

MEMORANDUM

TO: File **DATE:** August 7, 2023
FROM: Sean Savage **PROJECT NO.:** 19-720
SUBJECT: Pre- and Post- Dev. Hydrographs **PROJECT NAME:** Spectrum 360

This memo has been prepared for the purpose of demonstrating that each drainage area is in compliance with NJAC 7:8-5.6. This memo also demonstrates that the post-development runoff hydrograph does not exceed the pre-construction runoff hydrograph at any point for the same storm events for the drainage areas that are reducing in both peak flow rate and peak flow volume.

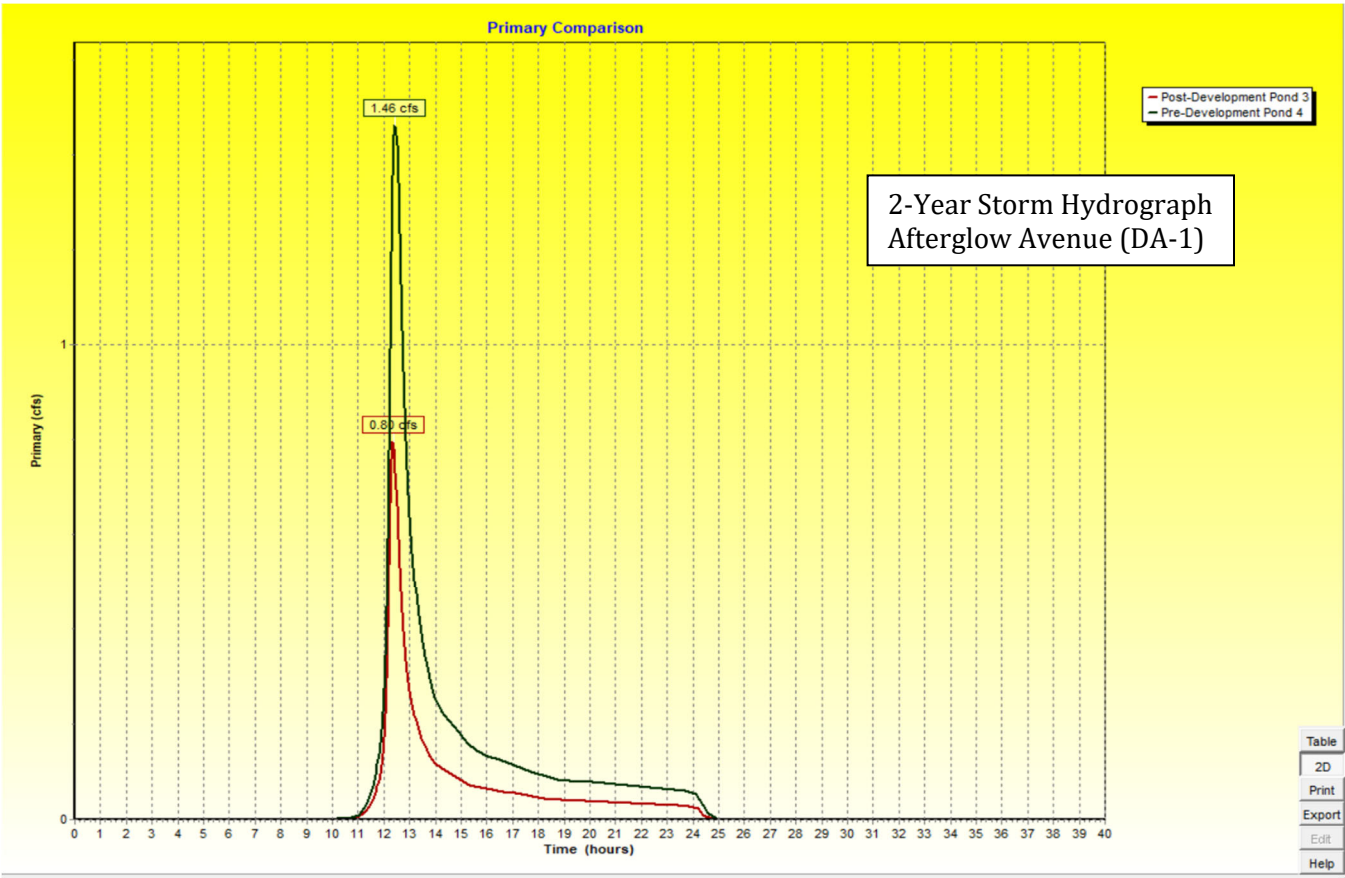
Drainage Area to Afterglow Avenue (DA-1)**Pre-Development****Table 1: Pre-development Peak Flow Rates and Volume to Afterglow Ave (DA-1)**

Storm Event (yr)	Pre-Development Peak Flow Rate (cfs)	Pre-Development Peak Volume (af)
2	1.46	0.207
10	3.39	0.453
100	7.68	1.019

Post-Development**Table 5: Pre-Development and Post-Development Peak Flow Rate and Volume Summary to Afterglow Ave (DA-1)**

Storm Event (yr)	Pre-Development Peak Flow Rate (cfs)	Post-Development Peak Flow Rate (cfs)	Pre-Development Peak Volume (af)	Post-Development Peak Flow Volume (af)
2	1.46	0.80	0.207	0.101
10	3.39	1.85	0.453	0.222
100	7.68	4.19	1.019	0.500

Pre-Development vs. Post-Development Hydrographs and Tables



Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

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Primary Comparison

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
0.00	0.00	0.00
0.10	0.00	0.00
0.20	0.00	0.00
0.30	0.00	0.00
0.40	0.00	0.00
0.50	0.00	0.00
0.60	0.00	0.00
0.70	0.00	0.00
0.80	0.00	0.00
0.90	0.00	0.00
1.00	0.00	0.00
1.10	0.00	0.00
1.20	0.00	0.00
1.30	0.00	0.00
1.40	0.00	0.00
1.50	0.00	0.00
1.60	0.00	0.00
1.70	0.00	0.00
1.80	0.00	0.00
1.90	0.00	0.00
2.00	0.00	0.00
2.10	0.00	0.00
2.20	0.00	0.00
2.30	0.00	0.00
2.40	0.00	0.00
2.50	0.00	0.00
2.60	0.00	0.00
2.70	0.00	0.00
2.80	0.00	0.00
2.90	0.00	0.00
3.00	0.00	0.00
3.10	0.00	0.00
3.20	0.00	0.00
3.30	0.00	0.00
3.40	0.00	0.00
3.50	0.00	0.00
3.60	0.00	0.00
3.70	0.00	0.00
3.80	0.00	0.00
3.90	0.00	0.00
4.00	0.00	0.00
4.10	0.00	0.00
4.20	0.00	0.00
4.30	0.00	0.00
4.40	0.00	0.00
4.50	0.00	0.00
4.60	0.00	0.00
4.70	0.00	0.00
4.80	0.00	0.00
4.90	0.00	0.00
5.00	0.00	0.00
5.10	0.00	0.00
5.20	0.00	0.00

Post-Development

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
5.30	0.00	0.00
5.40	0.00	0.00
5.50	0.00	0.00
5.60	0.00	0.00
5.70	0.00	0.00
5.80	0.00	0.00
5.90	0.00	0.00
6.00	0.00	0.00
6.10	0.00	0.00
6.20	0.00	0.00
6.30	0.00	0.00
6.40	0.00	0.00
6.50	0.00	0.00
6.60	0.00	0.00
6.70	0.00	0.00
6.80	0.00	0.00
6.90	0.00	0.00
7.00	0.00	0.00
7.10	0.00	0.00
7.20	0.00	0.00
7.30	0.00	0.00
7.40	0.00	0.00
7.50	0.00	0.00
7.60	0.00	0.00
7.70	0.00	0.00
7.80	0.00	0.00
7.90	0.00	0.00
8.00	0.00	0.00
8.10	0.00	0.00
8.20	0.00	0.00
8.30	0.00	0.00
8.40	0.00	0.00
8.50	0.00	0.00
8.60	0.00	0.00
8.70	0.00	0.00
8.80	0.00	0.00
8.90	0.00	0.00
9.00	0.00	0.00
9.10	0.00	0.00
9.20	0.00	0.00
9.30	0.00	0.00
9.40	0.00	0.00
9.50	0.00	0.00
9.60	0.00	0.00
9.70	0.00	0.00
9.80	0.00	0.00
9.90	0.00	0.00
10.00	0.00	0.00
10.10	0.00	0.00
10.20	0.00	0.00
10.30	0.00	0.00
10.40	0.00	0.00
10.50	0.00	0.00

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
10.60	0.00	0.00
10.70	0.00	0.00
10.80	0.00	0.00
10.90	0.00	0.00
11.00	0.00	0.01
11.10	0.01	0.01
11.20	0.01	0.02
11.30	0.02	0.03
11.40	0.02	0.04
11.50	0.03	0.06
11.60	0.04	0.08
11.70	0.06	0.10
11.80	0.08	0.14
11.90	0.11	0.19
12.00	0.17	0.28
12.10	0.30	0.45
12.20	0.53	0.78
12.30	0.76	1.20
12.40	0.78	1.44
12.50	0.66	1.42
12.60	0.53	1.23
12.70	0.43	1.03
12.80	0.36	0.87
12.90	0.31	0.74
13.00	0.27	0.64
13.10	0.24	0.56
13.20	0.22	0.50
13.30	0.20	0.45
13.40	0.18	0.41
13.50	0.17	0.37
13.60	0.15	0.34
13.70	0.14	0.31
13.80	0.13	0.29
13.90	0.12	0.27
14.00	0.12	0.25
14.10	0.11	0.24
14.20	0.11	0.23
14.30	0.11	0.22
14.40	0.10	0.22
14.50	0.10	0.21
14.60	0.10	0.20
14.70	0.09	0.20
14.80	0.09	0.19
14.90	0.09	0.18
15.00	0.08	0.18
15.10	0.08	0.17
15.20	0.08	0.16
15.30	0.07	0.16
15.40	0.07	0.15
15.50	0.07	0.15
15.60	0.07	0.14
15.70	0.07	0.14
15.80	0.07	0.14

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
15.90	0.07	0.14
16.00	0.06	0.13
16.10	0.06	0.13
16.20	0.06	0.13
16.30	0.06	0.13
16.40	0.06	0.13
16.50	0.06	0.12
16.60	0.06	0.12
16.70	0.06	0.12
16.80	0.06	0.12
16.90	0.06	0.12
17.00	0.06	0.12
17.10	0.05	0.11
17.20	0.05	0.11
17.30	0.05	0.11
17.40	0.05	0.11
17.50	0.05	0.11
17.60	0.05	0.10
17.70	0.05	0.10
17.80	0.05	0.10
17.90	0.05	0.10
18.00	0.05	0.10
18.10	0.04	0.09
18.20	0.04	0.09
18.30	0.04	0.09
18.40	0.04	0.09
18.50	0.04	0.09
18.60	0.04	0.09
18.70	0.04	0.08
18.80	0.04	0.08
18.90	0.04	0.08
19.00	0.04	0.08
19.10	0.04	0.08
19.20	0.04	0.08
19.30	0.04	0.08
19.40	0.04	0.08
19.50	0.04	0.08
19.60	0.04	0.08
19.70	0.04	0.08
19.80	0.04	0.08
19.90	0.04	0.08
20.00	0.04	0.08
20.10	0.04	0.08
20.20	0.04	0.08
20.30	0.04	0.08
20.40	0.04	0.08
20.50	0.04	0.08
20.60	0.04	0.08
20.70	0.04	0.08
20.80	0.04	0.07
20.90	0.04	0.07
21.00	0.04	0.07
21.10	0.04	0.07

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
21.20	0.04	0.07
21.30	0.04	0.07
21.40	0.03	0.07
21.50	0.03	0.07
21.60	0.03	0.07
21.70	0.03	0.07
21.80	0.03	0.07
21.90	0.03	0.07
22.00	0.03	0.07
22.10	0.03	0.07
22.20	0.03	0.07
22.30	0.03	0.07
22.40	0.03	0.07
22.50	0.03	0.07
22.60	0.03	0.07
22.70	0.03	0.07
22.80	0.03	0.06
22.90	0.03	0.06
23.00	0.03	0.06
23.10	0.03	0.06
23.20	0.03	0.06
23.30	0.03	0.06
23.40	0.03	0.06
23.50	0.03	0.06
23.60	0.03	0.06
23.70	0.03	0.06
23.80	0.03	0.06
23.90	0.03	0.06
24.00	0.03	0.06
24.10	0.03	0.06
24.20	0.02	0.05
24.30	0.02	0.04
24.40	0.01	0.03
24.50	0.00	0.02
24.60	0.00	0.01
24.70	0.00	0.01
24.80	0.00	0.00
24.90	0.00	0.00
25.00	0.00	0.00
25.10	0.00	0.00
25.20	0.00	0.00
25.30	0.00	0.00
25.40	0.00	0.00
25.50	0.00	0.00
25.60	0.00	0.00
25.70	0.00	0.00
25.80	0.00	0.00
25.90	0.00	0.00
26.00	0.00	0.00
26.10	0.00	0.00
26.20	0.00	0.00
26.30	0.00	0.00
26.40	0.00	0.00

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
26.50	0.00	0.00
26.60	0.00	0.00
26.70	0.00	0.00
26.80	0.00	0.00
26.90	0.00	0.00
27.00	0.00	0.00
27.10	0.00	0.00
27.20	0.00	0.00
27.30	0.00	0.00
27.40	0.00	0.00
27.50	0.00	0.00
27.60	0.00	0.00
27.70	0.00	0.00
27.80	0.00	0.00
27.90	0.00	0.00
28.00	0.00	0.00
28.10	0.00	0.00
28.20	0.00	0.00
28.30	0.00	0.00
28.40	0.00	0.00
28.50	0.00	0.00
28.60	0.00	0.00
28.70	0.00	0.00
28.80	0.00	0.00
28.90	0.00	0.00
29.00	0.00	0.00
29.10	0.00	0.00
29.20	0.00	0.00
29.30	0.00	0.00
29.40	0.00	0.00
29.50	0.00	0.00
29.60	0.00	0.00
29.70	0.00	0.00
29.80	0.00	0.00
29.90	0.00	0.00
30.00	0.00	0.00
30.10	0.00	0.00
30.20	0.00	0.00
30.30	0.00	0.00
30.40	0.00	0.00
30.50	0.00	0.00
30.60	0.00	0.00
30.70	0.00	0.00
30.80	0.00	0.00
30.90	0.00	0.00
31.00	0.00	0.00
31.10	0.00	0.00
31.20	0.00	0.00
31.30	0.00	0.00
31.40	0.00	0.00
31.50	0.00	0.00
31.60	0.00	0.00
31.70	0.00	0.00

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
31.80	0.00	0.00
31.90	0.00	0.00
32.00	0.00	0.00
32.10	0.00	0.00
32.20	0.00	0.00
32.30	0.00	0.00
32.40	0.00	0.00
32.50	0.00	0.00
32.60	0.00	0.00
32.70	0.00	0.00
32.80	0.00	0.00
32.90	0.00	0.00
33.00	0.00	0.00
33.10	0.00	0.00
33.20	0.00	0.00
33.30	0.00	0.00
33.40	0.00	0.00
33.50	0.00	0.00
33.60	0.00	0.00
33.70	0.00	0.00
33.80	0.00	0.00
33.90	0.00	0.00
34.00	0.00	0.00
34.10	0.00	0.00
34.20	0.00	0.00
34.30	0.00	0.00
34.40	0.00	0.00
34.50	0.00	0.00
34.60	0.00	0.00
34.70	0.00	0.00
34.80	0.00	0.00
34.90	0.00	0.00
35.00	0.00	0.00
35.10	0.00	0.00
35.20	0.00	0.00
35.30	0.00	0.00
35.40	0.00	0.00
35.50	0.00	0.00
35.60	0.00	0.00
35.70	0.00	0.00
35.80	0.00	0.00
35.90	0.00	0.00
36.00	0.00	0.00
36.10	0.00	0.00
36.20	0.00	0.00
36.30	0.00	0.00
36.40	0.00	0.00
36.50	0.00	0.00
36.60	0.00	0.00
36.70	0.00	0.00
36.80	0.00	0.00
36.90	0.00	0.00
37.00	0.00	0.00

Post-Development

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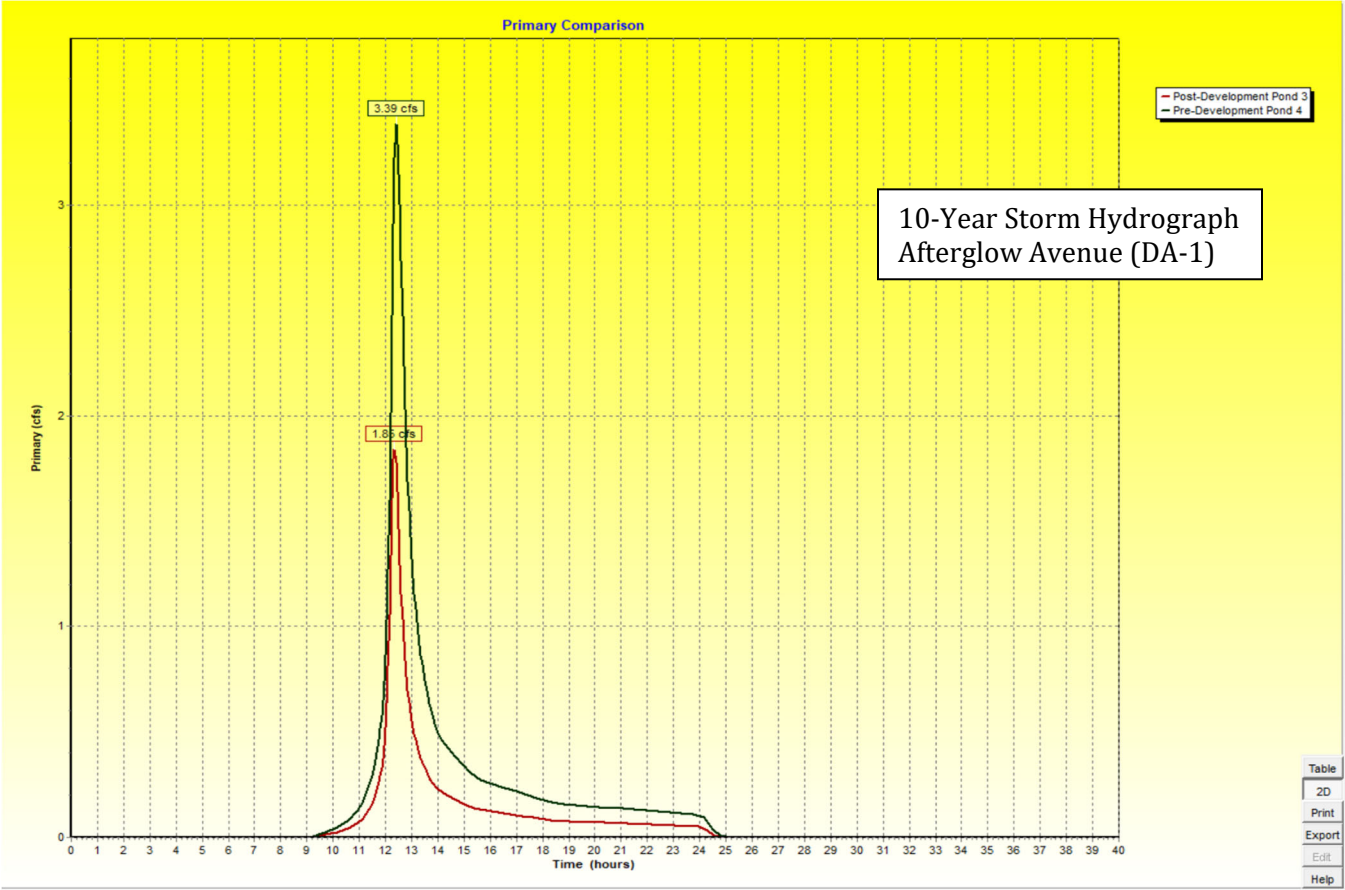
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Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
37.10	0.00	0.00
37.20	0.00	0.00
37.30	0.00	0.00
37.40	0.00	0.00
37.50	0.00	0.00
37.60	0.00	0.00
37.70	0.00	0.00
37.80	0.00	0.00
37.90	0.00	0.00
38.00	0.00	0.00
38.10	0.00	0.00
38.20	0.00	0.00
38.30	0.00	0.00
38.40	0.00	0.00
38.50	0.00	0.00
38.60	0.00	0.00
38.70	0.00	0.00
38.80	0.00	0.00
38.90	0.00	0.00
39.00	0.00	0.00
39.10	0.00	0.00
39.20	0.00	0.00
39.30	0.00	0.00
39.40	0.00	0.00
39.50	0.00	0.00
39.60	0.00	0.00
39.70	0.00	0.00
39.80	0.00	0.00
39.90	0.00	0.00
40.00	0.00	0.00



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NOAA 24-hr D 10-yr Rainfall=5.20"

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Primary Comparison

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
0.00	0.00	0.00
0.10	0.00	0.00
0.20	0.00	0.00
0.30	0.00	0.00
0.40	0.00	0.00
0.50	0.00	0.00
0.60	0.00	0.00
0.70	0.00	0.00
0.80	0.00	0.00
0.90	0.00	0.00
1.00	0.00	0.00
1.10	0.00	0.00
1.20	0.00	0.00
1.30	0.00	0.00
1.40	0.00	0.00
1.50	0.00	0.00
1.60	0.00	0.00
1.70	0.00	0.00
1.80	0.00	0.00
1.90	0.00	0.00
2.00	0.00	0.00
2.10	0.00	0.00
2.20	0.00	0.00
2.30	0.00	0.00
2.40	0.00	0.00
2.50	0.00	0.00
2.60	0.00	0.00
2.70	0.00	0.00
2.80	0.00	0.00
2.90	0.00	0.00
3.00	0.00	0.00
3.10	0.00	0.00
3.20	0.00	0.00
3.30	0.00	0.00
3.40	0.00	0.00
3.50	0.00	0.00
3.60	0.00	0.00
3.70	0.00	0.00
3.80	0.00	0.00
3.90	0.00	0.00
4.00	0.00	0.00
4.10	0.00	0.00
4.20	0.00	0.00
4.30	0.00	0.00
4.40	0.00	0.00
4.50	0.00	0.00
4.60	0.00	0.00
4.70	0.00	0.00
4.80	0.00	0.00
4.90	0.00	0.00
5.00	0.00	0.00
5.10	0.00	0.00
5.20	0.00	0.00

Post-Development

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
5.30	0.00	0.00
5.40	0.00	0.00
5.50	0.00	0.00
5.60	0.00	0.00
5.70	0.00	0.00
5.80	0.00	0.00
5.90	0.00	0.00
6.00	0.00	0.00
6.10	0.00	0.00
6.20	0.00	0.00
6.30	0.00	0.00
6.40	0.00	0.00
6.50	0.00	0.00
6.60	0.00	0.00
6.70	0.00	0.00
6.80	0.00	0.00
6.90	0.00	0.00
7.00	0.00	0.00
7.10	0.00	0.00
7.20	0.00	0.00
7.30	0.00	0.00
7.40	0.00	0.00
7.50	0.00	0.00
7.60	0.00	0.00
7.70	0.00	0.00
7.80	0.00	0.00
7.90	0.00	0.00
8.00	0.00	0.00
8.10	0.00	0.00
8.20	0.00	0.00
8.30	0.00	0.00
8.40	0.00	0.00
8.50	0.00	0.00
8.60	0.00	0.00
8.70	0.00	0.00
8.80	0.00	0.00
8.90	0.00	0.00
9.00	0.00	0.00
9.10	0.00	0.00
9.20	0.00	0.00
9.30	0.00	0.01
9.40	0.01	0.01
9.50	0.01	0.01
9.60	0.01	0.02
9.70	0.01	0.02
9.80	0.01	0.03
9.90	0.02	0.03
10.00	0.02	0.04
10.10	0.02	0.04
10.20	0.03	0.05
10.30	0.03	0.06
10.40	0.04	0.07
10.50	0.04	0.08

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
10.60	0.04	0.08
10.70	0.05	0.09
10.80	0.06	0.11
10.90	0.07	0.12
11.00	0.08	0.14
11.10	0.09	0.16
11.20	0.10	0.19
11.30	0.12	0.22
11.40	0.14	0.26
11.50	0.17	0.30
11.60	0.19	0.35
11.70	0.23	0.42
11.80	0.29	0.51
11.90	0.37	0.65
12.00	0.52	0.86
12.10	0.81	1.27
12.20	1.34	2.02
12.30	1.80	2.91
12.40	1.78	3.37
12.50	1.47	3.23
12.60	1.15	2.74
12.70	0.93	2.24
12.80	0.76	1.85
12.90	0.64	1.55
13.00	0.55	1.33
13.10	0.49	1.15
13.20	0.44	1.02
13.30	0.40	0.91
13.40	0.36	0.82
13.50	0.33	0.74
13.60	0.30	0.68
13.70	0.28	0.62
13.80	0.26	0.57
13.90	0.24	0.53
14.00	0.23	0.50
14.10	0.22	0.47
14.20	0.21	0.45
14.30	0.21	0.43
14.40	0.20	0.42
14.50	0.19	0.41
14.60	0.19	0.39
14.70	0.18	0.38
14.80	0.17	0.37
14.90	0.17	0.35
15.00	0.16	0.34
15.10	0.15	0.33
15.20	0.15	0.31
15.30	0.14	0.30
15.40	0.14	0.29
15.50	0.13	0.28
15.60	0.13	0.27
15.70	0.13	0.27
15.80	0.13	0.26

Post-Development

Prepared by Matrix New World Engineering

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
15.90	0.13	0.26
16.00	0.12	0.26
16.10	0.12	0.25
16.20	0.12	0.25
16.30	0.12	0.24
16.40	0.12	0.24
16.50	0.11	0.24
16.60	0.11	0.23
16.70	0.11	0.23
16.80	0.11	0.23
16.90	0.11	0.22
17.00	0.11	0.22
17.10	0.10	0.21
17.20	0.10	0.21
17.30	0.10	0.21
17.40	0.10	0.20
17.50	0.10	0.20
17.60	0.09	0.20
17.70	0.09	0.19
17.80	0.09	0.19
17.90	0.09	0.18
18.00	0.09	0.18
18.10	0.08	0.18
18.20	0.08	0.17
18.30	0.08	0.17
18.40	0.08	0.16
18.50	0.08	0.16
18.60	0.08	0.16
18.70	0.08	0.16
18.80	0.08	0.16
18.90	0.08	0.16
19.00	0.08	0.16
19.10	0.08	0.15
19.20	0.07	0.15
19.30	0.07	0.15
19.40	0.07	0.15
19.50	0.07	0.15
19.60	0.07	0.15
19.70	0.07	0.15
19.80	0.07	0.15
19.90	0.07	0.15
20.00	0.07	0.15
20.10	0.07	0.15
20.20	0.07	0.14
20.30	0.07	0.14
20.40	0.07	0.14
20.50	0.07	0.14
20.60	0.07	0.14
20.70	0.07	0.14
20.80	0.07	0.14
20.90	0.07	0.14
21.00	0.07	0.14
21.10	0.07	0.14

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
21.20	0.07	0.13
21.30	0.07	0.13
21.40	0.06	0.13
21.50	0.06	0.13
21.60	0.06	0.13
21.70	0.06	0.13
21.80	0.06	0.13
21.90	0.06	0.13
22.00	0.06	0.13
22.10	0.06	0.13
22.20	0.06	0.13
22.30	0.06	0.12
22.40	0.06	0.12
22.50	0.06	0.12
22.60	0.06	0.12
22.70	0.06	0.12
22.80	0.06	0.12
22.90	0.06	0.12
23.00	0.06	0.12
23.10	0.06	0.12
23.20	0.06	0.12
23.30	0.06	0.11
23.40	0.06	0.11
23.50	0.05	0.11
23.60	0.05	0.11
23.70	0.05	0.11
23.80	0.05	0.11
23.90	0.05	0.11
24.00	0.05	0.11
24.10	0.05	0.11
24.20	0.04	0.10
24.30	0.03	0.08
24.40	0.02	0.06
24.50	0.01	0.03
24.60	0.00	0.02
24.70	0.00	0.01
24.80	0.00	0.01
24.90	0.00	0.00
25.00	0.00	0.00
25.10	0.00	0.00
25.20	0.00	0.00
25.30	0.00	0.00
25.40	0.00	0.00
25.50	0.00	0.00
25.60	0.00	0.00
25.70	0.00	0.00
25.80	0.00	0.00
25.90	0.00	0.00
26.00	0.00	0.00
26.10	0.00	0.00
26.20	0.00	0.00
26.30	0.00	0.00
26.40	0.00	0.00

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
26.50	0.00	0.00
26.60	0.00	0.00
26.70	0.00	0.00
26.80	0.00	0.00
26.90	0.00	0.00
27.00	0.00	0.00
27.10	0.00	0.00
27.20	0.00	0.00
27.30	0.00	0.00
27.40	0.00	0.00
27.50	0.00	0.00
27.60	0.00	0.00
27.70	0.00	0.00
27.80	0.00	0.00
27.90	0.00	0.00
28.00	0.00	0.00
28.10	0.00	0.00
28.20	0.00	0.00
28.30	0.00	0.00
28.40	0.00	0.00
28.50	0.00	0.00
28.60	0.00	0.00
28.70	0.00	0.00
28.80	0.00	0.00
28.90	0.00	0.00
29.00	0.00	0.00
29.10	0.00	0.00
29.20	0.00	0.00
29.30	0.00	0.00
29.40	0.00	0.00
29.50	0.00	0.00
29.60	0.00	0.00
29.70	0.00	0.00
29.80	0.00	0.00
29.90	0.00	0.00
30.00	0.00	0.00
30.10	0.00	0.00
30.20	0.00	0.00
30.30	0.00	0.00
30.40	0.00	0.00
30.50	0.00	0.00
30.60	0.00	0.00
30.70	0.00	0.00
30.80	0.00	0.00
30.90	0.00	0.00
31.00	0.00	0.00
31.10	0.00	0.00
31.20	0.00	0.00
31.30	0.00	0.00
31.40	0.00	0.00
31.50	0.00	0.00
31.60	0.00	0.00
31.70	0.00	0.00

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
31.80	0.00	0.00
31.90	0.00	0.00
32.00	0.00	0.00
32.10	0.00	0.00
32.20	0.00	0.00
32.30	0.00	0.00
32.40	0.00	0.00
32.50	0.00	0.00
32.60	0.00	0.00
32.70	0.00	0.00
32.80	0.00	0.00
32.90	0.00	0.00
33.00	0.00	0.00
33.10	0.00	0.00
33.20	0.00	0.00
33.30	0.00	0.00
33.40	0.00	0.00
33.50	0.00	0.00
33.60	0.00	0.00
33.70	0.00	0.00
33.80	0.00	0.00
33.90	0.00	0.00
34.00	0.00	0.00
34.10	0.00	0.00
34.20	0.00	0.00
34.30	0.00	0.00
34.40	0.00	0.00
34.50	0.00	0.00
34.60	0.00	0.00
34.70	0.00	0.00
34.80	0.00	0.00
34.90	0.00	0.00
35.00	0.00	0.00
35.10	0.00	0.00
35.20	0.00	0.00
35.30	0.00	0.00
35.40	0.00	0.00
35.50	0.00	0.00
35.60	0.00	0.00
35.70	0.00	0.00
35.80	0.00	0.00
35.90	0.00	0.00
36.00	0.00	0.00
36.10	0.00	0.00
36.20	0.00	0.00
36.30	0.00	0.00
36.40	0.00	0.00
36.50	0.00	0.00
36.60	0.00	0.00
36.70	0.00	0.00
36.80	0.00	0.00
36.90	0.00	0.00
37.00	0.00	0.00

Post-Development

Prepared by Matrix New World Engineering

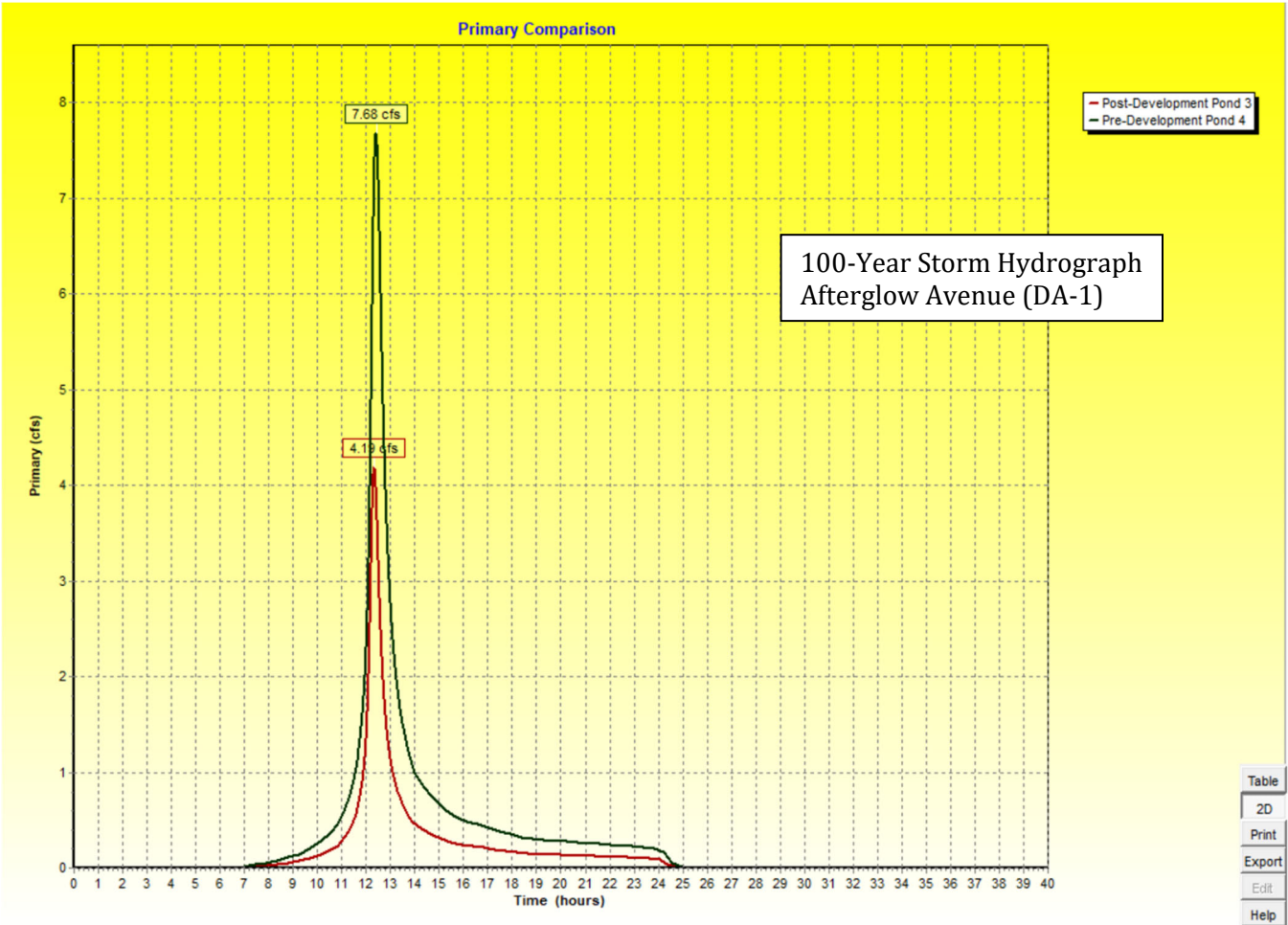
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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
37.10	0.00	0.00
37.20	0.00	0.00
37.30	0.00	0.00
37.40	0.00	0.00
37.50	0.00	0.00
37.60	0.00	0.00
37.70	0.00	0.00
37.80	0.00	0.00
37.90	0.00	0.00
38.00	0.00	0.00
38.10	0.00	0.00
38.20	0.00	0.00
38.30	0.00	0.00
38.40	0.00	0.00
38.50	0.00	0.00
38.60	0.00	0.00
38.70	0.00	0.00
38.80	0.00	0.00
38.90	0.00	0.00
39.00	0.00	0.00
39.10	0.00	0.00
39.20	0.00	0.00
39.30	0.00	0.00
39.40	0.00	0.00
39.50	0.00	0.00
39.60	0.00	0.00
39.70	0.00	0.00
39.80	0.00	0.00
39.90	0.00	0.00
40.00	0.00	0.00



Post-Development

Prepared by Matrix New World Engineering

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
0.00	0.00	0.00
0.10	0.00	0.00
0.20	0.00	0.00
0.30	0.00	0.00
0.40	0.00	0.00
0.50	0.00	0.00
0.60	0.00	0.00
0.70	0.00	0.00
0.80	0.00	0.00
0.90	0.00	0.00
1.00	0.00	0.00
1.10	0.00	0.00
1.20	0.00	0.00
1.30	0.00	0.00
1.40	0.00	0.00
1.50	0.00	0.00
1.60	0.00	0.00
1.70	0.00	0.00
1.80	0.00	0.00
1.90	0.00	0.00
2.00	0.00	0.00
2.10	0.00	0.00
2.20	0.00	0.00
2.30	0.00	0.00
2.40	0.00	0.00
2.50	0.00	0.00
2.60	0.00	0.00
2.70	0.00	0.00
2.80	0.00	0.00
2.90	0.00	0.00
3.00	0.00	0.00
3.10	0.00	0.00
3.20	0.00	0.00
3.30	0.00	0.00
3.40	0.00	0.00
3.50	0.00	0.00
3.60	0.00	0.00
3.70	0.00	0.00
3.80	0.00	0.00
3.90	0.00	0.00
4.00	0.00	0.00
4.10	0.00	0.00
4.20	0.00	0.00
4.30	0.00	0.00
4.40	0.00	0.00
4.50	0.00	0.00
4.60	0.00	0.00
4.70	0.00	0.00
4.80	0.00	0.00
4.90	0.00	0.00
5.00	0.00	0.00
5.10	0.00	0.00
5.20	0.00	0.00

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
5.30	0.00	0.00
5.40	0.00	0.00
5.50	0.00	0.00
5.60	0.00	0.00
5.70	0.00	0.00
5.80	0.00	0.00
5.90	0.00	0.00
6.00	0.00	0.00
6.10	0.00	0.00
6.20	0.00	0.00
6.30	0.00	0.00
6.40	0.00	0.00
6.50	0.00	0.00
6.60	0.00	0.00
6.70	0.00	0.00
6.80	0.00	0.01
6.90	0.01	0.01
7.00	0.01	0.01
7.10	0.01	0.02
7.20	0.01	0.02
7.30	0.01	0.03
7.40	0.02	0.03
7.50	0.02	0.03
7.60	0.02	0.04
7.70	0.02	0.04
7.80	0.03	0.05
7.90	0.03	0.05
8.00	0.03	0.06
8.10	0.03	0.07
8.20	0.04	0.07
8.30	0.04	0.08
8.40	0.04	0.08
8.50	0.05	0.09
8.60	0.05	0.10
8.70	0.05	0.10
8.80	0.06	0.11
8.90	0.06	0.12
9.00	0.06	0.12
9.10	0.07	0.13
9.20	0.07	0.14
9.30	0.08	0.15
9.40	0.08	0.16
9.50	0.09	0.17
9.60	0.10	0.19
9.70	0.10	0.20
9.80	0.11	0.22
9.90	0.12	0.23
10.00	0.13	0.25
10.10	0.14	0.27
10.20	0.15	0.29
10.30	0.16	0.31
10.40	0.17	0.33
10.50	0.18	0.35

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
10.60	0.19	0.38
10.70	0.21	0.40
10.80	0.23	0.44
10.90	0.25	0.48
11.00	0.28	0.53
11.10	0.31	0.59
11.20	0.35	0.66
11.30	0.40	0.74
11.40	0.45	0.84
11.50	0.51	0.95
11.60	0.59	1.08
11.70	0.68	1.25
11.80	0.82	1.48
11.90	1.02	1.80
12.00	1.36	2.30
12.10	2.02	3.24
12.20	3.18	4.90
12.30	4.12	6.80
12.40	3.99	7.67
12.50	3.23	7.21
12.60	2.50	6.02
12.70	1.98	4.85
12.80	1.60	3.97
12.90	1.33	3.29
13.00	1.15	2.78
13.10	1.01	2.40
13.20	0.90	2.11
13.30	0.80	1.87
13.40	0.73	1.67
13.50	0.67	1.51
13.60	0.61	1.37
13.70	0.56	1.25
13.80	0.52	1.15
13.90	0.48	1.06
14.00	0.46	0.99
14.10	0.44	0.94
14.20	0.42	0.90
14.30	0.41	0.87
14.40	0.40	0.84
14.50	0.38	0.81
14.60	0.37	0.78
14.70	0.36	0.75
14.80	0.34	0.72
14.90	0.33	0.70
15.00	0.32	0.67
15.10	0.30	0.64
15.20	0.29	0.62
15.30	0.28	0.59
15.40	0.27	0.57
15.50	0.26	0.55
15.60	0.26	0.54
15.70	0.25	0.53
15.80	0.25	0.52

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
15.90	0.25	0.51
16.00	0.24	0.50
16.10	0.24	0.49
16.20	0.23	0.49
16.30	0.23	0.48
16.40	0.23	0.47
16.50	0.22	0.46
16.60	0.22	0.45
16.70	0.22	0.45
16.80	0.21	0.44
16.90	0.21	0.43
17.00	0.21	0.42
17.10	0.20	0.42
17.20	0.20	0.41
17.30	0.19	0.40
17.40	0.19	0.39
17.50	0.19	0.39
17.60	0.18	0.38
17.70	0.18	0.37
17.80	0.18	0.36
17.90	0.17	0.36
18.00	0.17	0.35
18.10	0.16	0.34
18.20	0.16	0.33
18.30	0.16	0.33
18.40	0.15	0.32
18.50	0.15	0.31
18.60	0.15	0.31
18.70	0.15	0.31
18.80	0.15	0.30
18.90	0.15	0.30
19.00	0.15	0.30
19.10	0.15	0.30
19.20	0.14	0.30
19.30	0.14	0.29
19.40	0.14	0.29
19.50	0.14	0.29
19.60	0.14	0.29
19.70	0.14	0.29
19.80	0.14	0.29
19.90	0.14	0.28
20.00	0.14	0.28
20.10	0.14	0.28
20.20	0.14	0.28
20.30	0.13	0.28
20.40	0.13	0.27
20.50	0.13	0.27
20.60	0.13	0.27
20.70	0.13	0.27
20.80	0.13	0.27
20.90	0.13	0.26
21.00	0.13	0.26
21.10	0.13	0.26

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
21.20	0.13	0.26
21.30	0.13	0.26
21.40	0.12	0.25
21.50	0.12	0.25
21.60	0.12	0.25
21.70	0.12	0.25
21.80	0.12	0.25
21.90	0.12	0.25
22.00	0.12	0.24
22.10	0.12	0.24
22.20	0.12	0.24
22.30	0.12	0.24
22.40	0.11	0.24
22.50	0.11	0.23
22.60	0.11	0.23
22.70	0.11	0.23
22.80	0.11	0.23
22.90	0.11	0.23
23.00	0.11	0.22
23.10	0.11	0.22
23.20	0.11	0.22
23.30	0.11	0.22
23.40	0.11	0.22
23.50	0.10	0.21
23.60	0.10	0.21
23.70	0.10	0.21
23.80	0.10	0.21
23.90	0.10	0.21
24.00	0.10	0.20
24.10	0.10	0.20
24.20	0.08	0.19
24.30	0.06	0.15
24.40	0.03	0.11
24.50	0.02	0.07
24.60	0.01	0.04
24.70	0.00	0.02
24.80	0.00	0.01
24.90	0.00	0.01
25.00	0.00	0.01
25.10	0.00	0.00
25.20	0.00	0.00
25.30	0.00	0.00
25.40	0.00	0.00
25.50	0.00	0.00
25.60	0.00	0.00
25.70	0.00	0.00
25.80	0.00	0.00
25.90	0.00	0.00
26.00	0.00	0.00
26.10	0.00	0.00
26.20	0.00	0.00
26.30	0.00	0.00
26.40	0.00	0.00

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
26.50	0.00	0.00
26.60	0.00	0.00
26.70	0.00	0.00
26.80	0.00	0.00
26.90	0.00	0.00
27.00	0.00	0.00
27.10	0.00	0.00
27.20	0.00	0.00
27.30	0.00	0.00
27.40	0.00	0.00
27.50	0.00	0.00
27.60	0.00	0.00
27.70	0.00	0.00
27.80	0.00	0.00
27.90	0.00	0.00
28.00	0.00	0.00
28.10	0.00	0.00
28.20	0.00	0.00
28.30	0.00	0.00
28.40	0.00	0.00
28.50	0.00	0.00
28.60	0.00	0.00
28.70	0.00	0.00
28.80	0.00	0.00
28.90	0.00	0.00
29.00	0.00	0.00
29.10	0.00	0.00
29.20	0.00	0.00
29.30	0.00	0.00
29.40	0.00	0.00
29.50	0.00	0.00
29.60	0.00	0.00
29.70	0.00	0.00
29.80	0.00	0.00
29.90	0.00	0.00
30.00	0.00	0.00
30.10	0.00	0.00
30.20	0.00	0.00
30.30	0.00	0.00
30.40	0.00	0.00
30.50	0.00	0.00
30.60	0.00	0.00
30.70	0.00	0.00
30.80	0.00	0.00
30.90	0.00	0.00
31.00	0.00	0.00
31.10	0.00	0.00
31.20	0.00	0.00
31.30	0.00	0.00
31.40	0.00	0.00
31.50	0.00	0.00
31.60	0.00	0.00
31.70	0.00	0.00

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
31.80	0.00	0.00
31.90	0.00	0.00
32.00	0.00	0.00
32.10	0.00	0.00
32.20	0.00	0.00
32.30	0.00	0.00
32.40	0.00	0.00
32.50	0.00	0.00
32.60	0.00	0.00
32.70	0.00	0.00
32.80	0.00	0.00
32.90	0.00	0.00
33.00	0.00	0.00
33.10	0.00	0.00
33.20	0.00	0.00
33.30	0.00	0.00
33.40	0.00	0.00
33.50	0.00	0.00
33.60	0.00	0.00
33.70	0.00	0.00
33.80	0.00	0.00
33.90	0.00	0.00
34.00	0.00	0.00
34.10	0.00	0.00
34.20	0.00	0.00
34.30	0.00	0.00
34.40	0.00	0.00
34.50	0.00	0.00
34.60	0.00	0.00
34.70	0.00	0.00
34.80	0.00	0.00
34.90	0.00	0.00
35.00	0.00	0.00
35.10	0.00	0.00
35.20	0.00	0.00
35.30	0.00	0.00
35.40	0.00	0.00
35.50	0.00	0.00
35.60	0.00	0.00
35.70	0.00	0.00
35.80	0.00	0.00
35.90	0.00	0.00
36.00	0.00	0.00
36.10	0.00	0.00
36.20	0.00	0.00
36.30	0.00	0.00
36.40	0.00	0.00
36.50	0.00	0.00
36.60	0.00	0.00
36.70	0.00	0.00
36.80	0.00	0.00
36.90	0.00	0.00
37.00	0.00	0.00

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 3 (cfs)	Pre-Development Pond 4 (cfs)
37.10	0.00	0.00
37.20	0.00	0.00
37.30	0.00	0.00
37.40	0.00	0.00
37.50	0.00	0.00
37.60	0.00	0.00
37.70	0.00	0.00
37.80	0.00	0.00
37.90	0.00	0.00
38.00	0.00	0.00
38.10	0.00	0.00
38.20	0.00	0.00
38.30	0.00	0.00
38.40	0.00	0.00
38.50	0.00	0.00
38.60	0.00	0.00
38.70	0.00	0.00
38.80	0.00	0.00
38.90	0.00	0.00
39.00	0.00	0.00
39.10	0.00	0.00
39.20	0.00	0.00
39.30	0.00	0.00
39.40	0.00	0.00
39.50	0.00	0.00
39.60	0.00	0.00
39.70	0.00	0.00
39.80	0.00	0.00
39.90	0.00	0.00
40.00	0.00	0.00

*In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at N.J.A.C. 7:8-5.6, complete **one of the following**:*

NJAC 7:8-5.4-i. Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the two, 10 and 100-year storm events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events;

NJAC 7:8-5.4-ii. Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the two, 10 and 100-year storm events and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full development under existing zoning and land use ordinances in the drainage area;

The drainage area to Afterglow Avenue from pre-development to post-development conditions is demonstrating compliance with both NJAC 7:8-5.4-i and ii. In post-development conditions, there is no increase in the peak flow rate and peak flow volume as shown in Table 5. See above for the post-development runoff hydrographs for the two, 10 and 100-year storm events. As shown, the post-development runoff hydrograph does not exceed the pre-construction runoff hydrograph at any point for the same storm events.

Drainage Area to Sunset-Bloomfield Avenue (DA-2)**Pre-Development****Table 2: Pre-development Runoff Summary and Allowable Flow Rate to Sunset-Bloomfield Ave**

Storm Event (yr)	Pre-Development Peak Flow Rate (cfs)	Peak Reduction Factor	Allowable Discharge Rate (cfs)
2	8.38	50%	4.19
10	13.86	75%	10.39
100	25.01	80%	20.00

Post-Development**Table 6: Pre-Development and Post-Development Peak Flow Rate Summary to Basin A and B to Sunset-Bloomfield Ave**

Storm Event (yr)	Basin A Inflow (cfs)	Basin B Inflow (cfs)	Total Allowable Discharge Rate (cfs)	Basin A Outflow (cfs)	Basin B Outflow (cfs)	Total Post-Development Flow Rate (cfs)
2	7.57	3.18	4.19	2.19	1.73	3.79
10	11.70	5.15	10.39	4.80	4.63	9.25
100	22.22	9.11	20.00	7.12	8.77	15.27

*In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at N.J.A.C. 7:8-5.6, complete **one of the following**:*

NJAC 7:8-5.4-iii. Design stormwater management measures so that the post-construction peak runoff rates for the two, 10 and 100-year storm events are 50, 75 and 80 percent, respectively, of the pre-construction peak runoff rates. The percentages apply only to the post-construction stormwater runoff that is attributable to the portion of the site on which the proposed development or project is to be constructed;

The drainage area to Sunset-Bloomfield from pre-development to post-development conditions is demonstrating compliance with NJAC 7:8-5.4-iii. The post-construction peak flow rates for the 2-, 10-, and 100-year storms are reduced by 50%, 75% and 80%, respectively.

Drainage Area Overland to Bloomfield Avenue (DA-3)

Pre-Development

Table 3: Pre-Development Peak Flow Rates and Volume Overland to Bloomfield Ave

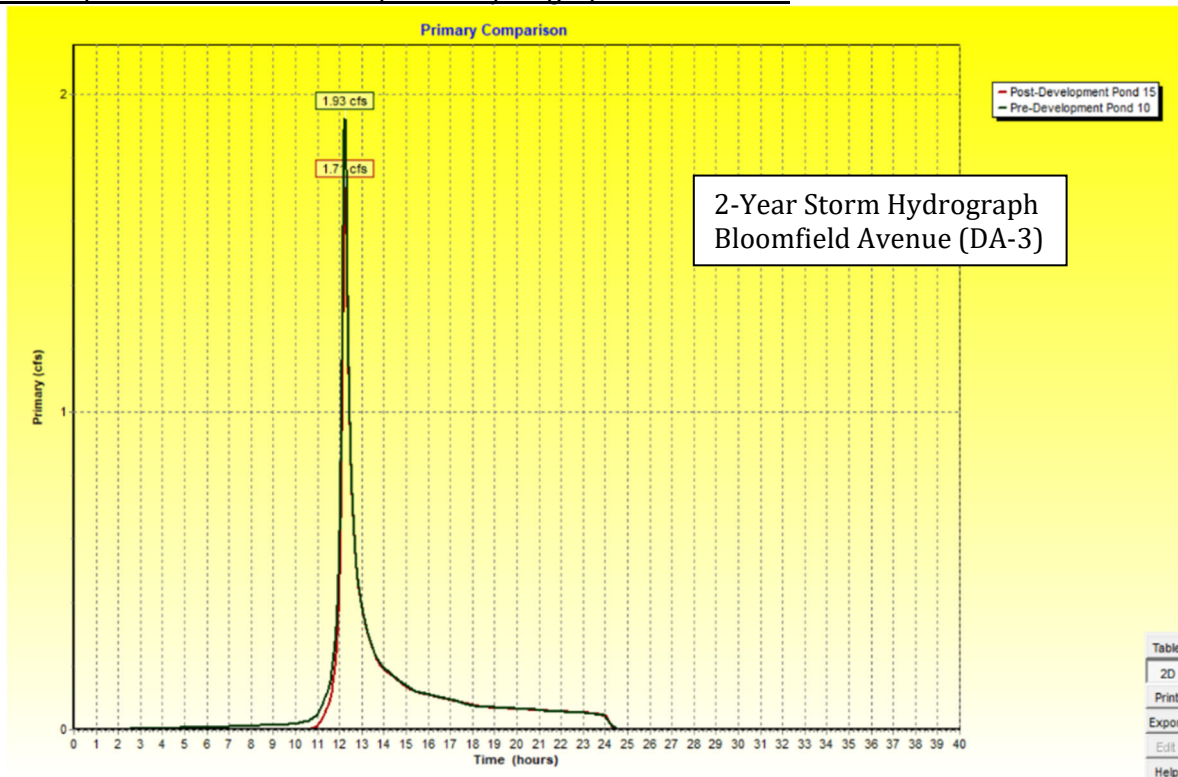
Storm Event (yr)	Pre-Development Peak Flow Rate (cfs)	Pre-Development Peak Volume (af)
2	1.93	0.193
10	4.16	0.399
100	9.05	0.866

Post-Development

Table 7: : Pre-Development and Post-Development Peak Flow Rate and Volume Summary Overland to Bloomfield Ave

Storm Event (yr)	Pre-Development Peak Flow Rate (cfs)	Post-Development Peak Flow Rate (cfs)	Pre-Development Peak Volume (af)	Post-Development Peak Flow Volume (af)
2	1.93	1.71	0.193	0.174
10	4.16	3.95	0.399	0.382
100	9.05	8.90	0.866	0.862

Pre-Development vs. Post-Development Hydrographs and Tables



Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
0.00	0.00	0.00
0.10	0.00	0.00
0.20	0.00	0.00
0.30	0.00	0.00
0.40	0.00	0.00
0.50	0.00	0.00
0.60	0.00	0.00
0.70	0.00	0.00
0.80	0.00	0.00
0.90	0.00	0.00
1.00	0.00	0.00
1.10	0.00	0.00
1.20	0.00	0.00
1.30	0.00	0.00
1.40	0.00	0.00
1.50	0.00	0.00
1.60	0.00	0.00
1.70	0.00	0.00
1.80	0.00	0.00
1.90	0.00	0.00
2.00	0.00	0.00
2.10	0.00	0.00
2.20	0.00	0.00
2.30	0.00	0.00
2.40	0.00	0.00
2.50	0.00	0.00
2.60	0.00	0.00
2.70	0.00	0.00
2.80	0.00	0.00
2.90	0.00	0.00
3.00	0.00	0.00
3.10	0.00	0.00
3.20	0.00	0.00
3.30	0.00	0.00
3.40	0.00	0.00
3.50	0.00	0.00
3.60	0.00	0.00
3.70	0.00	0.00
3.80	0.00	0.00
3.90	0.00	0.00
4.00	0.00	0.00
4.10	0.00	0.00
4.20	0.00	0.01
4.30	0.00	0.01
4.40	0.00	0.01
4.50	0.00	0.01
4.60	0.00	0.01
4.70	0.00	0.01
4.80	0.00	0.01
4.90	0.00	0.01
5.00	0.00	0.01
5.10	0.00	0.01
5.20	0.00	0.01

Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
5.30	0.00	0.01
5.40	0.00	0.01
5.50	0.00	0.01
5.60	0.00	0.01
5.70	0.00	0.01
5.80	0.00	0.01
5.90	0.00	0.01
6.00	0.00	0.01
6.10	0.00	0.01
6.20	0.00	0.01
6.30	0.00	0.01
6.40	0.00	0.01
6.50	0.00	0.01
6.60	0.00	0.01
6.70	0.00	0.01
6.80	0.00	0.01
6.90	0.00	0.01
7.00	0.00	0.01
7.10	0.00	0.01
7.20	0.00	0.01
7.30	0.00	0.01
7.40	0.00	0.01
7.50	0.00	0.01
7.60	0.00	0.01
7.70	0.00	0.01
7.80	0.00	0.01
7.90	0.00	0.01
8.00	0.00	0.01
8.10	0.00	0.01
8.20	0.00	0.01
8.30	0.00	0.01
8.40	0.00	0.01
8.50	0.00	0.01
8.60	0.00	0.01
8.70	0.00	0.01
8.80	0.00	0.01
8.90	0.00	0.01
9.00	0.00	0.01
9.10	0.00	0.01
9.20	0.00	0.02
9.30	0.00	0.02
9.40	0.00	0.02
9.50	0.00	0.02
9.60	0.00	0.02
9.70	0.00	0.02
9.80	0.00	0.02
9.90	0.00	0.02
10.00	0.00	0.02
10.10	0.00	0.02
10.20	0.00	0.02
10.30	0.00	0.02
10.40	0.00	0.02
10.50	0.00	0.03

Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
10.60	0.00	0.03
10.70	0.00	0.03
10.80	0.00	0.03
10.90	0.01	0.04
11.00	0.01	0.05
11.10	0.02	0.06
11.20	0.03	0.07
11.30	0.04	0.09
11.40	0.06	0.11
11.50	0.08	0.13
11.60	0.10	0.16
11.70	0.15	0.21
11.80	0.20	0.28
11.90	0.29	0.39
12.00	0.49	0.63
12.10	0.94	1.16
12.20	1.63	1.89
12.30	1.56	1.65
12.40	1.12	1.15
12.50	0.83	0.84
12.60	0.67	0.68
12.70	0.55	0.56
12.80	0.47	0.48
12.90	0.42	0.43
13.00	0.39	0.39
13.10	0.35	0.36
13.20	0.32	0.33
13.30	0.30	0.30
13.40	0.28	0.28
13.50	0.26	0.26
13.60	0.24	0.24
13.70	0.22	0.22
13.80	0.20	0.21
13.90	0.20	0.20
14.00	0.19	0.19
14.10	0.18	0.19
14.20	0.18	0.18
14.30	0.17	0.18
14.40	0.17	0.17
14.50	0.16	0.17
14.60	0.16	0.16
14.70	0.15	0.15
14.80	0.15	0.15
14.90	0.14	0.14
15.00	0.14	0.14
15.10	0.13	0.13
15.20	0.13	0.13
15.30	0.12	0.12
15.40	0.12	0.12
15.50	0.12	0.12
15.60	0.12	0.12
15.70	0.11	0.12
15.80	0.11	0.11

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NOAA 24-hr D 2-yr Rainfall=3.42"

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
15.90	0.11	0.11
16.00	0.11	0.11
16.10	0.11	0.11
16.20	0.11	0.11
16.30	0.10	0.11
16.40	0.10	0.10
16.50	0.10	0.10
16.60	0.10	0.10
16.70	0.10	0.10
16.80	0.10	0.10
16.90	0.10	0.10
17.00	0.09	0.09
17.10	0.09	0.09
17.20	0.09	0.09
17.30	0.09	0.09
17.40	0.09	0.09
17.50	0.09	0.09
17.60	0.08	0.08
17.70	0.08	0.08
17.80	0.08	0.08
17.90	0.08	0.08
18.00	0.08	0.08
18.10	0.08	0.08
18.20	0.07	0.07
18.30	0.07	0.07
18.40	0.07	0.07
18.50	0.07	0.07
18.60	0.07	0.07
18.70	0.07	0.07
18.80	0.07	0.07
18.90	0.07	0.07
19.00	0.07	0.07
19.10	0.07	0.07
19.20	0.07	0.07
19.30	0.07	0.07
19.40	0.07	0.07
19.50	0.07	0.07
19.60	0.07	0.07
19.70	0.07	0.07
19.80	0.07	0.07
19.90	0.07	0.07
20.00	0.07	0.07
20.10	0.06	0.07
20.20	0.06	0.06
20.30	0.06	0.06
20.40	0.06	0.06
20.50	0.06	0.06
20.60	0.06	0.06
20.70	0.06	0.06
20.80	0.06	0.06
20.90	0.06	0.06
21.00	0.06	0.06
21.10	0.06	0.06

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
21.20	0.06	0.06
21.30	0.06	0.06
21.40	0.06	0.06
21.50	0.06	0.06
21.60	0.06	0.06
21.70	0.06	0.06
21.80	0.06	0.06
21.90	0.06	0.06
22.00	0.06	0.06
22.10	0.06	0.06
22.20	0.06	0.06
22.30	0.06	0.06
22.40	0.06	0.06
22.50	0.05	0.05
22.60	0.05	0.05
22.70	0.05	0.05
22.80	0.05	0.05
22.90	0.05	0.05
23.00	0.05	0.05
23.10	0.05	0.05
23.20	0.05	0.05
23.30	0.05	0.05
23.40	0.05	0.05
23.50	0.05	0.05
23.60	0.05	0.05
23.70	0.05	0.05
23.80	0.05	0.05
23.90	0.05	0.05
24.00	0.05	0.05
24.10	0.04	0.04
24.20	0.03	0.02
24.30	0.01	0.01
24.40	0.00	0.00
24.50	0.00	0.00
24.60	0.00	0.00
24.70	0.00	0.00
24.80	0.00	0.00
24.90	0.00	0.00
25.00	0.00	0.00
25.10	0.00	0.00
25.20	0.00	0.00
25.30	0.00	0.00
25.40	0.00	0.00
25.50	0.00	0.00
25.60	0.00	0.00
25.70	0.00	0.00
25.80	0.00	0.00
25.90	0.00	0.00
26.00	0.00	0.00
26.10	0.00	0.00
26.20	0.00	0.00
26.30	0.00	0.00
26.40	0.00	0.00

Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
26.50	0.00	0.00
26.60	0.00	0.00
26.70	0.00	0.00
26.80	0.00	0.00
26.90	0.00	0.00
27.00	0.00	0.00
27.10	0.00	0.00
27.20	0.00	0.00
27.30	0.00	0.00
27.40	0.00	0.00
27.50	0.00	0.00
27.60	0.00	0.00
27.70	0.00	0.00
27.80	0.00	0.00
27.90	0.00	0.00
28.00	0.00	0.00
28.10	0.00	0.00
28.20	0.00	0.00
28.30	0.00	0.00
28.40	0.00	0.00
28.50	0.00	0.00
28.60	0.00	0.00
28.70	0.00	0.00
28.80	0.00	0.00
28.90	0.00	0.00
29.00	0.00	0.00
29.10	0.00	0.00
29.20	0.00	0.00
29.30	0.00	0.00
29.40	0.00	0.00
29.50	0.00	0.00
29.60	0.00	0.00
29.70	0.00	0.00
29.80	0.00	0.00
29.90	0.00	0.00
30.00	0.00	0.00
30.10	0.00	0.00
30.20	0.00	0.00
30.30	0.00	0.00
30.40	0.00	0.00
30.50	0.00	0.00
30.60	0.00	0.00
30.70	0.00	0.00
30.80	0.00	0.00
30.90	0.00	0.00
31.00	0.00	0.00
31.10	0.00	0.00
31.20	0.00	0.00
31.30	0.00	0.00
31.40	0.00	0.00
31.50	0.00	0.00
31.60	0.00	0.00
31.70	0.00	0.00

Post-Development

Prepared by Matrix New World Engineering

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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
31.80	0.00	0.00
31.90	0.00	0.00
32.00	0.00	0.00
32.10	0.00	0.00
32.20	0.00	0.00
32.30	0.00	0.00
32.40	0.00	0.00
32.50	0.00	0.00
32.60	0.00	0.00
32.70	0.00	0.00
32.80	0.00	0.00
32.90	0.00	0.00
33.00	0.00	0.00
33.10	0.00	0.00
33.20	0.00	0.00
33.30	0.00	0.00
33.40	0.00	0.00
33.50	0.00	0.00
33.60	0.00	0.00
33.70	0.00	0.00
33.80	0.00	0.00
33.90	0.00	0.00
34.00	0.00	0.00
34.10	0.00	0.00
34.20	0.00	0.00
34.30	0.00	0.00
34.40	0.00	0.00
34.50	0.00	0.00
34.60	0.00	0.00
34.70	0.00	0.00
34.80	0.00	0.00
34.90	0.00	0.00
35.00	0.00	0.00
35.10	0.00	0.00
35.20	0.00	0.00
35.30	0.00	0.00
35.40	0.00	0.00
35.50	0.00	0.00
35.60	0.00	0.00
35.70	0.00	0.00
35.80	0.00	0.00
35.90	0.00	0.00
36.00	0.00	0.00
36.10	0.00	0.00
36.20	0.00	0.00
36.30	0.00	0.00
36.40	0.00	0.00
36.50	0.00	0.00
36.60	0.00	0.00
36.70	0.00	0.00
36.80	0.00	0.00
36.90	0.00	0.00
37.00	0.00	0.00

Post-Development

Prepared by Matrix New World Engineering

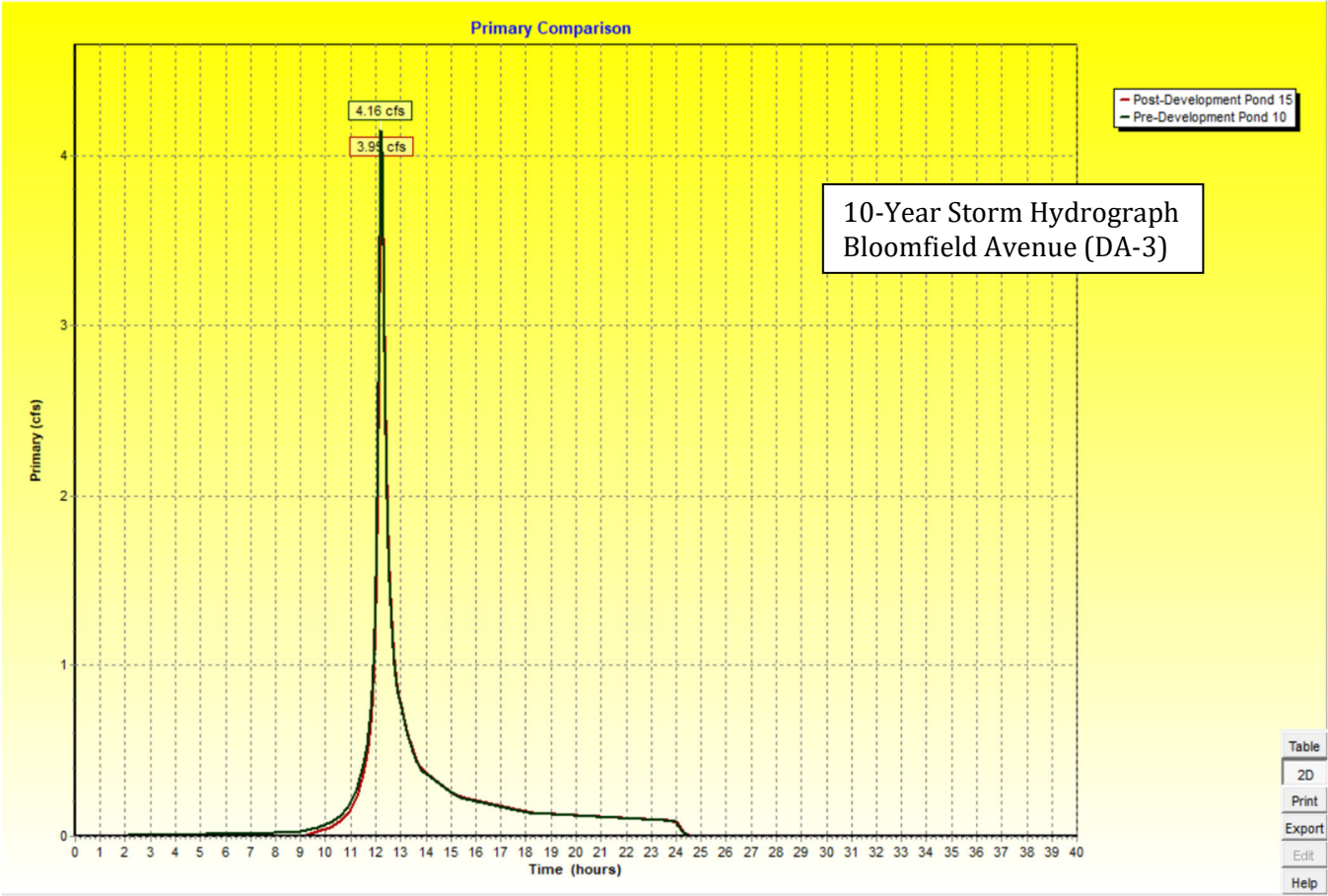
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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
37.10	0.00	0.00
37.20	0.00	0.00
37.30	0.00	0.00
37.40	0.00	0.00
37.50	0.00	0.00
37.60	0.00	0.00
37.70	0.00	0.00
37.80	0.00	0.00
37.90	0.00	0.00
38.00	0.00	0.00
38.10	0.00	0.00
38.20	0.00	0.00
38.30	0.00	0.00
38.40	0.00	0.00
38.50	0.00	0.00
38.60	0.00	0.00
38.70	0.00	0.00
38.80	0.00	0.00
38.90	0.00	0.00
39.00	0.00	0.00
39.10	0.00	0.00
39.20	0.00	0.00
39.30	0.00	0.00
39.40	0.00	0.00
39.50	0.00	0.00
39.60	0.00	0.00
39.70	0.00	0.00
39.80	0.00	0.00
39.90	0.00	0.00
40.00	0.00	0.00



Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
0.00	0.00	0.00
0.10	0.00	0.00
0.20	0.00	0.00
0.30	0.00	0.00
0.40	0.00	0.00
0.50	0.00	0.00
0.60	0.00	0.00
0.70	0.00	0.00
0.80	0.00	0.00
0.90	0.00	0.00
1.00	0.00	0.00
1.10	0.00	0.00
1.20	0.00	0.00
1.30	0.00	0.00
1.40	0.00	0.00
1.50	0.00	0.00
1.60	0.00	0.00
1.70	0.00	0.00
1.80	0.00	0.00
1.90	0.00	0.00
2.00	0.00	0.00
2.10	0.00	0.00
2.20	0.00	0.01
2.30	0.00	0.01
2.40	0.00	0.01
2.50	0.00	0.01
2.60	0.00	0.01
2.70	0.00	0.01
2.80	0.00	0.01
2.90	0.00	0.01
3.00	0.00	0.01
3.10	0.00	0.01
3.20	0.00	0.01
3.30	0.00	0.01
3.40	0.00	0.01
3.50	0.00	0.01
3.60	0.00	0.01
3.70	0.00	0.01
3.80	0.00	0.01
3.90	0.00	0.01
4.00	0.00	0.01
4.10	0.00	0.01
4.20	0.00	0.01
4.30	0.00	0.01
4.40	0.00	0.01
4.50	0.00	0.01
4.60	0.00	0.01
4.70	0.00	0.01
4.80	0.00	0.01
4.90	0.00	0.01
5.00	0.00	0.01
5.10	0.00	0.01
5.20	0.00	0.01

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
5.30	0.00	0.01
5.40	0.00	0.01
5.50	0.00	0.01
5.60	0.00	0.01
5.70	0.00	0.01
5.80	0.00	0.01
5.90	0.00	0.01
6.00	0.00	0.01
6.10	0.00	0.01
6.20	0.00	0.01
6.30	0.00	0.01
6.40	0.00	0.01
6.50	0.00	0.01
6.60	0.00	0.01
6.70	0.00	0.01
6.80	0.00	0.01
6.90	0.00	0.01
7.00	0.00	0.02
7.10	0.00	0.02
7.20	0.00	0.02
7.30	0.00	0.02
7.40	0.00	0.02
7.50	0.00	0.02
7.60	0.00	0.02
7.70	0.00	0.02
7.80	0.00	0.02
7.90	0.00	0.02
8.00	0.00	0.02
8.10	0.00	0.02
8.20	0.00	0.02
8.30	0.00	0.02
8.40	0.00	0.02
8.50	0.00	0.02
8.60	0.00	0.02
8.70	0.00	0.02
8.80	0.00	0.02
8.90	0.00	0.02
9.00	0.00	0.02
9.10	0.00	0.03
9.20	0.01	0.03
9.30	0.01	0.03
9.40	0.01	0.04
9.50	0.02	0.04
9.60	0.02	0.05
9.70	0.03	0.05
9.80	0.03	0.06
9.90	0.04	0.07
10.00	0.04	0.07
10.10	0.05	0.08
10.20	0.06	0.09
10.30	0.06	0.09
10.40	0.07	0.10
10.50	0.08	0.11

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
10.60	0.09	0.12
10.70	0.10	0.13
10.80	0.12	0.15
10.90	0.14	0.18
11.00	0.16	0.20
11.10	0.18	0.23
11.20	0.21	0.26
11.30	0.25	0.30
11.40	0.30	0.35
11.50	0.35	0.40
11.60	0.41	0.48
11.70	0.52	0.60
11.80	0.66	0.74
11.90	0.89	1.01
12.00	1.36	1.52
12.10	2.39	2.67
12.20	3.84	4.11
12.30	3.52	3.48
12.40	2.45	2.36
12.50	1.78	1.70
12.60	1.40	1.35
12.70	1.14	1.10
12.80	0.96	0.93
12.90	0.86	0.84
13.00	0.78	0.76
13.10	0.71	0.69
13.20	0.64	0.63
13.30	0.59	0.58
13.40	0.55	0.53
13.50	0.50	0.49
13.60	0.46	0.45
13.70	0.43	0.42
13.80	0.40	0.39
13.90	0.38	0.38
14.00	0.37	0.37
14.10	0.36	0.36
14.20	0.35	0.34
14.30	0.34	0.33
14.40	0.33	0.32
14.50	0.32	0.31
14.60	0.31	0.30
14.70	0.30	0.29
14.80	0.28	0.28
14.90	0.27	0.27
15.00	0.26	0.26
15.10	0.25	0.25
15.20	0.24	0.24
15.30	0.23	0.23
15.40	0.23	0.22
15.50	0.22	0.22
15.60	0.22	0.22
15.70	0.22	0.21
15.80	0.22	0.21

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
15.90	0.21	0.21
16.00	0.21	0.21
16.10	0.21	0.20
16.20	0.20	0.20
16.30	0.20	0.20
16.40	0.20	0.19
16.50	0.19	0.19
16.60	0.19	0.19
16.70	0.19	0.18
16.80	0.18	0.18
16.90	0.18	0.18
17.00	0.18	0.17
17.10	0.17	0.17
17.20	0.17	0.17
17.30	0.17	0.16
17.40	0.16	0.16
17.50	0.16	0.16
17.60	0.16	0.15
17.70	0.15	0.15
17.80	0.15	0.15
17.90	0.15	0.15
18.00	0.14	0.14
18.10	0.14	0.14
18.20	0.14	0.14
18.30	0.14	0.13
18.40	0.13	0.13
18.50	0.13	0.13
18.60	0.13	0.13
18.70	0.13	0.13
18.80	0.13	0.13
18.90	0.13	0.13
19.00	0.13	0.13
19.10	0.13	0.13
19.20	0.13	0.13
19.30	0.13	0.13
19.40	0.13	0.12
19.50	0.13	0.12
19.60	0.13	0.12
19.70	0.12	0.12
19.80	0.12	0.12
19.90	0.12	0.12
20.00	0.12	0.12
20.10	0.12	0.12
20.20	0.12	0.12
20.30	0.12	0.12
20.40	0.12	0.12
20.50	0.12	0.12
20.60	0.12	0.11
20.70	0.12	0.11
20.80	0.12	0.11
20.90	0.11	0.11
21.00	0.11	0.11
21.10	0.11	0.11

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
21.20	0.11	0.11
21.30	0.11	0.11
21.40	0.11	0.11
21.50	0.11	0.11
21.60	0.11	0.11
21.70	0.11	0.11
21.80	0.11	0.11
21.90	0.11	0.10
22.00	0.11	0.10
22.10	0.10	0.10
22.20	0.10	0.10
22.30	0.10	0.10
22.40	0.10	0.10
22.50	0.10	0.10
22.60	0.10	0.10
22.70	0.10	0.10
22.80	0.10	0.10
22.90	0.10	0.10
23.00	0.10	0.10
23.10	0.10	0.09
23.20	0.10	0.09
23.30	0.09	0.09
23.40	0.09	0.09
23.50	0.09	0.09
23.60	0.09	0.09
23.70	0.09	0.09
23.80	0.09	0.09
23.90	0.09	0.09
24.00	0.09	0.09
24.10	0.08	0.08
24.20	0.05	0.04
24.30	0.02	0.01
24.40	0.01	0.00
24.50	0.00	0.00
24.60	0.00	0.00
24.70	0.00	0.00
24.80	0.00	0.00
24.90	0.00	0.00
25.00	0.00	0.00
25.10	0.00	0.00
25.20	0.00	0.00
25.30	0.00	0.00
25.40	0.00	0.00
25.50	0.00	0.00
25.60	0.00	0.00
25.70	0.00	0.00
25.80	0.00	0.00
25.90	0.00	0.00
26.00	0.00	0.00
26.10	0.00	0.00
26.20	0.00	0.00
26.30	0.00	0.00
26.40	0.00	0.00

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
26.50	0.00	0.00
26.60	0.00	0.00
26.70	0.00	0.00
26.80	0.00	0.00
26.90	0.00	0.00
27.00	0.00	0.00
27.10	0.00	0.00
27.20	0.00	0.00
27.30	0.00	0.00
27.40	0.00	0.00
27.50	0.00	0.00
27.60	0.00	0.00
27.70	0.00	0.00
27.80	0.00	0.00
27.90	0.00	0.00
28.00	0.00	0.00
28.10	0.00	0.00
28.20	0.00	0.00
28.30	0.00	0.00
28.40	0.00	0.00
28.50	0.00	0.00
28.60	0.00	0.00
28.70	0.00	0.00
28.80	0.00	0.00
28.90	0.00	0.00
29.00	0.00	0.00
29.10	0.00	0.00
29.20	0.00	0.00
29.30	0.00	0.00
29.40	0.00	0.00
29.50	0.00	0.00
29.60	0.00	0.00
29.70	0.00	0.00
29.80	0.00	0.00
29.90	0.00	0.00
30.00	0.00	0.00
30.10	0.00	0.00
30.20	0.00	0.00
30.30	0.00	0.00
30.40	0.00	0.00
30.50	0.00	0.00
30.60	0.00	0.00
30.70	0.00	0.00
30.80	0.00	0.00
30.90	0.00	0.00
31.00	0.00	0.00
31.10	0.00	0.00
31.20	0.00	0.00
31.30	0.00	0.00
31.40	0.00	0.00
31.50	0.00	0.00
31.60	0.00	0.00
31.70	0.00	0.00

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
31.80	0.00	0.00
31.90	0.00	0.00
32.00	0.00	0.00
32.10	0.00	0.00
32.20	0.00	0.00
32.30	0.00	0.00
32.40	0.00	0.00
32.50	0.00	0.00
32.60	0.00	0.00
32.70	0.00	0.00
32.80	0.00	0.00
32.90	0.00	0.00
33.00	0.00	0.00
33.10	0.00	0.00
33.20	0.00	0.00
33.30	0.00	0.00
33.40	0.00	0.00
33.50	0.00	0.00
33.60	0.00	0.00
33.70	0.00	0.00
33.80	0.00	0.00
33.90	0.00	0.00
34.00	0.00	0.00
34.10	0.00	0.00
34.20	0.00	0.00
34.30	0.00	0.00
34.40	0.00	0.00
34.50	0.00	0.00
34.60	0.00	0.00
34.70	0.00	0.00
34.80	0.00	0.00
34.90	0.00	0.00
35.00	0.00	0.00
35.10	0.00	0.00
35.20	0.00	0.00
35.30	0.00	0.00
35.40	0.00	0.00
35.50	0.00	0.00
35.60	0.00	0.00
35.70	0.00	0.00
35.80	0.00	0.00
35.90	0.00	0.00
36.00	0.00	0.00
36.10	0.00	0.00
36.20	0.00	0.00
36.30	0.00	0.00
36.40	0.00	0.00
36.50	0.00	0.00
36.60	0.00	0.00
36.70	0.00	0.00
36.80	0.00	0.00
36.90	0.00	0.00
37.00	0.00	0.00

Post-Development

Prepared by Matrix New World Engineering

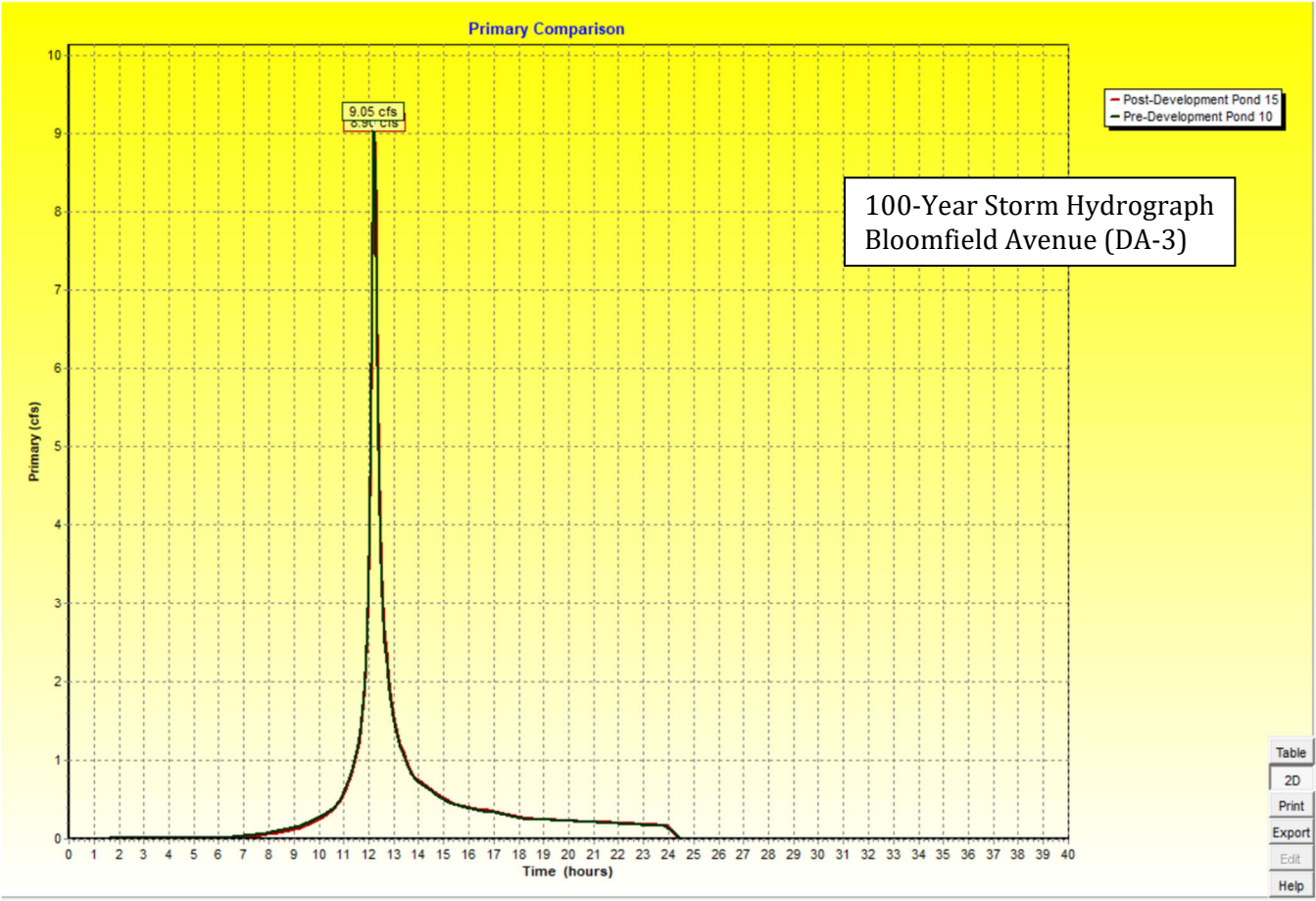
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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
37.10	0.00	0.00
37.20	0.00	0.00
37.30	0.00	0.00
37.40	0.00	0.00
37.50	0.00	0.00
37.60	0.00	0.00
37.70	0.00	0.00
37.80	0.00	0.00
37.90	0.00	0.00
38.00	0.00	0.00
38.10	0.00	0.00
38.20	0.00	0.00
38.30	0.00	0.00
38.40	0.00	0.00
38.50	0.00	0.00
38.60	0.00	0.00
38.70	0.00	0.00
38.80	0.00	0.00
38.90	0.00	0.00
39.00	0.00	0.00
39.10	0.00	0.00
39.20	0.00	0.00
39.30	0.00	0.00
39.40	0.00	0.00
39.50	0.00	0.00
39.60	0.00	0.00
39.70	0.00	0.00
39.80	0.00	0.00
39.90	0.00	0.00
40.00	0.00	0.00



Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
0.00	0.00	0.00
0.10	0.00	0.00
0.20	0.00	0.00
0.30	0.00	0.00
0.40	0.00	0.00
0.50	0.00	0.00
0.60	0.00	0.00
0.70	0.00	0.00
0.80	0.00	0.00
0.90	0.00	0.00
1.00	0.00	0.00
1.10	0.00	0.01
1.20	0.00	0.01
1.30	0.00	0.01
1.40	0.00	0.01
1.50	0.00	0.01
1.60	0.00	0.01
1.70	0.00	0.01
1.80	0.00	0.01
1.90	0.00	0.01
2.00	0.00	0.01
2.10	0.00	0.01
2.20	0.00	0.01
2.30	0.00	0.01
2.40	0.00	0.01
2.50	0.00	0.01
2.60	0.00	0.01
2.70	0.00	0.01
2.80	0.00	0.01
2.90	0.00	0.01
3.00	0.00	0.01
3.10	0.00	0.02
3.20	0.00	0.02
3.30	0.00	0.02
3.40	0.00	0.02
3.50	0.00	0.02
3.60	0.00	0.02
3.70	0.00	0.02
3.80	0.00	0.02
3.90	0.00	0.02
4.00	0.00	0.02
4.10	0.00	0.02
4.20	0.00	0.02
4.30	0.00	0.02
4.40	0.00	0.02
4.50	0.00	0.02
4.60	0.00	0.02
4.70	0.00	0.02
4.80	0.00	0.02
4.90	0.00	0.02
5.00	0.00	0.02
5.10	0.00	0.02
5.20	0.00	0.02

Post-Development

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
5.30	0.00	0.02
5.40	0.00	0.02
5.50	0.00	0.02
5.60	0.00	0.02
5.70	0.00	0.02
5.80	0.00	0.02
5.90	0.00	0.02
6.00	0.00	0.02
6.10	0.00	0.02
6.20	0.00	0.02
6.30	0.00	0.02
6.40	0.00	0.02
6.50	0.00	0.03
6.60	0.00	0.03
6.70	0.01	0.03
6.80	0.01	0.04
6.90	0.01	0.04
7.00	0.02	0.04
7.10	0.02	0.05
7.20	0.02	0.05
7.30	0.03	0.05
7.40	0.03	0.06
7.50	0.04	0.06
7.60	0.04	0.07
7.70	0.05	0.07
7.80	0.05	0.08
7.90	0.06	0.08
8.00	0.06	0.09
8.10	0.07	0.09
8.20	0.07	0.10
8.30	0.08	0.10
8.40	0.08	0.11
8.50	0.09	0.11
8.60	0.09	0.12
8.70	0.10	0.13
8.80	0.11	0.13
8.90	0.11	0.14
9.00	0.12	0.14
9.10	0.12	0.15
9.20	0.13	0.16
9.30	0.14	0.17
9.40	0.16	0.19
9.50	0.17	0.20
9.60	0.18	0.21
9.70	0.20	0.23
9.80	0.21	0.24
9.90	0.23	0.26
10.00	0.25	0.28
10.10	0.26	0.29
10.20	0.28	0.31
10.30	0.30	0.33
10.40	0.32	0.35
10.50	0.34	0.37

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
10.60	0.36	0.39
10.70	0.40	0.43
10.80	0.45	0.48
10.90	0.50	0.54
11.00	0.56	0.60
11.10	0.62	0.66
11.20	0.71	0.75
11.30	0.81	0.86
11.40	0.92	0.97
11.50	1.04	1.09
11.60	1.20	1.25
11.70	1.48	1.55
11.80	1.80	1.87
11.90	2.35	2.46
12.00	3.42	3.61
12.10	5.72	6.07
12.20	8.76	8.98
12.30	7.79	7.43
12.40	5.32	4.96
12.50	3.79	3.51
12.60	2.95	2.77
12.70	2.38	2.24
12.80	1.99	1.88
12.90	1.76	1.68
13.00	1.59	1.53
13.10	1.44	1.38
13.20	1.30	1.25
13.30	1.19	1.14
13.40	1.10	1.06
13.50	1.02	0.98
13.60	0.93	0.90
13.70	0.85	0.82
13.80	0.80	0.77
13.90	0.77	0.74
14.00	0.74	0.72
14.10	0.72	0.70
14.20	0.70	0.67
14.30	0.67	0.65
14.40	0.65	0.63
14.50	0.63	0.61
14.60	0.61	0.59
14.70	0.59	0.57
14.80	0.56	0.54
14.90	0.54	0.52
15.00	0.52	0.50
15.10	0.49	0.48
15.20	0.47	0.46
15.30	0.46	0.44
15.40	0.45	0.43
15.50	0.44	0.43
15.60	0.43	0.42
15.70	0.43	0.41
15.80	0.42	0.41

Post-Development

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
15.90	0.42	0.40
16.00	0.41	0.40
16.10	0.40	0.39
16.20	0.40	0.38
16.30	0.39	0.38
16.40	0.38	0.37
16.50	0.38	0.37
16.60	0.37	0.36
16.70	0.36	0.35
16.80	0.36	0.35
16.90	0.35	0.34
17.00	0.35	0.33
17.10	0.34	0.33
17.20	0.33	0.32
17.30	0.33	0.32
17.40	0.32	0.31
17.50	0.31	0.30
17.60	0.31	0.30
17.70	0.30	0.29
17.80	0.29	0.28
17.90	0.29	0.28
18.00	0.28	0.27
18.10	0.27	0.26
18.20	0.27	0.26
18.30	0.26	0.25
18.40	0.26	0.25
18.50	0.26	0.25
18.60	0.26	0.25
18.70	0.26	0.25
18.80	0.25	0.25
18.90	0.25	0.24
19.00	0.25	0.24
19.10	0.25	0.24
19.20	0.25	0.24
19.30	0.25	0.24
19.40	0.24	0.24
19.50	0.24	0.24
19.60	0.24	0.23
19.70	0.24	0.23
19.80	0.24	0.23
19.90	0.24	0.23
20.00	0.23	0.23
20.10	0.23	0.23
20.20	0.23	0.22
20.30	0.23	0.22
20.40	0.23	0.22
20.50	0.23	0.22
20.60	0.23	0.22
20.70	0.22	0.22
20.80	0.22	0.22
20.90	0.22	0.21
21.00	0.22	0.21
21.10	0.22	0.21

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
21.20	0.22	0.21
21.30	0.21	0.21
21.40	0.21	0.21
21.50	0.21	0.20
21.60	0.21	0.20
21.70	0.21	0.20
21.80	0.21	0.20
21.90	0.20	0.20
22.00	0.20	0.20
22.10	0.20	0.19
22.20	0.20	0.19
22.30	0.20	0.19
22.40	0.20	0.19
22.50	0.19	0.19
22.60	0.19	0.19
22.70	0.19	0.18
22.80	0.19	0.18
22.90	0.19	0.18
23.00	0.19	0.18
23.10	0.18	0.18
23.20	0.18	0.18
23.30	0.18	0.18
23.40	0.18	0.17
23.50	0.18	0.17
23.60	0.18	0.17
23.70	0.17	0.17
23.80	0.17	0.17
23.90	0.17	0.17
24.00	0.17	0.16
24.10	0.16	0.15
24.20	0.09	0.08
24.30	0.03	0.03
24.40	0.01	0.01
24.50	0.00	0.00
24.60	0.00	0.00
24.70	0.00	0.00
24.80	0.00	0.00
24.90	0.00	0.00
25.00	0.00	0.00
25.10	0.00	0.00
25.20	0.00	0.00
25.30	0.00	0.00
25.40	0.00	0.00
25.50	0.00	0.00
25.60	0.00	0.00
25.70	0.00	0.00
25.80	0.00	0.00
25.90	0.00	0.00
26.00	0.00	0.00
26.10	0.00	0.00
26.20	0.00	0.00
26.30	0.00	0.00
26.40	0.00	0.00

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
26.50	0.00	0.00
26.60	0.00	0.00
26.70	0.00	0.00
26.80	0.00	0.00
26.90	0.00	0.00
27.00	0.00	0.00
27.10	0.00	0.00
27.20	0.00	0.00
27.30	0.00	0.00
27.40	0.00	0.00
27.50	0.00	0.00
27.60	0.00	0.00
27.70	0.00	0.00
27.80	0.00	0.00
27.90	0.00	0.00
28.00	0.00	0.00
28.10	0.00	0.00
28.20	0.00	0.00
28.30	0.00	0.00
28.40	0.00	0.00
28.50	0.00	0.00
28.60	0.00	0.00
28.70	0.00	0.00
28.80	0.00	0.00
28.90	0.00	0.00
29.00	0.00	0.00
29.10	0.00	0.00
29.20	0.00	0.00
29.30	0.00	0.00
29.40	0.00	0.00
29.50	0.00	0.00
29.60	0.00	0.00
29.70	0.00	0.00
29.80	0.00	0.00
29.90	0.00	0.00
30.00	0.00	0.00
30.10	0.00	0.00
30.20	0.00	0.00
30.30	0.00	0.00
30.40	0.00	0.00
30.50	0.00	0.00
30.60	0.00	0.00
30.70	0.00	0.00
30.80	0.00	0.00
30.90	0.00	0.00
31.00	0.00	0.00
31.10	0.00	0.00
31.20	0.00	0.00
31.30	0.00	0.00
31.40	0.00	0.00
31.50	0.00	0.00
31.60	0.00	0.00
31.70	0.00	0.00

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
31.80	0.00	0.00
31.90	0.00	0.00
32.00	0.00	0.00
32.10	0.00	0.00
32.20	0.00	0.00
32.30	0.00	0.00
32.40	0.00	0.00
32.50	0.00	0.00
32.60	0.00	0.00
32.70	0.00	0.00
32.80	0.00	0.00
32.90	0.00	0.00
33.00	0.00	0.00
33.10	0.00	0.00
33.20	0.00	0.00
33.30	0.00	0.00
33.40	0.00	0.00
33.50	0.00	0.00
33.60	0.00	0.00
33.70	0.00	0.00
33.80	0.00	0.00
33.90	0.00	0.00
34.00	0.00	0.00
34.10	0.00	0.00
34.20	0.00	0.00
34.30	0.00	0.00
34.40	0.00	0.00
34.50	0.00	0.00
34.60	0.00	0.00
34.70	0.00	0.00
34.80	0.00	0.00
34.90	0.00	0.00
35.00	0.00	0.00
35.10	0.00	0.00
35.20	0.00	0.00
35.30	0.00	0.00
35.40	0.00	0.00
35.50	0.00	0.00
35.60	0.00	0.00
35.70	0.00	0.00
35.80	0.00	0.00
35.90	0.00	0.00
36.00	0.00	0.00
36.10	0.00	0.00
36.20	0.00	0.00
36.30	0.00	0.00
36.40	0.00	0.00
36.50	0.00	0.00
36.60	0.00	0.00
36.70	0.00	0.00
36.80	0.00	0.00
36.90	0.00	0.00
37.00	0.00	0.00

Post-Development

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Primary Comparison (continued)

Time (hours)	Post-Development Pond 15 (cfs)	Pre-Development Pond 10 (cfs)
37.10	0.00	0.00
37.20	0.00	0.00
37.30	0.00	0.00
37.40	0.00	0.00
37.50	0.00	0.00
37.60	0.00	0.00
37.70	0.00	0.00
37.80	0.00	0.00
37.90	0.00	0.00
38.00	0.00	0.00
38.10	0.00	0.00
38.20	0.00	0.00
38.30	0.00	0.00
38.40	0.00	0.00
38.50	0.00	0.00
38.60	0.00	0.00
38.70	0.00	0.00
38.80	0.00	0.00
38.90	0.00	0.00
39.00	0.00	0.00
39.10	0.00	0.00
39.20	0.00	0.00
39.30	0.00	0.00
39.40	0.00	0.00
39.50	0.00	0.00
39.60	0.00	0.00
39.70	0.00	0.00
39.80	0.00	0.00
39.90	0.00	0.00
40.00	0.00	0.00

*In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at N.J.A.C. 7:8-5.6, complete **one of the following**:*

NJAC 7:8-5.4-ii. Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the two, 10 and 100-year storm events and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full development under existing zoning and land use ordinances in the drainage area;

The drainage area Overland to Bloomfield Avenue from pre-development to post-development conditions is demonstrating compliance with NJAC 7:8-5.4-ii. In post-development conditions, there is no increase in the peak flow rate and peak flow volume as shown in Table 7. See above for the post-development runoff hydrographs for the two, 10 and 100-year storm events.

Drainage Area to Parkhurst Place (DA-4)

Pre-Development

Table 4: Pre-development Peak Flow Rates and Volume to Parkhurst Place

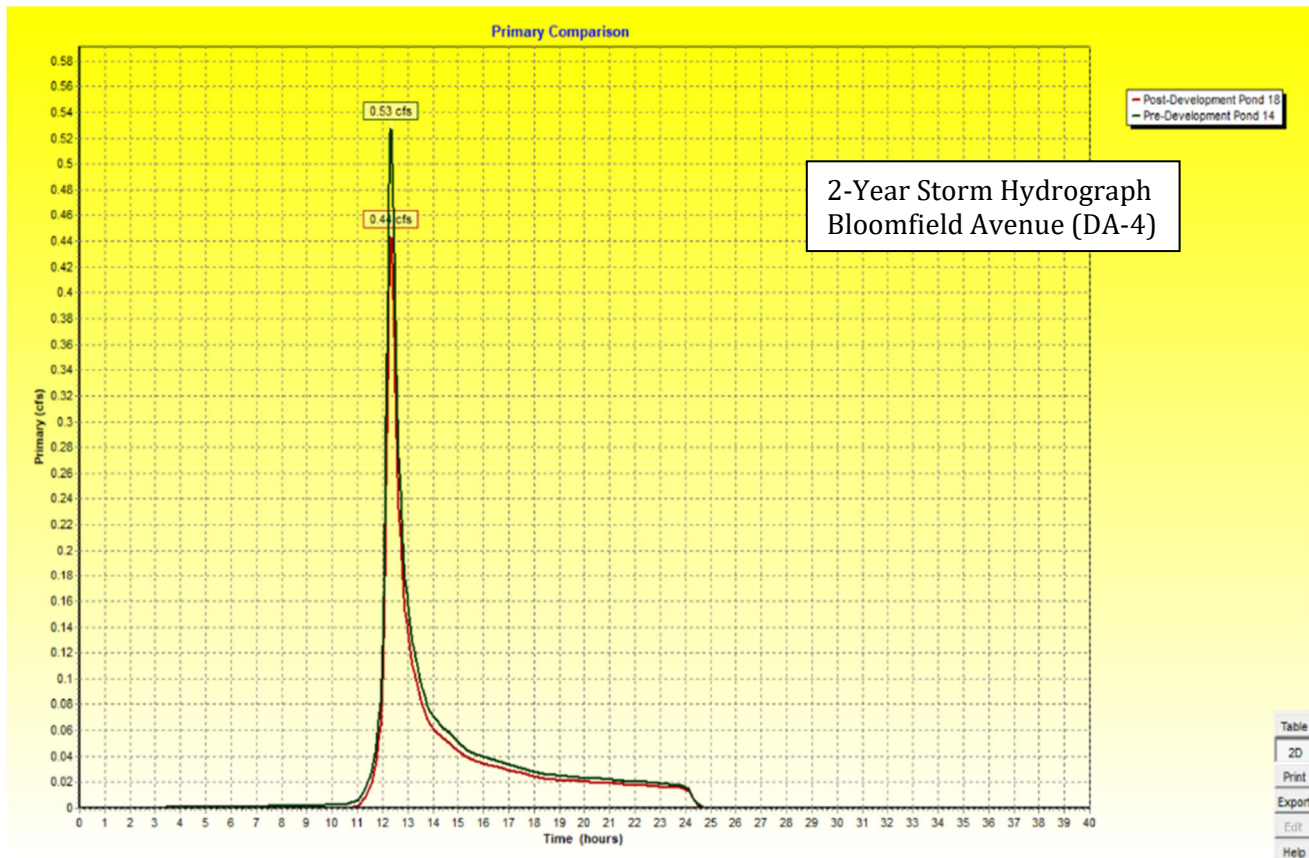
Storm Event (yr)	Pre-Development Peak Flow Rate (cfs)	Pre-Development Peak Volume (af)
2	0.53	0.064
10	1.22	0.139
100	2.77	0.312

Post-Development

Table 8: Pre-Development and Post-Development Peak Flow Rate and Volume Summary to Parkhurst Place

Storm Event (yr)	Pre-Development Peak Flow Rate (cfs)	Post-Development Peak Flow Rate (cfs)	Pre-Development Peak Volume (af)	Post-Development Peak Flow Volume (af)
2	0.53	0.44	0.064	0.053
10	1.22	1.06	0.139	0.119
100	2.77	2.43	0.312	0.272

Pre-Development vs. Post-Development Hydrographs



Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
0.00	0.00	0.00
0.10	0.00	0.00
0.20	0.00	0.00
0.30	0.00	0.00
0.40	0.00	0.00
0.50	0.00	0.00
0.60	0.00	0.00
0.70	0.00	0.00
0.80	0.00	0.00
0.90	0.00	0.00
1.00	0.00	0.00
1.10	0.00	0.00
1.20	0.00	0.00
1.30	0.00	0.00
1.40	0.00	0.00
1.50	0.00	0.00
1.60	0.00	0.00
1.70	0.00	0.00
1.80	0.00	0.00
1.90	0.00	0.00
2.00	0.00	0.00
2.10	0.00	0.00
2.20	0.00	0.00
2.30	0.00	0.00
2.40	0.00	0.00
2.50	0.00	0.00
2.60	0.00	0.00
2.70	0.00	0.00
2.80	0.00	0.00
2.90	0.00	0.00
3.00	0.00	0.00
3.10	0.00	0.00
3.20	0.00	0.00
3.30	0.00	0.00
3.40	0.00	0.00
3.50	0.00	0.00
3.60	0.00	0.00
3.70	0.00	0.00
3.80	0.00	0.00
3.90	0.00	0.00
4.00	0.00	0.00
4.10	0.00	0.00
4.20	0.00	0.00
4.30	0.00	0.00
4.40	0.00	0.00
4.50	0.00	0.00
4.60	0.00	0.00
4.70	0.00	0.00
4.80	0.00	0.00
4.90	0.00	0.00
5.00	0.00	0.00
5.10	0.00	0.00
5.20	0.00	0.00

Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
5.30	0.00	0.00
5.40	0.00	0.00
5.50	0.00	0.00
5.60	0.00	0.00
5.70	0.00	0.00
5.80	0.00	0.00
5.90	0.00	0.00
6.00	0.00	0.00
6.10	0.00	0.00
6.20	0.00	0.00
6.30	0.00	0.00
6.40	0.00	0.00
6.50	0.00	0.00
6.60	0.00	0.00
6.70	0.00	0.00
6.80	0.00	0.00
6.90	0.00	0.00
7.00	0.00	0.00
7.10	0.00	0.00
7.20	0.00	0.00
7.30	0.00	0.00
7.40	0.00	0.00
7.50	0.00	0.00
7.60	0.00	0.00
7.70	0.00	0.00
7.80	0.00	0.00
7.90	0.00	0.00
8.00	0.00	0.00
8.10	0.00	0.00
8.20	0.00	0.00
8.30	0.00	0.00
8.40	0.00	0.00
8.50	0.00	0.00
8.60	0.00	0.00
8.70	0.00	0.00
8.80	0.00	0.00
8.90	0.00	0.00
9.00	0.00	0.00
9.10	0.00	0.00
9.20	0.00	0.00
9.30	0.00	0.00
9.40	0.00	0.00
9.50	0.00	0.00
9.60	0.00	0.00
9.70	0.00	0.00
9.80	0.00	0.00
9.90	0.00	0.00
10.00	0.00	0.00
10.10	0.00	0.00
10.20	0.00	0.00
10.30	0.00	0.00
10.40	0.00	0.00
10.50	0.00	0.00

Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
10.60	0.00	0.00
10.70	0.00	0.00
10.80	0.00	0.00
10.90	0.00	0.00
11.00	0.00	0.01
11.10	0.00	0.01
11.20	0.00	0.01
11.30	0.01	0.01
11.40	0.01	0.02
11.50	0.02	0.02
11.60	0.02	0.03
11.70	0.03	0.04
11.80	0.04	0.06
11.90	0.06	0.08
12.00	0.10	0.13
12.10	0.18	0.22
12.20	0.33	0.40
12.30	0.44	0.52
12.40	0.41	0.48
12.50	0.32	0.38
12.60	0.26	0.30
12.70	0.21	0.25
12.80	0.18	0.21
12.90	0.15	0.18
13.00	0.14	0.16
13.10	0.12	0.14
13.20	0.11	0.13
13.30	0.10	0.12
13.40	0.09	0.11
13.50	0.09	0.10
13.60	0.08	0.09
13.70	0.07	0.08
13.80	0.07	0.08
13.90	0.06	0.07
14.00	0.06	0.07
14.10	0.06	0.07
14.20	0.06	0.07
14.30	0.06	0.06
14.40	0.05	0.06
14.50	0.05	0.06
14.60	0.05	0.06
14.70	0.05	0.06
14.80	0.05	0.05
14.90	0.05	0.05
15.00	0.04	0.05
15.10	0.04	0.05
15.20	0.04	0.05
15.30	0.04	0.05
15.40	0.04	0.04
15.50	0.04	0.04
15.60	0.04	0.04
15.70	0.04	0.04
15.80	0.04	0.04

Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
15.90	0.04	0.04
16.00	0.03	0.04
16.10	0.03	0.04
16.20	0.03	0.04
16.30	0.03	0.04
16.40	0.03	0.04
16.50	0.03	0.04
16.60	0.03	0.04
16.70	0.03	0.04
16.80	0.03	0.04
16.90	0.03	0.03
17.00	0.03	0.03
17.10	0.03	0.03
17.20	0.03	0.03
17.30	0.03	0.03
17.40	0.03	0.03
17.50	0.03	0.03
17.60	0.03	0.03
17.70	0.03	0.03
17.80	0.03	0.03
17.90	0.03	0.03
18.00	0.02	0.03
18.10	0.02	0.03
18.20	0.02	0.03
18.30	0.02	0.03
18.40	0.02	0.03
18.50	0.02	0.03
18.60	0.02	0.03
18.70	0.02	0.03
18.80	0.02	0.03
18.90	0.02	0.03
19.00	0.02	0.03
19.10	0.02	0.02
19.20	0.02	0.02
19.30	0.02	0.02
19.40	0.02	0.02
19.50	0.02	0.02
19.60	0.02	0.02
19.70	0.02	0.02
19.80	0.02	0.02
19.90	0.02	0.02
20.00	0.02	0.02
20.10	0.02	0.02
20.20	0.02	0.02
20.30	0.02	0.02
20.40	0.02	0.02
20.50	0.02	0.02
20.60	0.02	0.02
20.70	0.02	0.02
20.80	0.02	0.02
20.90	0.02	0.02
21.00	0.02	0.02
21.10	0.02	0.02

Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
21.20	0.02	0.02
21.30	0.02	0.02
21.40	0.02	0.02
21.50	0.02	0.02
21.60	0.02	0.02
21.70	0.02	0.02
21.80	0.02	0.02
21.90	0.02	0.02
22.00	0.02	0.02
22.10	0.02	0.02
22.20	0.02	0.02
22.30	0.02	0.02
22.40	0.02	0.02
22.50	0.02	0.02
22.60	0.02	0.02
22.70	0.02	0.02
22.80	0.02	0.02
22.90	0.02	0.02
23.00	0.02	0.02
23.10	0.02	0.02
23.20	0.02	0.02
23.30	0.02	0.02
23.40	0.02	0.02
23.50	0.02	0.02
23.60	0.02	0.02
23.70	0.02	0.02
23.80	0.02	0.02
23.90	0.02	0.02
24.00	0.02	0.02
24.10	0.01	0.02
24.20	0.01	0.01
24.30	0.01	0.01
24.40	0.00	0.00
24.50	0.00	0.00
24.60	0.00	0.00
24.70	0.00	0.00
24.80	0.00	0.00
24.90	0.00	0.00
25.00	0.00	0.00
25.10	0.00	0.00
25.20	0.00	0.00
25.30	0.00	0.00
25.40	0.00	0.00
25.50	0.00	0.00
25.60	0.00	0.00
25.70	0.00	0.00
25.80	0.00	0.00
25.90	0.00	0.00
26.00	0.00	0.00
26.10	0.00	0.00
26.20	0.00	0.00
26.30	0.00	0.00
26.40	0.00	0.00

Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
26.50	0.00	0.00
26.60	0.00	0.00
26.70	0.00	0.00
26.80	0.00	0.00
26.90	0.00	0.00
27.00	0.00	0.00
27.10	0.00	0.00
27.20	0.00	0.00
27.30	0.00	0.00
27.40	0.00	0.00
27.50	0.00	0.00
27.60	0.00	0.00
27.70	0.00	0.00
27.80	0.00	0.00
27.90	0.00	0.00
28.00	0.00	0.00
28.10	0.00	0.00
28.20	0.00	0.00
28.30	0.00	0.00
28.40	0.00	0.00
28.50	0.00	0.00
28.60	0.00	0.00
28.70	0.00	0.00
28.80	0.00	0.00
28.90	0.00	0.00
29.00	0.00	0.00
29.10	0.00	0.00
29.20	0.00	0.00
29.30	0.00	0.00
29.40	0.00	0.00
29.50	0.00	0.00
29.60	0.00	0.00
29.70	0.00	0.00
29.80	0.00	0.00
29.90	0.00	0.00
30.00	0.00	0.00
30.10	0.00	0.00
30.20	0.00	0.00
30.30	0.00	0.00
30.40	0.00	0.00
30.50	0.00	0.00
30.60	0.00	0.00
30.70	0.00	0.00
30.80	0.00	0.00
30.90	0.00	0.00
31.00	0.00	0.00
31.10	0.00	0.00
31.20	0.00	0.00
31.30	0.00	0.00
31.40	0.00	0.00
31.50	0.00	0.00
31.60	0.00	0.00
31.70	0.00	0.00

Post-Development

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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
31.80	0.00	0.00
31.90	0.00	0.00
32.00	0.00	0.00
32.10	0.00	0.00
32.20	0.00	0.00
32.30	0.00	0.00
32.40	0.00	0.00
32.50	0.00	0.00
32.60	0.00	0.00
32.70	0.00	0.00
32.80	0.00	0.00
32.90	0.00	0.00
33.00	0.00	0.00
33.10	0.00	0.00
33.20	0.00	0.00
33.30	0.00	0.00
33.40	0.00	0.00
33.50	0.00	0.00
33.60	0.00	0.00
33.70	0.00	0.00
33.80	0.00	0.00
33.90	0.00	0.00
34.00	0.00	0.00
34.10	0.00	0.00
34.20	0.00	0.00
34.30	0.00	0.00
34.40	0.00	0.00
34.50	0.00	0.00
34.60	0.00	0.00
34.70	0.00	0.00
34.80	0.00	0.00
34.90	0.00	0.00
35.00	0.00	0.00
35.10	0.00	0.00
35.20	0.00	0.00
35.30	0.00	0.00
35.40	0.00	0.00
35.50	0.00	0.00
35.60	0.00	0.00
35.70	0.00	0.00
35.80	0.00	0.00
35.90	0.00	0.00
36.00	0.00	0.00
36.10	0.00	0.00
36.20	0.00	0.00
36.30	0.00	0.00
36.40	0.00	0.00
36.50	0.00	0.00
36.60	0.00	0.00
36.70	0.00	0.00
36.80	0.00	0.00
36.90	0.00	0.00
37.00	0.00	0.00

Post-Development

Prepared by Matrix New World Engineering

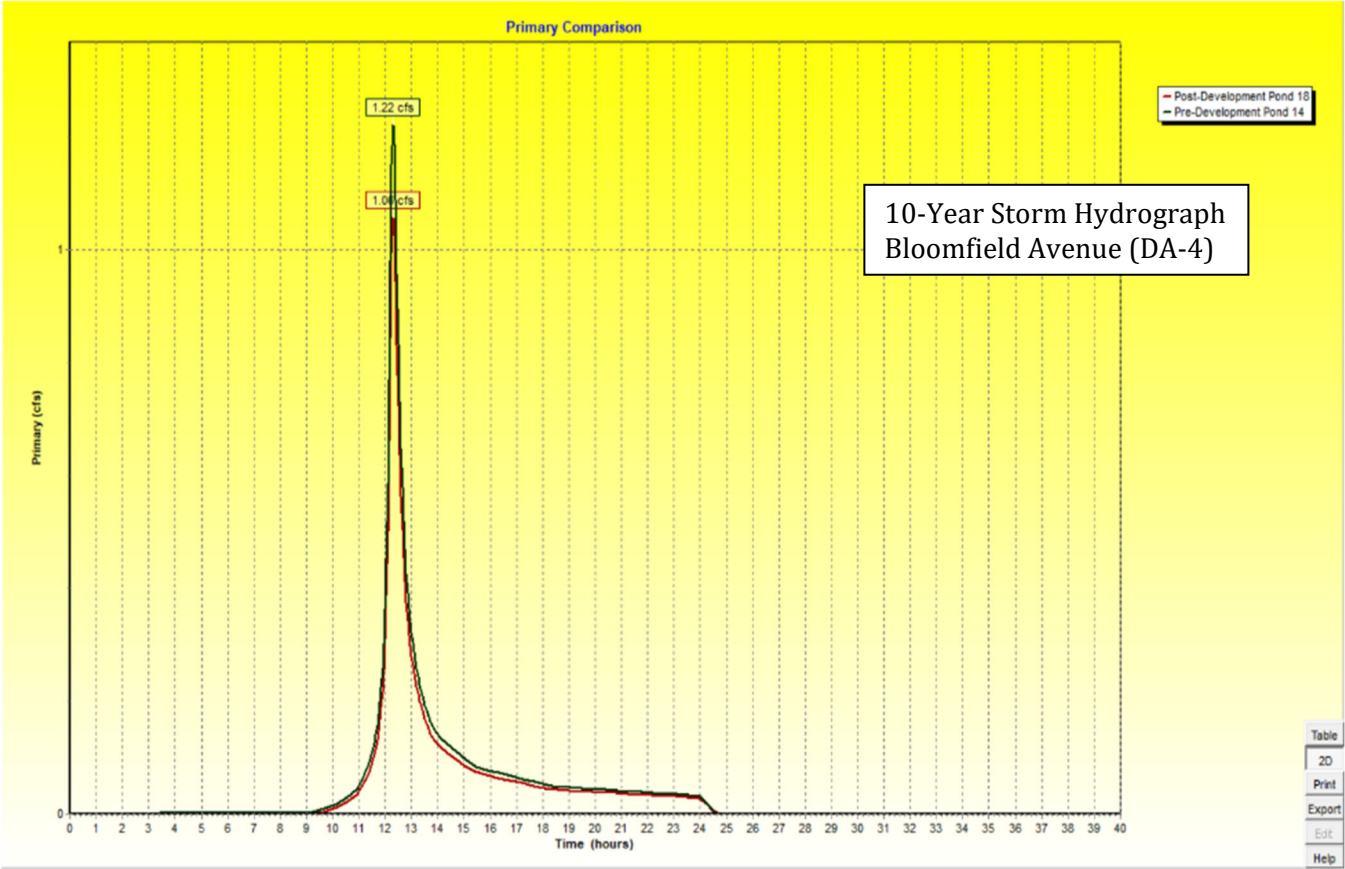
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NOAA 24-hr D 2-yr Rainfall=3.42"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
37.10	0.00	0.00
37.20	0.00	0.00
37.30	0.00	0.00
37.40	0.00	0.00
37.50	0.00	0.00
37.60	0.00	0.00
37.70	0.00	0.00
37.80	0.00	0.00
37.90	0.00	0.00
38.00	0.00	0.00
38.10	0.00	0.00
38.20	0.00	0.00
38.30	0.00	0.00
38.40	0.00	0.00
38.50	0.00	0.00
38.60	0.00	0.00
38.70	0.00	0.00
38.80	0.00	0.00
38.90	0.00	0.00
39.00	0.00	0.00
39.10	0.00	0.00
39.20	0.00	0.00
39.30	0.00	0.00
39.40	0.00	0.00
39.50	0.00	0.00
39.60	0.00	0.00
39.70	0.00	0.00
39.80	0.00	0.00
39.90	0.00	0.00
40.00	0.00	0.00



Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
0.00	0.00	0.00
0.10	0.00	0.00
0.20	0.00	0.00
0.30	0.00	0.00
0.40	0.00	0.00
0.50	0.00	0.00
0.60	0.00	0.00
0.70	0.00	0.00
0.80	0.00	0.00
0.90	0.00	0.00
1.00	0.00	0.00
1.10	0.00	0.00
1.20	0.00	0.00
1.30	0.00	0.00
1.40	0.00	0.00
1.50	0.00	0.00
1.60	0.00	0.00
1.70	0.00	0.00
1.80	0.00	0.00
1.90	0.00	0.00
2.00	0.00	0.00
2.10	0.00	0.00
2.20	0.00	0.00
2.30	0.00	0.00
2.40	0.00	0.00
2.50	0.00	0.00
2.60	0.00	0.00
2.70	0.00	0.00
2.80	0.00	0.00
2.90	0.00	0.00
3.00	0.00	0.00
3.10	0.00	0.00
3.20	0.00	0.00
3.30	0.00	0.00
3.40	0.00	0.00
3.50	0.00	0.00
3.60	0.00	0.00
3.70	0.00	0.00
3.80	0.00	0.00
3.90	0.00	0.00
4.00	0.00	0.00
4.10	0.00	0.00
4.20	0.00	0.00
4.30	0.00	0.00
4.40	0.00	0.00
4.50	0.00	0.00
4.60	0.00	0.00
4.70	0.00	0.00
4.80	0.00	0.00
4.90	0.00	0.00
5.00	0.00	0.00
5.10	0.00	0.00
5.20	0.00	0.00

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
5.30	0.00	0.00
5.40	0.00	0.00
5.50	0.00	0.00
5.60	0.00	0.00
5.70	0.00	0.00
5.80	0.00	0.00
5.90	0.00	0.00
6.00	0.00	0.00
6.10	0.00	0.00
6.20	0.00	0.00
6.30	0.00	0.00
6.40	0.00	0.00
6.50	0.00	0.00
6.60	0.00	0.00
6.70	0.00	0.00
6.80	0.00	0.00
6.90	0.00	0.00
7.00	0.00	0.00
7.10	0.00	0.00
7.20	0.00	0.00
7.30	0.00	0.00
7.40	0.00	0.00
7.50	0.00	0.00
7.60	0.00	0.00
7.70	0.00	0.00
7.80	0.00	0.00
7.90	0.00	0.00
8.00	0.00	0.00
8.10	0.00	0.00
8.20	0.00	0.00
8.30	0.00	0.00
8.40	0.00	0.00
8.50	0.00	0.00
8.60	0.00	0.00
8.70	0.00	0.00
8.80	0.00	0.00
8.90	0.00	0.00
9.00	0.00	0.00
9.10	0.00	0.00
9.20	0.00	0.00
9.30	0.00	0.00
9.40	0.00	0.00
9.50	0.00	0.01
9.60	0.00	0.01
9.70	0.00	0.01
9.80	0.01	0.01
9.90	0.01	0.01
10.00	0.01	0.01
10.10	0.01	0.02
10.20	0.01	0.02
10.30	0.02	0.02
10.40	0.02	0.02
10.50	0.02	0.03

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
10.60	0.02	0.03
10.70	0.03	0.03
10.80	0.03	0.04
10.90	0.03	0.04
11.00	0.04	0.05
11.10	0.05	0.06
11.20	0.05	0.07
11.30	0.06	0.08
11.40	0.08	0.09
11.50	0.09	0.11
11.60	0.11	0.13
11.70	0.13	0.16
11.80	0.17	0.20
11.90	0.22	0.26
12.00	0.31	0.36
12.10	0.50	0.59
12.20	0.84	0.98
12.30	1.05	1.22
12.40	0.94	1.09
12.50	0.72	0.83
12.60	0.56	0.65
12.70	0.45	0.52
12.80	0.37	0.43
12.90	0.32	0.36
13.00	0.28	0.32
13.10	0.25	0.29
13.20	0.22	0.26
13.30	0.20	0.23
13.40	0.19	0.21
13.50	0.17	0.20
13.60	0.16	0.18
13.70	0.15	0.17
13.80	0.14	0.15
13.90	0.13	0.15
14.00	0.12	0.14
14.10	0.12	0.13
14.20	0.11	0.13
14.30	0.11	0.13
14.40	0.11	0.12
14.50	0.10	0.12
14.60	0.10	0.11
14.70	0.10	0.11
14.80	0.09	0.11
14.90	0.09	0.10
15.00	0.09	0.10
15.10	0.08	0.09
15.20	0.08	0.09
15.30	0.08	0.09
15.40	0.07	0.08
15.50	0.07	0.08
15.60	0.07	0.08
15.70	0.07	0.08
15.80	0.07	0.08

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
15.90	0.07	0.08
16.00	0.07	0.08
16.10	0.07	0.08
16.20	0.07	0.07
16.30	0.06	0.07
16.40	0.06	0.07
16.50	0.06	0.07
16.60	0.06	0.07
16.70	0.06	0.07
16.80	0.06	0.07
16.90	0.06	0.07
17.00	0.06	0.07
17.10	0.06	0.06
17.20	0.06	0.06
17.30	0.05	0.06
17.40	0.05	0.06
17.50	0.05	0.06
17.60	0.05	0.06
17.70	0.05	0.06
17.80	0.05	0.06
17.90	0.05	0.05
18.00	0.05	0.05
18.10	0.05	0.05
18.20	0.04	0.05
18.30	0.04	0.05
18.40	0.04	0.05
18.50	0.04	0.05
18.60	0.04	0.05
18.70	0.04	0.05
18.80	0.04	0.05
18.90	0.04	0.05
19.00	0.04	0.05
19.10	0.04	0.05
19.20	0.04	0.05
19.30	0.04	0.05
19.40	0.04	0.05
19.50	0.04	0.05
19.60	0.04	0.05
19.70	0.04	0.05
19.80	0.04	0.04
19.90	0.04	0.04
20.00	0.04	0.04
20.10	0.04	0.04
20.20	0.04	0.04
20.30	0.04	0.04
20.40	0.04	0.04
20.50	0.04	0.04
20.60	0.04	0.04
20.70	0.04	0.04
20.80	0.04	0.04
20.90	0.04	0.04
21.00	0.04	0.04
21.10	0.04	0.04

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
21.20	0.04	0.04
21.30	0.04	0.04
21.40	0.04	0.04
21.50	0.04	0.04
21.60	0.03	0.04
21.70	0.03	0.04
21.80	0.03	0.04
21.90	0.03	0.04
22.00	0.03	0.04
22.10	0.03	0.04
22.20	0.03	0.04
22.30	0.03	0.04
22.40	0.03	0.04
22.50	0.03	0.04
22.60	0.03	0.04
22.70	0.03	0.04
22.80	0.03	0.04
22.90	0.03	0.04
23.00	0.03	0.04
23.10	0.03	0.04
23.20	0.03	0.03
23.30	0.03	0.03
23.40	0.03	0.03
23.50	0.03	0.03
23.60	0.03	0.03
23.70	0.03	0.03
23.80	0.03	0.03
23.90	0.03	0.03
24.00	0.03	0.03
24.10	0.03	0.03
24.20	0.02	0.03
24.30	0.01	0.02
24.40	0.01	0.01
24.50	0.00	0.00
24.60	0.00	0.00
24.70	0.00	0.00
24.80	0.00	0.00
24.90	0.00	0.00
25.00	0.00	0.00
25.10	0.00	0.00
25.20	0.00	0.00
25.30	0.00	0.00
25.40	0.00	0.00
25.50	0.00	0.00
25.60	0.00	0.00
25.70	0.00	0.00
25.80	0.00	0.00
25.90	0.00	0.00
26.00	0.00	0.00
26.10	0.00	0.00
26.20	0.00	0.00
26.30	0.00	0.00
26.40	0.00	0.00

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
26.50	0.00	0.00
26.60	0.00	0.00
26.70	0.00	0.00
26.80	0.00	0.00
26.90	0.00	0.00
27.00	0.00	0.00
27.10	0.00	0.00
27.20	0.00	0.00
27.30	0.00	0.00
27.40	0.00	0.00
27.50	0.00	0.00
27.60	0.00	0.00
27.70	0.00	0.00
27.80	0.00	0.00
27.90	0.00	0.00
28.00	0.00	0.00
28.10	0.00	0.00
28.20	0.00	0.00
28.30	0.00	0.00
28.40	0.00	0.00
28.50	0.00	0.00
28.60	0.00	0.00
28.70	0.00	0.00
28.80	0.00	0.00
28.90	0.00	0.00
29.00	0.00	0.00
29.10	0.00	0.00
29.20	0.00	0.00
29.30	0.00	0.00
29.40	0.00	0.00
29.50	0.00	0.00
29.60	0.00	0.00
29.70	0.00	0.00
29.80	0.00	0.00
29.90	0.00	0.00
30.00	0.00	0.00
30.10	0.00	0.00
30.20	0.00	0.00
30.30	0.00	0.00
30.40	0.00	0.00
30.50	0.00	0.00
30.60	0.00	0.00
30.70	0.00	0.00
30.80	0.00	0.00
30.90	0.00	0.00
31.00	0.00	0.00
31.10	0.00	0.00
31.20	0.00	0.00
31.30	0.00	0.00
31.40	0.00	0.00
31.50	0.00	0.00
31.60	0.00	0.00
31.70	0.00	0.00

Post-Development

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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
31.80	0.00	0.00
31.90	0.00	0.00
32.00	0.00	0.00
32.10	0.00	0.00
32.20	0.00	0.00
32.30	0.00	0.00
32.40	0.00	0.00
32.50	0.00	0.00
32.60	0.00	0.00
32.70	0.00	0.00
32.80	0.00	0.00
32.90	0.00	0.00
33.00	0.00	0.00
33.10	0.00	0.00
33.20	0.00	0.00
33.30	0.00	0.00
33.40	0.00	0.00
33.50	0.00	0.00
33.60	0.00	0.00
33.70	0.00	0.00
33.80	0.00	0.00
33.90	0.00	0.00
34.00	0.00	0.00
34.10	0.00	0.00
34.20	0.00	0.00
34.30	0.00	0.00
34.40	0.00	0.00
34.50	0.00	0.00
34.60	0.00	0.00
34.70	0.00	0.00
34.80	0.00	0.00
34.90	0.00	0.00
35.00	0.00	0.00
35.10	0.00	0.00
35.20	0.00	0.00
35.30	0.00	0.00
35.40	0.00	0.00
35.50	0.00	0.00
35.60	0.00	0.00
35.70	0.00	0.00
35.80	0.00	0.00
35.90	0.00	0.00
36.00	0.00	0.00
36.10	0.00	0.00
36.20	0.00	0.00
36.30	0.00	0.00
36.40	0.00	0.00
36.50	0.00	0.00
36.60	0.00	0.00
36.70	0.00	0.00
36.80	0.00	0.00
36.90	0.00	0.00
37.00	0.00	0.00

Post-Development

Prepared by Matrix New World Engineering

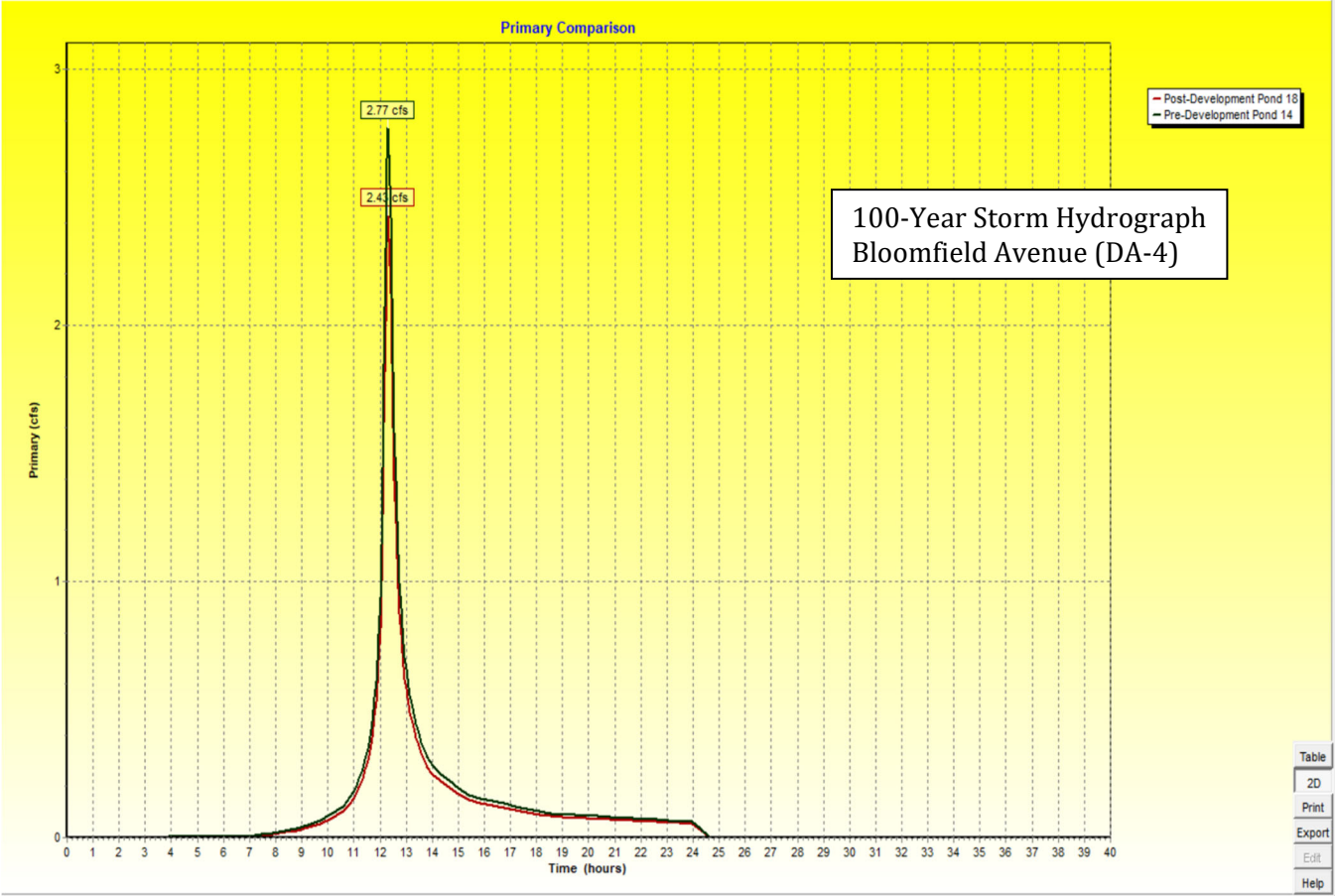
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NOAA 24-hr D 10-yr Rainfall=5.20"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
37.10	0.00	0.00
37.20	0.00	0.00
37.30	0.00	0.00
37.40	0.00	0.00
37.50	0.00	0.00
37.60	0.00	0.00
37.70	0.00	0.00
37.80	0.00	0.00
37.90	0.00	0.00
38.00	0.00	0.00
38.10	0.00	0.00
38.20	0.00	0.00
38.30	0.00	0.00
38.40	0.00	0.00
38.50	0.00	0.00
38.60	0.00	0.00
38.70	0.00	0.00
38.80	0.00	0.00
38.90	0.00	0.00
39.00	0.00	0.00
39.10	0.00	0.00
39.20	0.00	0.00
39.30	0.00	0.00
39.40	0.00	0.00
39.50	0.00	0.00
39.60	0.00	0.00
39.70	0.00	0.00
39.80	0.00	0.00
39.90	0.00	0.00
40.00	0.00	0.00



Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
0.00	0.00	0.00
0.10	0.00	0.00
0.20	0.00	0.00
0.30	0.00	0.00
0.40	0.00	0.00
0.50	0.00	0.00
0.60	0.00	0.00
0.70	0.00	0.00
0.80	0.00	0.00
0.90	0.00	0.00
1.00	0.00	0.00
1.10	0.00	0.00
1.20	0.00	0.00
1.30	0.00	0.00
1.40	0.00	0.00
1.50	0.00	0.00
1.60	0.00	0.00
1.70	0.00	0.00
1.80	0.00	0.00
1.90	0.00	0.00
2.00	0.00	0.00
2.10	0.00	0.00
2.20	0.00	0.00
2.30	0.00	0.00
2.40	0.00	0.00
2.50	0.00	0.00
2.60	0.00	0.00
2.70	0.00	0.00
2.80	0.00	0.00
2.90	0.00	0.00
3.00	0.00	0.00
3.10	0.00	0.00
3.20	0.00	0.00
3.30	0.00	0.00
3.40	0.00	0.00
3.50	0.00	0.00
3.60	0.00	0.00
3.70	0.00	0.00
3.80	0.00	0.00
3.90	0.00	0.00
4.00	0.00	0.00
4.10	0.00	0.00
4.20	0.00	0.00
4.30	0.00	0.00
4.40	0.00	0.00
4.50	0.00	0.00
4.60	0.00	0.00
4.70	0.00	0.00
4.80	0.00	0.00
4.90	0.00	0.00
5.00	0.00	0.00
5.10	0.00	0.00
5.20	0.00	0.00

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
5.30	0.00	0.00
5.40	0.00	0.00
5.50	0.00	0.00
5.60	0.00	0.00
5.70	0.00	0.00
5.80	0.00	0.00
5.90	0.00	0.00
6.00	0.00	0.00
6.10	0.00	0.00
6.20	0.00	0.00
6.30	0.00	0.00
6.40	0.00	0.00
6.50	0.00	0.00
6.60	0.00	0.00
6.70	0.00	0.00
6.80	0.00	0.00
6.90	0.00	0.01
7.00	0.00	0.01
7.10	0.00	0.01
7.20	0.00	0.01
7.30	0.01	0.01
7.40	0.01	0.01
7.50	0.01	0.01
7.60	0.01	0.01
7.70	0.01	0.02
7.80	0.01	0.02
7.90	0.01	0.02
8.00	0.02	0.02
8.10	0.02	0.02
8.20	0.02	0.02
8.30	0.02	0.03
8.40	0.02	0.03
8.50	0.02	0.03
8.60	0.03	0.03
8.70	0.03	0.03
8.80	0.03	0.04
8.90	0.03	0.04
9.00	0.03	0.04
9.10	0.03	0.04
9.20	0.04	0.05
9.30	0.04	0.05
9.40	0.04	0.05
9.50	0.05	0.06
9.60	0.05	0.06
9.70	0.06	0.07
9.80	0.06	0.07
9.90	0.06	0.08
10.00	0.07	0.08
10.10	0.07	0.09
10.20	0.08	0.10
10.30	0.09	0.10
10.40	0.09	0.11
10.50	0.10	0.12

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
10.60	0.10	0.12
10.70	0.11	0.13
10.80	0.12	0.15
10.90	0.14	0.16
11.00	0.16	0.18
11.10	0.17	0.20
11.20	0.20	0.23
11.30	0.22	0.26
11.40	0.25	0.30
11.50	0.29	0.34
11.60	0.33	0.38
11.70	0.39	0.45
11.80	0.48	0.55
11.90	0.60	0.69
12.00	0.82	0.94
12.10	1.26	1.44
12.20	2.01	2.30
12.30	2.43	2.77
12.40	2.13	2.42
12.50	1.60	1.82
12.60	1.23	1.40
12.70	0.97	1.11
12.80	0.79	0.90
12.90	0.67	0.76
13.00	0.58	0.66
13.10	0.52	0.59
13.20	0.46	0.53
13.30	0.42	0.47
13.40	0.38	0.43
13.50	0.35	0.40
13.60	0.32	0.37
13.70	0.30	0.34
13.80	0.27	0.31
13.90	0.26	0.29
14.00	0.25	0.28
14.10	0.24	0.27
14.20	0.23	0.26
14.30	0.22	0.25
14.40	0.22	0.24
14.50	0.21	0.24
14.60	0.20	0.23
14.70	0.19	0.22
14.80	0.19	0.21
14.90	0.18	0.20
15.00	0.17	0.19
15.10	0.16	0.19
15.20	0.16	0.18
15.30	0.15	0.17
15.40	0.15	0.17
15.50	0.14	0.16
15.60	0.14	0.16
15.70	0.14	0.16
15.80	0.14	0.15

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
15.90	0.13	0.15
16.00	0.13	0.15
16.10	0.13	0.15
16.20	0.13	0.15
16.30	0.13	0.14
16.40	0.12	0.14
16.50	0.12	0.14
16.60	0.12	0.14
16.70	0.12	0.13
16.80	0.12	0.13
16.90	0.11	0.13
17.00	0.11	0.13
17.10	0.11	0.12
17.20	0.11	0.12
17.30	0.11	0.12
17.40	0.10	0.12
17.50	0.10	0.12
17.60	0.10	0.11
17.70	0.10	0.11
17.80	0.10	0.11
17.90	0.09	0.11
18.00	0.09	0.10
18.10	0.09	0.10
18.20	0.09	0.10
18.30	0.09	0.10
18.40	0.08	0.10
18.50	0.08	0.09
18.60	0.08	0.09
18.70	0.08	0.09
18.80	0.08	0.09
18.90	0.08	0.09
19.00	0.08	0.09
19.10	0.08	0.09
19.20	0.08	0.09
19.30	0.08	0.09
19.40	0.08	0.09
19.50	0.08	0.09
19.60	0.08	0.09
19.70	0.08	0.09
19.80	0.08	0.09
19.90	0.08	0.09
20.00	0.08	0.09
20.10	0.08	0.09
20.20	0.07	0.08
20.30	0.07	0.08
20.40	0.07	0.08
20.50	0.07	0.08
20.60	0.07	0.08
20.70	0.07	0.08
20.80	0.07	0.08
20.90	0.07	0.08
21.00	0.07	0.08
21.10	0.07	0.08

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
21.20	0.07	0.08
21.30	0.07	0.08
21.40	0.07	0.08
21.50	0.07	0.08
21.60	0.07	0.08
21.70	0.07	0.08
21.80	0.07	0.08
21.90	0.07	0.07
22.00	0.07	0.07
22.10	0.06	0.07
22.20	0.06	0.07
22.30	0.06	0.07
22.40	0.06	0.07
22.50	0.06	0.07
22.60	0.06	0.07
22.70	0.06	0.07
22.80	0.06	0.07
22.90	0.06	0.07
23.00	0.06	0.07
23.10	0.06	0.07
23.20	0.06	0.07
23.30	0.06	0.07
23.40	0.06	0.07
23.50	0.06	0.06
23.60	0.06	0.06
23.70	0.06	0.06
23.80	0.06	0.06
23.90	0.06	0.06
24.00	0.05	0.06
24.10	0.05	0.06
24.20	0.04	0.05
24.30	0.03	0.03
24.40	0.01	0.01
24.50	0.01	0.01
24.60	0.00	0.00
24.70	0.00	0.00
24.80	0.00	0.00
24.90	0.00	0.00
25.00	0.00	0.00
25.10	0.00	0.00
25.20	0.00	0.00
25.30	0.00	0.00
25.40	0.00	0.00
25.50	0.00	0.00
25.60	0.00	0.00
25.70	0.00	0.00
25.80	0.00	0.00
25.90	0.00	0.00
26.00	0.00	0.00
26.10	0.00	0.00
26.20	0.00	0.00
26.30	0.00	0.00
26.40	0.00	0.00

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
26.50	0.00	0.00
26.60	0.00	0.00
26.70	0.00	0.00
26.80	0.00	0.00
26.90	0.00	0.00
27.00	0.00	0.00
27.10	0.00	0.00
27.20	0.00	0.00
27.30	0.00	0.00
27.40	0.00	0.00
27.50	0.00	0.00
27.60	0.00	0.00
27.70	0.00	0.00
27.80	0.00	0.00
27.90	0.00	0.00
28.00	0.00	0.00
28.10	0.00	0.00
28.20	0.00	0.00
28.30	0.00	0.00
28.40	0.00	0.00
28.50	0.00	0.00
28.60	0.00	0.00
28.70	0.00	0.00
28.80	0.00	0.00
28.90	0.00	0.00
29.00	0.00	0.00
29.10	0.00	0.00
29.20	0.00	0.00
29.30	0.00	0.00
29.40	0.00	0.00
29.50	0.00	0.00
29.60	0.00	0.00
29.70	0.00	0.00
29.80	0.00	0.00
29.90	0.00	0.00
30.00	0.00	0.00
30.10	0.00	0.00
30.20	0.00	0.00
30.30	0.00	0.00
30.40	0.00	0.00
30.50	0.00	0.00
30.60	0.00	0.00
30.70	0.00	0.00
30.80	0.00	0.00
30.90	0.00	0.00
31.00	0.00	0.00
31.10	0.00	0.00
31.20	0.00	0.00
31.30	0.00	0.00
31.40	0.00	0.00
31.50	0.00	0.00
31.60	0.00	0.00
31.70	0.00	0.00

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
31.80	0.00	0.00
31.90	0.00	0.00
32.00	0.00	0.00
32.10	0.00	0.00
32.20	0.00	0.00
32.30	0.00	0.00
32.40	0.00	0.00
32.50	0.00	0.00
32.60	0.00	0.00
32.70	0.00	0.00
32.80	0.00	0.00
32.90	0.00	0.00
33.00	0.00	0.00
33.10	0.00	0.00
33.20	0.00	0.00
33.30	0.00	0.00
33.40	0.00	0.00
33.50	0.00	0.00
33.60	0.00	0.00
33.70	0.00	0.00
33.80	0.00	0.00
33.90	0.00	0.00
34.00	0.00	0.00
34.10	0.00	0.00
34.20	0.00	0.00
34.30	0.00	0.00
34.40	0.00	0.00
34.50	0.00	0.00
34.60	0.00	0.00
34.70	0.00	0.00
34.80	0.00	0.00
34.90	0.00	0.00
35.00	0.00	0.00
35.10	0.00	0.00
35.20	0.00	0.00
35.30	0.00	0.00
35.40	0.00	0.00
35.50	0.00	0.00
35.60	0.00	0.00
35.70	0.00	0.00
35.80	0.00	0.00
35.90	0.00	0.00
36.00	0.00	0.00
36.10	0.00	0.00
36.20	0.00	0.00
36.30	0.00	0.00
36.40	0.00	0.00
36.50	0.00	0.00
36.60	0.00	0.00
36.70	0.00	0.00
36.80	0.00	0.00
36.90	0.00	0.00
37.00	0.00	0.00

Post-Development

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NOAA 24-hr D 100-yr Rainfall=8.69"

Printed 8/2/2023

Primary Comparison (continued)

Time (hours)	Post-Development Pond 18 (cfs)	Pre-Development Pond 14 (cfs)
37.10	0.00	0.00
37.20	0.00	0.00
37.30	0.00	0.00
37.40	0.00	0.00
37.50	0.00	0.00
37.60	0.00	0.00
37.70	0.00	0.00
37.80	0.00	0.00
37.90	0.00	0.00
38.00	0.00	0.00
38.10	0.00	0.00
38.20	0.00	0.00
38.30	0.00	0.00
38.40	0.00	0.00
38.50	0.00	0.00
38.60	0.00	0.00
38.70	0.00	0.00
38.80	0.00	0.00
38.90	0.00	0.00
39.00	0.00	0.00
39.10	0.00	0.00
39.20	0.00	0.00
39.30	0.00	0.00
39.40	0.00	0.00
39.50	0.00	0.00
39.60	0.00	0.00
39.70	0.00	0.00
39.80	0.00	0.00
39.90	0.00	0.00
40.00	0.00	0.00

*In order to control stormwater runoff quantity impacts, the design engineer shall, using the assumptions and factors for stormwater runoff calculations at N.J.A.C. 7:8-5.6, complete **one of the following**:*

NJAC 7:8-5.4-i. Demonstrate through hydrologic and hydraulic analysis that for stormwater leaving the site, post-construction runoff hydrographs for the two, 10 and 100-year storm events do not exceed, at any point in time, the pre-construction runoff hydrographs for the same storm events;

NJAC 7:8-5.4-ii. Demonstrate through hydrologic and hydraulic analysis that there is no increase, as compared to the pre-construction condition, in the peak runoff rates of stormwater leaving the site for the two, 10 and 100-year storm events and that the increased volume or change in timing of stormwater runoff will not increase flood damage at or downstream of the site. This analysis shall include the analysis of impacts of existing land uses and projected land uses assuming full development under existing zoning and land use ordinances in the drainage area;

The drainage area Overland to Parkhurst Place from pre-development to post-development conditions is demonstrating compliance with both NJAC 7:8-5.4-i and ii. In post-development conditions, there is no increase in the peak flow rate and peak flow volume as shown in Table 8. See above for the post-development runoff hydrographs for the two, 10 and 100-year storm events. As shown, the post-development runoff hydrograph does not exceed the pre-construction runoff hydrograph at any point for the same storm events.