

## 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: Retreat at TimberRidge Filing No. 2	
Timbor Pidgo Dovolonment Group II C	
Owner name.	
Location Address:	
N/A East of the int. of Vollmer Rd. and Poco Rd.	
Latitude and Longitude:	
38.979212, -104.663294	
Assessor's Parcel #: 52272-00-001 Section: 27, 28	Township: 12S Range: 65W
date	ect completion entry
Project acreage:  75.829 Ac. Design Ponding Acres: 0.6	Design Storm: 100 yr. ▼
Design Engineer Email Address: Mwhorton@classicconsulting.	net
To ensure compliance with C.R.S. 37-92-602(8), the completed Storm Detention and Infiltration Design Data Sheet <b>must be attached</b> . The factorial transfer in the factorial tr	orm can be found here:
List all permanent water quality control measure(s) (EDBs, rain garder	ns, etc):
Pond 3 - EDB with associated forebay, trickle channel, m	icropool and outlet box
For all projects for which the constrained redevelopment sites standa	rd 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 of control measurements and operation of control measurements. If multiple, different water quality control measurements are provided for each facility.	re(s), including routine inspection frequencies and
Attach Private Detention Basin / Stormwater Quality Best Managem	ent Practice Maintenance Agreement and
<b>Easement</b> addressing maintenance of BMPs that shall be binding on a	Il subsequent owners of the permanent BMPs.
Attachments:	Review Engineer
Stormwater Detention and Infiltration Design Data Sheet  O & M Plan	EPC Project File No.
Maintenance and Access Agreement	

## **Stormwater Detention and Infiltration Design Data Sheet**

Workhook 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 =	0.020	ft/ft
Watershed Length-to-Width Ratio =	2.00	L:W
Watershed Area =	64.00	acres
Watershed Imperviousness =	13.0%	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

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

User Input

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**User Input: Detention Basin Characteristics** 

WQCV Design Drain Time = 40.00 hours

User Defined	User Defined	User Defined	User Defined	
Stage [ft]	Area [ft^2]	Stage [ft]	Discharge [cfs]	
0.00	115	0.00	0.00	
1.00	2,577	1.00	0.06	
2.00	7,500	2.00	0.13	
3.00	11,770	3.00	0.18	
4.00	15,387	4.00	0.28	
5.00	18,910	5.00	6.38	
6.00	22,339	6.00	40.74	
7.00	26,165	7.00	81.76	
8.00	30,388	8.00	260.55	

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** 

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Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	25 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	0.53	1.19	1.50	1.75	2.00	2.25	2.52	in
Calculated Runoff Volume =	0.439	0.584	1.633	2.797	4.883	6.389	8.159	acre-ft
OPTIONAL Override Runoff Volume =								acre-ft
Inflow Hydrograph Volume =	0.439	0.584	1.632	2.797	4.883	6.384	8.156	acre-ft
Time to Drain 97% of Inflow Volume =	41	48	49	44	38	34	30	hours
Time to Drain 99% of Inflow Volume =	45	52	56	53	49	47	45	hours
Maximum Ponding Depth =	3.16	3.62	5.14	5.74	6.68	7.15	7.38	ft
Maximum Ponded Area =	0.283	0.321	0.444	0.492	0.572	0.615	0.637	acres
Maximum Volume Stored =	0.411	0.549	1.130	1.414	1.910	2.194	2.331	acre-ft

## **Stormwater Detention and Infiltration Design Data Sheet**

