration Design Data Sheet

