ENG-PUDSP20005-R3-PDR-redlines.pdf Markup Summary

1 (3)

Also see comment letter.

Subject: Text Box
Page Index: 1
Date: 4/12/2021 8:03:35 AM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 1

Also see comment letter.

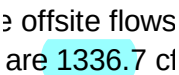
Subject: EPC ENG Review
Page Index: 1
Date: 4/12/2021 8:03:50 AM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 1

PUDSP-20-005

Subject: Text Box
Page Index: 1
Date: 4/12/2021 8:05:29 AM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 1

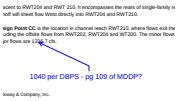
PUDSP-20-005

8 (3)



Subject:
Page Index: 8
Date: 4/11/2021 3:29:43 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 8

1336.



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Page Index: 8
Date: 4/11/2021 3:32:47 PM
Author: dsdrice
Color:
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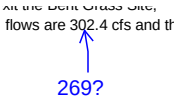
Page Label: 8

1040 per DBPS - pg 109 of MDDP?



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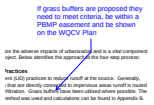
Page Label: 8

269?

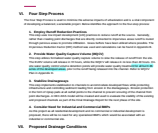
9 (3)



Subject: Callout
Page Index: 9
Date: 4/11/2021 3:56:53 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 9

If grass buffers are proposed they need to meet criteria, be within a PBMP easement and be shown on the WQCV Plan

---



Subject:
Page Index: 9
Date: 4/11/2021 3:57:26 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 9

nt for all but 0.86
acres of the developed areas

Subject: Callout
Page Index: 9
Date: 4/11/2021 3:58:25 PM
Author: dsdrice
Color:
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Page Label: 9

see redlines; any areas net treated need to be justifiable

10 (6)

flows, via a
DP 21.

Basin OS-

Subject:
Page Index: 10
Date: 4/11/2021 4:21:43 PM
Author: dsdrice
Color:
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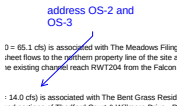
Page Label: 10



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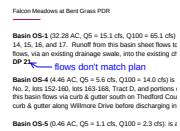
Page Index: 10
Date: 4/11/2021 4:23:47 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 10

address OS-2 and OS-3

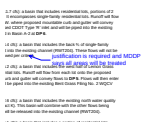


Subject: Callout
Page Index: 10
Date: 4/11/2021 4:24:46 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 10

flows don't match plan

Subject:
Page Index: 10
Date: 4/11/2021 4:28:59 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 10

These flows will not be detained but are less than 1.0 acre max allowed per criteria.



Subject: Callout
Page Index: 10
Date: 4/11/2021 4:38:54 PM
Author: dsdrice
Color:
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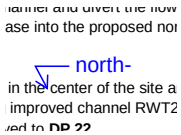
Page Label: 10

justification is required and MDDP says all areas will be treated

---



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Page Label: 10

north-

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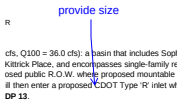
11 (9)



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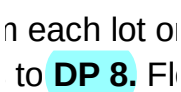
provide size



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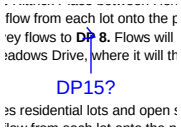
DP 8



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Page Label: 11

DP15?

Subject:
Page Index: 11
Date: 4/11/2021 4:48:33 PM
Author: dsdrice
Color:
Layer:
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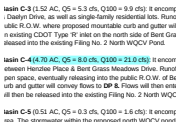
Page Label: 11

. Flows will then enter
an existing CDOT Type ‘R’ inlet on the north side
of Bent Grass Meadows Drive,



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Date: 4/11/2021 4:50:00 PM
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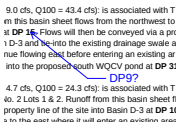
(4.70 AC, Q5 = 8.0 cfs, Q100 = 21.0 cfs)



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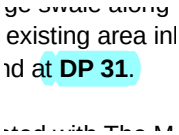
Page Label: 11

DP9?



Subject:
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Date: 4/11/2021 5:01:20 PM
Author: dsdrice
Color:
Layer:
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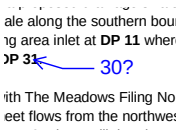
Page Label: 11

t DP 31.



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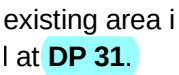
30?



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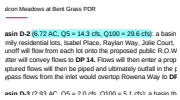
DP 31.

12 (8)



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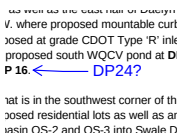
Page Label: 12

(6.72 AC, Q5 = 14.3 cfs, Q100 = 29.6 cfs



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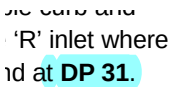
Page Label: 12

DP24?



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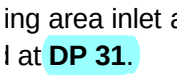
Page Label: 12

t DP 31.



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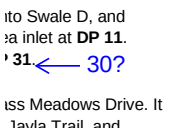
DP 31.



Subject: Callout
Page Index: 12
Date: 4/11/2021 5:09:21 PM
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Color:
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Page Label: 12

30?

Subject: Highlight
Page Index: 12
Date: 4/11/2021 5:11:04 PM
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Color:
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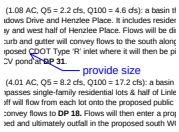
Page Label: 12



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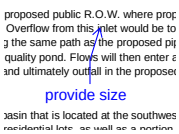
Page Label: 12

provide size



Subject: Callout
Page Index: 12
Date: 4/11/2021 5:16:39 PM
Author: dsdrice
Color:
Layer:
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Page Label: 12

provide size

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13 (8)

---

e offsite flows f
are 1137.6 cfs

Subject:
Page Index: 13
Date: 4/11/2021 3:30:09 PM
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Layer:
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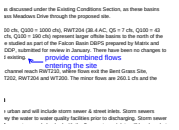
Page Label: 13

1137.6



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Page Index: 13
Date: 4/11/2021 5:19:48 PM
Author: dsdrice
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Page Label: 13

provide combined flows entering the site

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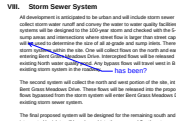
sump are
will be us
storm sys

Subject:
Page Index: 13
Date: 4/11/2021 5:20:32 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 13

will be



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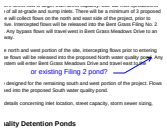
has been?

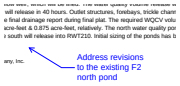


Subject: Callout
Page Index: 13
Date: 4/11/2021 5:22:16 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 13

or existing Filing 2 pond?

Subject: Callout
Page Index: 13
Date: 4/11/2021 5:24:11 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 13

state the proposed materials (RCP, CDOT type R inlets)



Subject: Callout
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Author: dsdrice
Color:
Layer:
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Page Label: 13

Address revisions to the existing F2 north pond

Subject: Callout
Page Index: 13
Date: 4/12/2021 8:59:02 AM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 13

The south pond will be constructed in conformance with water quality requirements with the early grading.

---

14 (5)

Subject: Callout
Page Index: 14
Date: 4/11/2021 5:39:47 PM
Author: dsdrice
Color:
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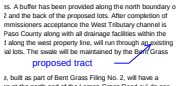
Page Label: 14

You need to address whether the DBPS improvements will be adequate for the increased flows (~1300 vs ~900 cfs? and what the proposed revisions are.



Subject: Callout
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Date: 4/11/2021 5:41:16 PM
Author: dsdrice
Color:
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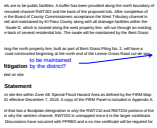
Page Label: 14

proposed tract



Subject: Callout
Page Index: 14
Date: 4/11/2021 5:42:02 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 14

to be maintained by the district?

Subject: Callout
Page Index: 14
Date: 4/11/2021 5:45:55 PM
Author: dsdrice
Color:
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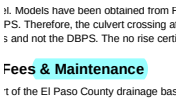
Page Label: 14

Also address the swale from the northwest corner in Tract G



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Page Index: 14
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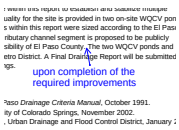
Page Label: 14

& Maintenance

15 (1)



Subject: Callout
Page Index: 15
Date: 4/11/2021 5:47:52 PM
Author: dsdrice
Color:
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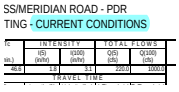
Page Label: 15

upon completion of the required improvements

46 (2)



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Page Index: 46
Date: 4/11/2021 6:13:31 PM
Author: dsdrice
Color:
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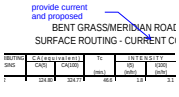
Page Label: 46

CURRENT CONDITIONS



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Page Index: 46
Date: 4/11/2021 6:14:03 PM
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Color:
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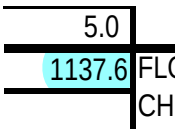
Page Label: 46

provide current and proposed

49 (1)



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Page Label: 49

1137.6

51 (1)

Subject: Text Box
Page Index: 51
Date: 4/11/2021 6:21:35 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 51

Swales with supercritical designs highlighted.

52 (1)

Subject:
Page Index: 52
Date: 4/11/2021 6:17:23 PM
Author: dsdrice
Color:
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Space:
Page Label: 52

1.13

53 (1)

Subject:
Page Index: 53
Date: 4/11/2021 6:17:18 PM
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Page Label: 53

1.08

54 (1)

Subject:
Page Index: 54
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Page Label: 54

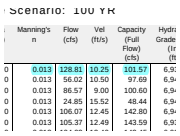
1.15

57 (1)

Subject: Text Box
Page Index: 57
Date: 4/11/2021 6:20:57 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 57

Inlet calculations not checked with this review.

84 (2)



Subject:
Page Index: 84
Date: 4/11/2021 6:24:49 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 84

101.57
10.25
128.81
0.013

Subject: Callout
Page Index: 84
Date: 4/11/2021 6:36:24 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 84

flow is higher than capacity - are watertight gasket joints proposed?

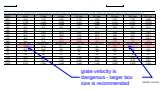
97 (1)

Provide update for Filing 2 North pond

Subject: Text Box
Page Index: 97
Date: 4/11/2021 4:02:37 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 97

Provide update for Filing 2 North pond

105 (2)



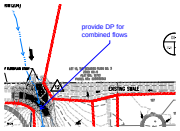
Subject: Callout
Page Index: 105
Date: 4/11/2021 6:39:25 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 105

grate velocity is dangerous - larger box size is recommended

Subject:
Page Index: 105
Date: 4/11/2021 6:39:55 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 105

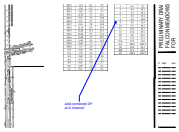
6.00 feet Overflow Weir Slope Length = 3.00 feet
Overflow Weir Grate Slope = 0.00 H:V Grate Open Area / 100-yr Orifice Area = 2.57
Horiz. Length of Weir Sides = 3.00

107 (4)



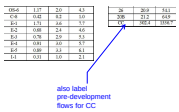
Subject: Callout
Page Index: 107
Date: 4/11/2021 4:08:01 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 107

provide DP for combined flows



Subject: Callout
Page Index: 107
Date: 4/11/2021 6:41:05 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 107

Add combined DP at N channel



Subject: Callout
Page Index: 107
Date: 4/11/2021 6:41:07 PM
Author: dsdrice
Color:
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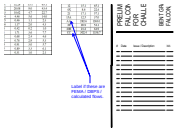
Space:
Page Label: 107

also label pre-development flows for CC



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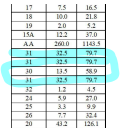
Page Index: 107
Date: 4/11/2021 6:41:58 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 107

Label if these are FEMA / DBPS / calculated flows.

---

109 (3)



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Page Index: 109
Date: 4/11/2021 4:19:42 PM
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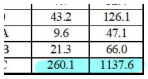
Color:
Layer:
Space:
Page Label: 109



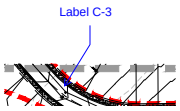
	43.2	126.1
A	9.6	47.1
B	21.3	66.0
	260.1	1137.6

Subject:
Page Index: 109
Date: 4/11/2021 4:20:32 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 109

Subject: Callout
Page Index: 109
Date: 4/11/2021 4:35:49 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 109

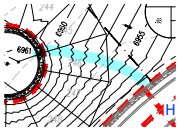
Provide DP 22

110 (9)



Subject: Callout
Page Index: 110
Date: 4/11/2021 4:48:10 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 110

Label C-3

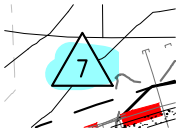


Subject:
Page Index: 110
Date: 4/11/2021 4:49:18 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 110

Basin line?

Subject: Callout
Page Index: 110
Date: 4/11/2021 4:49:28 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 110

Basin line?



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Page Index: 110
Date: 4/11/2021 4:50:53 PM
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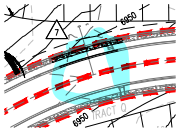
Color:
Layer:
Space:
Page Label: 110



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Page Index: 110
Date: 4/11/2021 4:51:05 PM
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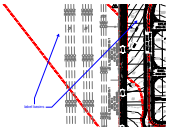
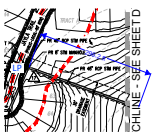
Color:
Layer:
Space:
Page Label: 110



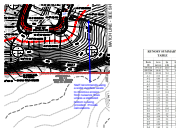
Subject: Callout
Page Index: 110
Date: 4/11/2021 5:03:35 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 110

label basins



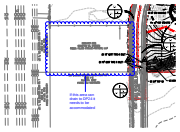
Subject: Length Measurement
Page Index: 110
Date: 4/11/2021 6:36:51 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 110

296.2 ft



Subject: Callout
Page Index: 110
Date: 4/11/2021 6:37:23 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 110

Staff recommends using a wider overflow swale to minimize erosion from nuisance flows unless a stabilized bottom is being provided. Provide calculations.



Subject: Cloud+
Page Index: 110
Date: 4/11/2021 6:46:28 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 110

If this area can drain to DP24 it needs to be accommodated

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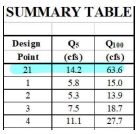
111 (4)

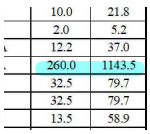


SUMMARY TABLE		
Design Point	Q_S (cfs)	Q_{100} (cfs)
21	14.2	63.6
1	5.8	15.0
2	5.3	13.9
3	7.5	18.7
4	11.1	27.7

Subject:
Page Index: 111
Date: 4/11/2021 4:21:38 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 111

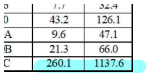
Subject: Callout
Page Index: 111
Date: 4/11/2021 4:34:59 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 111

provide DP 22 flows



	10.0	21.8
	2.0	5.2
	12.2	37.0
	260.0	1143.5
	32.5	79.7
	32.5	79.7
	13.5	58.9

Subject:
Page Index: 111
Date: 4/11/2021 4:36:57 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 111



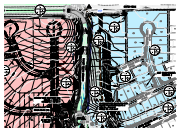
D	43.2	126.1
A	9.6	47.1
B	21.3	66.0
C	260.1	1137.6

Subject:
Page Index: 111
Date: 4/11/2021 4:37:01 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 111

112 (3)

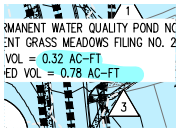
Subject: Callout
Page Index: 112
Date: 4/11/2021 3:54:54 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 112

Can't a swale be provided here?



Subject:
Page Index: 112
Date: 4/11/2021 3:55:20 PM
Author: dsdrice
Color:
Layer:
Space:
Page Label: 112

swale?



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Page Index: 112
Date: 4/11/2021 4:01:26 PM
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Color:
Layer:
Space:
Page Label: 112