



## El Paso County MS4 Post Construction Detention Facility Documentation Form

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

Project name: **WATERBURY FILING NO. 2**

Owner name: 4-WAY RANCH JOINT VENTURE, LLC

Location (Address and Latitude and Longitude): NW OF INT. OF HWY. 24 AND STAPLETON DR.

38.972329 104.565405

Assessor's Parcel #: 42000-00-366, 42000-00-367

Expected Completion Date: SUMMER 2018

Project Acreage: 20.335 AC.

Design Ponding Acres: 0.6 AC.

Design Engineer Email Address: MWHORTON@CLASSICCONSULTING.NET

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)

Design Storm: circle one below:

Water Quality
<b>Excess Urban Runoff</b>
2-year
5-year
10-year
25-year
50-year
100-year
Other

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

EXTENDED DETENTION BASIN (EDB)

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 and 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 and M Plan

Maintenance and Access Agreement

Review Engineer: \_\_\_\_\_

## Stormwater Detention and Infiltration Design Data Sheet

Stormwater Facility Name: WATERBURY FILING NO. 2 - INTERIM DETENTION POND 2C

**Facility Location & Jurisdiction:** FALCON, COLORADO - EL PASO COUNTY

### User (Input) Watershed Characteristics

Watershed Slope =	0.020	ft/ft
Watershed Length-to-Width Ratio =	4.00	L:W
Watershed Area =	24.10	acres
Watershed Imperviousness =	36.0%	percent
Percentage Hydrologic Soil Group A =		percent
Percentage Hydrologic Soil Group B =	100.0%	percent
Percentage Hydrologic Soil Groups C/D =		percent
Location for 1-hr Rainfall Depths (use dropdown):		

User Input

### User Input: Detention Basin Characteristics

WQCV Design Drain Time = 40.00 hours

[illegible]

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

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 =	0.336	0.727	1.255	1.722	2.449	3.017	3.673	acre-ft
OPTIONAL Override Runoff Volume =								acre-ft
Inflow Hydrograph Volume =	0.336	0.726	1.254	1.721	2.448	3.017	3.673	acre-ft
Time to Drain 97% of Inflow Volume =	69	72	77	77	70	66	62	hours
Time to Drain 99% of Inflow Volume =	92	94	99	100	93	89	85	hours
Maximum Ponding Depth =	0.85	1.75	2.68	3.10	3.44	3.68	3.94	ft
Maximum Poned Area =	0.320	0.359	0.600	0.745	0.864	0.946	1.036	acres
Maximum Volume Stored =	0.258	0.562	0.980	1.262	1.540	1.756	2.013	acre-ft



# Stormwater Detention and Infiltration Design Data Sheet

