

# ENG-PUDSP21010-R4-PDR.pdf Markup Summary

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4 (2)

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ian", HK  
es 567 dv

**Subject:**  
**Page Index:** 4  
**Date:** 5/24/2022 3:57:52 PM  
**Author:** dsdrice  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 4

567

on the Waterbury Development to the south. A V  
liminary drainage report is the basis for the draina  
ly approved MDDP for the site prepared by HR G  
s Plan": HR Green, November 2020 (MDDP). The  
ides 564 wetting units. — 565 now  
ting soil types within the proposed site as determi  
nea consist of Columbine gravelly sandy loam (h  
drologic soil group B). See the soils map includ

**Subject:** Callout  
**Page Index:** 4  
**Date:** 5/24/2022 3:58:03 PM  
**Author:** dsdrice  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 4

565 now

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5 (1)

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basin  
3" CMP

**Subject:** Text Box  
**Page Index:** 5  
**Date:** 5/24/2022 11:31:19 AM  
**Author:** CDurham  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 5

CMP

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6 (9)

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basin  
3" CMP

**Subject:** Text Box  
**Page Index:** 6  
**Date:** 5/24/2022 11:28:00 AM  
**Author:** CDurham  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 6

CMP

18" culvert tha  
3asin OS-4 (1

**Subject:** Text Box  
**Page Index:** 6  
**Date:** 5/24/2022 11:28:15 AM  
**Author:** CDurham  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 6

CMP

24" culvert th  
100 = 138.0 cf

**Subject:** Text Box  
**Page Index:** 6  
**Date:** 5/24/2022 11:30:04 AM  
**Author:** CDurham  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 6

CMP





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9 (1)

---

5 = 4.2 cfs  
id Phase

**Subject:** Highlight  
**Page Index:** 9  
**Date:** 5/24/2022 4:28:20 PM  
**Author:** CDurham  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 9

4.2

---

10 (1)

---

5 = 4.6 cfs  
Circle ar

**Subject:** Highlight  
**Page Index:** 10  
**Date:** 5/24/2022 4:29:42 PM  
**Author:** CDurham  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 10

4.6

---

12 (2)

---

5 = 3.3 cfs  
tion of rec

**Subject:** Highlight  
**Page Index:** 12  
**Date:** 5/24/2022 4:32:43 PM  
**Author:** CDurham  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 12

3.3

0 = 7.7 cfs  
ial lots al

**Subject:** Highlight  
**Page Index:** 12  
**Date:** 5/24/2022 4:32:49 PM  
**Author:** CDurham  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 12

7.7

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13 (1)

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stream via curb & gutter to DP 17b.  
in the central portion of the site, this basin  
rain, and proposed drainage reveals (Dialer C-  
side which will direct runoff to the adjacent

**Subject:** Callout  
**Page Index:** 13  
**Date:** 5/24/2022 12:40:43 PM  
**Author:** CDurham  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 13

portion of Sparkwell St?

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14 (4)

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proposed (private  
22), just north of t  
downstream to Di  
South  
Galloway & Compa

**Subject:** Callout  
**Page Index:** 14  
**Date:** 5/24/2022 1:02:40 PM  
**Author:** CDurham  
**Color:**   
**Layer:**  
**Space:**  
**Page Label:** 14

South

File Number: 2 (2022)

1 (AC, Q<sub>1</sub> = 1.1 cfs, Q<sub>2</sub> = 0.3 cfs) Located at the southeast corner of the site, with a concrete curb on the east side of the curb. The basin will be used to collect runoff from the site and will be used to store the runoff until it can be discharged to the stormwater management system.

1 (AC, Q<sub>1</sub> = 1.1 cfs, Q<sub>2</sub> = 0.3 cfs) Located at the southeast corner of the site, with a concrete curb on the east side of the curb. The basin will be used to collect runoff from the site and will be used to store the runoff until it can be discharged to the stormwater management system.

**Subject:** Callout  
**Page Index:** 14  
**Date:** 5/24/2022 1:04:46 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 14

sump or at-grade inlet?

is basin will shed (private) 10' st north of the ir

**Subject:**  
**Page Index:** 14  
**Date:** 5/26/2022 11:25:51 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 14

(private)

1 (3.46 AC, Q<sub>1</sub> = 5.4 cfs, Q<sub>2</sub> = 12.7 cfs) Located at the southeast corner of the site, with a concrete curb on the east side of the curb. The basin will be used to collect runoff from the site and will be used to store the runoff until it can be discharged to the stormwater management system.

Company, Inc.

**Subject:** Callout  
**Page Index:** 14  
**Date:** 5/26/2022 11:26:09 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 14

public?

15 (3)

is basin will shed (private) 10' just southeast o

**Subject:**  
**Page Index:** 15  
**Date:** 5/26/2022 11:26:25 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 15

(private)

on this basin will shed (private) 15' (DP 24), southea

**Subject:**  
**Page Index:** 15  
**Date:** 5/26/2022 11:26:31 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 15

(private)

on this basin will shed (private) 10' (DP 25), just sou

**Subject:**  
**Page Index:** 15  
**Date:** 5/26/2022 11:26:36 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 15

(private)

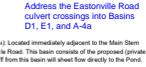




**Subject:** Callout  
**Page Index:** 16  
**Date:** 5/26/2022 11:32:34 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 16

verify potential future contributing acreage per plan redlines

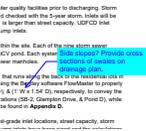
17 (4)



Address the Eastonville Road culvert crossings into Basins D1, E1, and A-4a

**Subject:** Callout  
**Page Index:** 17  
**Date:** 5/24/2022 1:20:07 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 17

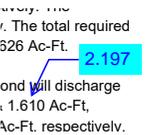
Address the Eastonville Road culvert crossings into Basins D1, E1, and A-4a



Side slopes? Provide cross sections of swales on drainage plan.

**Subject:** Callout  
**Page Index:** 17  
**Date:** 5/24/2022 1:23:03 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 17

Side slopes? Provide cross sections of swales on drainage plan.



2.197

**Subject:** Callout  
**Page Index:** 17  
**Date:** 5/24/2022 1:37:44 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 17

2.197

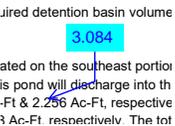


provide headwater calculations

**Subject:** Text Box  
**Page Index:** 17  
**Date:** 5/26/2022 11:34:58 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 17

provide headwater calculations

18 (5)



3.084

**Subject:** Callout  
**Page Index:** 18  
**Date:** 5/24/2022 1:38:57 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 18

3.084

For the WQV and LOM  
sin volume is 4.633 Ac-Ft  
.909  
channel. This pond will d  
are 0.244 Ac-Ft & 0.666 A  
0.246 Ac-Ft & 0.913 Ac-F

**Subject:** Callout  
**Page Index:** 18  
**Date:** 5/24/2022 1:39:54 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 18

ation basin storage is  
1.594  
el. This pond will  
are 0.431 Ac-Ft & 1.163  
c-Ft & 1.601 Ac-Ft.

**Subject:** Callout  
**Page Index:** 18  
**Date:** 5/24/2022 1:40:50 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 18

**Subject:** Callout  
**Page Index:** 18  
**Date:** 5/24/2022 1:45:53 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 18

Address the other 2 for Eastonville Rd.

**Subject:** Callout  
**Page Index:** 18  
**Date:** 5/26/2022 11:40:21 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 18

(to be determined with CDR-22-008)

19 (2)

ndix B.  
D  
on the Board of C.

**Subject:** Callout  
**Page Index:** 19  
**Date:** 5/24/2022 2:00:45 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 19

**Subject:** Callout  
**Page Index:** 19  
**Date:** 5/24/2022 2:57:15 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 19

Not all, some basins are releasing directly to channels. Revise statement.

Provide for all new existing offsite basins

**Subject:** Callout  
**Page Index:** 50  
**Date:** 5/24/2022 2:05:15 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 50

Provide for all existing offsite basins

Provide for proposed offsite basins

**Subject:** Callout  
**Page Index:** 50  
**Date:** 5/24/2022 4:43:49 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 50

Provide for proposed offsite basins

the computed value needs to be used for existing conditions if its higher than the Tc check (the area isn't urbanized yet)

**Subject:** Callout  
**Page Index:** 52  
**Date:** 5/24/2022 2:06:55 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 52

the computed value needs to be used for existing conditions if its higher than the Tc check (the area isn't urbanized yet)

19.6
29.0

**Subject:** Highlight  
**Page Index:** 52  
**Date:** 5/24/2022 2:07:03 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 52

19.6

19.6
29.0
33.7

**Subject:** Highlight  
**Page Index:** 52  
**Date:** 5/24/2022 2:07:04 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 52

29.0

29.0
33.7
14.2

**Subject:** Highlight  
**Page Index:** 52  
**Date:** 5/24/2022 2:07:05 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 52

33.7

33.7
14.2
23.4

Subject: Highlight  
Page Index: 52  
Date: 5/24/2022 2:07:06 PM  
Author: CDurham  
Color: ■  
Layer:  
Space:  
Page Label: 52

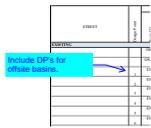
14.2
23.4
19.9

Subject: Highlight  
Page Index: 52  
Date: 5/24/2022 2:07:07 PM  
Author: CDurham  
Color: ■  
Layer:  
Space:  
Page Label: 52

23.4
19.9

Subject: Highlight  
Page Index: 52  
Date: 5/24/2022 2:07:09 PM  
Author: CDurham  
Color: ■  
Layer:  
Space:  
Page Label: 52

53 (4)



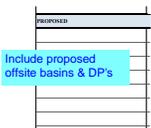
Subject: Callout  
Page Index: 53  
Date: 5/24/2022 4:18:59 PM  
Author: CDurham  
Color: ■  
Layer:  
Space:  
Page Label: 53

Include DP's for offsite basins.



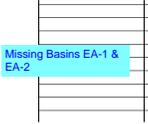
Subject: Callout  
Page Index: 53  
Date: 5/24/2022 4:19:19 PM  
Author: CDurham  
Color: ■  
Layer:  
Space:  
Page Label: 53

Map has two DP's.



Subject: Text Box  
Page Index: 53  
Date: 5/24/2022 4:44:24 PM  
Author: CDurham  
Color: ■  
Layer:  
Space:  
Page Label: 53

Include proposed offsite basins & DP's



**Subject:** Text Box  
**Page Index:** 53  
**Date:** 5/24/2022 4:45:05 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 53

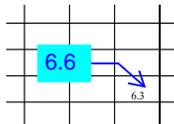
Missing Basins EA-1 & EA-2

54 (2)



**Subject:** Callout  
**Page Index:** 54  
**Date:** 5/24/2022 6:03:05 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 54

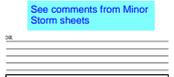
0.7



**Subject:** Callout  
**Page Index:** 54  
**Date:** 5/24/2022 6:02:55 PM  
**Author:** CDurham  
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**Layer:**  
**Space:**  
**Page Label:** 54

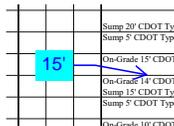
6.6

56 (3)



**Subject:** Text Box  
**Page Index:** 56  
**Date:** 5/24/2022 4:45:25 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 56

See comments from Minor Storm sheets



**Subject:** Callout  
**Page Index:** 56  
**Date:** 5/24/2022 6:03:50 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 56

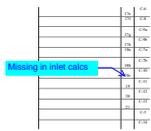
15'



**Subject:** Callout  
**Page Index:** 56  
**Date:** 5/24/2022 6:04:08 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 56

20'

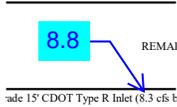




**Subject:** Callout  
**Page Index:** 57  
**Date:** 5/24/2022 6:07:49 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 57

Missing in inlet calcs

58 (3)



**Subject:** Callout  
**Page Index:** 58  
**Date:** 5/24/2022 6:08:08 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 58

8.8

Length	Notes	TI (ft)
18.1	On-Grade 15' CDO	
	On-Grade 15' CDO	
	Receives 15' cfs of	
	Stump 15' CDO T	
	Stump 20' CDO T	

**Subject:** Callout  
**Page Index:** 58  
**Date:** 5/24/2022 6:08:24 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 58

18.1

TOTAL NUMBER	STREET	TYPE	SIZE
32.1			

**Subject:** Callout  
**Page Index:** 58  
**Date:** 5/24/2022 6:08:32 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 58

32.1

60 (1)

CLASS (UNVILLE: KJAU SUMP INLET 15  
 DP1 - Q100 = 16.1 CFS -> 15 TYPE R  
 DP2 - Q100 = 14.9 CFS -> 15 TYPE R  
 Update to match DP designations  
 used on Drainage map.

**Subject:** Text Box  
**Page Index:** 60  
**Date:** 5/24/2022 4:45:42 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 60

Update to match DP designations used on  
 Drainage map.

61 (1)

Per drainage map, DP3 is a proposed  
 inlet and flow shown here does not match  
 hydrology spreadsheet. Verify that this is  
 the correct DP designation for this culvert.

**Subject:** Text Box  
**Page Index:** 61  
**Date:** 5/24/2022 4:48:30 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 61

Per drainage map, DP3 is a proposed inlet and  
 flow shown here does not match hydrology  
 spreadsheet. Verify that this is the correct DP  
 designation for this culvert.

---

62 (1)

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Hydroflow Expr  
DP 35  
Pr 48-in

**Subject:** Text Box  
**Page Index:** 62  
**Date:** 5/24/2022 4:49:29 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 62

DP 35

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63 (1)

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138.00 87%

What culvert is this for? Could not find culvert on map or Channel B

**Subject:** Text Box  
**Page Index:** 63  
**Date:** 5/24/2022 5:02:35 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 63

What culvert is this for? Could not find culvert on map or Channel B

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66 (1)

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00000, Inc.

Did not find any DP33 in hydrology spreadsheet.

Highlighted Depth (ft) Q (cfs)

**Subject:** Text Box  
**Page Index:** 66  
**Date:** 5/24/2022 5:14:53 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 66

Did not find any DP33 in hydrology spreadsheet.

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67 (1)

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Move sheets to go with other sheet (page 63) that has section and input information for these culverts.

**Subject:** Text Box  
**Page Index:** 67  
**Date:** 5/24/2022 5:08:29 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 67

Move sheets to go with other sheet (page 63) that has section and input information for these culverts.

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69 (2)

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by Autodesk, Inc.

Could not locate this swale on drainage map. What DP is it accepting flows from?

Depth (ft)  
Q (cfs)  
Area (sqft)

**Subject:** Text Box  
**Page Index:** 69  
**Date:** 5/24/2022 5:16:09 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 69

Could not locate this swale on drainage map. What DP is it accepting flows from?

2.39  
130.00  
21.92  
8.16  
17.12  
2.23  
16.34  
2.98

Based on velocities, they need a lining.

**Subject:** Callout  
**Page Index:** 69  
**Date:** 5/24/2022 5:16:36 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 69

Based on velocities, may need a lining.

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76 (1)

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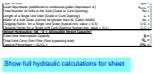
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**Page Index:** 76  
**Date:** 5/24/2022 5:23:17 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 76

Check why spreadsheet is giving an error for this.

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88 (1)

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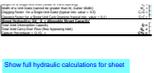
**Subject:** Text Box  
**Page Index:** 88  
**Date:** 5/24/2022 5:26:53 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 88

Show full hydraulic calculations for sheet

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90 (1)

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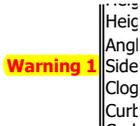
**Subject:** Text Box  
**Page Index:** 90  
**Date:** 5/24/2022 5:28:03 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 90

Show full hydraulic calculations for sheet

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92 (1)

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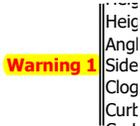
**Subject:** Highlight  
**Page Index:** 92  
**Date:** 5/24/2022 5:29:36 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 92

Warning 1

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94 (1)

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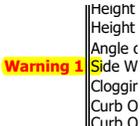
**Subject:** Highlight  
**Page Index:** 94  
**Date:** 5/24/2022 5:29:43 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 94

Warning 1

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96 (1)

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**Subject:** Highlight  
**Page Index:** 96  
**Date:** 5/24/2022 5:30:13 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 96

Warning 1 S

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100 (1)

---

**Warning 1**

Heig  
Angr  
Side  
Clog  
Curt

**Subject:** Highlight  
**Page Index:** 100  
**Date:** 5/24/2022 5:31:09 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 100

Warning 1

---

110 (1)

---

**Warning 1**

Heig  
Angr  
Side  
Clog  
Curt

**Subject:** Highlight  
**Page Index:** 110  
**Date:** 5/24/2022 5:34:31 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 110

Warning 1

---

112 (1)

---

**Warning 1**

Heig  
Angr  
Side  
Clog  
Curt

**Subject:** Highlight  
**Page Index:** 112  
**Date:** 5/24/2022 5:34:46 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 112

Warning 1

---

126 (1)

---



Show full hydraulic calculations for sheet

**Subject:** Text Box  
**Page Index:** 126  
**Date:** 5/24/2022 5:41:08 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 126

Show full hydraulic calculations for sheet

---

128 (1)

---

**Warning 1**

Heig  
Angr  
Side  
Clog  
Curt

**Subject:** Highlight  
**Page Index:** 128  
**Date:** 5/24/2022 5:42:25 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 128

Warning 1

---

131 (1)

---



Remove duplicate and add in DP 18c inlet



**Subject:** Text Box  
**Page Index:** 131  
**Date:** 5/24/2022 6:10:00 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 131

Remove duplicate and add in DP 18c inlet

---

136 (1)

Warning 1

Heig  
Angr  
Side  
Clog  
Curt

**Subject:** Highlight  
**Page Index:** 136  
**Date:** 5/24/2022 5:45:04 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 136

Warning 1

---

142 (1)

Warning 1

Heig  
Angr  
Side  
Clog  
Curt

**Subject:** Highlight  
**Page Index:** 142  
**Date:** 5/24/2022 5:55:39 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 142

Warning 1

---

144 (1)

Warning 1

Heig  
Angr  
Side  
Clog  
Curt

**Subject:** Highlight  
**Page Index:** 144  
**Date:** 5/24/2022 5:48:20 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 144

Warning 1

---

150 (1)

Warning 1

Heig  
Angr  
Side  
Clog  
Curt

**Subject:** Highlight  
**Page Index:** 150  
**Date:** 5/24/2022 5:49:45 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 150

Warning 1

---

152 (1)

Warning 1

Heig  
Angr  
Side  
Clog  
Curt

**Subject:** Highlight  
**Page Index:** 152  
**Date:** 5/24/2022 5:50:15 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 152

Warning 1

---

155 (1)

Channel Report

SWALE BASIN C-7a  
Rectangular  
Bottom Width (ft) = 1.00  
Total Depth (ft) = 2.00  
N/V Value = 0.013  
Calculations

**Subject:** Callout  
**Page Index:** 155  
**Date:** 5/24/2022 6:01:34 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 155

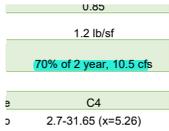
Label if this is for Sidewalk Chase not actual swale, which is next sheet

161 (4)



**Subject:** Callout  
**Page Index:** 161  
**Date:** 5/26/2022 11:41:29 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 161

Exceeded in both channels?



**Subject:**  
**Page Index:** 161  
**Date:** 5/26/2022 11:44:43 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 161

70% of 2 year, 10.5 cf



**Subject:** Callout  
**Page Index:** 161  
**Date:** 5/26/2022 11:45:01 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 161

Provide values



**Subject:**  
**Page Index:** 161  
**Date:** 5/26/2022 11:45:10 AM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 161

3.8 ft

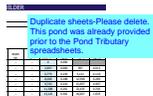
307 (1)



**Subject:** Text Box  
**Page Index:** 307  
**Date:** 5/24/2022 2:20:54 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 307

MHFD spreadsheet calculations need to be provided for 2 - TSB's to show they meet the necessary drain time. SB details sheets from MHFD were removed in this submittal. Please add back in.

325 (1)



**Subject:** Text Box  
**Page Index:** 325  
**Date:** 5/24/2022 1:30:26 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 325

Duplicate sheets-Please delete. This pond was already provided prior to the Pond Tributary spreadsheets.



**Subject:** Text Box  
**Page Index:** 356  
**Date:** 5/24/2022 2:30:52 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 356

Delete duplicate note



**Subject:** Callout  
**Page Index:** 356  
**Date:** 5/24/2022 2:31:03 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 356

Provide flows from this basin



**Subject:** Callout  
**Page Index:** 356  
**Date:** 5/24/2022 2:31:55 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 356

If flows from MDDP are being used, additional or new basins do not need to be added. Just make note where the flows came from



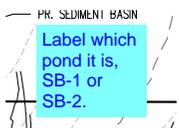
**Subject:** Callout  
**Page Index:** 356  
**Date:** 5/24/2022 4:05:17 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 356

What is this arrow for? If it's drainage, it is pointed in wrong direction. Please revise or delete.



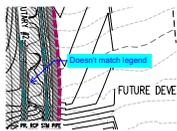
**Subject:** Callout  
**Page Index:** 356  
**Date:** 5/24/2022 4:05:31 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 356

Please use different DP number as DP7 is used where flows are exiting site.



**Subject:** Text Box  
**Page Index:** 357  
**Date:** 5/24/2022 2:40:06 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Label which pond it is, SB-1 or SB-2.



**Subject:** Callout  
**Page Index:** 357  
**Date:** 5/24/2022 2:40:48 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Doesn't match legend



**Subject:** Text Box  
**Page Index:** 357  
**Date:** 5/24/2022 2:41:10 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Hatch doesn't match legend



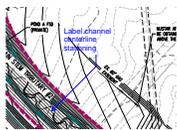
**Subject:** Callout  
**Page Index:** 357  
**Date:** 5/24/2022 2:42:20 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Show the proposed floodplain boundary



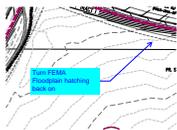
**Subject:** Text Box  
**Page Index:** 357  
**Date:** 5/24/2022 2:43:41 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Add existing contour labels



**Subject:** Callout  
**Page Index:** 357  
**Date:** 5/24/2022 2:44:54 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Label channel centerline stationing



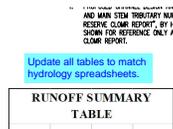
**Subject:** Callout  
**Page Index:** 357  
**Date:** 5/24/2022 2:47:17 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Turn FEMA Floodplain hatching back on



**Subject:** Callout  
**Page Index:** 357  
**Date:** 5/24/2022 3:36:25 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Indicate whether storm facilities are public or private



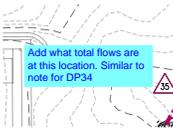
**Subject:** Text Box  
**Page Index:** 357  
**Date:** 5/24/2022 4:27:24 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Update all tables to match hydrology spreadsheets.



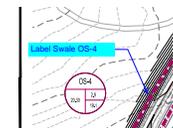
**Subject:** Text Box  
**Page Index:** 357  
**Date:** 5/24/2022 4:56:18 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Provide cross sections for drainage swales.



**Subject:** Text Box  
**Page Index:** 357  
**Date:** 5/24/2022 5:00:46 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Add what total flows are at this location. Similar to note for DP34



**Subject:** Callout  
**Page Index:** 357  
**Date:** 5/24/2022 5:20:22 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Label Swale OS-4



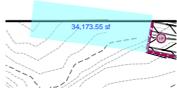
**Subject:** Callout  
**Page Index:** 357  
**Date:** 5/24/2022 5:54:32 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

Label improvements that will need to be relocated



**Subject:** Callout  
**Page Index:** 357  
**Date:** 5/24/2022 5:58:41 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

It looks like the HP will be to the west



**Subject:** Area Measurement  
**Page Index:** 357  
**Date:** 5/24/2022 6:00:42 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 357

34,173.31 sf

---

358 (9)



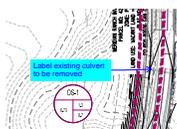
**Subject:** Callout  
**Page Index:** 358  
**Date:** 5/24/2022 2:48:21 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 358

There is no Note #2. Please revise reference.



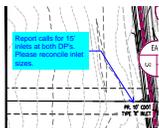
**Subject:** Callout  
**Page Index:** 358  
**Date:** 5/24/2022 4:54:30 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 358

Label existing culvert to be removed



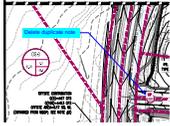
**Subject:** Callout  
**Page Index:** 358  
**Date:** 5/24/2022 2:50:07 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 358

Label existing culvert to be removed



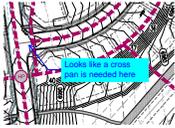
**Subject:** Callout  
**Page Index:** 358  
**Date:** 5/24/2022 4:03:49 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 358

Report calls for 15' inlets at both DP's. Please reconcile inlet sizes.



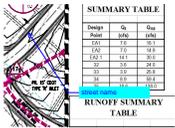
**Subject:** Callout  
**Page Index:** 358  
**Date:** 5/24/2022 4:04:05 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 358

Delete duplicate note



**Subject:** Callout  
**Page Index:** 358  
**Date:** 5/24/2022 4:04:24 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 358

Looks like a cross pan is needed here



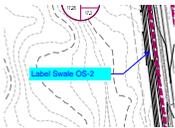
**Subject:** Callout  
**Page Index:** 358  
**Date:** 5/24/2022 4:04:43 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 358

street name



**Subject:** Callout  
**Page Index:** 358  
**Date:** 5/24/2022 5:17:31 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 358

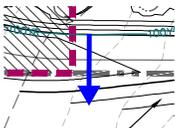
Label Swale OS-1



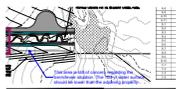
**Subject:** Callout  
**Page Index:** 358  
**Date:** 5/24/2022 5:19:04 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 358

Label Swale OS-2

359 (4)

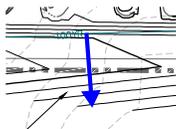


**Subject:** Arrow  
**Page Index:** 359  
**Date:** 5/26/2022 12:31:56 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 359

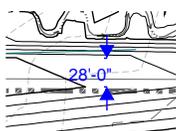


**Subject:** Callout  
**Page Index:** 359  
**Date:** 5/26/2022 12:33:35 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 359

This area is still of concern regarding the berm/levee situation. The 100-yr water surface should be lower than the adjoining property



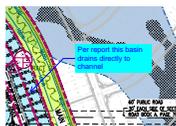
**Subject:** Arrow  
**Page Index:** 359  
**Date:** 5/26/2022 12:37:38 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 359



**Subject:** Length Measurement  
**Page Index:** 359  
**Date:** 5/26/2022 12:37:17 PM  
**Author:** dsdrice  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 359

28'-0"

360 (8)



**Subject:** Callout  
**Page Index:** 360  
**Date:** 5/24/2022 4:11:41 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 360

Per report this basin drains directly to channel



**Subject:** Callout  
**Page Index:** 360  
**Date:** 5/24/2022 3:03:02 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 360

Fix overlapping text



**Subject:** Callout  
**Page Index:** 360  
**Date:** 5/24/2022 4:12:07 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 360

Per report these basins drain directly to channel



**Subject:** Callout  
**Page Index:** 360  
**Date:** 5/24/2022 4:12:37 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 360

Per report this basin drains directly to channel



**Subject:** Callout  
**Page Index:** 360  
**Date:** 5/24/2022 4:12:52 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 360

Per report this basin drains directly to channel



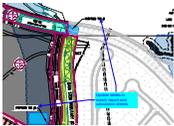
**Subject:** Callout  
**Page Index:** 360  
**Date:** 5/24/2022 4:13:14 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 360

Per report this basin drains directly to channel



**Subject:** Callout  
**Page Index:** 360  
**Date:** 5/24/2022 4:14:06 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 360

Where does this white area drain to?



**Subject:** Callout  
**Page Index:** 360  
**Date:** 5/24/2022 4:14:52 PM  
**Author:** CDurham  
**Color:** ■  
**Layer:**  
**Space:**  
**Page Label:** 360

Update labels to match report and calculation sheets