








ENG-PUDSP21005-R3-PDR.pdf Markup Summary

1 (1)		
	<div>See comment letter also</div> <div>Subject: Text Box Page Index: 1 Date: 4/22/2022 12:19:19 PM Author: dsdrice Color:  Layer: Space: Page Label: 1</div>	See comment letter also
5 (5)		
be	<div>Subject: Text Box Page Index: 5 Date: 4/18/2022 4:13:41 PM Author: CDurham Color:  Layer: Space: Page Label: 5</div>	be
Haegler the Hagler	<div>Subject: Text Box Page Index: 5 Date: 4/18/2022 4:16:21 PM Author: CDurham Color:  Layer: Space: Page Label: 5</div>	Haegler
<div><small>TRUCK containing 61.93 acres and is part of a larger development of 13 in multiple filings. A PUD Development Plan, Zoning and ly processed and approved with El Paso County. Filing 1 is while Filing 2 is 32.44 acres 93 single family lots. 198 total on updated plan  Sections 28, SE 1/4, 29 & NW 1/4 33, Township 12 South, Ra within El Paso County, Colorado. The site is bounded to Ranch Filing No. 1. To the south by Stapleton Drive. To future Waterbury Filings, and to the west by a natural share</small></div>	<div>Subject: Callout Page Index: 5 Date: 4/21/2022 6:06:06 PM Author: dsdrice Color:  Layer: Space: Page Label: 5</div>	198 total on updated plan
es 93 sir	<div>Subject: Page Index: 5 Date: 4/21/2022 6:06:37 PM Author: dsdrice Color:  Layer: Space: Page Label: 5</div>	93
th 108 si	<div>Subject: Page Index: 5 Date: 4/21/2022 6:08:26 PM Author: dsdrice Color:  Layer: Space: Page Label: 5</div>	108

Id ~~propre~~

7 (3)

in June of 2

will need to

will nee

DEPS, the Drainage Basin Planning Study on file for this basin was prep in June of 2008. Drainage and Bridge fees for the part of the site that lies within the basin will be paid at the time of Final Plat.

METHODOLOGY

The 12 Point County Drainage Criteria Manual (SPDCDM), dated May 1 in this analysis with the exception for calculating the 5-year and 100-year 6 of the City of Colorado Springs Drainage Criteria Manual (C determining rainfall and runoff for the proposed drainage system was runoff. Runoff was calculated using the Rational Method for developed runoff coefficients, snow related areas, and other factors.

(other subdivisions in this diversion area have not paid)

(diversion to Geick)

repaired by URS and approved
lies with Haegler Ranch Basin

(diversion to Geick)


[illegible]

Calculations for forebay missing in appendix

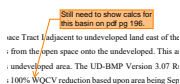
Did not see a copy of this map in the appendix. Please include.


Did not see a copy of this map in the appendix.
Please include.



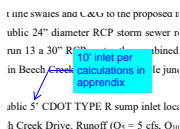
Subject: SW - Highlight
Page Index: 18
Date: 4/7/2022 2:30:37 PM
Author: EPC Stormwater - Glenn Reese
Color: 
Layer:
Space:
Page Label: 18


The UD-BMP Version 3.07 Runoff Reduction was used to show that this area has 100% WQCV



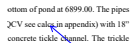
Subject: SW - Textbox with Arrow
Page Index: 18
Date: 4/7/2022 2:31:09 PM
Author: EPC Stormwater - Glenn Reese
Color: 
Layer:
Space:
Page Label: 18


Still need to show calcs for this basin on pdf pg 196.



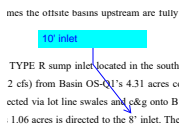
Subject: Callout
Page Index: 18
Date: 4/20/2022 4:43:51 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 18


10' inlet per calculations in appendix



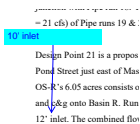
Subject: Callout
Page Index: 19
Date: 4/20/2022 4:49:31 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 19


Calculations for forebay missing in appendix



Subject: Callout
Page Index: 20
Date: 4/20/2022 4:50:26 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 20

10' inlet



Subject: Callout
Page Index: 21
Date: 4/20/2022 4:57:13 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 21

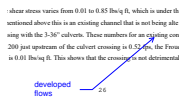
10' inlet

and diversion of OS-2 flows to a point higher in the channel



Areas above 0.9 (and $V > 5$) need to be identified and if necessary, stabilized.

n existing




developed flows

e exception of Lot 45 w



This lot needs to be adjusted to be out of the
calculated floodplain




Subject:
Page Index: 27
Date: 4/22/2022 9:33:06 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 27

PS


28 (2)

water storm routes the flows to a manhole junction routes the combined flow ($Q_1 = 4$ cfs, $Q_{10} = 1$ cfs) east down Muddy Pond Street to a manhole junction Point 21 is a proposed 10' CDOT TYPE 1 Street just east of Masonboro Way intersection.

Subject: Highlight
Page Index: 28
Date: 4/21/2022 7:47:54 AM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 28

east down Muddy Pond Street


the flows to a manhole junction with Pipe 1 sized flow ($Q_1 = 4$ cfs, $Q_{10} = 9$ cfs) of Pipe 1 Muddy Pond Street to a manhole junction with Pipe 2.
delete repeated text
exposed 10' CDOT TYPE R at-grade inlet for Masonboro Way intersection. Runoff ($Q_1 = 1$ cfs) consists of undeveloped land and will sheet flow.

Subject: Callout
Page Index: 28
Date: 4/21/2022 7:48:07 AM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 28

delete repeated text


30 (3)

Figure 3-1: SW - Highlight
This area is not treated for water quality but is accounted for using Runoff Reduction as mentioned in the MDDP.

Subject: SW - Highlight
Page Index: 30
Date: 4/7/2022 2:32:18 PM
Author: EPC Stormwater - Glenn Reese
Color: 
Layer:
Space:
Page Label: 30


This area is not treated for water quality but is accounted for using Runoff Reduction as mentioned in the MDDP

Figure 3-2: SW - Textbox with Arrow
Still need to show calcs for this basin on pdf pg 196.

Subject: SW - Textbox with Arrow
Page Index: 30
Date: 4/7/2022 2:32:34 PM
Author: EPC Stormwater - Glenn Reese
Color: 
Layer:
Space:
Page Label: 30

Still need to show calcs for this basin on pdf pg 196.


Figure 3-3: Text Box
Include discussion for maintenance & easements for all swales.

Subject: Text Box
Page Index: 30
Date: 4/21/2022 8:13:14 AM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 30


Include discussion for maintenance & easements for all swales.

31 (3)

mercial BMP's- The proposed deve
Commercial BMPs have been prop
diversion
Basin and Geick Ranch Basin. Th
1 fees for Geick Ranch Basin. At th


Subject: Callout
Page Index: 31
Date: 4/22/2022 9:34:18 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 31

diversion

Subject:
Page Index: 31
Date: 4/22/2022 9:34:36 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 31

At the time of the Final
Drainage Report Basin fee calculations will be
done for the portion in the Haegler Ranch Basin.


...therefore, no Industrial and Commercial BMPs have been proposed.
18
in the Haegler Ranch Drainage Basin and Geick Ranch Basin. There is no ap
among map on the basin with fees for Geick Ranch Basin. For the basin with
basin fee calculations will be done for the portion in the Haegler Ranch Bas
Blue comment
on page 7
new drain and apertures associated with the development of the Wa
we will not adversely affect the surrounding and downstream developments. I
be existing and proposed diversion basins and reduce the runoff to be at or
basin of storm in the region via Full-Function Diversion while clearly meet
any volume and is now helping to establish the downstream channel bank.

Subject: Callout
Page Index: 31
Date: 4/22/2022 9:35:42 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 31

See comment on page 7

54 (1)


Missing Basin
OS-9 as shown
on basin map.
Please include

Subject: Text Box
Page Index: 54
Date: 4/19/2022 12:11:09 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 54

Missing Basin OS-9 as shown on basin map.
Please include

55 (1)

Design Points
EX10 , 9 and 13
are shown on
drainage map but
are missing from
table. Please
include.


Subject: Text Box
Page Index: 55
Date: 4/19/2022 12:10:42 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 55

Design Points EX10 , 9 and 13 are shown on
drainage map but are missing from table. Please
include.

62 (1)

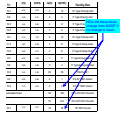
1" Type III Storm Sewer
1" Type III Storm Sewer
1" Type III Storm Sewer
RSD Project
12" 30" RCP
12" 30" RCP
12" 30" RCP
12" 30" RCP
12" 30" RCP
12" 30" RCP

Report that culverts
listed as RCP.
Confirm material type

Subject: Callout
Page Index: 62
Date: 4/19/2022 1:31:49 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 62

Report has culverts listed as RCP - Confirm
material type

74 (1)



Flow doesn't match with Basin O1

Subject: Callout
Page Index: 74
Date: 4/20/2022 2:45:51 PM
Author: CDurham
Color:
Layer:
Space:
Page Label: 74

How did these flows change from MDDP if no change to basin.

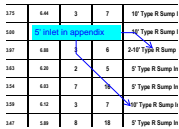
76 (3)



Flow doesn't match with Basin O1

Subject: Callout
Page Index: 76
Date: 4/20/2022 2:46:41 PM
Author: CDurham
Color:
Layer:
Space:
Page Label: 76

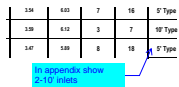
Flow doesn't match with Basin O1



5' inlet in appendix

Subject: Callout
Page Index: 76
Date: 4/20/2022 2:50:29 PM
Author: CDurham
Color:
Layer:
Space:
Page Label: 76

5' inlet in appendix

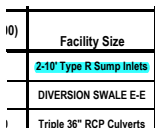


In appendix show 2-10' inlets

Subject: Callout
Page Index: 76
Date: 4/20/2022 2:50:57 PM
Author: CDurham
Color:
Layer:
Space:
Page Label: 76

In appendix show 2-10' inlets

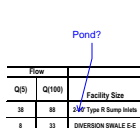
77 (4)



2-10' Type R Sump Inlets

Subject:
Page Index: 77
Date: 4/22/2022 12:21:45 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 77

2-10' Type R Sump Inlets




Pond?

Subject: Callout
Page Index: 77
Date: 4/22/2022 12:22:03 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 77

Pond?


Why so much lower than MHFD sheet?

Summary		Intensity		Flow		Facility
IS	IS100	Q(1)	Q(100)	IS	IS100	
1.47	1.48	15	3	2.17	2.18	2.17 Type 1.5
1.47	1.48	1	1	1	1	OVERSIC 8

Subject: Callout
Page Index: 77
Date: 4/22/2022 12:22:27 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 77

Why so much lower than MHFD sheet?


5.20

Subject:
Page Index: 77
Date: 4/22/2022 12:22:46 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 77

5.20

84 (1)


Segment	Velocity	Flow	Velocity	Flow
Run	ft/s	cfs	ft/s	cfs
1	0.000	0.000	0.000	0.000
2	0.000	0.000	0.000	0.000
3	0.000	0.000	0.000	0.000
4	0.000	0.000	0.000	0.000
5	0.000	0.000	0.000	0.000
6	0.000	0.000	0.000	0.000
7	0.000	0.000	0.000	0.000
8	0.000	0.000	0.000	0.000
9	0.000	0.000	0.000	0.000
10	0.000	0.000	0.000	0.000
11	0.000	0.000	0.000	0.000
12	0.000	0.000	0.000	0.000
13	0.000	0.000	0.000	0.000
14	0.000	0.000	0.000	0.000
15	0.000	0.000	0.000	0.000
16	0.000	0.000	0.000	0.000
17	0.000	0.000	0.000	0.000
18	0.000	0.000	0.000	0.000
19	0.000	0.000	0.000	0.000
20	0.000	0.000	0.000	0.000
21	0.000	0.000	0.000	0.000
22	0.000	0.000	0.000	0.000
23	0.000	0.000	0.000	0.000
24	0.000	0.000	0.000	0.000
25	0.000	0.000	0.000	0.000
26	0.000	0.000	0.000	0.000
27	0.000	0.000	0.000	0.000
28	0.000	0.000	0.000	0.000
29	0.000	0.000	0.000	0.000
30	0.000	0.000	0.000	0.000
31	0.000	0.000	0.000	0.000
32	0.000	0.000	0.000	0.000
33	0.000	0.000	0.000	0.000
34	0.000	0.000	0.000	0.000
35	0.000	0.000	0.000	0.000
36	0.000	0.000	0.000	0.000
37	0.000	0.000	0.000	0.000
38	0.000	0.000	0.000	0.000
39	0.000	0.000	0.000	0.000
40	0.000	0.000	0.000	0.000
41	0.000	0.000	0.000	0.000
42	0.000	0.000	0.000	0.000
43	0.000	0.000	0.000	0.000
44	0.000	0.000	0.000	0.000
45	0.000	0.000	0.000	0.000
46	0.000	0.000	0.000	0.000
47	0.000	0.000	0.000	0.000
48	0.000	0.000	0.000	0.000
49	0.000	0.000	0.000	0.000
50	0.000	0.000	0.000	0.000
51	0.000	0.000	0.000	0.000
52	0.000	0.000	0.000	0.000
53	0.000	0.000	0.000	0.000
54	0.000	0.000	0.000	0.000
55	0.000	0.000	0.000	0.000
56	0.000	0.000	0.000	0.000
57	0.000	0.000	0.000	0.000
58	0.000	0.000	0.000	0.000
59	0.000	0.000	0.000	0.000
60	0.000	0.000	0.000	0.000
61	0.000	0.000	0.000	0.000
62	0.000	0.000	0.000	0.000
63	0.000	0.000	0.000	0.000
64	0.000	0.000	0.000	0.000
65	0.000	0.000	0.000	0.000
66	0.000	0.000	0.000	0.000
67	0.000	0.000	0.000	0.000
68	0.000	0.000	0.000	0.000
69	0.000	0.000	0.000	0.000
70	0.000	0.000	0.000	0.000
71	0.000	0.000	0.000	0.000
72	0.000	0.000	0.000	0.000
73	0.000	0.000	0.000	0.000
74	0.000	0.000	0.000	0.000
75	0.000	0.000	0.000	0.000
76	0.000	0.000	0.000	0.000
77	0.000	0.000	0.000	0.000
78	0.000	0.000	0.000	0.000
79	0.000	0.000	0.000	0.000
80	0.000	0.000	0.000	0.000
81	0.000	0.000	0.000	0.000
82	0.000	0.000	0.000	0.000
83	0.000	0.000	0.000	0.000
84	0.000	0.000	0.000	0.000
85	0.000	0.000	0.000	0.000
86	0.000	0.000	0.000	0.000
87	0.000	0.000	0.000	0.000
88	0.000	0.000	0.000	0.000
89	0.000	0.000	0.000	0.000
90	0.000	0.000	0.000	0.000
91	0.000	0.000	0.000	0.000
92	0.000	0.000	0.000	0.000
93	0.000	0.000	0.000	0.000
94	0.000	0.000	0.000	0.000
95	0.000	0.000	0.000	0.000
96	0.000	0.000	0.000	0.000
97	0.000	0.000	0.000	0.000
98	0.000	0.000	0.000	0.000
99	0.000	0.000	0.000	0.000
100	0.000	0.000	0.000	0.000

Subject: Callout
Page Index: 84
Date: 4/20/2022 7:54:53 AM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 84

Flow is 38 cfs per hydrology spreadsheet

104 (1)


or see my 2-minute tutorial for stanc
 Missing pipe runs for 10A, 10B & 10C

Subject: Text Box
Page Index: 104
Date: 4/20/2022 2:00:53 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 104

Missing pipe runs for 10A, 10B & 10C

106 (1)


Missing sheet for Pipe Run 12.
 Please delete whichever one is not needed.

Subject: Text Box
Page Index: 106
Date: 4/20/2022 8:14:52 AM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 106

Duplicate sheet for Pipe Run 12. Please delete whichever one is not needed.

111 (1)


Missing pipe run for 17A

Subject: Text Box
Page Index: 111
Date: 4/20/2022 2:01:23 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 111

Missing pipe run for 17A

137 (1)


Determina
object: [Timberridge Estates](#)
sin ID: [Design Point 11- Dual 42"](#)

Subject:
Page Index: 137
Date: 4/22/2022 11:04:28 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 137

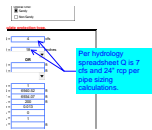
Timberridge Estates
Design Point 11- Du


139 (3)

Missing Culvert
Stage-Discharge
Sizing sheet with
graph. Please add
back in.

Subject: Text Box
Page Index: 139
Date: 4/20/2022 9:18:02 AM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 139


Missing Culvert Stage-Discharge Sizing sheet with
graph. Please add back in.



Subject: Callout
Page Index: 139
Date: 4/20/2022 9:19:18 AM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 139

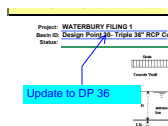
Per hydrology spreadsheet Q is 7 cfs and 24" rcp
per pipe sizing calculations.


Determina
object: [Timberridge Estates](#)
sin ID: [Design Point 12- 18" RCP](#)

Subject:
Page Index: 139
Date: 4/22/2022 11:04:14 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 139

Timberridge Estates

140 (1)




Subject: Callout
Page Index: 140
Date: 4/20/2022 9:20:22 AM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 140

Update to DP 36

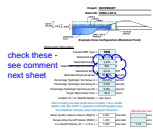
167 (1)

Do not include SDI
sheets in the report.
Design Data Sheet
Worksheet Protected

Subject: Text Box
Page Index: 167
Date: 4/22/2022 11:08:06 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 167

Do not include SDI sheets in the report.

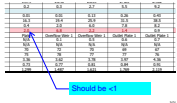
169 (1)



Subject: Cloud+
Page Index: 169
Date: 4/22/2022 11:13:13 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 169

check these - see comment next sheet

171 (2)



Subject: Callout
Page Index: 171
Date: 4/20/2022 9:38:05 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: 171

Should be <1



Subject: Callout
Page Index: 171
Date: 4/22/2022 11:34:41 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 171

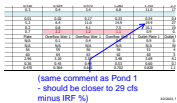
59 calculated - check sheet input to approximate that minus IRF %

175 (1)



Subject:
Page Index: 175
Date: 4/22/2022 11:15:09 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 175

179 (1)



Subject: Callout
Page Index: 179
Date: 4/22/2022 11:35:02 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 179

(same comment as Pond 1 - should be closer to 29 cfs minus IRF %)

182 (1)




Subject: Callout
Page Index: 182
Date: 4/22/2022 11:25:44 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 182

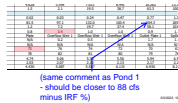
Delete duplicate sheets or relabel if this is different


188 (1)



Subject:
Page Index: 188
Date: 4/22/2022 11:27:12 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 188

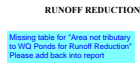
192 (1)




Subject: Callout
Page Index: 192
Date: 4/22/2022 11:34:25 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 192

(same comment as Pond 1 - should be closer to 88 cfs minus IRF %)

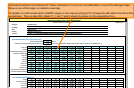
195 (1)




Subject: Text Box
Page Index: 195
Date: 4/20/2022 9:41:14 AM
Author: CDurham
Color: 
Layer:
Space:
Page Label: 195

Missing table for "Area not tributary to WQ Ponds for Runoff Reduction" Please add back into report


196 (2)



Subject: Contractor
Page Index: 196
Date: 4/7/2022 2:33:29 PM
Author: EPC Stormwater - Glenn Reese
Color: 
Layer:
Space:
Page Label: 196

Unresolved comment from Review #2: These sub-basins of I and J are not delineated on any of the drainage maps. Show on one of the maps, or created a new map.

V3 Update: it is still unclear which UIA/RPA region on the map (on pdf pg 277) corresponds with which Area ID on this spreadsheet. There is also RR in Basin P, V, and Y which should be shown on this spreadsheet too...

Subject: SW - Rectangle
Page Index: 196
Date: 4/7/2022 12:57:31 PM
Author: EPC Stormwater - Glenn Reese
Color: 
Layer:
Space:
Page Label: 196

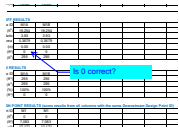
197 (2)



Subject: Contractor
Page Index: 197
Date: 4/7/2022 2:34:03 PM
Author: EPC Stormwater - Glenn Reese
Color: ■
Layer:
Space:
Page Label: 197

Unresolved comment from Review #2: These sub-basins of M are not delineated on any of the drainage maps. Show on one of the maps, or created a new map.

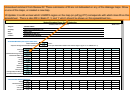
V3 Update: it is still unclear which UIA/RPA region on the map (on pdf pg 277) corresponds with which Area ID on this spreadsheet. There is also RR in Basin P, V, and Y which should be shown on this spreadsheet too...



Subject: Callout
Page Index: 197
Date: 4/20/2022 9:42:38 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: 197

Is 0 correct?

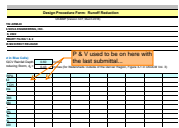
198 (2)



Subject: Contractor
Page Index: 198
Date: 4/7/2022 2:34:21 PM
Author: EPC Stormwater - Glenn Reese
Color: ■
Layer:
Space:
Page Label: 198

Unresolved comment from Review #2: These sub-basins of M are not delineated on any of the drainage maps. Show on one of the maps, or created a new map.

V3 Update: it is still unclear which UIA/RPA region on the map (on pdf pg 277) corresponds with which Area ID on this spreadsheet. There is also RR in Basin P, V, and Y which should be shown on this spreadsheet too...



Subject: SW - Textbox with Arrow
Page Index: 198
Date: 4/7/2022 4:54:00 PM
Author: EPC Stormwater - Glenn Reese
Color: ■
Layer:
Space:
Page Label: 198

P & V used to be on here with the last submittal...

201 (1)

6964.11	R
6964.11	F
0.018200	A

Subject:
Page Index: 201
Date: 4/22/2022 11:39:02 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 201

6964.11


202 (3)

6962.32	R
6962.32	F
0.016174	A

Subject:
Page Index: 202
Date: 4/22/2022 11:39:30 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 202


6962.32

6959.60	R
6959.60	F
0.016348	A

Subject:
Page Index: 202
Date: 4/22/2022 11:39:44 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 202

6959.60


6955.67	R
6955.58	F
0.010768	A

Subject:
Page Index: 202
Date: 4/22/2022 11:39:53 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 202

6955.58


203 (3)

6954.37	R
6954.37	F
0.015744	A

Subject:
Page Index: 203
Date: 4/22/2022 11:40:10 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 203


6954.37

6951.49	R
6951.49	F
0.014715	A

Subject:
Page Index: 203
Date: 4/22/2022 11:40:14 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 203

6951.49


6949.19	R
6949.19	F
0.013784	A

Subject:
Page Index: 203
Date: 4/22/2022 11:40:21 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 203

6949.19

204 (2)


6944.86	R
6944.86	F
0.016056	A

Subject:
Page Index: 204
Date: 4/22/2022 11:41:18 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 204

6944.86


207 (3)

6929.52	R
6929.52	F
0.015820	A

Subject:
Page Index: 207
Date: 4/22/2022 11:44:09 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 207


6929.52

6926.98	R
6926.98	F
0.014589	A

Subject:
Page Index: 207
Date: 4/22/2022 11:44:13 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 207

6926.98


6924.27	R
6924.27	F
0.013593	A

Subject:
Page Index: 207
Date: 4/22/2022 11:44:19 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 207

6924.27


208 (1)


6921.37	R
6921.37	F
0.014171	A


Subject:
Page Index: 208
Date: 4/22/2022 11:49:32 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 208


6921.37

209 (6)


1.02	
0.81	

Subject:
Page Index: 209
Date: 4/22/2022 11:52:20 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 209


0.81	
1.02	
0.99	
1.01	
0.86	
0.99	

Subject:
Page Index: 209
Date: 4/22/2022 11:52:17 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 209


1.01
0.86
0.99
1.02
1.01
0.84
1.00

Subject:
Page Index: 209
Date: 4/22/2022 11:52:13 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 209

102.96	0.80
129.67	0.99
144.97	1.08
153.92	0.99
174.79	1.02
55.48	1.00
58.43	1.01
60.36	1.01
61.67	0.96


Subject:
Page Index: 209
Date: 4/22/2022 11:52:24 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 209

1.01
0.84
1.00
1.02
1.00
0.07

Subject:
Page Index: 209
Date: 4/22/2022 11:52:09 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 209

1.01	0.84	1.00
1.02	1.00	0.07

Stabilization /
modification needs to
be provided where
flows are supercritical


Subject: Callout
Page Index: 209
Date: 4/22/2022 11:53:34 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 209

Stabilization / modification needs to be provided
where flows are supercritical

226 (1)

an pr	Plan: Plan 01	3/8/2022
-------	---------------	----------


provide station
labels

Subject: Callout
Page Index: 226
Date: 4/22/2022 11:54:49 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 226


provide station labels

235 (2)

6967.61
6967.61
0.018361


Subject:
Page Index: 235
Date: 4/22/2022 11:55:30 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 235

6964.11	F
6964.11	F
0.018200	A


Subject:
Page Index: 235
Date: 4/22/2022 11:55:37 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 235

243 (8)

0.99
0.92
1.00
0.93

Subject:
Page Index: 243
Date: 4/22/2022 11:57:02 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 243

0.71
1.01
1.02
0.62
1.01

Subject:
Page Index: 243
Date: 4/22/2022 11:56:59 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 243


0.62
1.01
0.69

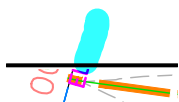
Subject:
Page Index: 243
Date: 4/22/2022 11:56:57 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 243


0.69
1.02
1.01
0.89

Subject:
Page Index: 243
Date: 4/22/2022 11:56:38 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 243


0.96
0.26

Subject:
Page Index: 243
Date: 4/22/2022 11:56:33 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 243




Subject:
Page Index: 270
Date: 4/21/2022 6:10:49 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1




Subject:
Page Index: 270
Date: 4/21/2022 6:10:59 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1




Subject:
Page Index: 270
Date: 4/21/2022 6:11:46 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1

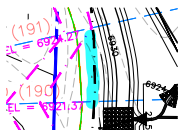



Subject: Callout
Page Index: 270
Date: 4/21/2022 6:13:31 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1

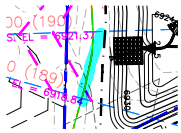
Are contours missing?




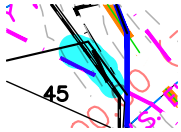
Subject:
Page Index: 270
Date: 4/21/2022 6:14:24 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1




Subject:
Page Index: 270
Date: 4/21/2022 6:14:40 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1




Subject:
Page Index: 270
Date: 4/21/2022 6:15:04 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1

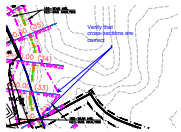



Subject:
Page Index: 270
Date: 4/21/2022 6:17:17 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1



Subject: Callout
Page Index: 270
Date: 4/21/2022 6:17:32 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1

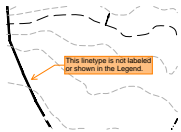
Adjust lot to be out of floodplain




Subject: Callout
Page Index: 270
Date: 4/22/2022 12:00:30 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1

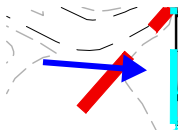
Verify that cross-sections are correct


273 (3)

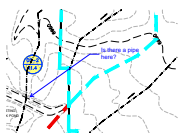


Subject: SW - Textbox with Arrow
Page Index: 273
Date: 4/7/2022 1:56:52 PM
Author: EPC Stormwater - Glenn Reese
Color: 
Layer:
Space:
Page Label: [1] EX 2

This linetype is not labeled or shown in the Legend.



Subject: Arrow
Page Index: 273
Date: 4/22/2022 9:22:38 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] EX 2



Subject: Callout
Page Index: 273
Date: 4/22/2022 9:25:06 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: [1] EX 2

Is there a pipe here?

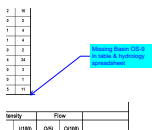
274 (1)



Subject: Callout
Page Index: 274
Date: 4/20/2022 9:50:36 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] EGP 1

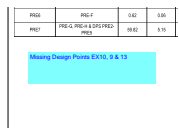
Show spillway location

275 (2)



Subject: Callout
Page Index: 275
Date: 4/20/2022 10:24:48 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] EGP 2

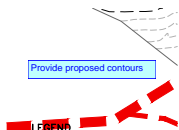
Missing Basin OS-9 in table & hydrology spreadsheet



Subject: Text Box
Page Index: 275
Date: 4/20/2022 10:25:20 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] EGP 2

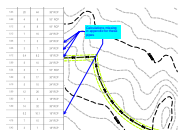
Missing Design Points EX10, 9 & 13

276 (9)



Subject: Text Box
Page Index: 276
Date: 4/20/2022 9:52:49 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] PROP 1


Provide proposed contours




Subject: Callout
Page Index: 276
Date: 4/20/2022 1:57:02 PM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] PROP 1

Calculations missing in appendix for these pipes


18" RCP
24" RCP
18" RCP

Subject: Highlight
Page Index: 276
Date: 4/20/2022 1:58:13 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1


24" RCP
30" RCP

Subject: Highlight
Page Index: 276
Date: 4/20/2022 1:58:19 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1


24" RCP
18" RCP

Subject: Highlight
Page Index: 276
Date: 4/20/2022 1:58:25 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1


42" RCP
18" RCP
18" RCP

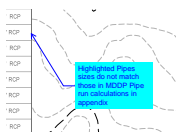
Subject: Highlight
Page Index: 276
Date: 4/20/2022 1:58:41 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

18" RCP
30" RCP

Subject: Highlight
Page Index: 276
Date: 4/20/2022 1:58:46 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

18" RCP
24" RCP
18" RCP

Subject: Highlight
Page Index: 276
Date: 4/20/2022 1:58:58 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1



Subject: Callout
Page Index: 276
Date: 4/20/2022 1:59:32 PM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] PROP 1

Highlighted Pipes sizes do not match those in MDDP Pipe run calculations in appendix

277 (4)



Subject: SW - Textbox with Arrow
Page Index: 277
Date: 4/7/2022 5:08:28 PM
Author: EPC Stormwater - Glenn Reese
Color: ■
Layer:
Space:
Page Label: [1] PROP 2

Note that all RPA areas will need to be within a no build/drainage easement and discussed in the maintenance agreement and O&M manual. Also make sure to show the limits of the RPA's on GEC Plans (not just FDR) so our SW inspectors and the QSM know that these areas are to remain pervious and vegetated post-construction. Update the O&M Manual accordingly and provide a Maintenance Agreement.

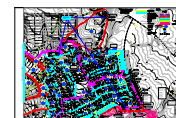


Subject: SW - Textbox with Arrow
Page Index: 277
Date: 4/7/2022 5:07:16 PM
Author: EPC Stormwater - Glenn Reese
Color: ■
Layer:
Space:
Page Label: [1] PROP 2

Still unresolved:
It is still unclear which areas throughout the site are to be excluded from WQ treatment. For example, it appears that these three areas are to be graded but are not tributary to a pond or a runoff reduction area. Clarify which exclusion(s) apply to each area. It is really helpful to have a WQ-specific map such as the example provided below. It has different colors for each tributary area to each pond and for the different exclusions (Exclusion D for utilities, Exclusion G for land disturbance to undeveloped land that will remain undeveloped, and up to 20% not to exceed 1ac of the site can be excluded from WQ treatment.



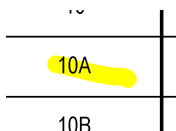
Subject: Image
Page Index: 277
Date: 4/7/2022 5:07:13 PM
Author: EPC Stormwater - Glenn Reese
Color: ■
Layer:
Space:
Page Label: [1] PROP 2



Subject: Callout
Page Index: 277
Date: 4/20/2022 9:55:49 AM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] PROP 2


Consider moving overflow spillways north (less drop to channels)

278 (17)




Subject: Highlight
Page Index: 278
Date: 4/20/2022 2:20:53 PM
Author: CDurham
Color: ■
Layer:
Space:
Page Label: [1] PROP 1


10B
10C

Subject: Highlight
Page Index: 278
Date: 4/20/2022 2:20:54 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

10B
10C
11


Subject: Highlight
Page Index: 278
Date: 4/20/2022 2:20:59 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

Missing pipe run calculations in appendix
7
8
9
10
10A
10B
10C
11
12


Subject: Callout
Page Index: 278
Date: 4/20/2022 2:21:36 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

Missing pipe run calculations in appendix


18" RCP
24" RCP
18" RCP

Subject: Highlight
Page Index: 278
Date: 4/20/2022 2:21:59 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1


24" RCP
30" RCP
36" RCP

Subject: Highlight
Page Index: 278
Date: 4/20/2022 2:22:04 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

24" RCP
18" RCP
30" RCP


Subject: Highlight
Page Index: 278
Date: 4/20/2022 2:22:10 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

24" RCP

Subject: Highlight
Page Index: 278
Date: 4/20/2022 2:22:18 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

18" RCP


36" RCP

Subject: Highlight
Page Index: 278
Date: 4/20/2022 2:22:29 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

42" RCP


18" RCP

18" RCP

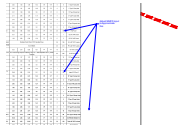
Subject: Highlight
Page Index: 278
Date: 4/20/2022 2:22:35 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1


Type Size	BAOR	CA(2)	CA(100)	SDI	Imp	dt
18" RCP	8	1.52	2.03	0.26	5	
24" RCP	11	1.53	1.36	0.26	5	
30" RCP	12	1.52	0.93	0.26	5	
36" RCP	13	1.52	0.68	0.26	5	
42" RCP	14	1.52	0.51	0.26	5	
48" RCP	15	1.52	0.40	0.26	5	
54" RCP	16	1.52	0.32	0.26	5	
60" RCP	17	1.52	0.26	0.26	5	
66" RCP	18	1.52	0.21	0.26	5	
72" RCP	19	1.52	0.17	0.26	5	

Highlighted pipe sizes do not match pipe sizes in appendix

Subject: Callout
Page Index: 278
Date: 4/20/2022 2:22:58 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

Highlighted pipe sizes do not match pipe sizes in appendix




Subject: Callout
Page Index: 278
Date: 4/22/2022 11:38:09 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 1

Adjust MHFD input to approximate this


mp Inlets
mp Inlets
mp Inlets
mp Inlets
VALE E-E
Culverts

Pond 3?


Subject: Callout
Page Index: 278
Date: 4/22/2022 11:32:02 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 1

Pond 3?


	10' Type R Sump Inlets
	5' Type R Sump Inlets
	2-10' Type R Sump Inlets

Subject:
Page Index: 278
Date: 4/22/2022 12:14:54 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 1


8	5' Type R Sump Inl
18	2-10' Type R Sump Inl
13	DIVERSION SWALE

Subject:
Page Index: 278
Date: 4/22/2022 12:14:57 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 1

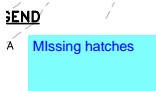
6	5' Type R Sump Inl
7	10' Type R Sump Inl
8	5' Type R Sump Inl


Subject:
Page Index: 278
Date: 4/22/2022 12:15:46 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 1

6	5' Type R Sump Inl
6	5' Type R Sump Inl
7	10' Type R Sump Inl

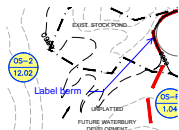
Subject:
Page Index: 278
Date: 4/22/2022 12:15:55 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 1


279 (8)



Subject: Text Box
Page Index: 279
Date: 4/20/2022 2:51:35 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 2


Missing hatches

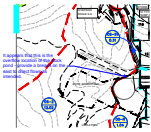



Subject: Callout
Page Index: 279
Date: 4/22/2022 9:12:48 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 2

Label berm




Subject: Arrow
Page Index: 279
Date: 4/22/2022 9:13:06 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 2



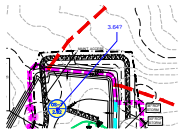
Subject: Callout
Page Index: 279
Date: 4/22/2022 9:13:38 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 2


It appears that this is the overflow location of the stock pond - provide a breach on the east to direct flows as intended.



Subject:
Page Index: 279
Date: 4/22/2022 12:15:27 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 2


6



Subject: Callout
Page Index: 279
Date: 4/22/2022 12:25:53 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 2


3.64?



Subject: Callout
Page Index: 279
Date: 4/22/2022 12:27:25 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 2

These flows should be per calculations. Label MHFD flows separately if you want to add them as well.



Subject: Callout
Page Index: 279
Date: 4/22/2022 12:27:44 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] PROP 2

These flows should be per calculations. Label MHFD flows separately if you want to add them as well.