

ENG-PUDSP21005-R3-PDR.pdf Markup Summary

1 (1)

See
comment
letter also

Subject: Text Box
Page Index: 1
Date: 4/22/2022 12:19:19 PM
Author: dsdrice
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See comment letter also

5 (5)

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be

Subject: Text Box
Page Index: 5
Date: 4/18/2022 4:13:41 PM
Author: CDurham
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Haegler

the Hagler

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Page Index: 5
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Author: CDurham
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Haegler

IFRCS
south of 61.93 acres and is part of a larger development of 33
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 char

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198 total on updated plan

es 93 sir

Subject:
Page Index: 5
Date: 4/21/2022 6:06:37 PM
Author: dsdrice
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93

th 108 si

Subject:
Page Index: 5
Date: 4/21/2022 6:08:26 PM
Author: dsdrice
Color: ■
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Page Label: 5

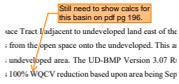
108

18 (3)



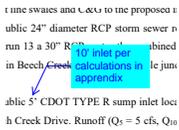
Subject: SW - Highlight
Page Index: 18
Date: 4/7/2022 2:30:37 PM
Author: EPC Stormwater - Glenn Reese
Color: ■
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The UD-BMP Version 3.07 Runoff Reduction was used to show that this area has 100% WQCV



Subject: SW - Textbox with Arrow
Page Index: 18
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Author: EPC Stormwater - Glenn Reese
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Page Label: 18

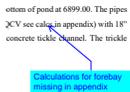
Still need to show calcs for this basin on pdf pg 196.



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

10' inlet per calculations in appendix

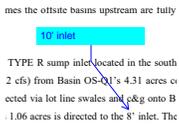
19 (1)



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

Calculations for forebay missing in appendix

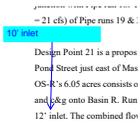
20 (1)



Subject: Callout
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Date: 4/20/2022 4:50:26 PM
Author: CDurham
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Page Label: 20

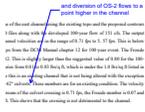
10' inlet

21 (1)



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

10' inlet



Subject: Callout
Page Index: 26
Date: 4/22/2022 9:27:59 AM
Author: dsdrice
Color: ■
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Page Label: 26

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



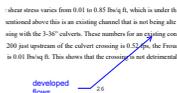
Subject: Callout
Page Index: 26
Date: 4/22/2022 9:30:05 AM
Author: dsdrice
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Areas above 0.9 (and V>5) need to be identified and if necessary, stabilized.

it is not being alter
or an existing con
.52 fps, the Frouc

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n existing



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Date: 4/22/2022 9:31:18 AM
Author: dsdrice
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developed flows

on grades are set above the adjacent
e all set out side of the FEMA Flood
. The lots along the east channel are
with the exception of Lot 45 where tl
but the building setback is set out si

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e exception of Lot 45 w



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

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PS

28 (2)

eter storm routes the flows to a manhole ju
n routes the combined flow (Q₁ = 4 cfs, Q₁₀
J Street **east down Muddy Pond Street** to a m

gn Point 21 is a proposed 10' CDOT TYPE I
J Street just east of Masonboro Way intersec

Subject: Highlight
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Author: CDurham
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east down Muddy Pond Street

the flows to a manhole junction with Pipe r
sined flow (Q₁ = 4 cfs, Q₁₀ = 9 cfs) of Pipe
Muddy Pond Street to a manhole junction wi
delete repeated text
exposed 10' CDOT TYPE R at-grade inlet lo
of Masonboro Way intersection. Runoff (Q₁)
sists of undeveloped land and will sheet flow

Subject: Callout
Page Index: 28
Date: 4/21/2022 7:48:07 AM
Author: CDurham
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delete repeated text

30 (3)

Reduction as mentioned in the MDDP discussion mentioned above. After entering the channe

Subject: SW - Highlight
Page Index: 30
Date: 4/7/2022 2:32:18 PM
Author: EPC Stormwater - Glenn Reese
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This area is not treated for water quality but is accounted for using Runoff Reduction as mentioned in the MDDP

min 2' deep swale with 4:1 side-slopes. The 100-Y highwater depth in the
to the water.
need to show calcs for this basin on pdf pg 196
single 36" RCP culvert (10' long) under Station Master Road. Offsets Bas
Basin Basin O/S-1. Basin O/S-1 = 1 cfs, Q₁₀ = 19 cfs from Basin O/S-1's
area. Basin Basin O/S-2. Basin O/S-2 = 1 cfs, Q₁₀ = 19 cfs from Basin O/S-2's
pond land and open area containing the natural channel. Basin O/S-3 =
Basin O/S-3 is designed to drain through the wetlands to the culverts. Basin O/S-4
undeveloped open space. Basin O/S-4 is adjacent to the existing natural channel.
Basin O/S-5 = 1 cfs, Q₁₀ = 2 cfs from Basin O/S-5 about flows from its
Inlet. This flow is not treated for water quality but is accounted for as menti
ned in the MDDP discussion mentioned above. After entering the channe

Subject: SW - Textbox with Arrow
Page Index: 30
Date: 4/7/2022 2:32:34 PM
Author: EPC Stormwater - Glenn Reese
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Still need to show calcs for this basin on pdf pg 196.

Reduction as mentioned in the MDDP discussion mentioned above. After entering the channe
Diversion Swale E-E. The combin
OS-8, OS-9, & Y will be safety
Include discussion for maintenance & easements for all swales. Basin
safety routed through the proposed

Subject: Text Box
Page Index: 30
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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
fees for Geick Ranch Basin. At th

Subject: Callout
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diversion

Subject:
Page Index: 31
Date: 4/22/2022 9:34:36 AM
Author: dsdrice
Color: ■
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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.

Industrial and Commercial BMPs have been proposed
in the Haegler Ranch Drainage Basin and Geick Ranch Basin. There is no way
among which to fit these with fees for Geick Ranch Basin. In the time of the
basin fee calculations will be done for the portion in the Haegler Ranch Basin
See comment
on page 7
with their and appearance associated with the development of the W
we will not submit until the necessary and development is complete. I
be existing and proposed diversion basins and reduce the runoff to be at or
basin of the basin in the upper 100 ft. However, diversion will directly result
we reduce and do not help to stabilize the downstream channel banks.

Subject: Callout
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Author: dsdrice
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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: ■
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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: ■
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Page Label: 55

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

62 (1)

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

Report has culverts listed as RCP - Confirm
material type

Flow	Q20	Q200	Facility Size
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet

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

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

Flow	Q20	Q200	Facility Size
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet

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

Flow	Q20	Q200	Facility Size
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet

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

5' inlet in appendix

Flow	Q20	Q200	Facility Size
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet

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

In appendix show 2-10' inlets

Flow	Q20	Q200	Facility Size
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet

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

2-10' Type R Sump Inlets

Flow	Q20	Q200	Facility Size
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet
100	1	1	10' Type R Sump Inlet

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

Pond?

Why so much lower than MHFD sheet?

SUMMARY					
	Intensity	Flow	Q10	Q100	Facility
1	1.57	1.00	33	33	2-1/2" Type II
2	1.57	1.00	33	33	OVERSICKE

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

5.20

84 (1)

segment	Velocity	Flow	Velocity	Flow	Facility
1	0.001973	38.000	0.001973	38.000	2-1/2" Type II

Flow is 38 cfs per hydrology spreadsheet

Subject: Callout
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Author: CDurham
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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: ■
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Page Label: 104

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

106 (1)

Duplicate 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: ■
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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: ■
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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:
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Page Label: 137

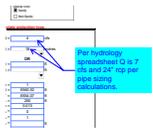
Timberridge Estates
Design Point 11- Du

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
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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: 
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Page Label: 139

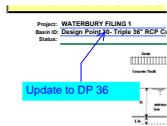
Per hydrology spreadsheet Q is 7 cfs and 24" rcp per pipe sizing calculations.

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
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Page Label: 139

Timberridge Estates

140 (1)



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

Update to DP 36

167 (1)

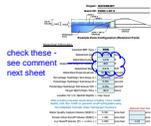
Do not include SDI
sheets in the report.

Design Data Sheet

Subject: Text Box
Page Index: 167
Date: 4/22/2022 11:08:06 AM
Author: dsdrice
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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
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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: ■
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Page Label: 171

Should be <1



Subject: Callout
Page Index: 171
Date: 4/22/2022 11:34:41 AM
Author: dsdrice
Color: ■
Layer:
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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:
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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: ■
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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: 
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Page Label: 188

192 (1)



Subject: Callout
Page Index: 192
Date: 4/22/2022 11:34:25 AM
Author: dsdrice
Color: 
Layer:
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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
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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: 
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Page Label: 196

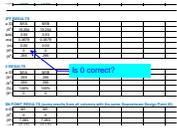
197 (2)



Subject: Contractor
Page Index: 197
Date: 4/7/2022 2:34:03 PM
Author: EPC Stormwater - Glenn Reese
Color: ■
Layer:
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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
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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:
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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: ■
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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:
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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:
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Page Label: 202

6962.32

6959.60	R	Subject:	6959.60
6959.60	F	Page Index: 202	
0.016348	A	Date: 4/22/2022 11:39:44 AM	
		Author: dsdrice	
		Color: ■	
		Layer:	
		Space:	
		Page Label: 202	

6955.67	R	Subject:	6955.58
6955.58	F	Page Index: 202	
0.010768	A	Date: 4/22/2022 11:39:53 AM	
		Author: dsdrice	
		Color: ■	
		Layer:	
		Space:	
		Page Label: 202	

203 (3)

6954.37	R	Subject:	6954.37
6954.37	F	Page Index: 203	
0.015744	A	Date: 4/22/2022 11:40:10 AM	
		Author: dsdrice	
		Color: ■	
		Layer:	
		Space:	
		Page Label: 203	

6951.49	R	Subject:	6951.49
6951.49	F	Page Index: 203	
0.014715	A	Date: 4/22/2022 11:40:14 AM	
		Author: dsdrice	
		Color: ■	
		Layer:	
		Space:	
		Page Label: 203	

6949.19	R	Subject:	6949.19
6949.19	F	Page Index: 203	
0.013784	A	Date: 4/22/2022 11:40:21 AM	
		Author: dsdrice	
		Color: ■	
		Layer:	
		Space:	
		Page Label: 203	

204 (2)

6944.86	R	Subject:	6944.86
6944.86	F	Page Index: 204	
0.016056	A	Date: 4/22/2022 11:41:18 AM	
		Author: dsdrice	
		Color: ■	
		Layer:	
		Space:	
		Page Label: 204	

6946.56	R
6946.56	F
0.015089	A

Subject: 6946.56
Page Index: 204
Date: 4/22/2022 11:41:24 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 204

205 (2)

6942.09	R
6939.49	F
0.000053	A

Subject: 6939.49
Page Index: 205
Date: 4/22/2022 11:41:55 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 205

6942.09	R
6942.09	F
0.016728	A

Subject: 6942.09
Page Index: 205
Date: 4/22/2022 11:42:07 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 205

206 (3)

6934.68	R
6934.68	F
0.020420	A

Subject: 6934.68
Page Index: 206
Date: 4/22/2022 11:43:41 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 206

6931.98	R
6931.98	F
0.014832	A

Subject: 6931.98
Page Index: 206
Date: 4/22/2022 11:43:47 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 206

10000	10000	10000	10000	10000	10000
10000	10000	10000	10000	10000	10000
10000	10000	10000	10000	10000	10000
10000	10000	10000	10000	10000	10000

All of the highlighted values indicate supercritical flows

Subject: Callout
Page Index: 206
Date: 4/22/2022 11:51:01 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: 206

All of the highlighted values indicate supercritical flows

207 (3)

6929.52	R	Subject:	6929.52
6929.52	F	Page Index: 207	
0.015820	A	Date: 4/22/2022 11:44:09 AM	
		Author: dsdrice	
		Color: 	
		Layer:	
		Space:	
		Page Label: 207	

6926.98	R	Subject:	6926.98
6926.98	F	Page Index: 207	
0.014589	A	Date: 4/22/2022 11:44:13 AM	
		Author: dsdrice	
		Color: 	
		Layer:	
		Space:	
		Page Label: 207	

6924.27	R	Subject:	6924.27
6924.27	F	Page Index: 207	
0.013593	A	Date: 4/22/2022 11:44:19 AM	
		Author: dsdrice	
		Color: 	
		Layer:	
		Space:	
		Page Label: 207	

208 (1)

6921.37	R	Subject:	6921.37
6921.37	F	Page Index: 208	
0.014171	A	Date: 4/22/2022 11:49:32 AM	
		Author: dsdrice	
		Color: 	
		Layer:	
		Space:	
		Page Label: 208	

209 (6)

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

	Subject:	
1.02 	Page Index: 209	
0.99	Date: 4/22/2022 11:52:17 AM	
1.01	Author: dsdrice	
0.86	Color: 	
0.99	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

152.95	0.80
129.67	0.99
144.97	1.08
133.02	0.99
24.79	1.02
55.48	1.00
38.43	1.01
20.38	1.01
61.67	0.98

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	0.80	0.99	1.02
0.84	0.99	1.00	1.01
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)

0.01	0.04
------	------

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

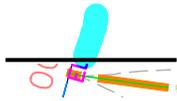
Subject:
Page Index: 243
Date: 4/22/2022 11:56:57 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 243

0.69
1.02
1.01
0.89

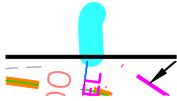
Subject:
Page Index: 243
Date: 4/22/2022 11:56:38 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 243

0.96
0.26

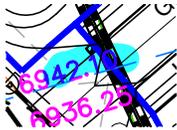
Subject:
Page Index: 243
Date: 4/22/2022 11:56:33 AM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: 243



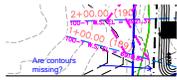
Subject:
Page Index: 270
Date: 4/21/2022 6:10:49 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1



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

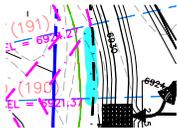


Subject: Callout
Page Index: 270
Date: 4/21/2022 6:13:31 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1

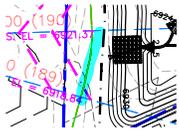
Are contours missing?



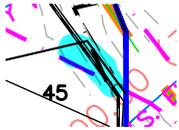
Subject:
Page Index: 270
Date: 4/21/2022 6:14:24 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1



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

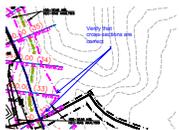


Subject:
Page Index: 270
Date: 4/21/2022 6:17:17 PM
Author: dsdrice
Color: 
Layer:
Space:
Page Label: [1] Layout1



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

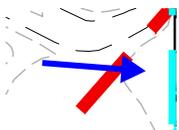
Verify that cross-sections are correct

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?

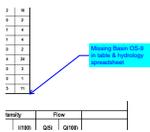
274 (1)



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

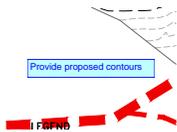
Missing Basin OS-9 in table & hydrology spreadsheet



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

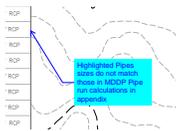
Subject: Highlight
Page Index: 276
Date: 4/20/2022 1:58:41 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1

18" RCP

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.

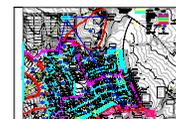


Subject: SW - Textbox with Arrow
Page Index: 277
Date: 4/7/2022 5:07:16 PM
Author: EPC Stormwater - Glenn Reese
Color: ■
Layer:
Space:
Page Label: [1] PROP 2

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.



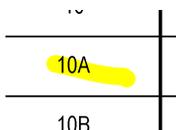
Subject: Image
Page Index: 277
Date: 4/7/2022 5:07:13 PM
Author: EPC Stormwater - Glenn Reese
Color: ■
Layer:
Space:
Page Label: [1] PROP 2



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)

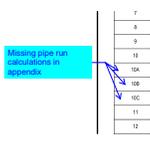
278 (17)



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

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

10C
Subject: Highlight
Page Index: 278
Date: 4/20/2022 2:20:59 PM
Author: CDurham
Color: 
Layer:
Space:
Page Label: [1] PROP 1


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	Basin	CAO	CA100	CS1	Imp	Off
18" RCP	A	1.02	2.01	0.26	1	1
24" RCP	B1	1.03	1.36	0.29	1	1
18" RCP	C1	1.02	0.90	0.29	1	1
18" RCP	D1	0.98	0.90	0.26	1	1
24" RCP	E	0.98	1.21	0.26	1	1
36" RCP	F	0.98	0.91	0.26	1	1
36" RCP	G	0.98	0.91	0.26	1	1

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

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	5' Type R Sump Inlets
6	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

0	5' Type R Su
7	10' Type R Su
8	5' Type R Su

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

1	5' Type R Sum
6	5' Type R Sum
7	10' Type R Sum

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

279 (8)

END	
A	Missing hatches

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



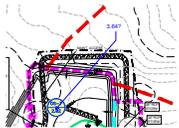
Subject: Callout
Page Index: 279
Date: 4/22/2022 9:13:38 AM
Author: dsdrice
Color: ■
Layer:
Space:
Page Label: [1] PROP 2

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.