



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: SADDLEHORN RANCH FILING 1 – POND H

Owner name: SADDLEHORN RANCH, LLC

Location Address: APPROX. 3000 FT SOUTHEAST OF INT. OF CURTIS RD. AND JUDGE ORR RD.

Latitude and Longitude:

38deg56min21sec N, 104deg33min01sec W

Assessor's Parcel #: 4300000601 Section: 3 Township: 13S Range: 64W

Expected Completion date: 12/2021

Project acreage: 178 Design Ponding Acres: 0.45 Design Storm: 100 YEAR
(21.16 cont.)

Design Engineer Email Address: MBRAMLETT@JRENGINEERING.COM

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):

EXTENDED DETENTION BASIN

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

JDR

EPC Project File No.

SP-19-006 /
SF-19-012 /
EGP-21-001

Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected

Worksheet Protected

Stormwater Facility Name: SADDLEHORN RANCH - FILING 1 - POND H

Facility Location & Jurisdiction: EL PASO COUNTY - SADDLEHORN RANCH METROPOLITAN DISTRICT

User Input: Watershed Characteristics

Watershed Slope = ft/ft
 Watershed Length = ft
 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):

WQCV Treatment Method =

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	40	0.00	0.00
1.00	2,700	1.00	0.04
2.00	7,616	2.00	0.07
3.00	13,296	3.00	0.10
4.00	19,991	4.00	6.61

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	50 Year	100 Year	
Design Storm Return Period =	0.53	1.19	1.50	1.75	2.25	2.52	in
One-Hour Rainfall Depth =	0.181	0.202	0.274	0.353	0.775	1.231	acre-ft
Calculated Runoff Volume =							acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.180	0.201	0.273	0.353	0.774	1.231	hours
Time to Drain 97% of Inflow Volume =	42.7	45.6	54.7	63.9	66.6	62.7	hours
Time to Drain 99% of Inflow Volume =	46.1	49.2	58.9	68.6	73.6	71.4	ft
Maximum Ponding Depth =	0.19	0.20	0.24	0.28	0.37	0.45	acre-ft
Maximum Poned Area =	0.166	0.186	0.256	0.333	0.543	0.731	acre-ft
Maximum Volume Stored =							

Stormwater Detention and Infiltration Design Data Sheet

